FINAL GENERIC ENVIRONMENTAL IMPACT STATEMENT
ECOGEN, LLC PRATTSBURGH/ITALY WIND FARM

TOWN OF PRATTSBURGH
STEUBEN COUNTY, NEW YORK

AND

TOWN OF ITALY
YATES COUNTY, NEW YORK

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NOVEMBER 22, 2005
FINAL GENERIC ENVIRONMENTAL IMPACT STATEMENT
ECOGEN, LLC PRATTSHBURG/ITALY WIND FARM

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# TABLE OF CONTENTS

| PART A | INTRODUCTION ............................................................................................................. 1 |
|        | A.1 SEQR Process .................................................................................................. 1 |
|        | A.2 Methodology/Selection of Comments ................................................................... 3 |
| PART B | SUMMARY OF DGEIS .................................................................................................. 5 |
|        | B.1 Project Description .......................................................................................... 6 |
|        | B.2 Regulatory Setting ........................................................................................... 7 |
|        | B.3 Purpose, Public Need and Benefits .................................................................. 9 |
|        | B.4 Existing Conditions .......................................................................................... 9 |
|        | B.5 Alternatives Summary ...................................................................................... 11 |
|        | B.6 Summary of Potential Impacts and Mitigations ............................................... 12 |
|        | B.6.1 Land and Land Use ...................................................................................... 12 |
|        | B.6.2 Water and Wetland Resources ...................................................................... 14 |
|        | B.6.3 Wildlife and Habitat Resources .................................................................. 14 |
|        | B.6.4 Agricultural Resources ............................................................................... 16 |
|        | B.6.5 Aesthetic/Visual Impacts ............................................................................ 17 |
|        | B.6.6 Historic and Archaeological Resources .................................................... 17 |
|        | B.6.7 Noise Impacts .............................................................................................. 18 |
|        | B.6.8 Energy Impacts ............................................................................................ 19 |
|        | B.6.9 Temporary and Short Term Impacts ............................................................... 19 |
|        | B.6.10 Health and Safety Impacts ........................................................................ 21 |
|        | B.6.11 Impacts on Local Roads .............................................................................. 22 |
|        | B.6.12 Blasting and Seismic Issues ...................................................................... 23 |
|        | B.6.13 Socio-Economic Impacts ............................................................................ 23 |
|        | B.6.14 Property Values ........................................................................................... 25 |
|        | B.6.15 Groundwater and Wells ............................................................................. 25 |
|        | B.6.16 Decommissioning ......................................................................................... 26 |
|        | B.6.17 Mandated FAA Lighting ............................................................................ 26 |
|        | B.6.18 Obstruction of FCC Regulated Signals ....................................................... 27 |
|        | B.6.19 Land Title ................................................................................................... 27 |
|        | B.6.20 Solid Waste Management .......................................................................... 28 |
| PART C | COMMENTS AND RESPONSES .................................................................................. 29 |
|        | C.1 EXECUTIVE SUMMARY AND INTRODUCTION ................................................... 29 |
|        | C.2 ENVIRONMENTAL SETTING .............................................................................. 35 |
TABLES

Table A.1-1 Anticipated SEQR Chronology
Table D-1 Summary of Potential Impacts, Mitigation and Siting Criteria

REVISED AND SUPPLEMENTAL FIGURES
(Following FGEIS Text)

Figure 1.0-1 Preliminary Site Plan
Figure 1.2-1 Spread Footing Wind Turbine Foundation Plan, Elevation and Section
Figure 1.3-1 Project Location Map
Figure 1.5-1 Wind Resources
Figure 1.5-2 Primary Candidate Areas for WTG Consideration
Figure 2.5-1 Bedrock Geologic Setting
Figure 2.5-2 Surficial Geologic Setting
Figure 2.5-3 Confined and Unconfined Aquifers
Figure 3.1-1 Digital Orthophoto and Tax Parcels
Figure 3.1-2 Land Use Classification
Figure 3.2-1 Project Area Streams and Classification
Figure 3.2-2 Project Area Flood Plains
Figure 3.2-3 New York State Freshwater Wetlands
Figure 3.2-4 USFWS National Wetland Inventory Wetlands
Figure 3.2-5 Potential Wetland Designations
Figure 3.2-5a Silt Fence Detail
Figure 3.2-5b Straw Bale Dike Detail
Figure 3.2-5c Surface Filter Barrier Detail
Figure 3.2-5d Surface Water Diversion Berm with Silt Fence
Figure 3.2-5e Rock – Check Dam Detail
Figure 3.2-5f Temporary Culvert Ditch Crossing Detail
Figure 3.2-5g Temporary Drainage Ditch Detail
Figure 3.2-5h Erosion Control Blanket Details
Figure 3.2-5i Stabilized Construction Entrance
Figure 3.2-5j Typical Rock Filter and Silt Fence Detail
Figure 3.3-1 Daytime Bird Survey Observation Locations
REVISED AND SUPPLEMENTAL FIGURES (Continued)

Figure 3.3-2  Acoustic Monitoring and Radar Study Locations
Figure 3.3-2a Nightly Correlation of Radar and Acoustic Detections
Figure 3.3-3 Bat Mist Netting and Vocalization Monitoring Locations
Figure 3.3-4 Indiana Bat Hibernaculal and Projected Population Density
Figure 3.4-1 New York State Agricultural Districts
Figure 3.4-2 Golden Nematode Quarantine and Infected Areas
Figure 3.5-1 Visual Assessment Photo Location Map
Figure 3.5-2 Visual Assessment Line of Sight Profiles
Figure 3.6-1 Area of Potential Affect
Figure 3.6-2 National Register of Historic Places Listed Sites
Figure 3.6-3 Archaeological Site Location Map
Figure 3.7-1 Locations of Ambient Noise Study Meters
Figure 3.10-1 Location of Permanent Residences Within the Study Area
Figure 3.12-1 Geotechnical Test Pit Locations
Figure 3.12-2 Geotechnical Test Boring/Test Pit Locations
Figure 7.1-1 Proposed Ecogen and WFP Turbine Locations

REVISED AND SUPPLEMENTAL APPENDICES

Appendix D Revised Profiles
Appendix F Noise Impacts
Appendix N DGEIS Revisions (red-lined)
Appendix O Public Written Comments
Appendix P Public Hearing Transcripts
Appendix Q Supplemental Wildlife Studies
Appendix R Supplemental Photomontages
Appendix S Scope of Work for Cultural Resources Investigations (SHPO Work Plan)
Appendix T Analysis of Potential Safety Risks
Appendix U Geotechnical Report
Appendix V Update of Residential Impact Analysis
Appendix W TV Broadcast Off-Air Receptor Measurement Report
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ACHP</td>
<td>Advisory Council on Historic Preservation</td>
</tr>
<tr>
<td>ACOE</td>
<td>United States Army Corps of Engineers</td>
</tr>
<tr>
<td>APE</td>
<td>Area of Potential Effect</td>
</tr>
<tr>
<td>ATV</td>
<td>all terrain vehicle</td>
</tr>
<tr>
<td>AWEA</td>
<td>American Wind Energy Association</td>
</tr>
<tr>
<td>BBBO</td>
<td>Braddock Bay Bird Observatory</td>
</tr>
<tr>
<td>BCNYS</td>
<td>Building Code of New York State</td>
</tr>
<tr>
<td>bfg</td>
<td>below finished grade</td>
</tr>
<tr>
<td>bgs</td>
<td>below ground surface</td>
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<tr>
<td>BLM</td>
<td>Bureau of Land Management</td>
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<tr>
<td>BMP</td>
<td>best management practices</td>
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<td>BWEA</td>
<td>British Wind Energy Association</td>
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<tr>
<td>CBC</td>
<td>(National Audubon Society) Christmas Bird Count</td>
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<tr>
<td>dB</td>
<td>decibel</td>
</tr>
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<td>Draft Generic Environmental Impact Statement</td>
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<td>United States Department of Interior</td>
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<td>Environmental Assessment Form</td>
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<td>Ecogen, LLC</td>
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<td>EIS</td>
<td>Environmental Impact Statement</td>
</tr>
<tr>
<td>ELF</td>
<td>extremely low frequency</td>
</tr>
<tr>
<td>EMF</td>
<td>electromagnetic field</td>
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<tr>
<td>ECS</td>
<td>electrical collection system</td>
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<td>Federal Communications Commission</td>
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11/22/2005

vii
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<td>FGEIS</td>
<td>Final Generic Environmental Impact Statement</td>
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<td>FRWPP</td>
<td>Flat Rock Wind Energy Power Project</td>
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<td>ft</td>
<td>foot/feet</td>
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<td>United States Government Accountability Office</td>
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<td>GAR</td>
<td>GAR Associates</td>
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<td>GEIS</td>
<td>Generic Environmental Impact Statement</td>
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<tr>
<td>GIS</td>
<td>Geographic Information System</td>
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<tr>
<td>GPS</td>
<td>Global Positioning Satellite</td>
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<tr>
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<td>Hertz</td>
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<tr>
<td>in</td>
<td>inch</td>
</tr>
<tr>
<td>ISO</td>
<td>Independent System Operators</td>
</tr>
<tr>
<td>km/hr</td>
<td>kilometers per hour</td>
</tr>
<tr>
<td>kV</td>
<td>kilovolt</td>
</tr>
<tr>
<td>KHMO</td>
<td>Kestrel Haven Avian Migration Observatory</td>
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<tr>
<td>LED</td>
<td>light emitting diode</td>
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<tr>
<td>m</td>
<td>meter/meters</td>
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<tr>
<td>m/s</td>
<td>meters per second</td>
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<tr>
<td>MW</td>
<td>megawatt</td>
</tr>
<tr>
<td>MWh</td>
<td>megawatt hour</td>
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<tr>
<td>NEXRAD</td>
<td>Next Generation Weather Radar</td>
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<tr>
<td>NIEHS</td>
<td>National Institute of Environmental Health Sciences</td>
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<td>NRHP</td>
<td>National Register of Historic Places</td>
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<td>NWI</td>
<td>National Wetland Inventory</td>
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ABBREVIATIONS AND ACRONYMS
GLOSSARY OF TERMS, ACRONYMS AND ABBREVIATIONS (continued)

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<td>Nationwide Permit</td>
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<td>NYCRR</td>
<td>New York Code of Rules and Regulations</td>
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<td>New York Independent System Operator</td>
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<td>New York Renewable Portfolio Standard</td>
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<td>New York State</td>
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<td>New York State Department of Labor</td>
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<td>NYSDOT</td>
<td>New York State Department of Transportation</td>
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<td>NYS DPS</td>
<td>New York State Department of Public Services</td>
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<td>NYSEG</td>
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<td>NYSERDA</td>
<td>New York State Energy Research Development Authority</td>
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<tr>
<td>NYSOPRHP</td>
<td>New York State Office of Parks, Recreation and Historic Preservation</td>
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<tr>
<td>OHWM</td>
<td>ordinary high water mark</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>operations and maintenance</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>PE</td>
<td>Professional Engineer</td>
</tr>
<tr>
<td>PH</td>
<td>Public Hearing</td>
</tr>
<tr>
<td>PILOT</td>
<td>payment in lieu of taxes</td>
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<tr>
<td>PSC</td>
<td>Public Service Commission</td>
</tr>
<tr>
<td>PSL</td>
<td>Public Service Law</td>
</tr>
<tr>
<td>PTC</td>
<td>production tax credit</td>
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<tr>
<td>REPP</td>
<td>Renewable Energy Policy Project</td>
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<td>RICS</td>
<td>Royal Institute of Chartered Surveyors</td>
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</table>
ABBREVIATIONS AND ACRONYMS
GLOSSARY OF TERMS, ACRONYMS AND ABBREVIATIONS (continued)

ROW  right-of-way
rpm  revolutions per minute
RPS  Renewable Portfolio Standard
RPTL  Real Property Tax Law
SCIDA  Steuben County Industrial Development Agency
SEQRA  State Environmental Quality Review Act
SHPO  State Historic Preservation Office
SPDES  (New York) State Pollutant Discharge Elimination System
SPL  Sound Pressure Level
SRIS  System Reliability Impact Statement
SWL  Sound Power Level
THPO  Tribal Historic Preservation Office
UFPBC  Uniform Fire Prevention and Building Code
URS  URS Corporation
USDA  United States Department of Agriculture
USGS  United States Geologic Service
USEPA  United States Environmental Protection Agency
USFWS  United States Fish and Wildlife Service
VdB  van den Berg
WFP  Wind Farm Prattsburgh, LLC
WHO  World Health Organization
WMA  Wildlife Management Area
WTG  Wind Turbine Generator/Wind Turbine Generators
YCIDA  Yates County Industrial Development Agency
PART A  INTRODUCTION

This Final Generic Environmental Impact Statement (FGEIS) has been prepared for the Ecogen, LLC (Ecogen) Prattsburgh/Italy Wind Farm Project (Project) on the behalf of the Lead Agency, the Steuben County Industrial Development Agency (SCIDA). The FGEIS is prepared pursuant to the New York State Environmental Quality Review Act (SEQR), Environmental Conservation Law, Article 8, 6NYCRR Part 617, and its implementing regulations.

A.1  SEQR Process

SEQR requires state or local governments to assess the potential environmental impacts of their actions during the planning, review, and decision-making processes for those actions. The proposed financial assistance for construction of the Project constitutes an action subject to SEQR. The intent of SEQR is that a suitable balance of social, economic, and environmental factors be considered and weighed in reaching decisions on proposed activities or actions. Therefore, agencies must determine whether a proposed action may have a significant effect on the environment, and if so, prepare or request that an Environmental Impact Statement (EIS) be prepared. Presented below are the key milestones (since submission of the Draft Generic Environmental Impact Statement [DGEIS]) necessary to complete the SEQR process for the Project.

On April 7, 2005, the DGEIS was submitted to the Lead Agency for review. On April 21, 2005, the Lead Agency found the DGEIS to be in compliance with 6 NYCRR Part 617.9(b), and made a determination that it was adequate to begin public and agency review. The subsequent public comment period began on April 22, 2005 and concluded on June 17, 2005. A public hearing on the DGEIS was held within the public comment period, on May 23, 2005.

Input from the public review process was received in the form of written comments to SCIDA throughout the public comment period and as oral/written comments received during the public hearing. The Lead Agency determined that the comments should be addressed in the form of a FGEIS. The FGEIS is the responsibility of the Lead Agency (6 NYCRR Part 617.9(b)(8)). This FGEIS was prepared by the applicant for the Lead Agency’s consideration.

The intent of this FGEIS is to present public and agency comments on the DGEIS and responses to the substantive comments. This FGEIS incorporates, by reference the DGEIS and its
supporting studies as it was accepted by the Lead Agency on April 21, 2005. It also presents revisions to the DGEIS in Appendix N. Revisions are presented in a “red-lined” format to assist the reader to identifying revised text.

Table A.1-1 provides an anticipated scenario, since submittal of the DGEIS, to complete the SEQR process for the Project. The anticipated dates were developed at the time of writing and it is understood that the timing of actions by the Lead Agency may vary and result in modification to this estimated schedule.

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<td>4/7/05</td>
<td>45 days (max.)</td>
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<td>NA</td>
<td>4/22/05</td>
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<td>4/22/05</td>
<td>30 days (min.)</td>
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<td>Public Hearing Held</td>
<td>5/23/05</td>
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<td>5/23/05</td>
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<td>NA</td>
<td>10 days after close of public hearing (min.)</td>
<td>6/17/05</td>
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<td>11/17/05</td>
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* - Dates after 11/17/05 are anticipated and subject to change.
NA – Not applicable.

Following completion of this schedule, determination resulting from additional SEQR compliance may be made SCIDA as listed in Part D.
A.2 **Methodology/Selection of Comments**

Written comments on the DGEIS were received by the Lead Agency through the public comment period, which ended on June 17, 2005. A shorthand reporter transcribed oral comments received at the public hearing held on May 23, 2005 and a certified copy of the public hearing transcript was provided to the Lead Agency. Written comments in their entirety were assembled by the Lead Agency and organized by “submittal”. A submittal may have consisted of one or multiple comments provided by the author in an individual piece of correspondence. Copies of all the submittals in their entirety were provided to the applicant in order to draft initial responses for the Lead Agency’s consideration. The individual written comment submittals are provided in Appendix O in their entirety. The public hearing transcript is provided in Appendix P.

Under direction of the Lead Agency, comment submittals were assigned comment log numbers. A submittal may have comment(s) that related to one or more subjects in the DGEIS. Written comments were assigned a 3-digit number unique to each author's individual submittal. One hundred and eleven (111) individual comment submittals were received by the Lead Agency. Oral comments were also numbered and can be identified by their "PH" (Public Hearing) prefix and 2-digit number. Fifty-six (56) speakers commented at the public hearing. Tables identifying the commenter, subject and log number are presented in Appendices O and P.

The comments, or relevant portions of comments, were first grouped by subject matter and organized by the corresponding section in the DGEIS (i.e., visual impact, health and safety, etc.). Subheadings were added in order to further group and categorize the comments. Once the complete comments were grouped and categorized, they were reviewed in detail in order to identify substantive excerpts to present in the FGEIS. Comments that were unrelated to the subject matter presented in the DGEIS or relevant to potential environmental impacts were not included. These comments typically included references to the author’s general support or opposition to the project.

The substantive excerpts of the organized comments were consolidated to prepare for response. Similar comments from multiple individual authors that are duplicative in nature were then grouped together by issue. A consolidated document presenting all the summarized comments was provided by the applicant to the Lead Agency for their review and modification.
The summarized comments and corresponding responses are presented in Part C of this FGEIS – Comments and Responses. They are formatted by subject matter, corresponding to the sections in the DGEIS, followed by comment summary, authors of comments summarized and Lead Agency response. Most of the comments that requested additional information outside the range of issues included in the Final Written Scope issued by the Lead Agency (dated June 10, 2005) were included and responses provided in order to explain why or why not additional assessment was necessary.
PART B SUMMARY OF DGEIS

This section summarizes the content of the Generic Environmental Impact Statement (GEIS). Where appropriate, major revisions made to the Draft GEIS in reaction to the input received during the public and agency review are included. Elements of the Final GEIS are also described completing the content of the GEIS in its entirety. The subject of the DGEIS is the Project, which consists of the construction of 53 wind turbine generators (WTG) designed to generate up to 79.5 megawatts (MW) of electrical power.

The purpose of the DGEIS was to identify and evaluate the potential impacts of siting approximately 53 WTG at various locations within an overall study area comprised of approximately 24,000 acres, and where applicable, to identify reasonable mitigation measures to reduce the effect of significant adverse impacts to the maximum extent practicable.

The purpose of this FGEIS is to present: revisions to the DGEIS; substantive comments to the DGEIS resulting from the public/agency comment period; the Lead Agency’s responses to those comments, recommend mitigation, establish criteria, and identify additional SEQR compliance. This FGEIS includes by reference the DGEIS and its accompanying appendices as accepted by SCIDA on April 21, 2005. In an effort to clearly define where the DGEIS has undergone change, a revised DGEIS is provided in a “red-lined” format in Appendix N.

Part C of this FGEIS presents summaries of public and agency comments (written and verbal) received during the public comment period from April 22 through June 17, 2005. Lead Agency responses are provided to the substantive comments and are organized by the relative DGEIS section. The written comments received during the public comment period and the public hearing transcript are presented in Appendices O and P, respectively. The following supporting reports and studies are appended to this FGEIS:

- Appendix D  Revised Profiles
- Appendix F  Noise Impacts
- Appendix N  DGEIS Revisions (red-lined)
- Appendix O  Public Written Comments
- Appendix P  Public Hearing Transcripts
- Appendix Q  Supplemental Wildlife Studies
- Appendix R  Supplemental Photomontages
Part D of this FGEIS presents a series of conclusions and findings from the entire SEQR process. Table ES-1 – Summary of Impacts, Mitigation and Siting Criteria, of the DGEIS Executive Summary has been updated and included in Part D as Table D-1. A checklist prepared to aid in determining future regulatory compliance is also included in Part D. The checklist is offered to the Lead Agency as a tool to ensure that findings and conditions that result from this GEIS process will be enforced during the review of construction plans in the future and ensure that additional SEQR compliance required by the SCIDA is accomplished before executing the PILOT agreement. Siting criteria for setbacks (safety and noise), wetland buffers, tower/road/electrical collection system (ECS) location are included as well. A list of applicable discretionary permits is included. The checklist also establishes thresholds and conditions used to determine if additional review under SEQR will be necessary.

The following sections summarize the content of the DGEIS. Where appropriate, revisions in the DGEIS are incorporated in this summary.

B.1 Project Description

The Project study area is generally bounded by Twelve Mile Creek Road to the west; McMichael Road to the east; Edson Road, Italy Valley Road and Italy Turnpike Road to the north and West Creek Road to the south. A significant change in the Project study area occurred in response to concerns of the Town of Italy related to the size of the potential area where WTG sites may be located. The study area has changed (from approximately 33,000 acres to approximately 24,000 acres) by eliminating the most northern portion in the Town of Italy generally north of Italy Turnpike and Italy Valley Road.

The Project includes the construction of an ECS that would interconnect the 53 individual WTG and deliver power to the existing New York State Electric & Gas (NYSEG) infrastructure in the area; construction of a substation and operations and maintenance building; and
construction of ancillary service roads. Power generated from the Project will be conveyed directly to the NYSEG system.

Each WTG will have a generating capacity of 1.5 MW and will consist of a tubular, steel monopole tower approximately 80 m (262 ft) in height. Each tower will have three rotor blades. The net diameter of the rotor and hub will be 77 m (253 ft). The maximum height of the WTG will be approximately 119 m (389 ft) with a blade in the perfectly vertical position. Typical WTG impacts including roads, WTG pad, crane pad, and ECS are estimated to be 1.13 acres to 1.26 acres depending on whether the WTG is located on open agricultural land or forested land, respectively. The majority of each site will only be utilized during construction. The finished site will have a gravel pad measuring approximately 75 ft by 150 ft. In addition to the approximately 61 acres disturbed by the WTG, crane path, service roads, and ECS, there will also be 10 acres disturbed by the construction staging area/operations and maintenance building and one acre for the substation, bringing the total impacted area to approximately 72 acres.

The ECS will interconnect individual WTG primarily using buried cable. Overhead lines will be used for crossing streams, wetlands and extreme slopes to minimize impact to those areas. The ECS will be connected to the NYSEG power grid (115 kilovolt [kV] transmission line) at an electrical substation likely to be located off Emerson Road. Approximately 4.8 miles of 34.5 kV buried cable will be required to connect the WTG and tie into the substation. Where the ECS will not follow the service roads, it will be buried a minimum of 3 feet and a maximum of 4 ft below finished grade (bfg) and meet applicable National Electrical Codes. The substation will be located in a fenced compound of approximately one acre in size. The fence will be 8 ft high chain link with green vinyl privacy slats. The substation will be used to house transformers capable of stepping up voltage from 34.5 kV to 115 kV at the point of connection to the power grid.

B.2 Regulatory Setting

SEQR requires state or local governments to assess the potential environmental impacts of the actions that they undertake. Therefore, agencies must determine whether a proposed action may have a significant effect on the environment, and if so, prepare or request an EIS. The proposed financial assistance from SCIDA for construction of the proposed wind farm constitutes an action subject to SEQR. The intent of SEQR is that a suitable balance of social, economic, and environmental factors be considered and weighed in reaching decisions on proposed activities or actions.
During early consultation with several of the Involved Agencies, it was determined that SCIDA would be the best candidate to assume the role of Lead Agency. Because the Towns of Prattsburgh and Italy do not have zoning ordinances, they have no local discretionary approvals subject to SEQR. The SCIDA has the first discretionary approval due to its role in providing funding (approval of the payment in lieu of taxes [PILOT] agreement) and therefore would act as Lead Agency during the SEQR process. Lead Agency designation does not eliminate any other agency’s approval or permitting responsibilities. The SCIDA determined the proposed action was a Type I Action and that a Full Environmental Assessment Form (EAF) would be required. The Full EAF was completed and the SEQR process was initiated with a submittal on March 25, 2004.

Upon sending letters to agencies involved in funding, approving, or reviewing the proposed Project, and having received no objections to its proposed course of review, the SCIDA assumed Lead Agency status for the SEQR process March 25, 2004. The SCIDA determined that a DGEIS would be appropriate to evaluate the siting of the Project. The generic aspect of a DGEIS allows consideration of broad-based actions or related groups of actions that agencies are likely to approve, fund, or undertake. The generic feature of a DGEIS also allows for an accounting of the cumulative impacts and secondary impacts of potential alternative sites and combinations thereof. The DGEIS provided a set of siting criteria to evaluate prior to making final siting decisions. The Preliminary Site Plan evaluated during scoping depicted 99 potential WTG locations upon which the siting criteria will be applied.

The GEIS process concludes with a set of conditions and criteria under which future site-specific actions will be undertaken. These conditions and thresholds are introduced herein and will be finalized in the Findings Statement and include mitigation measures that have been identified during the SEQR process. The criteria established in the Findings Statement will be applied to the Project through the issuance of permits and approvals by state and local agencies for individual WTG locations. If the preset thresholds are exceeded or criteria cannot be met, additional evaluation as outlined under 6 NYCRR Part 617.10(d) may be warranted. The DGEIS, FGEIS and Findings Statement identify under what circumstances additional SEQR evaluation will be required.
B.3 **Purpose, Public Need and Benefits**

The purpose of the Project is to develop an alternate energy system to generate electricity from a clean and renewable source. Wind energy can be produced and supplied to the power grid at lower costs than other non-hydropower renewable energy sources. Wind energy offers utility companies an alternate energy source having production costs and purchase price that will be known for the 15 to 20 year life of the purchase agreement. In 2000 and 2001, commercial wind projects totaling 48 MW were installed in New York State (NYS) and it is anticipated that favorable market conditions will continue throughout the life of the Project.

The New York State Energy Plan and Final Environmental Impact Statement (Energy Plan) provides statewide policy guidance for energy-related decisions by government and private participants within the State. The Energy Plan states “A benefit of greater energy diversity… is greater energy security in the form of reduced risk of energy supply disruption and price volatility. Moreover, a balanced portfolio of energy resources, including renewable energy resources, provides greater service reliability.”

Public benefits resulting from the Project would include the creation of jobs, payment to landowners for land purchases and leases, revenue to the Towns through increased property taxes and/or payments in lieu of taxes. Environmental benefits would include utilization of a renewable energy source and energy production without the production of greenhouse gases and other air pollutants. The environmental costs associated with generating power from coal burning plants, hydropower plants, nuclear plants and burning oil are well publicized.

B.4 **Existing Conditions**

The Project study area is located in the Finger Lakes Highlands portion of the Appalachian Plateau physiographic province. Broad U-shaped valleys, steep wooded slopes and rounded or gently rolling hilltops characterize the topography of the region. Elevations range from about 1,000 ft above mean sea level in the Italy Valley to just over 2,100 ft along some of the hill tops. The Italy Valley is a prominent northeast to southwest trending glacial valley in the northern part of the Project area. Land uses in the Project area include active and abandoned agricultural land, low-density rural-residential housing, seasonal hunting camps and large areas of mixed hardwood woodlots (especially on steep slopes) and can be seen on Figure 3.1-2. These hilltop locations also include areas of abandoned agricultural land undergoing natural succession
to woody plant communities. Active and inactive agricultural lands on these hilltop locations are typically bounded by woodlots.

Water resources in the Project area include several streams and wetland areas as shown on Figure 3.2-1. Flint Creek and its tributaries are located in the northern part of the Project area and are part of the Oswego River watershed, flowing generally northward. Segar Gully is a tributary to Flint Creek. Twelve Mile, Ten Mile and Five Mile Creeks and their tributaries are part of the Chemung River watershed and drain generally southward to the Chemung River. West Creek is a tributary to Ten Mile Creek. Martin Hayes/Lyons Creek is a tributary to Twelve Mile Creek. Federal Emergency Management Agency (FEMA) 100-year floodplains mapped in the Project area are generally restricted to the banks of area streams. State wetland PB-1 is located just south of Route 53 and north of Cook School Road. This wetland is associated with a tributary to Twelve Mile Creek. National Wetland Inventory (NWI) wetlands mapped in the Project area are mainly associated with creek floodplains, farm ponds and depressional areas with poor drainage and hydric soils.

The majority of the Project area is dominated by active and inactive agricultural land, successional old-field and shrub land, and mixed hardwood forest including rich mesophytic forest and successional northern hardwoods. Other plant communities include small areas of conifer plantations, pastureland, forested wetland, wet meadow wetland, emergent marsh and riparian wetland. Based on habitats identified in the Project area, mammal species present would likely include many of the mammals, reptiles and amphibians known to thrive in areas of mixed agricultural and undeveloped land. Several of the streams in the Project area are classified by the State as trout and trout-spawning streams.

No Federal or State endangered or threatened species were observed within the Project area during daytime field surveys conducted in 2004 and 2005. State species of special concern observed during the surveys include cooper’s hawk, sharp-shinned hawk and vesper sparrow. The Federally endangered short-eared owl, the State-endangered northern harrier and special concern species osprey and cooper’s hawk were observed migrating over Italy Hill just north of the Project area during the one-day raptor survey in May 2004. Information collected from local breeding bird surveys, bird-banding operations and Audubon Christmas bird counts indicate that a significant number and variety of birds migrate over and over-winter in the Project area.
Acoustic studies conducted in the spring and fall of 2004 and the spring of 2005 indicate that nocturnal bird migration over the Project area occurs in low to moderate density. Similarly, radar studies conducted during the fall of 2004 and the spring of 2005 indicated a low to moderate density of nocturnal migrants passing over the Project area. Bat mist-netting and vocalization monitoring surveys conducted in the Project area during the summer and early fall of 2004 and the radar studies indicate that a variety of bat species utilize the Project area. No Federally endangered Indiana bats were observed during the surveys. The bat surveys identified a small number (6) of migrating tree bats in the Project area.

**B.5 Alternatives Summary**

**Number of WTG Installations**

Given the stated Project goal of creating a 79.5 MW Project, any change in size (generating capacity) of WTG would require a corresponding change in the number of WTGs in order to maintain 79.5 MW. Reducing the number of WTGs without increasing their size would negatively affect the economic feasibility of the Project and the realization of the potential of the Project area wind resource. The proposed size of the Project is necessary to produce power at a price that justifies the cost of the investment as well as providing a product that is competitive in the open market. The proposed Project also justifies having full time maintenance and operation staff on-site for immediate response to system demands. A smaller Project would not justify full time staff and a full build out of an operations and maintenance building.

From an impact standpoint, a smaller Project (less WTG sites) would in general, have proportionately smaller impacts on soils and plant communities including wetlands, wildlife displacement, avian and bat mortality and noise. Although visual impacts would be reduced, Project visibility would generally remain the same.

Similar to environmental impacts, economic benefits to the local community would also be reduced if a smaller Project were constructed. Economic benefits would be reduced for local landowners leasing or selling parcels of land for the Project. PILOT payments to the counties and towns would also be reduced.
Wind Turbine Generator Size and Design

The wind energy industry has been moving toward the use of larger WTGs because they are more cost effective. Wind velocity increases with altitude in New York State and more energy is captured with a larger wind-swept area and larger and better-designed rotor blades. To produce an equivalent amount of power would require the construction and operation of a significantly greater number of smaller WTGs. A greater number of smaller WTGs would not significantly reduce the potential for environmental impacts, and on some levels, would possibly increase the potential area of effects. A larger number of WTGs would require more land disturbance resulting in greater impacts on soils and plant communities including wetlands and wildlife. A larger number of WTGs would also increase the potential for avian and bat collision mortality as even small WTGs are still large structures. Regarding visual and noise impacts, a greater number and density of smaller WTGs would result in incremental changes in visual and noise impacts to receptors. WTG towers proposed for the Project are tubular steel and free standing structures. This tower design is believed to be less impacting to birds because of the lack of perches associated with lattice towers of earlier designs.

B.6 Summary of Potential Impacts and Mitigations

Section 3 of the DGEIS, as accepted on April 22, 2005, included a summary of impacts and possible mitigation measures that will be the basis for establishing the final WTG siting criteria. The following section summarizes the impact assessment and mitigation measures as they are now presented in this FGEIS as a result of the public and agency review process. Appendix N represents a complete version of the revised (redlined) DGEIS. Part D of the FGEIS provides a complete comprehensive schedule of all impacts, mitigation, siting criteria and conditions that will be required as part of the final design package.

B.6.1 Land and Land Use

Impacts

Approximately 1.13 to 1.26 acres of land will be impacted for each WTG site when constructed, depending on the site. For each WTG, impacts result from service roads, crane travel path, crane assembly area, crane pad and ECS. Approximately 3.4 miles of service roads will be constructed. Service roads will be 16 feet wide and crane travel paths will be
approximately 35 feet wide within each cluster. Cables buried as part of the ECS will cause temporary and minimal impacts during construction. Future land use patterns in the Project area are anticipated to remain largely unchanged.

The 53 WTG sites, roads, substation, and other ancillary facilities represent a combined conversion of approximately 72 acres of active and inactive agricultural land, vacant land and a minor amount of forested land into developed land use. This represents a minor net change in total area of disturbance from 75 acres as was presented in the DGEIS. The most significant changes resulted from an increase in length of the crane travel paths, increase in crane assembly areas, and a decrease in the disturbance required for the rotor laydown area. Construction activities related to topsoil and subsoil will be undertaken in accordance with New York State Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Wind Power Projects to ensure that land disturbance will be minimized.

It is acknowledged that a comprehensive plan was amended by the Town of Italy on July 25, 2005. This plan will be reviewed by SCIDA in the final design package. If zoning is required in the Town of Italy, Ecogen will be required to abide by those regulations.

Additionally, future use of small parcels without a residence may be negatively impacted by the project.

**Mitigation**

- Where feasible, use existing farm or logging roads for service roads.
- Re-use topsoil on-site.
- Mandatory setbacks from non-participating property lines and residences, “permanent and non-permanent”, per Part D of this FGEIS.
B.6.2 Water and Wetland Resources

Impacts

Precipitation during construction activities could result in silt-laden runoff entering project area streams and wetlands. Small wetland areas may be impacted by construction of service roads, the ECS and the 10-acre staging area.

Potential impacts may arise from crossing NYS protected streams with ECS.

Mitigation

- Wherever possible, overhead ECS stream crossings will be perpendicular to stream banks to minimize clearing along stream banks.
- The ECS will cross streams via overhead lines or direction boring.
- No trenching or use of heavy equipment will occur in streambeds and no ground disturbance will occur within 50 feet of NYS protected streams.
- Restore impacted wetlands to pre-construction conditions where applicable.
- Implement Stormwater Pollution Prevention Plan and Erosion and Sediment Control Plan to minimize impacts during construction.

B.6.3 Wildlife and Habitat Resources

Impacts

**Plant Communities:** The Project will impact approximately 72 acres of land including 17 acres of active agricultural land, 31.8 acres of abandoned agricultural land, and 12.6 acres of primarily successional second growth woodland. A small amount of forest plant community will be eliminated by the Project, which will be primarily successional second growth.

**Mammals, Reptiles, Amphibians and Fish:** Temporary displacement of mammal species during construction and operation. Mortality of small mammals, reptiles and amphibians during construction.
Endangered, Threatened and Special Concern Species: WTG collision mortality involving Federal or State listed migrating or foraging birds.

Birds: WTG collision mortality involving migrating resident and foraging birds. Temporary displacement of resident, breeding and over-wintering birds during construction and operation.

Bats: WTG collision mortality.

High Tor Wildlife Management Area: WTG collision mortality involving resident or breeding birds from the High Tor Wildlife Management Area migrating or foraging over the Project area.

Mitigation

- Paint WTG a color (off-white) readily visible to migrating and foraging birds and approved by the Federal Aviation Administration (FAA).
- Co-locate ECS along service roads where practicable to minimize impacts to active agricultural and woodlands.
- Minimize impacts to active agricultural and woodlands by locating service roads along existing farm roads and logging trails as much as possible and locating WTG along edges of agricultural fields and woodlands wherever other setbacks allow.
- Utilize state-of-the-art FAA approved lighting technology (red strobe-like L-864) on approximately 50% of the WTG to discourage avian attraction during migration while the remainder will be unlit.
- No crossing of streams with heavy equipment.
- Implement Stormwater Pollution Prevention Plan and Erosion and Sediment Control Plan to minimize impacts during construction.
- Stream crossings to be via overhead lines or directional boring.
B.6.4 **Agricultural Resources**

**Impacts**

Impacts on agricultural soils from Project construction would result from clearing, excavation and filling activities. Approximately 17 acres of agricultural land would be impacted.

Construction activities without adherence to the United States Department of Agriculture (USDA) recommended decontamination practices could result in the spread of the golden nematode from infected areas in the Town of Prattsburgh. Ecogen entered into a Compliance Agreement with the USDA regarding movement and possible treatment of construction equipment in golden nematode infected areas.

**Mitigation**

- Ecogen has entered into a Compliance Agreement with the USDA regarding movement and treatment of construction equipment, where necessary, in golden nematode infected areas.

- In cases where the ECS is not co-located with service roads, install the ECS a minimum of 4 feet below ground surface (bgs) within active agricultural lands or 3 feet if co-located with service roads.

- WTG constructed on active agricultural land will be sited as to best avoid disrupting agricultural activities, such as along field edges, when other setbacks allow.

- An Agricultural Restoration Contractor will be utilized to restore agricultural lands temporarily disturbed during construction.

- Implement Stormwater Pollution Prevention Plan and Erosion and Sediment Control Plan to minimize impacts during construction.

- Reuse top soil on site.
**B.6.5 Aesthetic/Visual Impacts**

**Impacts**

The Project has the potential to create contrasting visual effects at locations close to the WTG units. Further away, the impact diminishes but is still evident. In many locations within the Project area, especially along valley or forested roads, the WTG will not be visible. The WTG and associated operations and maintenance building, substation and service roads will have an influence on the viewshed in the area. Other visual impacts include FAA lighting on WTG at night.

**Mitigation**

- WTG will be uniform in design and all buildings associated with the Project will have a neutral, low-reflectivity finish to minimize contrast. However, paint must be an approved color (off-white) required by FAA regulations.
- Landscaping/fencing will be used to partially screen Ecogen buildings and help transition into the surroundings.
- Mandated FAA lighting will be on approximately 50% of the WTG and will be the lowest intensity required for pilot safety.
- The majority of the ECS will be placed underground.
- Service Roads will utilize existing farm or logging roads where possible.

**B.6.6 Historic and Archaeological Resources**

**Impacts**

Construction activities could potentially impact archaeological resources in areas identified as archeologically sensitive.

The Project could create indirect visual impacts on existing structures that are either listed on the National Register of Historic Places (NRHP) or eligible for listing on the NRHP.
Mitigation

- WTG will be uniform in design and all buildings associated with the Project will have a neutral, low-reflectivity finish to minimize contrast. However, WTG paint must by approved color (off-white) required by FAA regulations.
- Landscaping will be used to partially screen Ecogen buildings and help transition into the surroundings.
- Mandated FAA lighting will be on approximately 50% of the WTG and will be the lowest intensity required for pilot safety.
- The majority of the ECS will be placed underground.
- Service Roads will utilize existing farm or logging roads where possible.
- Ecogen will adhere to mitigation as determined by SHPO. A one time payment of $25,000 each for Town of Prattsburgh and Towns of Italy will be made for improvements to historic buildings or site.

B.6.7 Noise Impacts

Impacts

Noise will be associated with the construction of the Project.

A study of operational noise impacts was conducted for the Project using guidelines in the New York State Department of Environmental Conservation (NYSDEC) policy “Assessing and Mitigating Noise Impacts.” The study found that impacts from noise would be within a generally acceptable level. Receptors within close range of a WTG may experience increases in noise levels above the 6 decibel (dB) range but total noise would still be within the range identified by the NYSDEC as “very quiet” or “quiet.” During increasing wind conditions, impacts would be reduced due to increased background noise levels, especially during seasons with leaf cover.

Mitigation

- Ecogen will work with the contractors to minimize the construction noise generated. Best management practices will be implemented such as turning off engines when
not in use, maintaining equipment in good working order and using adequate engine covers and mufflers in order to minimize noise.

- Mandatory setbacks non-participating permanent residences have been developed to mitigate noise. Other setbacks to non-participating, non-permanent residences and property lines have also been established. Refer to Part D of this FGEIS.

**B.6.8 Energy Impacts**

**Impacts**

Impacts to energy would result from the use of petroleum products such as gasoline, diesel fuel, lubricating oils, greases and hydraulic fluids for construction vehicles and equipment and lighting. Energy would be needed for construction of WTG components and associated facilities, ECS components and transportation of these materials to construction sites. The Project is expected to consume less than one percent of the electricity it generates to power WTG and associated facilities.

**Mitigation**

There are no applicable mitigations.

**B.6.9 Temporary and Short Term Impacts**

**Impacts**

The following is a summary of anticipated temporary and short-term impacts:

- Temporary disturbance during the construction of approximately 53 WTG, 3.4 miles of service roads, 4.8 miles of ECS, 1 acre substation, and 10 acre construction staging area/operations and maintenance building.
- Potential for silt-laden runoff during construction.
- Temporary disturbance to wetlands during installation of the ECS.
- Larger mammals such as deer, coyote, fox, raccoon, skunk and opossum tend to be far ranging and opportunistic and can readily survive temporary disturbances such as WTG construction.
• Short-term impacts to agricultural soils may result from disturbance and compaction during construction.

• Temporary visual impacts will result from the use of large tower cranes used during WTG construction.

• The potential impact on archaeological resources will be limited to the areas where temporary construction activities will occur.

• Temporary noise impacts may result from the transportation and operation of construction equipment.

• Temporary increase in demand for energy resources as required for equipment used to construct WTG, operations and maintenance (O&M) building, substation, service roads, ECS, and decommissioning (if necessary).

• Temporary impacts to local roads may occur during construction as a result of movement of heavy equipment.

• Short-term impact to traffic will be limited to localized delays resulting from deliveries of equipment and WTG components.

• The Project will generate temporary employment and income during construction activities.

• Temporary impacts may occur to unconfined, unconsolidated, shallow groundwater resources or natural springs (if encountered) and may include temporary lowering of the water table during tower excavations via groundwater pumping.

• A negative visual impact would occur from premature project decommissioning during construction.

Mitigation

• All temporarily disturbed areas will be re-graded and re-vegetated upon completion of construction, including the majority of the construction staging area.

• No trenching for the ECS will occur in streambeds.

• No ground disturbance will occur within 50 feet of State-protected streams or 100 feet of a state wetland.
• Return ground surface of wetlands to pre-construction conditions as required by the ACOE Nationwide Permit for utility line crossing.

• Reclaim active agricultural fields per New York State Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Wind Power Projects.

• Locate WTGs as close to roads and edges of fields as appropriate given other siting criteria.

• Concentrating major construction periods in daytime hours will mitigate construction-related noise impacts.

• Repairs to local roads due to movement of heavy equipment during construction will be the responsibility of Ecogen.

• Utilize Agricultural Restoration Contractor to restore agricultural land temporarily disturbed during construction.

• In order to mitigate the additional inspection costs that may be required for each town to oversee construction issues related to SEQR compliance, Ecogen will provide a fund of $30,000 to cover these costs. The $30,000 will be divided between the municipalities based on the number of turbines built for each town.

**B.6.10 Health and Safety Impacts**

**Impacts**

Project construction will place workers at risk of accidents and fires. During Project operation, the potential exists for ice shedding from rotating blades, and in an extreme condition collapse. Although through the risk assessment, these risks were found to be minimal. Due to the nature of the concern, mitigation is proposed. Some receptors may be exposed to shadow flicker, which would be limited to the immediate vicinity of the WTG and would not be significant based on other setbacks.

Electromagnetic fields were researched and it was determined that the Project would not result in significant adverse health impacts.
Mitigation

- Site WTG minimum of 489 feet from property line of non-participating property or center line of public roadways.

- Redundant safety systems on the equipment combined with the applicable Federal, State and local codes will be utilized throughout the Project.

- Icing detectors will be installed on the meteorological tower to detect ice build up. Four other redundant ice detection systems will also be used. A significant accumulation of ice buildup that triggers the fail safe shut downs will require the WTG to be temporarily shut down until it can be restarted in a safe manner.

- Ecogen will be required to mark underground ECS with above grade markers every 300 feet. In addition, Ecogen will register the underground ECS locations with the state one-call service, Underground Facilities Protection Organization (UFPO).

- Project specific health and safety standards will be implemented during construction. Construction personnel will be provided with all appropriate personal protection equipment.

B.6.11 Impacts on Local Roads

Impacts

Impacts to local roads during construction would include road surface and shoulder damage, hazardous and non-hazardous substance spills, soil tracking and potential traffic congestion.

Most Project-related traffic would be construction workers commuting to and from work. Traffic congestion is unlikely under most circumstances. Delivery of Project materials, especially WTG components would likely cause short-term, temporary and localized disruptions in traffic flow. Transportation of WTG components and construction materials would place relatively heavy loads on road surfaces.
Mitigation

- Best management practices would be implemented during Project construction to minimize spills and soil tracking.
- If improvements are required, road, culvert and intersection upgrades will be the responsibility of Ecogen.
- Repairs to local roads due to movement of heavy equipment during construction will be the responsibility of Ecogen.
- Provide annual stipend to host community of $3,000 per WTG per year for 20 years for local road maintenance.
- Adhere to Road Assessment requirements and mitigation recommendations.

B.6.12 Blasting and Seismic Issues

Impacts

Some WTG bases will be installed on bedrock, but blasting is not anticipated. Because of the shallow nature of the service roads, no blasting would be required.

Mitigation

- If blasting is required, the Project will adhere to all applicable regulations to blasting including New York State Department of Labor (NYSDOL) explosive handling regulations (12 NYCRR 39) and NYSDEC blasting/mining regulations and as outlined in the project Blasting Plan.

B.6.13 Socio-Economic Impacts

Impacts

The Project will not increase school enrollment above current levels and, therefore, no significant adverse impacts to the Prattsburgh and Naples Central School Districts are anticipated. Beneficial impacts to the school districts will result from increased tax revenue through a PILOT agreement.
Police, fire, ambulance and life support services have adequate personnel and equipment to respond to basic emergencies that may occur during construction or operation of the Project facilities.

The Project will generate employment and income during construction activities and throughout operation. During an approximate six to nine month construction period, the Project will generate approximately 75 to 100 full-time jobs, representing approximately $2 million in wages. It is anticipated that construction employment will be drawn primarily from the Western and Central New York labor markets.

Upon completion of the Project and during full operation, approximately 6 to 8 full-time jobs will be created with approximately $250,000 to $300,000 in new annual wages. These jobs will provide additional employment and boost the local economy. Ecogen will also make approximately $150,000 in annual lease payments to landowners that will create additional local expenditures on goods and services. The Project will not have a significant adverse impact on tourism and tourism-related businesses or commercial businesses.

The PILOT program will increase revenue for the host counties, municipalities, school districts and special funding districts.

Mitigation

- Follow procedures established in a pre-construction meeting with local emergency providers.
- Project and contractor representatives will review any available local emergency preparedness plans(s) prior to construction and operation of the Project.
- No impact to park in Prattsburgh.
- In order to promote local workforce involvement in the project the following will be accomplished:
  - For short term construction jobs, a policy of “first among equals” will be implemented, and
  - For permanent jobs, Ecogen will coordinate the search for potential local job candidates with Chemung Schuyler Steuben Workforce New York.
B.6.14 Property Values

Impacts

The GAR Residential Impacts analysis (Appendix K) concludes that there has been no supportable decline in average market values or number of transactions in the Towns of Italy and Prattsburgh since the Project was announced in 2001. In fact, GAR’s analysis shows significant increases in residential and raw land values over a five and one-half-year period.

Mitigation

There are no applicable mitigations.

B.6.15 Groundwater and Wells

Impacts

Most groundwater resources will be generally located in valley regions, below the hilly areas where the WTG will be located. Since tower foundations will be approximately 6 feet bgs, with potential maximum 14 feet below bgs in select locations, and supply wells on hilltops are drawing water from greater than 60 feet bgs, no impact is anticipated. No impact to supply and recharge of groundwater resources is anticipated during construction of the service roads and ECS due to the shallow depth.

Although seasonal perched water may be encountered during placement of tower foundations, these are not groundwater resources used for drinking purposes. If groundwater resources are encountered during WTG installation, mitigation procedures will include engineering controls such as short-term pumping. Following completion of construction and groundwater pumping, perched water zones will resume normal conditions. No long-term groundwater pumping will be required thereby eliminating potential drawdown of the water table.

Mitigation

There are no applicable mitigations.
B.6.16 Decommissioning

Impacts

The potential impacts resulting from Project abandonment, include aesthetic impacts, erosion and sedimentation impacts and public safety impacts.

Mitigation

- In the unlikely event that the Project is abandoned during construction, wind turbine foundation/pedestals (if in place at time of abandonment) would be removed to 3 feet below grade; construction materials and debris would be removed and the leased parcel would be re-graded and reseeded as required in an approved “Decommissioning and Restoration Plan”.

- In order to mitigate any effects of Project abandonment, the wind farm would be decommissioned and disturbed property restored to original conditions per approved decommissioning and restoration plan.

- A decommissioning bond in the amount of “cost of tear down and restoration minus salvage value” will be established prior to construction in order to decommission and restore the Project, as determined by an independent engineer or salvage contractor. This bond will be held by SCIDA or its successor agency.

B.6.17 Mandated FAA Lighting

Impacts

Since the Project consists of multiple monopole structures over 200 feet in height, lighting per FAA requirements will be integrated and a visual impact may result. Potential impacts related to required lighting include air navigation, wildlife, and aesthetic/visual resources.

Mitigation

- Follow all requirements specified in the FAA’s acknowledgment letter(s), including lighting specifications in accordance with the FAA Advisory Circular AC 70/7460-1.
• Install red strobe-like L-864 lights on selected WTG to minimize the attraction to birds.

B.6.18 Obstruction of FCC Regulated Signals

Impacts

WTG have the potential to interfere with radio frequency signals by obstructing line-of-sight microwave transmitters. Based on microwave path analysis, five WTG sites are located along four microwave paths and have the potential for signal interference.

Mitigation

• Rotor blades will be constructed of fiberglass/carbon material and asynchronous (brushless) generators will be used which will reduce the potential for electromagnetic interference.

• Site WTG to avoid point to point microwave transmission paths.

• If future complaints relative to degraded television reception due to project operation arise, Ecogen will investigate such complaints and address any such problem resulting from such operation. Mitigation actions could include adjusting existing receiving antennae’s, install community step up signal antenna and related equipment, providing cable (if available), satellite reception, or other measures to the affected households who were utilizing a household antenna for their broadcast television reception needs as of the date of the FGEIS.

B.6.19 Land Title

Impacts

WTG will only be constructed on lands with a marketable title. Ecogen will deal with covenants or restrictions on the property accordingly with the landowner and original seller. Certain deed restrictions may be left in place and not impact the Project’s development.

Mitigation

• No mitigation required.
B.6.20 **Solid Waste Management**

**Impacts**

Solid waste composed primarily of general refuse and construction materials will be generated during Project construction. Following construction and during normal operations, there will be minimal to no solid waste generated by the Project.

**Mitigation**

- Refuse will be collected and hauled offsite to a dumpster at the main operations building and then collected by a local solid waste contractor. All vegetative material collected during the initial clearing process will be recycled in the Project area.

- WTGs will be visited on a regular basis and any solid waste created during these visits will be collected and hauled to the operations and maintenance building and then collected by a contractor for transport to a landfill.
PART C COMMENTS AND RESPONSES

C.1 EXECUTIVE SUMMARY AND INTRODUCTION

PROJECT DESCRIPTION

01 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

The DGEIS Executive Summary mentions that the diameter of the rotor will be 70.5-meters or 77-meters and that the 77-meter rotor was used throughout the document. If the 70.5-meter rotor is used, then recalculations will need to be done, resulting in a Supplemental DGEIS.

Response:

All of the calculations were completed using the 77-meter rotor diameter as the worst-case scenario. Therefore, if the Project used a 70.5-meter rotor the effects would be less than the worst-case scenario, rendering a supplemental SEQR review unnecessary. The Project will use 77-meter rotor diameter WTGs, so the analysis preformed to date are adequate.

REGULATORY SETTING

02 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

No applicable siting criteria and thresholds have been identified in the DGEIS.

Response:

Siting criteria and thresholds were established in the Executive Summary Table ES-1. These were identified throughout the text within their relevant sections and compiled in the table. In addition to establishing the siting criteria and thresholds, the table also identified potential impacts and mitigation measures that would need to be enacted in order to reduce any negative impacts to the community.

ALTERNATIVE SUMMARY

03 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

Visual assessment for either more numerous but smaller turbines or fewer but larger turbines was not included in the DGEIS. Using larger but fewer WTGs was not discussed and should be included in the document.
Response:

An impact on the visual landscape has already been established. The worst-case scenario evaluated the visual impacts of 99 WTG. The Project itself will only have 53 WTG, which means that the visual impact will be lessened. Even fewer but larger WTG will still have a visual impact, as they will still be seen.

Using fewer but larger WTG as an alternative was rejected for several reasons:

- The commercial availability of the larger WTG is limited as of the date of the FGEIS. The larger WTG have yet to be sold to projects within the United States.
- As a result of requiring an interconnection study to maintain the Independent System Operator (ISO) class year for operations by the project, the proposed project is limited to the 1.5 MW generators.

TABLE ES-1: SUMMARY OF POTENTIAL IMPACTS, MITIGATION AND SITING CRITERIA

04 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

Several inaccuracies are found within the table:

- Section 3.3:
  - FAA cannot make official Project lighting determination until Project layout is finalized
  - NYSDEC correspondence regarding Indiana bat and timber rattlesnake was not found in the online version of the DGEIS.
- Section 3.4:
  - Include the four conditions found in Appendix C regarding New York State Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Windpower Projects.
- Section 3.9:
  - Resolve contradictory statements regarding water impacts contained in Section 3.9.
  - Include construction moratorium during all trout/trout spawning streams in Section 3.9.
  - Noise impacts should include the suggestions found within the response letter.

Response:

The FAA cannot make official lighting determination until the project layout is complete, however the FAA has proposed commercial wind farm lighting standards as discussed in Part C, heading 3.17.

The correspondence is provided as the last attachment to Appendix A. All appendices were provided in the hard copy available for review. The website was also provided by Ecogen as an additional source for public access and the entire DGEIS is available.
online, including the letter referenced. SCIDA acknowledges that there have been several instances where technical problems were identified on the website and subsequently fixed by Ecogen. It should be noted that the official resource for the DGEIS is the hard copy distributed to the interested and involved agencies as well as the local public repositories (local libraries) and individuals who requested a copy and were given a CD version. Although regulations are pending, there is no requirement at this time to provide a web-based report.

The siting recommendations from Agriculture and Markets in Appendix C will be added into Table ES-1.

The comments in question are not contradictory. No ground disturbance will occur within 50 feet of the top-of-bank of any State-protected streams. By directional boring underneath the stream or placing transmission lines over the stream, as long as there is no ground disturbance within 50 feet of the stream, no permits are necessary. Whichever way is selected to cross streams, no disturbance will occur within 50 feet of any State-protected stream.

There is no construction planned within protected streams. Therefore, there will be no direct impact on these streams during spawning season.

Comments and responses on noise are provided in Part C, heading 3.7.

INTRODUCTION

Internal Document Conflicts

05 Comments:
#011, May 9, 2005 Alice Sokolov
#101, June 17, 2005 Bond, Schoeneck and King

The comment states that future alternatives are not detailed. If the number of turbines exceeds 53, it would cross a threshold and trigger an Article X, which is not mentioned. Transmission lines could also trigger an Article VII, which is also not mentioned.

Construction times are inconsistent within the document. Page 1-8 states that the construction time will span approximately 15 months while in ES-21 the construction time is 6-9 months.

Response:

During the Scoping process, the Lead Agency requested that additional potential WTG sites be identified. While 99 potential sites were mapped, the project will not exceed 53 turbines or 79.5 MW. Public Service Law (PSL) Article X expired in 2003 and therefore has no application to this project.

PSL Article VII has no application to this project as this Article pertains to construction of one mile or more of 125 kV (or greater) transmission line or construction of ten or more miles of transmission line rated between 100kV and 125kV – circumstances that are
not proposed in this project. Transmission lines are not a major component of the Project. The electrical collection system (ECS), which will be over lines rated below 100kV, which connects the WTGs with each other and to the electrical substation, will be placed below grade. Exceptions will be where it crosses streams overhead, which will be between 300 to 1200 total linear feet depending if the number of crossings is between four and eight, respectively. The substation, located off Emerson Road in the Town of Italy, will link the Project to the New York Independent System Operator (NYISO) bulk transmission system (power grid) via an existing 115-kV transmission line. With the exception of the approximately 200-foot connection between the substation and power grid, the Project does not include transmission lines.

GENERAL COMMENTS

06 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

The comments are summarized as stating that:
- Rotor diameter may vary from site to site, which requires a change to supporting visual, noise and communication impact studies.
- All areas where transmission lines will be placed should be identified.
- Maintaining the 15-foot width along the ECS [electrical collection system] is called into question as most other wind projects in New York State have allowed the area to re-vegetate.
- Existing conditions at the 10-acre construction staging area should be described.
- Crane travel along public roads is not discussed. Impacts should be noted and discussed.
- Sections of road that will not have directional undercuts, but will be crossed by open cuts should be identified.
- While the DGEIS mentions that all of the electrical equipment will be housed inside the base of the WTG, does that include the transformer? If not, it should be acknowledged and any impacts described.

Response:

The comments fail to recognize the generic nature of the proposal. Site-specific conditions will be considered under further review. The siting criteria will provide the mitigation for construction related impacts. The applicant intends to use the GE 1.5 MW turbine with a hub height of 262 feet. As indicated in the supplemental noise and visual analysis the noise characteristics and potential visual impacts are not significantly different from those considered in the DGEIS. The characteristics of the proposed construction staging area are similar to other upland areas of the project and site disturbance, restoration and mitigation will follow the same siting criteria as the rest of the project. It is Ecogen’s intention to utilize directional boring in all instances where it is practicable. As noted in the DGEIS, site conditions will determine if directional borings are impracticable and then open cuts will be used. In those circumstances, appropriate safety measures will be employed during the open trenching and the roads will be restored upon completion of the cable installation. The DGEIS discusses construction related impacts including the presence of construction vehicles on the roads; any damage
to local roads as a result of heavy machinery will be repaired by the project sponsor at its sole cost as part of the project.

07 **Comment:**

#106, June 17, 2005 USFWS

It is explained in this section the need and benefits of the proposed project. Certainly, wind generated electricity does not result in fossil emissions (except during the manufacturing of parts, transport, and construction of turbines). The premise for constructing this project is that environmental benefits will be realized in the form of reduced air pollutant emissions, greater energy security, and reduced electricity costs (also described in Section 4.2.5 Alternative Technologies). However, this document has not shown that air emissions will be reduced. We know of no plans by electric utility companies in New York State to close existing fossil fuel generating plant or forgo construction of new generating facility because of wind turbine projects proposed in this region. If this information is available, please inform us.

**Response:**

Neither SCIDA nor Ecogen have represented that construction of the project will result in an immediate reduction in fossil emissions or greenhouse gases. The size of this project is insufficient by itself to result in the retirement of existing conventional power plants. However, there is a steadily increasing need for electricity in both New York State and the region. Construction of this and other wind power projects will help satisfy the growing electrical needs and reduce the need for additional fossil fuel based generating facilities. The environmental benefits associated with proceeding with renewable projects such as the Ecogen Project in New York are addressed in the Public Service Commission’s (PSC’s) Final Generic Impact Statement for the New York Renewable Portfolio Standard (NYRPS) entitled, Case 03-E-0188-Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard.

08 **Comment:**

#106, June 17, 2005 USFWS

Due to the intermittent and seasonal (usually highest wind speeds are in winter) nature of wind in most locations, electricity will not be generated effectively when it is needed the most (summer). Also, relying on an intermittent source of electricity may not provide greater energy security. Finally, the document indicates that wind is a cheap source of electricity but on page 3-100 it is stated that due to the volatility of the energy market, it is not possible to predict electricity prices. While we do believe that there will be an environmental benefit from the project in the form of electricity generation without harmful generation emissions, this benefit needs to be put in proper context.

**Response:**

Comment noted. The DGEIS accurately reflects the relative efficiencies of wind power and the cost factors. As noted, above, in the PSC’s FGEIS and in the DGEIS, wind power is part of a renewable energy portfolio that reduces the state’s reliance upon power generation emitting greenhouse gases and other pollutants and assists in meeting the growing demand for electrical generation, reducing rates and energy security. Further, the
trend in energy prices is up. As explained in a recent report prepared in connection with
the NYRPS proceeding, the construction of renewable energy resources in New York
will have a stabilizing effect on volatile energy prices and will likely result in significant
savings for New York ratepayers. See Case 03-E-0188-Proceeding on Motion of the
Commission Regarding a Retail Renewable Portfolio Standard. Recent events in the
Gulf Coast underscore the benefits of including a variety of sources for New York’s
energy production.
C.2 ENVIRONMENTAL SETTING

LAND USE REGULATIONS AND PLANNING

Compliance With Town Of Italy Local Laws

01 Comments:
#028, May 23, 2005 Vincent Johnson
#057, June 6, 2005 Donald and Barbara Christmas

The comments are summarized as stating that the Town of Italy currently has a moratorium on wind farms and is in the process of creating zoning in addition to the completed Comprehensive Plan.

Since the proposal, the Town of Italy has been in the process of preparing the following local laws:

- Town of Italy Local Law 1 of 2005 - Regulations for Commercial Communications, Transmission, Broadcast and Cellular Communications Towers, Wind Turbines and Energy Creating Devices, and
- Town of Italy Local Law No. 2 of 2005 – To Establish Scenic District Protection Regulations

Response:

Comment acknowledged. The Town of Italy has adopted a moratorium on the construction of wind turbines, but has yet to finalize and adopt a local law governing wind turbines. Ecogen’s project will not be subject to any law adopted by the Town until such time as Ecogen is prepared to go forward with final site selection. At that time it will comply with all applicable requirements of the Town of Italy.

TOWN OF ITALY COMPREHENSIVE PLAN

02 Comment:
#028, May 23, 2005 Vincent Johnson

The comment is summarized by stating that the Town of Italy Comprehensive Plan “reference to exploration of wind power in Italy should not be taken as (and was not intended as) an endorsement of the project”.

Response:

Comment acknowledged. It is understood by this comment that the Town’s use of the term “exploration of wind power” in the Comprehensive Plan was intended to identify wind power as an area of concern and as a land use that should be regulated.
The DGEIS does not state that the Town of Italy endorses the project, rather, the Town of Italy’s Comprehensive Plan is a concise document that unequivocally recommends in Section 5.1 (page 27 of 28, Recreation and Natural Resources Recommendation 6) “…that other natural resources, such as wind energy, be explored [in such a way as to not adversely affect or endanger the soils, water, air, forests, or views]” (emphasis added). It is evident that the proposed project is consistent with this recommendation, and it is noted that the DGEIS thoroughly analyzed and assessed the project’s potential adverse impacts on recreational and natural resources, concluding that those resources (i.e., soils, water, air, forests or views) will not be adversely impacted by the project.

OVERALL HYDROLOGY

Wetlands

03 Comment:  
#101, June 17, 2005  Bond, Schoeneck and King

There was no mention of NYSDEC Freshwater Wetland mapping, National Wetlands Inventory mapping, or any wetlands identified during field investigations. Accordingly, wetlands are not adequately described in this section.

04 Comment:  
#106, June 17, 2005  USFWS

This section of the DEIS describes the environmental setting of the Project area. However, only one paragraph is provided to portray freshwater wetlands found in the 33,000-acre study area. It is not clear from the information provided if a wetland delineation was performed or how it can be determined at this point that wetland impacts will be minor. Likewise, it was not disclosed what functions and values the Project area wetlands provide. This information should be included in the EIS.

Response for Comments 03 and 04:

The NYSDEC Freshwater Wetlands and U.S. Fish and Wildlife Service National Wetlands Inventory maps are included in Section 3.2 in the DGEIS. Based on a conceptual layout of where the 53 WTGs may be located in the primary candidate areas, Ecogen will delineate federal jurisdictional wetlands in the field. The results of the delineation will be incorporated into a refinement of the Project layout so as to avoid and minimize impacts to wetlands to the maximum extent practicable. A preliminary wetland review of potential wetland areas as determined by correlation of field observations with aerial photos that would be subject to U.S. Army Corps of Engineers jurisdiction was completed and the results are presented in Figure 3.2-5. Further discussion of this is provided in Part C, Section C.3.2 of this FGEIS (Response to Comment #02). Based upon the existing NYSDEC Freshwater Wetland maps, the final location of the WTGs will be located outside of the wetlands and adjacent areas.
05  Comment:  
#106, June 17, 2005  USFWS

We found no discussion of the indigenous plant species and vegetation communities found in the project area, although some discussion is found in other sections of the document. Likewise, there is no discussion of aquatic and terrestrial organisms found in the study area. We would expect the environmental setting section of the document to provide sufficient information on area biota and habitat conditions which would allow for a clear understanding of the Project area.

Response:

Ecogen’s approach to writing the DGEIS was to provide a general picture of the environment in Section 2.0, Environmental Setting, and then to describe the environmental resources in detail in Section 3.0, Assessment of Impacts. Using this approach, the environmental resources are described in Section 3.0, and immediately following, there is a discussion of potential impacts to each resource and mitigative measures to reduce or eliminate the potential impacts. A description of Project area biota and habitats is presented in Section 3.3, Wildlife and Habitat Resources.
C.3 ASSESSMENT OF IMPACTS

C.3.1 Land and Land Use

SETBACKS

01 Comments:
#025, May 20, 2005  Thomas C. Johns
#034, May 27, 2005  John Servo
#041, June 7, 2005  Carolyn F. Penner
#043, June 10, 2005  Thomas C. Johns
#045, June 6, 2005  Gail E. Baker
#047, June 7, 2005  Todd and Cynthia Wolfer
#049, June 8, 2005  Michael J. Costello
#055, June 10, 2005  Robert G. McKinney
#056, June 9, 2005  Stephen and Gail Rowan
#060, June 12, 2005  Angela Cannon
#078, June 11, 2005  Advocates for Prattsburgh
#103, June 15, 2005  Richard Marx
#105, June 17, 2005  Rachel Treichler
PH#01, May 23, 2005  John Servo
PH#03, May 23, 2005  Brenda Saint Mary
PH#04, May 23, 2005  Amanda Gorten
PH#10, May 23, 2005  Todd Sharrow
PH#12, May 23, 2005  Alice Sokolow
PH#25, May 23, 2005  Carolyn Tinney
PH#38, May 23, 2005  Kris Allison
PH#41, May 23, 2005  Laura Pierce
PH#45, May 23, 2005  Steven Lewandowski (Village of Naples Trustee)
PH#54, May 23, 2005  Bob Pierce
PH#54, May 23, 2005  Carol (last name not provided)

The comments are summarized by stating that the proposed setbacks are inadequate and the authors disagree with different setbacks for seasonal and permanent residences. Recommended setbacks in the comments include: 3,000 feet, 4,000 feet, 1 mile, 2 miles, 125 times the maximum engineered ice throw and five miles from historic sites including the Village of Naples. An additional comment is that setbacks are not the same as those typical in the industry.

Response:

A minimum fallzone was determined by adding 100 feet to the total height of the WTG in order to determine the minimum distance required from the base of a WTG to a property line of a nonparticipating landowner. This is a conservative buffer because if the WTG should fall, it will shear around the middle of the tower and fall roughly straight down, collapsing in on itself.
In order to mitigate impacts to the future use of parcels may be negatively impacted by the presence of WTG 489-feet from the property line the following setbacks will be implemented:

- For adjacent, non participating properties without a residence, the following setbacks from the base of the WTG will apply:

<table>
<thead>
<tr>
<th>Property Size (acres)</th>
<th>Property Line Setback (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 or less</td>
<td>1,000</td>
</tr>
<tr>
<td>Greater than 2.0 to 4.0</td>
<td>925</td>
</tr>
<tr>
<td>Greater than 4.0 to 6.0</td>
<td>850</td>
</tr>
<tr>
<td>Greater than 6.0 to 8.0</td>
<td>775</td>
</tr>
<tr>
<td>Greater than 8.0 to 10</td>
<td>700</td>
</tr>
<tr>
<td>Greater than 10 to 12</td>
<td>625</td>
</tr>
<tr>
<td>Greater than 12 to 14</td>
<td>550</td>
</tr>
<tr>
<td>Greater than 14</td>
<td>489</td>
</tr>
</tbody>
</table>

Property sizes will be determined based on tax records as if November 22, 2005. The table of properties above. The property sizes will be based on the total acreage of contiguous parcel of common ownership and excludes properties less than 5 acres that contain a communication tower.

An additional setback of 850 feet from the base of the WTG to the structure will be required for a non-permanent residence that was constructed on a frost proof foundation or floating concrete slab as of November 22, 2005.

AWS Truewind has determined that the Project site is not located in a heavy icing environment. By using climatological reports and Air Force data, icing events were determined to last only hours when they occur with most of the ice melting and falling to the ground. Some icing will occur periodically in winter, but it will only have a minor impact to electricity production.

According to the University of Berkeley risk assessment study (Appendix T) and the AWS ice throw study conducted for the DGEIS, there is less than a 1:1,000,000 chance of being hit by a piece of flying ice. If an icing event does occur, there are five fail safe controls that will prevent ice throw from occurring. These controls are described below.

As icing occurs on the blades of the WTG, there is a change in the aerodynamic shape of the blade, which causes a change in the lift to drag ratio, which in turn causes the rotor to slow down. This drop in power output causes the WTG’s sensors to shut down the
turbine, preventing ice throw. Depending on weather conditions, the melting ice will fall straight down before the WTG resumes operations, or the ice that is thrown will fracture in flight resulting in small pieces landing.

The five independent and redundant fail-safes are integrated into the Wind farm system in order to stop the blades and prevent ice throw. These are:

- Blade icing imbalance: when the blades become unbalanced due to ice, the WTG shuts down.
- Loss of power: when power produced by the WTG drops due to the change in aerodynamic characteristics, which causes the power output to drop, the WTGs are shut down.
- Icing on the unheated versus heated anemometers: when the unheated anemometer shows a loss of wind speed compared to the heated anemometer, this indicates ice buildup and the WTG are subsequently shut down.
- Vibration: when the blades become unbalanced and produce vibrations, it is detected and shut down.
- MET Tower ice detection: when the meteorological tower’s ice detector is tripped, the WTG will be shut down until the machines and meteorological tower can be inspected.

With the project area icing conditions limited to glaze icing and inclusion of the five redundant fail safe controls there is no significant risk of ice throw to the general public from the operation of the turbines.

See response to comment 01 in Section C.3.10 for a complete response to comments related to icing.

Setbacks regarding noise based on studies that have been either conducted for this project or referenced due to their relevance. The recommended distance for noise setbacks are the setback to participating residences and the 1,200/1,375-foot setback to “exposed/windy” and “sheltered/quiet” non-participating residences, respectively.

Setbacks for wetlands are only 100 feet for NYS administered wetlands and no setbacks required for federal wetlands, but construction is not allowed on federal wetlands.
Resource | SETBACK *
--- | ---
Property Line (side and rear) | Fallzone – 489 feet
Road centerline (front) | Fallzone – 489 feet
(WTG height + 100’) = 489 feet
Property Line, Property with no residence | Sliding scale of setbacks, see table presented above
A non-permanent residence | A setback of 850 feet from the base of the WTG to the structure that was constructed on a frost proof foundation or floating concrete slab as of November 22, 2005.
Participating Residence | Health & Safety – 489 feet
Non-Participating Residence | Noise:
-Exposed/Windy | 1,200 feet
-SHELTERED/quiet | 1,375 feet
NYS Wetlands | Wetland – 100 feet
Federal Wetlands | Wetland – no setback, but no construction on Federal jurisdictional wetlands

* - Measured from the base of the WTG tower.

All of the above setbacks are consistent with standard industry setbacks used or recommended in New York State.

The noise setbacks do not differentiate between seasonal and non-seasonal uses. Rather, a structure will be considered a permanent residence if the following criteria are met:

1. Structure is connected to public utility for electric service, and
2. Structure is connected to a potable water supply, and
3. Structure is connected to a municipal sewer or has a on-site septic system.
4. Must meet the definition of residence by April 1, 2006. For proposed construction, must also be able to demonstrate issued building permit by January 1, 2006. Residences will be determined by Tax records through 2004 and by Building permits issued through 2005.

**Comment:**
#051, June 7, 2005    NYSDOH

Throughout the Draft Generic Environmental Impact Statement (DGEIS), mention is made to minimum distances from residences of non-participating landowners, with no reference to minimum distances in relation to residences of participating landowners. It is not clear from the DGEIS that the towers would be sited at least 400 feet from "participating residences." If a lesser distance is being proposed in relation to...
"participating residences," that distance would need to be characterized with regard to potential impacts as well.

Response:

See response to Comment 1 above. The 489-foot setback is consistent with minimum requirements needed to reduce risk from ice shedding and tower collapse.

ELECTRICAL COLLECTION SYSTEMS

03 Comments:
#89/109, June 16, 2005 NYSDPS

As there is an estimated 4.8 miles of ESC [sic] lines to be installed, the locations across steep ridges, important wetlands and streams are already known. Thus, even if preliminary, the information about these locations should be provided on a map in the FGEIS. The visual assessment should identify and discuss the visual impacts of the vegetation clearing necessary and the locations where these cleared rights-of-way are visible.

Response:

Maps of the project area including existing topography, state and federal mapped wetlands and streams are provided in the DGEIS. The precise location of the ECS has not been determined. Siting criteria will dictate the location of the ECS so as to minimize adverse environmental impacts to these areas to the extent practicable. Given that final ECS locations have not been determined, a visual assessment of vegetation clearing is premature at this time. Visual Impacts will be reviewed by SHPO once final siting is complete.

04 Comments:
#89/109, June 16, 2005 NYSDPS

The second sentence of Section 3.15.2.1 (p.3-143) [sic] states “Electrical collection systems will be buried cable except for road and stream crossings”. The FGEIS should explain how road crossings be performed. Will these crossings be made using an overhead ECS line, by open-cutting the road, or ditching across the road?

Response:

The method of the ECS crossing a particular road will be made in consultation with the appropriate entity having jurisdiction over the given road (i.e. town, county or state). Crossing options include directional boring, overhead transmission or ditching across a road.
05 Comments:
#89/109, June 16, 2005 NYSDPS

It appears there is a contradiction in Section 3.2.2.1.1 (p.3-11; 2nd & 3rd Sentences). The second sentence states “The only impacts will be minor stream crossings by light trenching equipment during the installation of the Electrical Collection Lines (ECS)” [sic]. Yet the next sentence states “The ECS will cross over streams on utility poles or beneath streams in borings and no trenching will occur across the protected streambeds”. The FGEIS should answer the following question: If the ECS lines are to be overhead or bored under streams, why should the light trenching equipment cross the streams at all?

Response:

The DGEIS will be corrected to state that that there will be no crossings of streams by construction equipment during installation of the ECS.

ELECTRICAL INTERCONNECTION AND SUBSTATION INFORMATION

06 Comments:
#89/109, June 16, 2005 NYSDPS

The FGEIS should provide information on whether the Draft System Reliability Impact Statement (SRIS) contained in the DGEIS was completed and accepted by the NYISO Transmission Planning Advisory Subcommittee and Operating Committee.

Response:

The NYISO Transmission Planning Advisory Subcommittee and Operating Committee approved the Draft System Reliability Impact Statement provided in the DGEIS on April 14, 2004.

07 Comments:
#89/109, June 16, 2005 NYSDPS

The FGEIS should contain a preliminary site plan for the substation and equipment that includes plan and elevation drawings, detail drawings, site grading, access road construction, the design of any stormwater detention system, landscape plantings and screening.

Response:

Detailed design information on structures, grading, access road construction, drainage systems, and landscaping/screening will be released as part of the Final Design Package, which will be released after the FGEIS and Statement of Findings are published. The Final Design Package will include discretionary state permits, ACOE permits and required agency consultation.
COMMUNITY CHARACTER (Section 3.1.2)

08 Comments:
#027, May 18, 2005 Village of Naples
#047, June 7, 2005 Todd and Cynthia Wolfer
#082, June 15, 2005 Town of Italy
#101, June 17, 2005 Bond, Schoeneck and King
PH#14, May 23, 2005 Martha Parker

The comments are summarized by stating that the wind towers are an industrial land use and therefore are not compatible with areas whose primary land uses are residential, agricultural and/or natural, and the DGEIS does not contain a sufficient amount of narrative on mitigation. Additionally, more should be written about the impacts to the community character. Locating the WTG to the Finger Lakes will mean the end of a pristine environment and would upend the community character.

Response:

SCIDA disagrees with commenters’ suggestion that the wind turbines are an industrial use. WTG and associated infrastructure are actually classified by the New York State Office of Real Property Services’ Assessor’s Manual: Property Type Classification and Ownership Codes as “Public Services.” This category includes such public services as water, transportation, and electric and gas. Within the Public Services category, the Property Type Classification Code most applicable to WTG is 877, Electric Power Generation Facility-Other Fuel. To the contrary, “Industrial” classifications per the Assessor’s Manual include such industrial activities as manufacturing and processing and mining and quarrying, clearly dissimilar to the proposed WTG and related facilities. Therefore, it is clear that the WTG and related facilities are not industrial land uses. As a public service, the Project is a necessary component to the electrical generation system serving New York State, even if it is a private venture.

SCIDA also disagrees with commenters’ statement that WTG are not compatible with residential, agricultural and/or natural areas. To the contrary, other public service facilities such as water towers and communications towers exist and are compatible with the rural landscape within and outside the project area. Moreover, the impact to community character is a subjective measurement that would involve some adjustment to the presence of WTG. That is, some believe that WTG that uses wind power passively without generating pollution is ideal for a rural setting while others believe that WTG are incompatible with such setting.

Potential impacts to community character are a function of the effects of other elements of the environment and their cumulative impact on the character of the community. The DGEIS presents extensive discussion of all relevant areas of environmental concern. In particular, the analysis of visual, noise, socioeconomic, property values, historic structures and agricultural resources provide the basis for the determination that community character will not be impacted.
09 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS fails to identify, assess or analyze the “adjustment to the presence of WTG” that would be required by the surrounding community.

Response:

The DGEIS acknowledges under Section 3.1.2.2.3 in the discussion on impacts to community character that adjustment to the presence of WTG would be expected and that there is likely to be a mix of approval and disapproval ratings for the project. Similar to other types of public services present in the community such as water towers and communications towers, the community will adjust and adapt to the WTG and related facilities. Furthermore, the DGEIS provides an extensive discussion and analysis of all the relevant areas of environmental concern, which provide the basis for the conclusion that community character will not be significantly impacted.

10 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS fails to take a “hard look” at significant aspects of the “existing community character” that could be adversely impacted by the proposed project, including, without limitation: 1) the secondary long-term and cumulative impacts on “recreational opportunity” and the attractiveness of the Project area to individuals desiring a seasonal residence, and 2) The secondary, and long term cumulative impacts on the local tourism industry and on business that provide fuel, food, lodging, etc. or seasonal visitors, guests and residents.

Response:

See responses to comments in Part C, Section 3.13, Socioeconomics.

11 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS fails to gather and/or assess any meaningful data that would allow an objective assessment of the proposed wind farm(s) likely impacts on tourism and outdoor activities. For example: a) The DGEIS does not attempt to systematically identify the percentage of current commercial activities that is generated by tourism and the presence of seasonal residents b) The DGEIS does not survey local business reliant on tourism and seasonal outdoor activities to see whether they anticipate a significant loss of income if the wind turbines are constructed. c) The DGEIS does not systematically gather data and attempt to objectively assess the impact of existing wind farms on tourism and seasonal outdoor activities on communities similar to Prattsburgh/ Italy area.

Response:

See responses to comments in Part C, Section 3.13, Socio-economics.
12  Comment:
#079, June 15, 2005  Arthur Giacalone

The DGEIS fails to adequately assess the extent to which the proposed project will set an important precedent for future projects, and, thereby, impact existing community character and future patterns of population concentration, distribution and growth.

Response:

As stated in responses to comments above and in responses to comments in Section 3.13, Socioeconomics and 3.14, Property Values, the DGEIS provides an extensive discussion and analysis of all the relevant areas of environmental concern which provide the basis for the conclusion that community character and socioeconomic conditions will not be impacted. Furthermore, as stated in Section 8.0 of the DGEIS, the project is unlikely to cause significant new growth in the Towns of Prattsburgh or Italy or their surrounding areas. Power generated from the project will be conveyed directly to New York Independent System Operator (NYISO) bulk transmission system and not to individual customers; all service roads will be private roads servicing the project; and the project does not include new public infrastructure improvements. Therefore, community character and population concentration, distribution and growth will not be adversely impacted by the project.

It should be noted that in the short term, the project will create approximately 75 to 100 construction jobs, with minor increases in employment in local establishments during the construction phase of the project. In the long term, approximately 6 to 8 permanent jobs will be created to operate and maintain the project. Moreover, there is a possibility of some increased tourist activity as discussed in responses to comments in Section 3.13, Socioeconomics. However, overall, these short term and long term impacts will be positive and will not have an adverse impact on community character or population concentration, distribution or growth.

13  Comment:
#082, June 15, 2005  Town of Italy

The concerns of local residents have been so summarily disregarded that this section consists of only six sentences in Sec. 3.1.3.2, “Determination and Mitigation Measures to Reduce Impacts from Changes in Land Use and Community Character.” These six sentences address none of their many concerns.

Response:

This comment is without merit. As discussed is numerous responses to comments and Sections 3.1, Land Use, 3.13, Agricultural Resources, 3.4, Socioeconomics and 3.14, Property Values, the DGEIS provides an extensive discussion and analysis of all the relevant areas of environmental concern which provide the basis for the conclusion that changes in land use and community character will not be impacted.

The fact remains that approximately only 72 acres of land will be impacted by the project. This is a fraction of a percent of the 24,000-acre study area. In addition, the
project may also help keep agricultural land uses in operation by supplementing the income of farmers whose land on which the WTG and related facilities will be located. The presence of WTG may also discourage the subdivision of participating agricultural land to seasonal or permanent residential use, which therefore helps maintain rural character of the project area. Finally, countywide agricultural enhancement policies and plans will encourage and promote agriculture-based land uses within and outside the project area.

LAND USE IN ITALY

14 Comments:
#082, June 15, 2005 Town of Italy
#101, June 17, 2005 Bond, Schoeneck, and King

Those in Italy are concerned that the DGEIS states that “agriculture is the predominant land use” in Italy, while in fact only 24 of the >310 parcels within Italy are active agricultural parcels, with the remaining parcels zoned residential. This misconception may have resulted in inaccurate conclusions regarding the potential impacts the Project may have within the Town of Italy. Additional comments were directed towards the impacts to recreational areas and the basis for determining the level of impact.

Response:

The DGEIS will be corrected to state that the predominant land use in the project area is residential, with active agricultural and vacant parcels also comprising a large portion of the project area. It should be noted that vacant parcels within the project area include rural and residential vacant land, which at one time may have been in active agricultural use.

The assessment of impacts on land use provided in the DGEIS provides an extensive discussion and analysis of all the relevant areas of environmental concern which provide the basis for the conclusion that changes in land use will not be impacted. The fact remains that the project area is sparsely populated and is comprised of a combination of agricultural, low-density residential, and rural vacant land uses, and the impact analysis provided throughout the DGEIS is based on this characterization. Therefore, the DGEIS assessment that the project will not significantly change the land uses within or outside the project area is accurate.

It should be further noted that the study area has been reduced from 33,000 acres to 24,000 acres and the parcels eliminated from the study area are located entirely within the Town of Italy. Therefore, the FGEIS will reflect the reduction in parcels although the assessment and determination of impacts on land use will not change.

The potential impacts to recreational areas are addressed in Section 3.13, Socioeconomics of the DGEIS and corresponding responses to comments. The DGEIS and corresponding responses to comments conclude that recreational areas, based on a thorough analysis, will not be adversely impacted by the project.
15  
**Comment:**

#079, June 15, 2005    Arthur Giacalone

The DGEIS fails to take a “hard look at how the proposed project might create a material conflict with the Town of Italy’s long-range plans and goals, as expressed in its recent Comprehensive Plan. The statements at page 2-3 of the DGEIS, under the heading “Long Range Plans” are conclusory at best. Additionally, it is wholly inadequate to merely state that various goals and plans that “indirectly relate” to wind farms are not “mutually exclusive with WTG”. The FGEIS should contain information regarding “how the Town’s plans and recommendations affect the Wind Project(s) and how the Wind Project(s) affect(s) the Towns Plans.”

**Response:**

This comment is without merit. The Town of Italy’s Comprehensive Plan is a concise document that unequivocally recommends in Section 5.1 (page 27 of 28, Recreation and Natural Resources Recommendation 6) “… that other natural resources, such as wind energy, be explored [in such a way as to not adversely affect or endanger the soils, water, air, forests, or views]” (emphasis added). It is evident that the proposed project is consistent with this recommendation, and it is noted that the DGEIS thoroughly analyzed and assessed the project’s potential adverse impacts on recreational and natural resources, concluding that those resources (i.e., soils, water, air, forests or views) will not be adversely impacted by the project.

16  
**Comment:**

#082, June 15, 2005    Town of Italy

The DGEIS claims that future land use patterns in the county are anticipated to remain largely unchanged for the foreseeable future (DGEIS 3.1.1.2; p. 3-3). However, the ramifications of altering 54% of the Town’s current land use classification (from residential to industrial) could be staggering. Allocating 54% of Italy for industrial development is unacceptable! The town requests the scale of the project be revised to include only the area of the Town with specified tower locations. The town of Italy further insists that the new project map be resubmitted for review and comment in a new DGEIS before a final GEIS is drafted. According to Sec. 3.3.2.2.5 the Northwest section of the project area will not be developed, due to proximity to Hi-Tor Wildlife Management Area (WMA).

**Response:**

The Town’s contention that 54% of the Town’s land use classification will be altered by the project is inaccurate. As stated in numerous responses to comments, approximately only 72 acres within the 24,000-acre study area will be impacted by the project. This includes land in both the Towns of Italy and Prattsburgh. Land use classifications will remain largely unchanged, in that current land uses surrounding the WTG will continue and classifications will remain the same. Only the land on which the WTG and related facilities will be located will be reclassified as public services per the State’s land classification system which represents an insignificant amount of land area out of the total study area or as a percentage of the Towns of Italy or Prattsburgh.
As stated in response to comment 08 above, the New York State Office of Real Property Services classifies wind power facilities as public services, not industrial facilities.

As stated in response to comment 13 above, the study area has been reduced from 33,000 acres to 24,000 acres and the parcels eliminated from the study area are located entirely within the Town of Italy.

17 **Comment:**
#082, June 15, 2005 Town of Italy

The statement “There is likely to be a mix of approval and disapproval ratings for the Project,” (DGEIS Sec. 3.1.2.2.3) is misleading and irresponsible. Both Ecogen and the SCIDA are painfully aware of the enormous amount of public opposition this project has generated. To use the word “likely” is to disregard this fact. The town of Italy has been divided to its core, and lawsuits have been threatened against the Town by private citizens and the Developer. SCIDA must be mindful of its responsibility to the host communities. Italy, as any small town, can ill-afford expensive court battles due to irresponsible project sitting. SCIDA must remain conscious of the fact that its actions, or lack thereof, will have on going consequences for the Town of Italy.

**Response:**

This comment simply fails to acknowledge that some residents within the study area approve of the proposed project. SCIDA stands by the statement made in the DGEIS (Section 3.1.2.2.3) that there is likely to be a mix of approval and disapproval ratings for the project.

Remainder of the comment related to SCIDA’s responsibilities is acknowledged.

**LAND USE QUANTIFICATION (Section 3.1.1.2)**

18 **Comments:**
#078, June 11, 2005 Advocates for Prattsburgh
#082, June 15, 2005 Town of Italy

The comment is summarized by stating that the DGEIS does not accurately quantify the agricultural, residential and recreational land uses in terms of area and numbers of units.

**Response:**

Land uses within the study area were classified using the New York State Office of Real Property Services’ Assessor’s Manual and summarized in the DGEIS in Tables 3.1-1 and 3.1-2 of Section 3.1, Land Use. Land use classifications identified within the study area include active agricultural, residential, seasonal residential and vacant, among others. Furthermore, Figure 3.1-2 graphically depicts land uses within the study area based on these State classifications. Therefore, SCIDA believes that use of the State’s land classification data is sound and provides an adequate basis to quantify land uses within the study area.
19  
**Comment:**  
#079, June 15, 2005  
Arthur Giacalone

In light of the scope of the Ecogen project and the requirements of GML § 854(4), SCIDA is prohibited from providing financial assistance to the proposed project, which is located partially outside Steuben County, “without prior consent” of both Town of Italy and Town of Yates. From the wording of the statute, this prohibition and the need to obtain prior consent apply to the provision of financial assistance for any part of the Ecogen project, whether or not the portion of the project located in Yates County is receiving any direct financial aid from SCIDA.

**Response:**

The portion of the Project located in the Town of Italy, County of Yates, falls under the jurisdiction of the Yates County Industrial Development Agency (YCIDA). Accordingly, the Yates County IDA is an involved agency under SEQR and will enter into its own PILOT agreement with the project sponsor at their discretion.

20  
**Comment:**  
#079, June 15, 2005  
Arthur Giacalone

The DGEIS’ conclusion that there are “no applicable siting criteria or thresholds” applicable to adverse impacts to land, land use and community character is based on the false and conclusory premise that the “proposed project is generally compatible with existing land use patterns within the Towns of Prattsburgh and Italy”.

**Response:**

As stated in the DGEIS and above in response to comment 13, only approximately 72 acres of land out of 24,000-acre study area will be impacted by the project, a fraction of a percent of the study area. In addition, as discussed in numerous responses to comments and Sections 3.1, Land Use, 3.13, Agricultural Resources, 3.4, Socioeconomics and 3.14, Property Values, the DGEIS provides an extensive discussion and analysis of all the relevant areas of environmental concern which provide the basis for the conclusion that changes in land use and community character will not be impacted.

The project may also help keep agricultural land uses in operation by supplementing the income of farmers whose land on which the WTG and related facilities will be located. Furthermore, the presence of WTG may also discourage the subdivision of participating agricultural land to seasonal or permanent residential use, which therefore helps maintain rural character of the project area. Finally, countywide agricultural enhancement policies and plans will encourage and promote agriculture-based land uses within and outside the project area.

21  
**Comment:**  
#079, June 15, 2005  
Arthur Giacalone

It has been estimated that 1,000 acres or more of the land within the Project area are burdened with covenants that state that no part of the land shall be used for purposes
other than residential, recreational and agricultural uses, and that no commercial use shall be permitted. It is wholly inadequate and inappropriate for Ecogen and/or SCIDA to treat this issue as one that can be ignored at this time. Ecogen has the ability to identify which of the parcels they have under control by lease or acquisition have these deed restrictions, and to eliminate such parcels as potential sites for wind turbines, service roads and/or placement of the project’s in-ground or aboveground electrical collection system. As the DGEIS states, “review of deed restrictions is an initial selection criteria.” (DGEIS at ES-26). The “initial selection” process should be taking place now as part of the SEQR review, identifying which of the proposed sites should be eliminated from consideration due to environmental impacts or other criteria, including the existence of deed restrictions.

Response:

Ecogen will be required to abide by the regulations of any deed restriction that is in place prior to constructing the project.

HOUSING CONCERNS

22 Comment:
#034, May 27, 2005 John Servo

The comment can be summarized by stating that the property status should not be determined by a Certificate of Occupancy.

Response:

When determining the appropriate setbacks that would apply to non-participating residences, the setbacks from the base of the WTG are established as follows (see also Part C.3.10):

- The minimum setback from the WTG to a permanent non-participating residence within a windy (i.e. high ambient noise) location will be 1,200.
- The minimum setback from a WTG to a permanent non-participating residence in a sheltered (i.e. low ambient background noise) location will be 1,375 feet.
- The windy and sheltered areas are defined by the locations presented in Figure 3.7-1 in the DGEIS.
- A structure will be considered a permanent residence if the following three criteria are met:
  - Structure is connected to public utility for electric service, and
  - Structure is connected to a potable water supply, and
  - Structure is connected to a municipal sewer or has a on-site septic system.
- Must meet the definition of residence by April 1, 2006. For proposed construction, must also be able to demonstrate issued building permit by January 1, 2006. Residences will be determined by Tax records through 2004 and by Building permits issued through 2005.
The comment is summarized by stating that the DGEIS should include an impact assessment based on 4.8 miles of ECS. Specific comments are:

- Is the layout of the project based on 53 or 99 WTGs?
- Clarification on the location of the 53 WTG and the impacts on each land use type should be quantified.
- Qualify statement that “additionally, no adverse impacts are anticipated for recreational areas.”
- Parcels that Ecogen owns, leases, or has an option on should be displayed on Figure 3.1.
- The number and location of other proposed wind projects within Yates and Steuben Counties should be discussed.

Response:

The DGEIS thoroughly and fully assesses the potential adverse impacts, which may result from the proposed project and provides a generic assessment of the entire project as proposed, including the ECS. However, the specific location of the ECS has not been determined and cannot be until the project layout is complete. Siting criteria established in the DGEIS will be utilized to minimize any significant adverse impacts to terrestrial resources within the project area.

The proposed project includes 53 WTG (maximum of 79.5 MW) that meet all of the objectives and siting criteria for the project.

The project will not have any adverse impacts to recreational areas. Given that only 72 acres of land (approximate) will be disturbed by the project, any recreational areas located within the project area will be avoided.

The project sponsor’s ownership, lease, or options on land associated with the proposed project is an evolving process and is subject to continued negotiations. There may also be confidentiality issues in displaying properties that have an agreement with the project sponsor.

The purpose of the DGEIS is to consider the impacts of more than just the Ecogen project and specifically addresses a maximum number of turbines that specifically includes Global Wind’s plans.
CHANGE IN LAND USE

24 Comment:
#082, June 15, 2005 Town of Italy

The comment is summarized by stating that the proposed project will alter 54% of the Town.

Response:

The Town’s contention that 54% of the Town’s land use classification will be altered by the project is inaccurate. As stated in numerous responses to comments, approximately only 72 acres within the 24,000-acre study area will be impacted by the project. This includes land in both the Towns of Italy and Prattsburgh. Land use classifications will remain largely unchanged, in that current land uses surrounding the WTG will continue and classifications will remain the same. Only the land on which the WTG and related facilities will be located will be reclassified as public services per the State’s land classification system which represents an insignificant amount of land area out of the total study area or as a percentage of the Towns of Italy or Prattsburgh.

As stated in response to comment 08 above, the New York State Office of Real Property Services classifies wind power facilities as public services, not industrial facilities.

As stated in response to comment 13 above, the study area has been reduced from 33,000 acres to 24,000 acres and the parcels eliminated from the study area are located entirely within the Town of Italy.

25 Comment:
#051, June 7, 2005 NYSDOH

The section on future land use primarily describes current land uses in the vicinity of the proposed project. From the information presented in the DGEIS, it is not clear that the applicant has considered any proposed changes in land use in its assessment of potential project impacts. For example, if plans for a residential subdivision or commercial development in the vicinity of the project have been publicly announced, the Steuben County Industrial Development Agency may want the applicant to examine the possible impacts of the proposed project on the future subdivision or development.

Response:

See responses to comments above and below.

The DGEIS, Section 3.1.2.2.2, includes a discussion on the project’s potential to impact future land use patterns. SCIDA believes that, based on the analysis and assessment provided in the DGEIS, the project will not have a significant adverse impact on future land use patterns. In addition, there are no residential subdivision or significant commercial developments planned in the project area and therefore it is not expected that
the project will have any impact on other projects under construction or undergoing regulatory review.

26 **Comment:**
#079, June 15, 2005  Arthur Giacalone

The DGEIS and Final Written Scope disregard the extent to which the adverse impacts relating to noise, aesthetics, safety, etc., that are likely to result from the construction and operation of the 53 wind turbine sites, individually and cumulatively, will extend well beyond the 0.8 acre footprint, and will affect land use patterns, future residential development, recreational opportunity, and existing community character over large areas of the two involved townships.

**Response:**

Potential adverse impacts related to noise, aesthetics, safety, etc. have been thoroughly analyzed and assessed in the DGEIS. The assessment of impacts included in the DGEIS provides an extensive discussion and analysis of all the relevant areas of environmental concern which provide the basis for the conclusion that changes in land use, future residential development, recreational opportunity, and existing community character will not be significantly impacted.

27 **Comment:**
#079, June 15, 2005  Arthur Giacalone

The final Written Scope’s instruction that the DGEIS “assess the potential impact on existing land use patterns, including impacts on future residential development and recreational opportunity” was not compiled in any meaningful fashion. Rather then take a “hard look” at these topics, the DGEIS contains conclusory statements, but no true analysis.

**Response:**

This comment is without merit. Section 3.1.2.2.2 provides a detailed discussion of the potential impacts of the project on future land use patterns. It concludes that, based on such factors as existing Census of Agriculture data, county planning efforts, the project’s positive impact on farmers’ income, and the project’s potential to discourage subdivision of land for seasonal or permanent residential use, the project will not have significant adverse impacts on future land use patterns.

28 **Comment:**
#079, June 15, 2005  Arthur Giacalone

On page 77[sic], the DGEIS makes the conclusory statement “The proposed project is generally compatible with existing lands use patterns within the Town of Prattsburgh,” but does not explain in any meaningful fashion how this conclusion is arrived at. Furthermore, the DGEIS assertion that “The project will occur entirely on private land in areas dominated by active and inactive agricultural land,” does not fully or adequately describe large portions of the Project area, as depicted in Figure 3.1-2, (Land Use
classification) and is believed by the information contained in the “Study Area Land and Land Use” section of the DGEIS and data contained in Table 3.1-1(Study area Town of Prattsburgh) and Table 3-1.2 (Study area Town of Italy), residential land comprises “the largest number of parcels within the study area,” 604 out of 1,478 or 40.86% of the parcels. Another 16.17% of the parcels within the study area, or 239 parcels, are “seasonal residences”. Therefore, a full 57.03% of the parcels within the Project area are developed with either permanent or seasonal residences. Given these facts, the DGEIS assertions that the proposed project is generally compatible with existing land use patterns, and the Project will occur in areas dominated by active and inactive agriculture land, are unsupported and unsupportable.

Response:

As stated in response to comment 08 above, SCIDA believes that the project is generally compatible with residential, agricultural and/or natural areas within the project area. Other public service facilities such as water towers and communications towers exist and are compatible with the rural landscape within and outside the project area. While the commenter is correct in stating that permanent or seasonal residences make up a significant portion of the study area, the commenter fails to point out that vacant and/or inactive agricultural land makes up a significant portion of the study area as well. It should be noted that compatibility of the WTG is a subjective measurement that would involve some adjustment to the presence of WTG. That is, some believe that WTG that utilizes wind power passively without generating pollution is ideal for a rural setting while others believe that WTG are incompatible with such setting.

CLUSTERING OF WIND TURBINES

29 Comments:

#042, June 7, 2005 John Passantino
#056, June 9, 2005 Stephen and Gail Rowan
#060, June 12, 2005 Angela Cannon

The comments are summarized as stating that the windmills should be clustered into an industrial park instead of scattered, creating a visual and noisy blight. No wind mill should be erected within 3,000 feet of the property line of any non-participating landowner.

Response:

WTGs are sited where significant wind resources and transmission capacity is available. This includes ridgelines within the project area where significant wind resources are available to make the project practical and viable. Therefore, siting WTG in an industrial park or areas with a limited footprint or flat topography would make the project impractical. The WTG will be clustered to the extent possible based on other setbacks and regulatory constraints.

Regarding minimum setbacks, see responses to comments 02 and 22 and the DGEIS.
When asked, Mr. Hagner (President of Ecogen) has repeatedly informed the Town that Ecogen has a second phase of towers already planned for Italy. Mr. Hagner has described Phase II as being an additional fifty towers. These will spin in conjunction with the initial fifty-three towers currently proposed. Phase II is never mentioned in the current DGEIS, though it is disclosed in the initial SEQR application. Also not addressed are the twenty-five to fifty additional towers planned for the same project area by a rival wind developer, Global Winds. That is a potential for one hundred and fifty-three-389-foot industrial wind towers split between the towns of Italy and Prattsburgh. This lack of disclosure disregards direct DEC recommendations that Ecogen address the cumulative effects of all turbine development in the proposed project area. The blatant omission of these well-documented facts is negligent.

Response:

The project sponsor has proposed a wind power project that includes 53 wind turbines to be constructed in a single phase. The detailed project description provided in the DGEIS is the project on which the DGEIS is based and which is under review by SCIDA, as Lead Agency. Any significant changes to the project, including an increase in the number of WTG, would require an independent SEQR review and possibly a supplemental DGEIS. At this time, the project sponsor does not have plans for an expanded project.

The DGEIS includes a cumulative impact assessment in Section 7.0, which analyzes the potential combined impacts of both the Ecogen and Global Winds projects. The DGEIS concludes that no significant cumulative impacts will result from the two projects.

ZONING

The comments can be summarized by stating that the lack of zoning does not offer protection in the form of appropriate setbacks where residences are proximate to the Prattsburgh-Italy townline, and the project should be located within an industrial zone.

Response:

The setbacks established and defined in the response to comments 1 and 2 provide appropriate setbacks to mitigate the identified impacts.

According to the Assessor’s Manual from the New York State Office of Real Property Services, wind turbine generators should be coded as within the 800-series, with the most likely classification being 877: Electric Power Generation Facility-Other Fuel. The 800-
series are classified as public service, not industrial as mistakenly believed. Public service uses provide services to the general public, which the Project will do by supplying power to the bulk electricity grid serving all New Yorkers.

Comment:
#068, June 14, 2005    Town of Italy Zoning Commission

Since it became aware of the impact of the proposed project, the Town of Italy has enacted and maintained a moratorium on this project so it could develop a comprehensive plan and proper zoning regulations to deal with this development. The intent of the Town is to protect and preserve its aesthetic and visual resources by stringent regulation of the proposed project and other commercial communication, broadcast, cellular communication and wind turbine tower construction. Our Comprehensive Plan is now complete and was reviewed in the present DGEIS. A draft Zoning Law is now being completed, including a Scenic Protection Overlay District, which will prohibit the proposed wind turbine towers within our identified, documented and protected scenic districts and viewsheds. (see below). Since the town is clearly developing these regulations, and does not want this project in Italy, it is inappropriate to continue your sponsorship of it (as written) within our Township. By the above-cited statutes, you are required to consider the zoning and land use regulations we are proposing and developing to deal with this project. Copies of the Draft Working Documents covering Wind Turbine regulation (Local Law # 1, dated March 9, 2005), and the establishment of Scenic District Protection(s) (Local Law # 2, dated March 11, 2005) planned for the Town are included here. Bear in mind that these are working drafts and subject to change over time. In the final format, these regulations will be embedded in a single, comprehensive zoning law, which will be completed and recorded prior to the end of the moratorium. In addition to our several comments on the DGEIS included here, in any instance where the project specification in the DGEIS differs from the regulations set forth in the local (Draft – working copy) zoning regulations being developed by the Town, you should consider the draft laws as “public comment” upon the appropriate, related DGEIS section(s). In this consideration, it is inappropriate to not consider, and give significant weight to, the zoning and land use regulation intent of the Town as it develops these regulations, prior to their completion.

The present DGEIS should also recognize, and give great significance to the fact that the project is not wanted here by those who have expressed an opinion on this topic. In three separate public hearings on this topic (Wind Turbine Moratorium and extensions), the overwhelming majority of those who spoke were against this project in Italy. As a responsible publicly funded development agency, SCIDA must consider the local support (or lack of same) as a key factor in the sponsorship of any IDA project. This lack of local support argues strongly against the project in Italy.

Response:

As stated in responses to comments 15 above and below, the proposed project is consistent with the Town of Italy’s Comprehensive Plan, which recommends exploration of wind energy in a way as to not adversely affect or endanger the soils, water, air, forests or views. While SCIDA acknowledges the Town’s efforts to enact a Zoning Law that seeks to prohibit wind power projects generally and the proposed project specifically
within certain portions of the Town, by its own admission, the Town acknowledges that such proposed law/regulations have not been enacted, are working drafts and are subject to change. Therefore, SCIDA cannot be expected to comment or consider such law/regulations in its deliberations pursuant to SEQR.

Finally, SCIDA’s role as Lead Agency under SEQR is to determine whether the proposed project may have one or more significant adverse impacts on the environment.

COMPREHENSIVE PLAN

33 Comment:
#082, June 15, 2005   Town of Italy

The DGEIS states that in reference to the Town of Italy Comprehensive Plan (2004): “The Plan subsequently makes the following recommendation: that other natural resources such as wind energy be explored in Italy.” (DGEIS Se. 2.2.3, p. 2-3. This quote represents a fragment of the original statement, and is taken out of context in this regard. The Comprehensive Plan states, “It further recommends that other natural resources, such as wind energy, be explored with the same considerations [including but not limited to the present rural character, natural resources, and quality of life in the Town of Italy].” To suggest that the Town of Italy’s Comprehensive Plan ‘recommends’ the development of a 33,000-acre industrial park within is intentionally misleading. The full statement clearly recommends protecting the rural character of the Town and its current scenic view sheds. The town insists that the statement be included in its entirety, or removed altogether.

Response:

See response to comment 32 above.

The FGEIS will clarify the original statement made in the Town of Italy’s Comprehensive Plan regarding wind energy and include the recommendation in its entirety. However, the fact remains that the Comprehensive Plan unequivocally recommends in Section 5.1 (page 27 of 28, Recreation and Natural Resources Recommendation 6) “… that other natural resources, such as wind energy, be explored [in such a way as to not adversely affect or endanger the soils, water, air, forests, or views]” (emphasis added). It is evident that the proposed project is consistent with this recommendation and it is noted that the DGEIS thoroughly analyzed and assessed the project’s potential adverse impacts on recreational and natural resources, concluding that those resources (i.e., soils, water, air, forests or views) will not be adversely impacted by the project.
C.3.2 Water Resources

EROSION

01 Comments:

#045, June 6, 2005 Gail E. Baker
#053, June 17, 2005 Frederick Bays
#057, June 6, 2005 Donald and Barbara Christmas
#078, June 11, 2005 Advocates for Prattsburgh
#085, June 13, 2005 William Curley
#097, June 14, 2005 Dave and Brenda Cooley
#101, June 17, 2005 Bond, Schoeneck and King

The comments are summarized by stating that the authors are concerned about the effects of erosion (from road expansion, stream crossings, tree cutting) on area ponds (including spring fed), lakes and streams. A specific time frame for soil stabilization should be indicated.

Response:

Soil disturbance during Project construction will exceed one acre and therefore a SPDES General Permit for Construction Activity (GP-02-01) will be required for the Project. This permit requires preparation and implementation of a Stormwater Pollution Prevention Plan which includes implementation of erosion and sediment control measures, and time frames for soil stabilization. The permit will include conditions tailored specifically to the Project for the purpose of preventing silt-laden runoff from entering waters of the United States. The Project layout will be designed to minimize and avoid impacts to wetlands and surface waters to the maximum extent practicable.

WETLANDS

02 Comments:

#078, June 11, 2005 Advocates for Prattsburgh
#101, June 17, 2005 Bond, Schoeneck and King

The comment is a copy of an email from Rudyard Edick regarding the U.S. Army Corps of Engineers (USACOE) identifying wetlands at a later date and that it must be delineated in the EIS. Also see page 100 and 168 of their submittal. Page 100 asks how a stream is disturbed and Page 168 indicates that no major wetlands are stated in the DGEIS. Other comments include exact location for the second NYS wetland identified in the DGEIS, the inappropriateness of using a ‘desktop’ review for determining federal and state wetlands locations, and the difficulty in avoiding jurisdictional wetlands. Existing roads requiring improvement or overhead transmission lines should also be included in the wetlands assessment. Without the wetland delineation the statement on page 3-12 is unsubstantiated.
Response:

New York State Freshwater Wetland maps and United States Fish and Wildlife Service (USFWS) National Wetland Inventory maps were evaluated to identify major wetland areas in the Project area. This initial approach was deemed appropriate for this level of review following two preliminary meetings with the USACOE at their branch office in Auburn, NY. The site-specific assessment, to be conducted by a professional wetland scientist, will delineate any Federal or New York State jurisdictional wetlands that will be impacted/disturbed as a result of the construction activity. The Project will be adjusted where practicable to avoid and minimize impacts to wetlands. The adjusted Project layout will be submitted to the SCIDA for further review after final siting but prior to approval or execution of the PILOT agreement. If the Project doesn’t meet the prescribed thresholds, then a supplemental SEQR review will be required.

The final Project layout will be designed to avoid impacts to these wetlands and associated 100-ft. adjacent areas.

03 Comment:

#101, June 17, 2005 Bond, Schoeneck and King

The comments are summarized as stating that impacts from Project activities other than ECS installation will not be covered under NWP 12. If wetland impacts occur but do not exceed the one-tenth acre notification threshold, the project developer is still required to adhere to the NWP General Conditions if other criteria are met (e.g., over 500 feet of wetlands or streams are affected). For notifications under NWP 12, there must be included a delineation of wetlands, information regarding threatened and endangered species if the project adversely impacts such species, and information about historic properties that may be affected. The Buffalo District of the USACOE has adopted its own Regional Conditions to the NWPs. These Regional Conditions, which are not discussed in the DGEIS, contain special provisions related to aerial and underground crossings of navigable waters. In addition, the NYSDEC has issued a blanket Water Quality Certification for NWP 12, but this explicitly does not apply where the impact is greater than one-tenth acre or where the impact is greater than 200 linear feet. Also, the Buffalo District requires a compensatory mitigation plan to be submitted where the impact is greater than one-tenth acre, but no mitigation plan is proposed in the DGEIS.

Response:

Since the onset of the Project, Ecogen has been in contact with the Buffalo District of the USACOE Auburn, NY office regarding permitting requirements for the Project. Ecogen will comply with all permitting requirements and conditions as set forth by the USACOE and the permitting regulations. The USACOE will determine which Nationwide Permits (NWPs) are applicable to the Project. Section 3.2.3.2 of the DGEIS indicates that a compensatory mitigation plan will be prepared if the thresholds of Nationwide Permit No. 12 – Utility Line Crossings are exceeded.

Ecogen anticipates that the NYSDEC will issue a Section 401 water quality certification for the Project.
04 Comment:
#108, June 17, 2005 NYSDEC

Construction and service roads and the ECS should be laid out to avoid wetland areas and, for State regulated wetlands, the 100-ft. adjacent area.

Response:

Comment noted. Section 3.2.3.2 of the DGEIS demonstrates that the final site layout will be designed to avoid and minimize impacts to wetlands, and for State regulated wetlands, the associated 100-ft. adjacent area as well.

05 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

How will the integrity of the existing culverts be maintained where the ECS associated with farm roads crosses streams?

Response:

Existing culverts will either be temporarily removed with subsequent storm water flow handled per NYSDEC Section 401 certification conditions and SPDES permit requirements, or the ECS will be directionally bored beneath culverted roads. A number of existing drainage culverts in non-Protected streams may need to be replaced.

06 Comment:
#108, June 17, 2005 NYSDEC

Potential wetland impacts from the ECS installation include fragmentation of forested adjacent upland, change in vegetative cover types and utility ROW clearing and maintenance. Staff strongly recommends using existing or proposed public and service roads for ECS right-of-way to avoid wetland impacts.

Response:

The ECS will be installed adjacent to existing farm roads and proposed service roads wherever possible. Some impacts to forest and successional plant communities are unavoidable. Installation of the ECS will not result in fragmentation of forested areas. A limited amount of 16-ft. right-of-way (ROW) will be cleared through forest where necessary, but this will not significantly affect the forest canopy. Significant clearing of trees and brush would still be required as a result of utilizing the edge of the public right-of-way for the installation of the electrical collection system. Further, following existing right-of-ways would possibly result in a longer electrical collection system network as apposed to taking a more direct path.
Currently it is unknown to what extent Project features will impact freshwater wetlands or other surface waters such as intermittent and perennial streams. Although the DGEIS indicates that impacts are believed to be minor, the locations of turbines are still being determined and, therefore, surface water impacts have not been calculated. While we understand the locations of the turbines will be on upland areas, construction work for the 3.4 miles of access roads and 4.8 miles of buried cable have the potential for substantial wetland involvement. Several aspects of the Project are still in the planning phase such as road and intersection upgrades and culvert replacements. Appendix I indicates that at least 14 roadway areas must be improved and 11 culverts replaced to accommodate the transport of construction equipment. While some work may involve temporary impacts, this information should be factored into the assessment of the Project. We suggest that adequate wetland delineation be conducted and confirmed by staff of the U.S. Army Corps of Engineers along with an assessment of site wetland functions. This information should be compared to the current Project design to provide at least a preliminary estimate of wetland impacts, both temporary and permanent. This information should be provided in the EIS.

**Response:**

As indicated in the comment, the final site layout had not been determined prior to submission of the DGEIS. A preliminary wetland assessment was conducted based on an evaluation of State and NWI wetland maps, recent aerial photography and ground truthing. Based in part on the preliminary wetland assessment, a proposed site layout will be designed. During the final siting process, a wetland delineation will be undertaken and the report submitted to the USACOE and the NYSDEC. The results and USACOE verification of the delineation will be used to avoid and minimize impacts to wetlands. Following approval of the FGEIS and Statement of Findings by the SCIDA, Ecogen will prepare a final design package that will be reviewed by the SCIDA for adherence to the thresholds criteria, including the obtaining of all applicable discretionary permits and approvals (i.e. USACOE and NYSDEC). If these conditions are not met, the SCIDA will not approve or execute the PILOT agreements until a supplemental SEQR review is completed.

**STREAM CROSSINGS**

**Comment:**

#101, June 17, 2005  Bond, Schoeneck and King

The comments are summarized as stating that USACOE/NYSDEC permits are needed for stream crossings. A section discussing the impacts to all surface waters (streams and wetlands) should be included. Further comments include:

1. Contradictions between pages 3-11 and 3-39 on whether NYSDEC/USACOE permits are required for crossing streams.
2. Will the Project’s service roads impact streams?
3. Section 3.2 does not discuss impacts to wetlands within the Project area and the permitting implications of those impacts.

4. Section 3.2 also does not discuss the potential need for a NYSDEC Article 24 wetland permit for impacts to the 100-ft. adjacent area.

5. There are contradictions between pages 3-12/13 and 3-11 stating whether there will be impacts to streams.

6. On pages 3-13 and 3-14, a statement is made that USACOE regulatory staff have indicated that they will not exercise jurisdiction over plow trenching in wetlands for installation of the ECS.

Response:

The reference to permitting for stream crossings addresses the potential, in rare cases, where a stream crossing may be the best means of crossing the watercourse. The other permitting requirements, under an applicable USACOE Nationwide Permit or an Article 24 permit, have been addressed and will be met. There are no specific permitting implications regarding the adjacent area of New York State wetlands. Nevertheless, it is the intent of Ecogen to avoid any impacts to the adjacent area. If an impact is unavoidable, the values and functions of the specific adjacent area impacted will be analyzed and evaluated through the permitting process.

1. There is no contradiction between pages 3-11 and 3-39 in the DGEIS regarding NYSDEC/USACOE stream crossing permits. Both pages indicate that NYSDEC and USACOE permits will be needed for stream crossings. The USACOE requires permits for stream crossings where fill will be placed below the Ordinary High Water Mark (OHWM). This would not include crossings by overhead lines and directional borings. For State-protected streams, the NYSDEC would require an Article 15 permit for any disturbance to the streambed including 50 ft. adjacent to the banks, and a Section 401 Water Quality Certification.

2. It is not anticipated that Project service roads will cross any streams. Construction of service roads in the vicinity of streams will incorporate approved and appropriate erosion and sedimentation control techniques to prevent silt laden storm water from entering streams. These will be described in the Erosion and Sediment Control Plan in the Stormwater Pollution Prevention Plan prepared as part of a SPDES General Permit for Construction Activities at the Project site.

3. Section 3.2.2.1.3 in the DGEIS discusses potential Project wetland impacts and permitting requirements.

4. As indicated in Section 3.2.3.2 of the DGEIS, no impacts to State-regulated wetlands and the 100-ft. adjacent area are anticipated. If impacts to the adjacent area are unavoidable, an Article 24 permit will be obtained from the NYSDEC and all conditions will be complied with.

5. As indicated in Sections 3.2.2.1 and 3.2.3.1, no trenching will occur in streams or within 50 ft. of a State-protected stream. Section 3.2.2.1 indicated that streambeds and banks would only be temporarily disturbed during light equipment crossings. Ecogen has since decided that no construction equipment will cross the streams. Access to the “other side” of the creek for ECS installation will be gained from the “other side”.

6. At the time of the DGEIS preparation, Ecogen anticipated using plow trenching for installation of the ECS. The USACOE indicated that plow trenching in wetlands
would be non-jurisdictional. Because of potential damage to electrical cable from stony soils, it was determined that plow trenching would not be appropriate for installation of the ECS. Several methods will now be used, depending on the terrain. Excavated trenches will be approximately two feet wide and four feet deep. Double trenching will be conducted through agricultural lands. Using this method, topsoil is segregated from the subsoil during trenching and later replaced over the subsoil when backfilling the trench. Directional boring is being considered when passing through wetlands and agricultural land. Overhead lines may be used where the terrain is steep, where bedrock is close to the surface and over streams. Directional boring may also be used for stream crossings. Whatever technique is employed, the Project layout will be designed to minimize and avoid impacts to wetlands per regulatory requirements.

SURFACE WATERS

09 Comment:
#108, June 17, 2005 NYSDEC

The FGEIS should clearly describe how the proposed construction layout, which focuses on the utilization of existing road corridors, would minimize the potential thermal impacts to coldwater fishery resources. Consideration should also be given to preserving a maximal riparian buffer corridor along all streams.

Response:

Comment noted. Thermal impacts to a coldwater fishery can occur when there is a direct discharge of heated water to a stream, or where a substantial amount of tree and shrub cover is removed, exposing significant stretches of a stream to the sun’s warming rays. During Project construction and operation, no heated water will be generated and there will be no discharges of heated water to any water body. Stream crossings for ECS installation will be via overhead lines perpendicular to the streambed or by using directional boring methods. The amount of tree and shrub cover impacted by these crossings will be very low and insignificant.

10 Comment:
#108, June 17, 2005 NYSDEC

All these measures should be clearly reflected in performance standards that will be applied to the siting of the turbines and layout of the project.

Response:

Comment noted. The siting of WTG and the Project layout will be based on the wind resource, land availability, terrain and minimizing and avoiding adverse impacts to the environment to the maximum extent practicable.
C.3.3 Wildlife And Habitat Resources

LIGHTING

01 Comment:
#009, May 2, 2005 Kestrel Haven Avian Migration Observatory

Page ES10 and supporting pages: Red Lights

The author is concerned about WTG lighting and potential detrimental effects on migrating birds. The author mentions that flashing and steady red lights are the most dangerous to migratory birds under appropriate weather conditions and that current research shows either white or red strobe lights to be the most effective mitigation. The author refers to the FAA 2004 memorandum supporting the use of white strobe lights on towers above 200 feet AGL. Most recent research has demonstrated that red strobes are also effective and acceptable to the FAA. The author questions why Ecogen is equivocating on lighting.

Response:

On page 3-57 of the DGEIS, paragraph 3 indicates that red strobe-like L-864 lights will be used for nighttime tower lighting, and that lighting will be placed on only a limited number of WTG in each grouping. The minimum spacing between light fixtures will be a half-mile around perimeter only. The flash cycle will be 20 to 40 flashes per minute. The flash duration will be 100 to 2,000 milliseconds. All lights for the entire project will flash simultaneously. The decision to use this lighting was based on state-of-the-art research data on minimizing impacts to wildlife. Prior to Project construction, if new information emerges that recommends different lighting, Ecogen will consult with the NYSDEC and the USFWS and accommodate their recommendations subject to FAA approval.

METEOROLOGICAL TOWER

02 Comments:
#009, May 2, 2005 Kestrel Haven Avian Migration Observatory
#106, June 17, 2005 USFWS

Page 1-4: Meteorological Tower

The DGEIS and much research recognize the superiority of un-guyed monopoles for collision mitigation. The USFWS also states the lattice structure may encourage bird perching or nesting. The meteorological tower proposed by Ecogen is a 262-ft. lattice structure. The commenters recommend this be changed to a monopole structure.

Response:

The single proposed meteorological tower will be located approximately 700 ft. away from any WTG. A monopole structure as requested by the USFWS would possibly
interfere with the accurate collection of wind data. Further, the lattice structure of the proposed tower does not provide significant nesting or perching positions compared to the many trees and branches that would be relatively close to many of the WTG.

03 Comments:
#009, May 2, 2005      Kestrel Haven Avian Migration Observatory
#044, June 7, 2005     Bruce D. Taylor
#053, June 17, 2005    Frederick Bays
#104, June 17, 2005    June Summers

The comments include the following:

1. Ecogen has refused to conduct spring migratory bird studies.
2. The only State-listed endangered species to use the area, the short-eared owl, was not fully addressed in the DGEIS. Sites adjacent to the proposed wind farm are the winter home to one of the largest populations of short-eared owls in the Finger Lakes Region.
3. Ecogen found the mean fall nocturnal passage rate of fall migratory birds at the Prattsburgh/Italy site to be 200 targets/km/h. Other sites listed as having high fall migration rates included Chautauqua, NY at 238 targets/km/h, the highest among the sites listed. Why then did they rate the Prattsburgh/Italy site as moderate?
4. A reasonable mitigation requirement for this or any Project known to kill birds and bats would be a mandatory donation per individual killed to an organization dedicated to habitat preservation and maintenance such as The Nature Conservancy. A penalty of $100.00 per individual killed is not unreasonable.

Response:

1. Ecogen has completed spring 2005 acoustic and radar studies for the Project. The results of the studies are included in section 3.3.1.3.4 of the revised DGEIS in Appendix Q of the FGEIS.
2. Table 3.3-1 in the DGEIS indicates that short-eared owls are possible migrants and winter residents in the Project area, and that they were not listed in the 2000-2004 Breeding Bird Atlas as breeding in the Project area. According to the National Audubon Society website (www.audubon.org), short-eared owls are now rare breeders in the northeast U.S. Short-eared owls in the eastern U.S. tend to form over-wintering groups where meadow vole populations are high, typically in fallow fields. The consulting engineer could find no information indicating sites adjacent to the proposed wind farm are the winter home to one of the largest populations of short-eared owls in the Finger Lakes Region. Over-wintering short-eared owls are widespread across the eastern U.S., tending to be nomadic and concentrating in areas of high vole populations.
3. On page 12 of the fall 2005 ABR, Inc. radar study report, ABR stated, “This study area appeared to have moderate rates of migration during fall, compared to other locations in New York where we have conducted studies using similar equipment and methods”. ABR determined that the mean fall nocturnal passage rate of migrating birds was 200 targets/km/hr, compared with 122 targets/km/hr at Harrisburg, NY (190 km northeast of Project area); 168 targets/km/hr at Wethersfield, NY (80 km
northwest); 225 targets/km/hr at Carthage, NY (200 km northeast); and 235 targets/km/hr at Chautauqua, NY (190 km southwest).

4. It is important to note that there is no correlation between the number of birds or bats counted at a site by radar or otherwise and a determination of the risk posed to those populations. The only way to assess the actual risk is a post-construction monitoring plan that has been recommended by NYSDEC and will be implemented by Ecogen. In a September 26, 2005 conference call between the Project sponsor and the NYSDEC, the NYSDEC requested a post-construction plan as mitigation to monitor any potential avian or bat impacts.

04 Comments:
#092a, June 16, 2005   Mark Deutschlander
PH#52, May 23, 2005   Maggie Sliwinski

BBBO’s Board of Directors was surprised and shocked to see our organization’s data used in Ecogen’s EIS. We were not informed or consulted about the use of our data and, furthermore, we were not sent a copy of the draft EIS to review. We found out about the use of our data and our organization’s name in this EIS only second hand. In 2004 we were approached by Ecogen to conduct a migratory bird survey in the Prattsburgh/Italy area. The board refused to take part in the survey largely on the grounds of improper methodology, which seems to be prevalent in many of the studies conducted as part of this EIS. It was requested that we provide an expert to survey migratory birds for only 8-10 total days during the migratory season. Migration monitoring requires intensive daily surveys due to the variable and stochastic migration within any given area. Migratory birds depend on weather patterns and prevailing winds for migratory flights. Daily and yearly variation in weather can cause large variations in the timing of migration affecting when birds will be present in any given area. Even during a “normal” year at Braddock Bay, we find large daily variation in the numbers of migrants in our study area. Days with few numbers of birds can be interspersed with days with extremely high numbers of birds. So surveying randomly during migration could easily lead to large misestimates of numbers of birds utilizing a given area during migration. On these grounds, we refused to take part in Ecogen’s specified survey on the proposed area.

Response:

In 2004, the lead consulting engineer for Ecogen contacted David Bonter and Elizabeth Brooks regarding the Project. Robert McKinney was contacted in 2004 but he reported that he was unavailable at that time. The consulting engineer spoke to him in July of 2005 concerning his bird-banding operation in the Project area. He provided the consulting engineer with excellent historical bird banding data for the Prattsburgh area as well as personal birding observations over the years.

Braddock Bay Bird Observatory (BBBO) provides bird banding data on their website and as such, this data is within the public domain. The consulting engineer also incorporated public information into the DGEIS from Kestrel Haven Avian Migration Observatory, North American Breeding Bird Survey and National Audubon Christmas Bird Count websites. The consulting engineer was unaware that BBBO was seeking permission to use the subject information and the name of their organization. Additionally, USFWS has recommended the inclusion of available data from BBBO as part of the DGEIS.
The consulting engineer agrees that surveying birds randomly in the Project area during migration could easily lead to misrepresenting the number of birds utilizing a given area during migration, and the consulting engineer appreciates BBBO for corroborating this fact. After much consultation and consideration, the consulting engineer determined that the best way to obtain information on bird use in the Project area was through conducting spring and fall radar and acoustic monitoring surveys; conducting bird surveys and breeding bird surveys in the prime candidate areas for WTG; and using publicly available information from sources proximate to the study area such as bird banding operations, North American Breeding Bird Surveys and National Audubon Christmas Bird Counts. The Corning, NY Christmas Bird Count records were cited because this count location is closest to the Project area at approximately 25 miles and includes areas with similar climate, topography and land use.

Regarding the comment: “The board refused to take part in the survey largely on the grounds of improper methodology, which seems to be prevalent in many of the studies conducted as part of this EIS”, the radar and acoustic nocturnal migration studies and the bat mist-netting and vocalization study were conducted by the top experts in their respective fields. These surveys were designed in consultation with the NYSDEC.

**Comment:**

#108, June 17, 2005  
NYSDEC

If the results of the spring 2005 acoustic and radar avian migration studies are found to be consistent with the results of the of the spring 2004 acoustic study and do not raise any significant new issues, the results should be included in the FGEIS.

**Response:**

The results of the spring 2005 acoustic and radar monitoring studies are consistent with the spring 2004 studies. Both the spring 2004 and spring 2005 acoustic studies conducted by Old Bird, Inc. (Bill Evans) indicated that spring flights of nocturnal bird migrants across the Project area and west-central western New York are largely broad front in nature and comparable in overall migration density. Next Generation Weather Data (NEXRAD) corresponded well with the spring data sets for both years. The acoustic monitoring data also corresponded well with the radar study that was conducted concurrently at the Project site by ABR.

The spring 2005 radar study found that the mean spring nocturnal passage rate was moderate at 170 targets per kilometer per hour. This rate is comparable to that at other locations studied by ABR in New York State. The mean flight altitude was 319 meters or 1,050 feet, approximately 650 feet higher than the proposed WTG height.

**Comment:**

#108, June 17, 2005  
NYSDEC

However, if significant issues are raised by the Spring 2005 studies, Ecogen is aware that additional study will be warranted and the appropriate issues may need to be fully explored through a supplemental GEIS.
Response:

NYSDEC, in a letter dated October 27, 2005, indicated that after reviewing the acoustic avian and radar studies conducted in spring 2005, no significant avian issues were raised. NYSDEC staff found the spring 2005 results to be consistent with the spring 2004 acoustical study. NYSDEC staff has not found issues with respect to avian studies that would warrant the preparation of a supplemental GEIS.

07 Comment:
#106, June, 17, 2005 USFWS

Data from Christmas bird counts was only available for Corning, located about 25 miles south of the Project site. The text incorrectly assumes that because of the proximity of Corning to the Project area, that habitat and wintering bird species will be similar. However, the text does not provide a description of the habitat where the Christmas bird counts were conducted or a comparison of habitat conditions in the two areas. Without this information, it would be conjecture to assume that the species found in the two areas would be similar. Corning is located within the Chemung River Valley, whereas the Project site is located in the Finger Lakes Highlands portion of the Appalachian Plateau.

Response:

The Corning, NY Christmas Bird Count records were cited because this count location is closest to the Project area at approximately 25 miles and includes areas with similar climate, topography and land use. No Christmas Bird Count information was available for the Project area. Being only 25 miles apart, the majority of the same species of birds will be found in both the Corning and Project areas during the winter.

08 Comment:
#106, June, 17, 2005 USFWS

On page 3-15, the text indicates that species such as waterfowl, gulls, and bald eagle observed in Corning CBC’s would not be expected to occur in the Project area. However, on the previous page, the text indicates that NYSDEC has confirmed that significant over-wintering waterfowl concentration occurs adjacent to the Project site. While information from sources such as CBC may be informative, it is secondary to actual data collected at the Project site. In our December 29, 2004 letter to Ecogen, we recommended that surveys be conducted during all seasons to determine avian use of the Project site. Also, in our May 6, 2004 letter to the IDA on the Draft Public Scoping Document, we stated, “Winter field surveys may be applicable to this site due to the seasonal use of the area by species such as short-eared owl (Asio flammeus), a State-listed endangered species.” We again recommend that additional data be collected which documents avian use during all seasons of the year.
Response:

Waterfowl, gulls and bald eagle over-winter where there is open water. When the open water freezes over, as typically occurs on Hemlock Lake, Seneca Lake, Keuka Lake and Canandaigua Lake, these birds move to other open water areas. There are no areas of open water in the Project area in the wintertime that would support these species or attract these species. There is certainly no great density of bald eagle at any of these locations in the winter. It is possible that a foraging or migrating bald eagle would pass over the Project area, but eagles are daytime flyers and WTG would be prominent and easily avoided by these birds.

We recognized in the DGEIS, Table 3.3-1, that short-eared owls are possible migrants and winter residents in the Project area, and that the NYSDEC commented that there were historical reports of short-eared owl, northern harrier and sedge wren in the Project area. Sedge wren is a seasonal migrant and does not over-winter in the Project area. Short-eared owls are diurnal but typically hunt in the late afternoon and early evening, flying relatively low to the ground as they hunt. Short-eared owls are nomadic and tend to roost in groups in areas where prey is abundant. The State-threatened northern harrier may also over-winter in the Project area, typically occupying the same habitat as short-eared owl. This species also hunts low over the ground, but during daylight hours. Ecogen acknowledges that these two species may be present in the Project area during the winter months, especially in areas where meadow vole populations are high. However the potential presence of these species is highly variable from year to year, based on resident food availability. The presence of these species in one year does not indicate that the species will be there in any subsequent years. The value of conducting a winter bird study was considered to be inconclusive.

The NYSDEC reviewed the studies conducted in the project area and had no concerns regarding this issue.

09 Comment:
#106, June 17, 2005 USFWS

We note that the acoustic studies indicated a migration channeling affect within Segar Gully and around the eastern end of the Project site. With this information in mind, the applicant has not made any changes to the Project design. We understand that the Project location is based upon the wind resource. However, it appears that other locations may be available to micro-site a number of turbines (especially if the total number of turbines is reduced). While we believe more data collection is required to confirm the migration channeling situation, it should be incumbent upon the applicant to modify the Project design to remove turbines from this area if it is known that a higher number of migrants is using the area. We find that the applicant’s claims that measures have been or will be taken to mitigate potential impacts to birds and bats to be unfounded and not proven in this document.

Response:

The final 2005 acoustic study report prepared by Bill Evans is included in Appendix Q in the FGEIS. In the report, Bill Evans discusses migration channeling in the Segar Valley
area observed during the fall 2004 study. He indicated that the channeling events were small events, only half an order of magnitude greater than other stations, and that the channeling was only observed on two nights. On page 76 of his report, he notes that the size of the channeling events was relatively low compared to other acoustic studies. He added that on a theoretical basis, greater channeling and concentration would occur where many of the valleys meet in the vicinity of Naples, New York, and that the High Tor Wildlife Management Area potentially steers a significant portion of migrants southwest of the Ecogen Project area, especially during low cloud ceiling nights. On page 94 of the report, he suggests that: “while there are a few areas within the Ecogen Project site that will see regular channeling dynamics, this resultant channeling will be relatively small and confined to a small portion of the Project area. The proposed location of most of the turbines for the Ecogen Project are on hilltops that would not be in the path of the minor channeling that was documented. In general, the channeling dynamics in the region are favorable for the Ecogen Project site because they would tend to steer the low altitude migratory flow around the site. The most significant channeling in proximity to the Project site is thought to be that formed by the confluence of several valleys near Naples and would flow just west of the Ecogen Project area.” On page 92 he notes that Lake Ontario has a huge effect on the density of migration passing over the Project site, and that “the region is effectively in a migration shadow caused by Lake Ontario. The data collected in this study suggest that general (broad-front) avian fall migration traffic is likely to increase substantially as one proceeds east and south of the Project area. It also suggests that general (broad-front) fall migration traffic may decline as one proceeds west to southwest of the Project area”. He goes on to say “there is no doubt that Lake Ontario plays a major factor in limiting migration density over the Ecogen Project site and multiple years of monitoring are not needed to document this”.

The Lead Agency does not agree with the comment of the USFWS that “the applicant’s claims that measures have been or will be taken to mitigate potential impacts to birds and bats (are) unfounded and not proven in this document”. In his 2005 acoustic report, Bill Evans concluded “the channeling dynamics in the region are favorable for the Ecogen Project site because they would tend to steer the low altitude migratory flow around the site”. Ecogen was willing to alter WTG locations but this was not warranted by any data collected during the radar and acoustic studies. The design of WTG for the Project is intended to minimize attraction to birds and bats, and WTG lighting will be FAA approved and designed in accordance with recommended industry standards for minimizing attraction to night flying birds. Post-construction studies will be designed with input from the NYSDEC and the USFWS in an effort to determine if any WTG are causing significant bird or bat mortality and under what conditions. The results of these studies will add significantly to a scientific understanding of bird and bat interactions with wind farms and aid in the siting of future wind farms.

10 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

1. The comments are summarized as stating that the acoustic monitoring results on page 3-27 imply that migrating birds follow certain physiographic features on the land, which conflicts with page 3-33.
2. There is also conflict whether migration is broad or channeled on pages 3-28/29 and the ABR radar study/page 3-44.
3. The document also indicates that only a fall radar survey was undertaken when NYSDEC calls for both a spring and a fall survey.

4. Table 3.3-2a needs to be explained better, especially determining if it is statistically significant or not.

Response:

1. Page 3-27 of the DGEIS refers to acoustic monitoring evidence of spring migration channeling along a mountain ridgeline in West Virginia and Maryland, and in Wisconsin. On page 3-33 of the DGEIS, reference is made to daytime migrating birds such as raptors, herons, shorebirds and water fowl sometimes being guided by geographic landform cues such as mountain ridges, lakes and rivers. Obstructions such as large water bodies like Lake Ontario may result in migrant concentrations and channeling.

2. The acoustic study indicated that broad front migration is evident in the Project area. The fall 2004 acoustic study found evidence of “minor” migration channeling along Segar Gully but added that the proposed Ecogen WTG locations would not be in the path of the migration channeling. The report indicated that Lake Ontario is a major factor in limiting migration density over the Project area. The ABR radar study identified passage rates and flight altitudes over a single radar station, and as a result, the study was not able to determine if migration channeling was occurring.

3. Both radar and acoustic surveys were conducted concurrently during the spring of 2005.

4. Table 3.3-2 lists the results of comparative radar studies conducted by ABR in the eastern U.S. The listed passage rates are comparable. Statistical analysis would not be useful as the studies were done during different time frames (dates) in different years with different numbers of study days. The mean passage rate of 200 at the Ecogen site is close to the mean of the 5 New York sites (194).

Comment:

#108, June 17, 2005 NYSDEC

The FGEIS should clearly indicate whether actual statistical correlations exist between the NEXRAD data and acoustic data, or whether they only appear to be similar. If a statistical correlation does exist, tabular or graphic statistical data should be provided.

Response:

NEXRAD data was used to compare, illustrate and corroborate rather than to statistically correlate data sets.

Comment:

#108 June 17, 2005 NYSDEC

It is the opinion of the DEC staff that the variability in passage rate is likely due to a large variety of physical and biological factors. Staff are concerned that attempts to attribute this variability solely to the distance the birds travel is misleading. Numerous migrating bird species travel long distances from South America and there are many that only migrate from the southern portion of the U.S. This section of the DGEIS should be
broadened to indicate other important sources likely to cause variation in passage rate and species composition at a given point during the spring and fall migrations.

Response:

The Lead Agency agrees that bird and bat migration is a dynamic and complex phenomenon. Although an important factor, it was not intended to suggest that distance traveled is the primary variable in determining passage rate. Other equally important factors include weather dynamics, time of year, food availability, species behavior and topography.

13 Comment:

#106, June, 17, 2005 USFWS

Radar monitoring of nocturnal migrants was completed by ABR, at the Project site in the fall of 2004 from mid-August until the end of September. A radar study was not conducted in the spring of 2004, but data were collected in the spring of 2005. The data and report of this effort are not yet available.

In reviewing the fall 2004 data, it appears that the study may have missed a large, but undetermined, portion of the migration. Because the study was completed at the end of September, birds migrating in October were not included. Banding data from BBBO and KHMO indicate that large numbers of birds were observed at those stations during October, with days of heavy activity occurring throughout the month. Likewise, NEXRAD data indicates moderate to heavy bio-target activity in early to mid-October. Therefore, a potentially substantial portion of the migration period was missed during the radar sampling effort.

We note that the text in the DEIS, on page 3-35, is misleading and incorrect in that it states surveillance radar can detect targets such as flocks of waterfowl. As is indicated by ABR, Inc., in their report, the mobile radar unit in this mode can detect small birds to a distance of only approximately 0.93 mile (1.5 kilometers).

Response:

The spring 2005 ABR radar study report is included in Appendix Q and summarized in section 3.3.1.3.4 of the revised DGEIS.

The fall 2004 radar study was completed at the end of September. The period that was surveyed includes the peak of migration and provides a representative indicator of migration density and passage rate. Such methodology is in concurrence with accepted industry sampling practices. Further, there is no scientific rationale for undertaking a comprehensive census of every bio-target passing over the site. All fall radar studies to date have surveyed this time period. We acknowledge that bird migration continues into November, but the peak migration was surveyed during the study.

ABR sampled small targets out to 1.5 km. for this study although larger targets can be detected farther out.
Radar data were collected for approximately 6.5 hours per night during a 45-day period in the fall of 2004. Because birds will migrate throughout the night, a portion of the migrants was most likely missed by the radar sampling. Based on acoustic data collected at the same Project area, a significant number of migrants were heard after midnight on some nights. For example, call data on September 9-10, the peak night of the fall migration, were heaviest between 1:00 a.m. and 5:00 a.m. Therefore, a portion of the migration peak was missed by radar sampling.

Response:

In the spring 2005 radar report, ABR compared all migration characteristics between all night sampling versus 6.5 hour sampling. All migration characteristics were very similar suggesting that the additional time sampled does not significantly change the assessment of the number of birds passing over the Project area.

BIRD BANDING STUDIES

The following points should be included in the Bird-Banding Studies section of the FGEIS:

Braddock Bay, home of the Braddock Bay Bird Observatory (BBBO), is known for its large raptor flights during migration, and to a lesser degree, the movement of other birds as they skirt around Lake Ontario in their northern migration.

The prevailing winds typically move migrating birds, especially daytime migrants, from west to east as they avoid moving over the large water body.

The number of night migrants stopping over at these raptor observation points is not typically high, especially during fall migration.

Response:

The points mentioned have been added to Section 3.3.1.3.2. in the revised DGEIS and in Appendix Q of this FGEIS.

The FGEIS should include justification for the statement that the actual numbers of individuals migrating over the Project area would be expected to be much less than the BBBO or Kestrel Haven Avian Migration Observatory (KHMO) stations. Based on
DEC’s understanding of this area, the KHMO does not appear to be a major stopover or concentration area for migrating passerines.

Response:

The north-south trending linear topography of Seneca and Cayuga Lakes and the ridge between where KHMO is located suggests that migrating birds might tend to channel through this ridge area and be more concentrated. The Lead Agency acknowledges that the NYSDEC doesn’t believe KHMO to be a major stopover or concentration area. Similarly, the Lead Agency does not believe the Project area to be a significant stopover or concentration area for spring or fall migrants as evidenced by the studies for this project.

17 Comment:
#106, June, 17, 2005 USFWS

Sources of existing avian information are described in Section 3.3.1.1.1 including bird banding data, Breeding Bird Atlas data, and Christmas Bird Count (CBC) records. Table 3.3-1 provides a list of New York State Endangered and Threatened Species and Species of Special Concern and the occurrence of each species in the Project area. It is not clear if the Breeding Bird Atlas was the sole source of information for this table. The source(s) of information should be provided.

Response:

The sources of information for Table 3.3-1 are the sources listed in Section 3.3.1.1 of the DGEIS. These sources include the Kestrel Haven Avian Migration Observatory banding station in Burdett, NY; the Braddock’s Bay Bird Observatory banding station on the shore of Lake Ontario, north of Rochester, NY; the New York State Breeding Bird Atlas 2000; National Audubon Society Christmas Bird Count records for the Corning, NY area; the consulting engineer’s field surveys conducted in the primary candidate areas for WTG during the summers of 2004 and 2005; the one-day raptor migration study conducted by the consulting engineer in May 2004; and birders familiar with birds in the Project area.

IMPACTS TO BIRDS, BATS AND ENDANGERED ANIMALS

18 Comments:
#101, June 17, 2005 Bond, Schoeneck and King
#103, June 15, 2005 Richard Marx
PH#25, May 23, 2005 Carolyn Tinney
PH#27, May 23, 2005 Edward Maruggi

The authors comment that there is no mention of the proximity to the High-Tor Wildlife Management Area and that specific turbine distances should be indicated.

Studies citing the low incidence of protected species should be included in the relevant section. The only Indiana bat correspondence in Appendix A was for the unrelated Flat
Rock Wind Power Project in Lewis County, NY and was issued by the U.S. Army Corps of Engineers, not the U.S. Fish and Wildlife Service.

The habitats for species of special concern such as the northern harrier, osprey, red-shouldered hawk, horned lark and grasshopper sparrow have been identified in the region around the Project area. A pre- and post-construction breeding bird survey and a post-construction fatality monitoring study are requested. The bat study on page 3-52 should acknowledge that it did not concentrate on the fall bat migration season, when more turbine-related fatalities occur. How does the Project bat data that suggests there isn’t a high number of bats migrating through the Project area compare with data from other wind power sites, particularly those that have high numbers of fatalities?

Comments were also received concerning the potential number of WTG-related bird fatalities.

Response:

Topographic and other maps were included as exhibits in the DGEIS. The distance between the High Tor Wildlife Management Area (WMA) and the closest WTG are indicated on the exhibits, using the referenced scale. It should be noted that the closest WTG is just over one mile from the High Tor WMA.

Correspondence related to the Flat Rock Wind Power project in Lewis County, NY was included as a reference for proper citation of what USFWS feels is appropriate Indiana bat habitat. No other information within that letter is meant to be applicable to this Project.

The USFWS letter dated December 29, 2004 regarding Indiana bats was received and filed within the official hardcopy of the DGEIS and Appendix A available for public viewing at public libraries and selected governmental offices. The letter indicated that, except for transient individuals, no Federally protected or proposed endangered species are listed for the Project area. This would include the Federal and State endangered Indiana bat.

Northern harrier is listed as threatened in New York State. Breeding habitat for northern harrier, osprey and red-shouldered hawk is very limited in the Project area. Northern harrier require relatively large open tracts of wet meadow, emergent marsh and grasslands (Cornell Laboratory of Ornithology, http://www.birds.cornell.edu/BOW/NORHAR/). According to the NYSDEC fact sheet (http://www.dec.state.ny.us/website/g informat/wildlife/endspec/rshafs.html), red shouldered hawks “breed in moist woodlands, riverine forests, the borders of swamps, open pine woods and similar habitats. Nesting almost always occurs near water, such as a swamp, river or pond. In New York State, nesting populations were found in the Appalachian Plateau, Catskill Peaks, the Delaware, Mongaup and Rensselaer hills, the Tug Hill Plateau, and Lake Champlain Valley”. The NYSDEC indicates on its website that this hawk was once the most common large hawk of western and central parts of the state. Elimination of suitable breeding habitat is thought to be largely responsible for the decline in population. According to the NYSDEC fact sheet for osprey, there are two main breeding populations in New York State, one on Long Island and the other in the
Adirondack Mountains. Within its range, the preferred habitat of osprey is along the coastline, and on lakes and rivers.

According to the Cornell Laboratory of Ornithology website, “northeastern horned larks breed in exposed arctic habitats and winter in the eastern United States, occasionally as far south as the Carolinas”.  The mid-western race, prairie horned lark, “has expanded eastward from Michigan through southern Ontario to New York and New England and south to Maryland and Virginia. Favorable habitat includes barren or semi-barren habitats on dry prairies, cultivated fields, and bare ground at the edges of airport runways or golf courses”. No horned larks were observed in the Project area during the summer 2004 bird/ecological survey or during the summer 2005 breeding bird survey. Horned larks likely forage in agricultural fields (especially where manure is spread) in the Project area during the winter.

Grasshopper sparrows prefer to nest in open grasslands with some bare ground (Cornell Laboratory of Ornithology website). Although limited, this type of habitat exists in the Project area and small breeding colonies of grasshopper sparrows may be present. None were observed or heard during site surveys in 2004 and 2005.

A post-construction monitoring study developed in consultation with the NYSDEC will be part of Project mitigation.

Table 3.3-5 in the DGEIS provides data from recent bat collision mortality studies at wind farms in the east. The studies indicate a regional variation in the number of fatalities with the highest number occurring along the Appalachian ridgeline and relatively low numbers in the northeast. The NYSDEC reviewed the studies conducted in the project area and did not raise concerns regarding bat impacts in their comment letters.

19 Comment:
#106, June, 17, 2005 USFWS

In Section 3.3.1.1, it is indicated that the timber rattlesnake (*Crotalus horridus*) is a Federally listed threatened species. That is incorrect as this species is not listed under the Endangered Species Act, but rather is protected as a State-listed species. See, also, response to Comment 35.

Response:

Comment acknowledged and the requested change has been made.

20 Comment:
106, June, 17, 2005 USFWS

We note that the document does not provide an estimate of the quantity of overhead transmission cables to be used in the Project area. Overhead lines can cause substantial avian and bat mortality (Avery 1978). Millions of birds are believed to be killed each year by these structures; therefore, the quantity to be used for this Project and associated potential impacts to birds and bats should be reported in the EIS.
Response:

The overhead ECS lines that would be used for stream and steep terrain crossings in the Project area will be an estimated 20 ft. above ground level. The overhead lines referred to in Avery (1978) that can cause substantial mortality to birds and bats are major electrical transmission lines. These high voltage power lines are much taller and typically include multiple lines and large towers. Because the ECS lines will be located below tree height, they will pose little danger to migrating birds. In addition, the lines will be insulated, reducing the likelihood of electrocution. The lines will be no more dangerous to birds and bats than local telephone, electric and cable television lines.

The quantity of overhead line to be used for the Project will depend on the number of stream crossings and the amount of terrain crossings with slopes greater than 15%. Most of the steep slopes in the Project area are forested. An estimated 300 ft. of line will be used for each stream crossing.

DAYTIME FIELD SURVEYS

21 Comment:
#108, June 17, 2005 NYSDEC

The qualitative assessment, conducted during the spring of 2004 at the Project site in order to monitor and inventory bird populations, lacks a determination of individual species counts that would be compared to post-licensing surveys. The baseline data would be used to look at the effects of habitat changes and the potential habituation of birds at the turbines. DEC staff recommends that a quantitative Breeding Bird Survey (BBS) be conducted at the Prattsburgh Project area this spring (2005). Each fixed location should be as close as possible to the proposed turbine locations, preferably at the base of the wind tower. Effort during the counts should be standardized using 3-5 minute counts. Locations of the point counts should be identified using GPS to ensure that sample locations are replicated during post-operative studies.

Response:

A breeding bird survey was conducted on June 28, 2005 in the primary candidate areas for WTG grouping. The breeding bird survey used North American Breeding Bird Survey protocols and incorporated recommendations of the NYSDEC. The results of these surveys will be used to establish baseline conditions for estimating potential Project-related impacts to bird populations. The results of the 2005 breeding bird survey are presented in Section 3.3.1.3.1 of the revised DGEIS.

22 Comment:
#108, June 17, 2005 NYSDEC

In order to determine the presence or absence of various species, sources such as the Kestrel Haven Avian Migration Observatory (KHMO) and nearby banding stations should be used in conjunction with the breeding bird survey data.
Response:

The only local banding station in the Town of Prattsburg area that we are aware of is operated by Robert McKinney. Mr. McKinney provided Ecogen with a species list outlining the total number of birds and species banded at his Spring Hill Wildlife Sanctuary in the Town of Prattsburg. Between 1972 and 2003, Mr. McKinney banded 6,754 birds of 92 species. These species represent species migrating through the Project area. Some of these species breed in the Project area as well. The list of birds banded by Mr. McKinney is presented in Appendix Q of this FGEIS.

FALL 2004 ACOUSTIC STUDY

23 Comment:  
#108, June 17, 2005  NYSDEC

The FGEIS should present the statistical data, derived from the acoustic study report, graphically or in table form within the text of the document rather than a reference to it being located in Appendix B-6. If the data is within the document, it is much easier to reference the statistical findings.

Response:

In order to facilitate reading of the report by non-scientifically oriented readers, the Lead Agency decided to keep all but the most important statistical presentations in the original report in Appendix B-6 of the DGEIS.

24 Comment:  
#108, June 17, 2005  NYSDEC

The FGEIS should state whether any migration channeling was observed during the radar study. The extent and significance of the migration channeling should be thoroughly explored especially with respect to the siting of wind turbines.

Response:

Multiple radar stations spread across the Project area would be needed to attempt to determine if migration channeling was occurring. The radar study conducted by ABR for the Project utilized a single radar station. The study protocol is the industry standard and was approved by the NYSDEC. Because only a single station was used, no inferences could be made regarding migration channeling. However, part of the acoustic study conducted by Old Bird, Inc. utilized an array of stations to look for suggestions of migration channeling. The 2005 acoustic study report is presented in Appendix Q of this FGEIS. On page 94 of the report, Bill Evans noted that although some migration channeling will likely occur, the channeling will be relatively small and confined to a small portion of the Project area. The proposed location of the majority of the WTG is on hilltops that would not be in the path of the minor channeling documented. He goes on to say that the channeling dynamics in the region are favorable for the Ecogen Project.
because the low altitude migratory flow would be steered around the WTG locations. The Lead Agency accepts these findings and conclusions.

Please also refer to response to Comment 10.

25 Comment:
#108, June 17, 2005  NYSDEC

The FGEIS should describe the limited utility of NEXRAD for determining migration patterns in areas located between the Buffalo and Binghampton NEXRAD stations. Although NEXRAD may show high passage near those stations, it is unclear whether inferences can be made about the concurrent passage rates within the Project area.

Response:

In response to this comment, Bill Evans of Old Bird, Inc. indicated that NEXRAD data was used to corroborate acoustic data and give a sense for the broader region’s migration dynamics and weather patterns. For example, NEXRAD data was used to demonstrate that a large portion of 2004 fall migration passed around Lake Ontario. This would have reduced the number of migrants passing over the Project area.

26 Comment:
#108, June 17, 2005  NYSDEC

If acoustic studies conducted near the Buffalo or Binghamton stations can draw inferences to concurrent rates observed from NEXRAD, this information should be noted in the FGEIS.

Response:

Old Bird, Inc. did not conduct any acoustic studies near the Buffalo or Binghamton NEXRAD stations.

27 Comment:
#106, June, 17, 2005 USFWS

The Project sponsor arranged for collection of avian data through the use of a mobile radar unit and acoustic monitoring. Old Bird, Inc., conducted acoustic monitoring in the spring of 2004 generally from mid-April to early June and during the fall migration from mid-August until mid-October. In addition, the acoustic report indicates that fall acoustic data gathered from sites 25 miles east and west and also 10 miles northwest of the Project area were analyzed to provide a regional baseline of acoustic data. A large amount of data from various sources, such as historical and current NEXRAD radar data, weather data and information from other wind projects, was collected and analyzed. Considerable effort was made to show the correlation between this data and the migration patterns of birds, particularly during the fall of 2004. One of the important points that we would like to note from this work is that there was a good positive correlation between the data collected at the mobile radar unit and the acoustic data. Therefore, there was some
validation of data between the two techniques. However, using these two techniques together occurred on only one other project, which had a very small data set.

More testing and data must be collected to verify the results of the Ecogen study. We typically recommend that three years of pre-construction data be gathered at each wind energy site to account for variability in weather and bird abundance. Additional data collection would not only help validate the technique of using the acoustic and radar equipment together but also verify the study results for this Project.

**Response:**

The Project sponsor conducted additional concurrent radar and acoustic studies at the Project site during the spring of 2005. As in the fall 2004 concurrent studies, there was good correlation between the two spring studies. Both spring studies indicated low to moderate migrant passage rates through the Project area. This was corroborated by NEXRAD data. The 2005 radar and acoustic study reports are presented in Appendix Q in the FGEIS.

Regarding collection of additional data, in the 2005 acoustic study report prepared by Old Bird, Inc. (Bill Evans), on page 92 he indicates that “Lake Ontario has a huge effect on the density of migration passing over the Ecogen Project site and other areas in west-central New York” and that this region “is effectively in a migration shadow caused by Lake Ontario”. He goes on to say “there is no doubt that Lake Ontario plays a major factor in limiting migration density over the Ecogen Project site and multiple years of monitoring are not needed to document this”. On page 74 of the report, he adds, “in some years the relative density gradients will be higher or lower. But it is also assumed that migration behavior (in this case channeling) and the relative density gradients will be generally the same no matter what the size of the flight”, and “if additional seasons of acoustic monitoring were carried out at the same transect of acoustic stations, the absolute number of calls would very likely vary from year to year, but the relative density gradients are likely to be similar to those found in 2004”.

In a letter dated April 26, 2004 from the USFWS to its regional directors concerning the implementation of Service Voluntary Interim Guidelines, the director of the USFWS reiterated that the Guidelines are a general guide. Regarding pre-construction studies, the director points out that “the guidance recommends 3 years of data as standard for determining the presence and/or magnitude of bird and bat migration in areas of high seasonal concentrations. This recommendation is not intended to be a strict requirement for all areas, or if a shorter collection period can be expected to yield sufficient data”. Avian migration data collected during Project studies has not revealed any evidence that would suggest high patterns of migratory avian concentration within the Project area. The commentators have not offered any site-specific rationale or justification that would warrant additional pre-construction avian studies greater than the two-year study that has already been completed. The concurrent radar and acoustic avian studies represent some of the most comprehensive pre-construction investigation that has been completed in North America for a wind farm project. The data collected during the radar and acoustic studies indicated that low to moderate migration occurs across the Project area. Accordingly, the Lead Agency believes that two spring seasons and one fall season of monitoring to be adequate for this assessment. The fall 2004 and spring 2005
monitoring involved concurrent radar and acoustic studies. The acoustic study, backed up by NEXRAD data, indicated that Lake Ontario plays a large role in directing fall migrants around the Project area resulting in broad front migration through the Project area.

Additionally, SCIDA stresses the fact that the amount of avian and bird studies conducted for this GEIS greatly exceeded those of other wind projects approved within New York State. Four wind energy projects have been approved and built (or currently being constructed) within New York State. These projects are: Weathersfield Wind Project in Wyoming County, Madison Wind Project in Madison County, Fenner Wind Project in Madison County, and Maple Ridge Wind Farm in Lewis County. Below is a summary of studies completed by both the four approved projects and the proposed Ecogen LLC Prattsburgh/Italy Windfarm.

<table>
<thead>
<tr>
<th>Project</th>
<th>Field Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weathersfield Project</td>
<td>A spring and fall radar study of avian and bat migration was conducted by ABR, Inc.</td>
</tr>
<tr>
<td>Madison Wind Project</td>
<td>No study</td>
</tr>
<tr>
<td>Fenner Wind Project</td>
<td>No radar or acoustic studies.</td>
</tr>
<tr>
<td>Maple Ridge Wind Farm</td>
<td>A single on-site breeding bird survey was conducted prior to approval. Radar study being completed during construction and operation</td>
</tr>
<tr>
<td>(a.k.a Flatrock Windpower)</td>
<td></td>
</tr>
<tr>
<td>Ecogen LLC</td>
<td>Two seasons of radar study by ABR, Inc. Three seasons of acoustic studies by Old Bird, Inc. Two seasons of breeding bird study</td>
</tr>
<tr>
<td></td>
<td>Supplement of radar and acoustic studies by analysis of NEXRAD data</td>
</tr>
</tbody>
</table>

**Comment:**

#106, June, 17, 2005 USFWS

Figure 18 of the acoustic report indicates that variability does exist between years in the number of bird calls detected. The acoustic data for the station in Alfred, New York shows significant year-to-year variability among nights and among years. It is noted in the acoustic report that the number of calls detected in 2004 was distinctly lower than in two earlier years. This demonstrates that one year of data is insufficient to draw accurate conclusions about bird and bat use of a particular site.

**Response:**

The Alfred data was provided in the acoustic report with the caveat that the data looked suspicious and that no conclusions should be drawn until additional analysis was completed. The spring 2004 and 2005 acoustic study results were similar, both indicating a low to moderate migration through the Project area. These data sets were corroborated by NEXRAD data.
NYSDEC, in a letter dated 10/27/05, indicated that after reviewing the acoustic avian and radar studies conducted in spring 2005, no significant avian issues were raised. NYSDEC staff found the spring 2005 results to be consistent with the spring 2004 acoustical study. NYSDEC staff has not found issues with respect to avian studies that would warrant the preparation of a supplemental GEIS.

AVIAN, BAT AND WILDLIFE IMPACTS

29  Comment:

#105, June 17, 2005    Rachel Treichler
#110, June 16, 2005    USFWS

The authors are concerned about Project-related negative impacts to birds, and that a longer study time of three years should have been used to study bird and bat populations living in or migrating near the proposed WTG locations. The methodologies used for the studies should be carefully recorded so that siting procedures resulting in problem sites can be accurately identified and study methodology can be modified in the future.

Response:

Additional radar and acoustic studies were conducted at the Project site in the spring of 2005. The results are summarized in Section 3.3.1.3.4 of the revised DGEIS and presented in Appendix Q of this FGEIS. Similar to the 2004 radar and acoustic studies, these studies demonstrated low to moderate passage rates similar to those obtained during other studies conducted in New York State and the northeast. Various experts have agreed that additional studies are not warranted. As indicated in Tables 3.3-4 and 3.3-5 in the DGEIS, mortality studies conducted at existing wind farms in New York State and the northeastern U.S. do not show high collision mortality rates for birds or bats. See, also, Response to Comment 35.

30  Comment:

#106, June, 17, 2005    USFWS

Avian studies conducted in the Project area are discussed in section 3.3.1.3. It is indicated that resident and breeding bird surveys (point counts) were conducted at each of the five general wind turbine grouping locations for grassland and State-listed species such as the northern harrier and upland sandpiper while traveling from one location to another. We are concerned with this statement because it indicates that surveys were conducted from a moving car, which would not be appropriate to determine presence, especially for small cryptic species. More detail is needed in the EIS which describes the methodology used during these surveys including dates, times, amount of survey effort, locations, weather conditions, etc. If the method used was inappropriate, we may recommend different protocols. We also recommend statistical analysis of the raw data, if this is possible. Tables, graphs, and charts of survey results will aid the reader in understanding the significance of the data collected.
Response:

As indicated in Section 3.3.1.3.1 of the DGEIS, the bird surveys were conducted at each of the prime candidate areas for WTG as well as while traveling between survey locations. A considerable amount of time was spent driving throughout the Project area. Bird watching by an experienced birder while driving is a time-honored and successful routine, especially when covering large areas.

Subsequent to submission of the DGEIS, a breeding bird survey modeled after the North American Breeding Bird Survey technique was completed in the Project area on June 28, 2005. This field survey was conducted using protocols as verbally approved by the USFW. The breeding bird survey focused on the prime candidate areas, as requested by the NYSDEC. The methods and results of the survey are presented in Appendix Q of this FGEIS. We believe the methods of the breeding bird surveys and other data collection was sufficient to assess the breeding bird populations of the project area.

31 Comment:

#106, June, 17, 2005 USFWS

As we pointed out in our December 2003 and May 2004 letters and during subsequent meetings and phone conversations, we believe the data collection for one spring and one fall season are insufficient to draw accurate conclusions about avian and bat use at this Project site. We included that recommendation in our comments on the Draft Public Scoping document as well.

Response:

Radar and acoustic studies were conducted concurrently at the Project site during the fall 2004 and spring 2005 migrations. Good correlation was found between the radar and acoustic studies in both seasons. An acoustic study was also conducted in spring 2004. Both Old Bird, Inc. and ABR have conducted other studies proximate to the Project area in New York State. The results of these studies were referenced in both the acoustic and radar study reports. The Lead Agency agrees that, for a variety of factors, there will always be variability in data collected from one year to another. The Lead Agency believes that the data generated during these studies and the bat studies, provides sufficient information to demonstrate that, in large part due to the presence of Lake Ontario, migration over the Project area occurs in a broad front in low to moderate densities. No red flags were raised as a result of the studies. The Lead Agency believes that additional pre-construction studies would not add significantly to an understanding of the bird and bat migration dynamics occurring over the Project area.

NYSDEC, in a letter dated 10/27/05, indicated that after reviewing the acoustic avian and radar studies conducted in spring 2005, no significant avian issues were raised. NYSDEC staff found the spring 2005 results to be consistent with the spring 2004 acoustical study. NYSDEC staff has not found issues with respect to avian studies that would warrant the preparation of a supplemental GEIS
As stated earlier, four wind energy projects have been approved and built (or currently being constructed) within New York State. These projects are: Weathersfield Wind Project in Wyoming County, Madison Wind Project in Madison County, Fenner Wind Project in Madison County, and Maple Ridge Wind Farm in Lewis County. The amount of study conducted for this proposed project exceeded the studies conducted of any of the above approved projects.

32 Comment:  
#106, June, 17, 2005 USFWS

Avian information was gathered from two bird-banding stations: Braddock Bay Bird Observatory (BBBO) near Lake Ontario and Kestrel Haven Avian Migration Observatory (KHMO) in Burdett, New York. While we view the data from these two sources to be of value when evaluating bird migration, site-specific information is still required to determine the temporal and spatial use of the Project airspace.

Response:

Site specific bird and migration information was collected at the Project site: acoustic monitoring surveys were conducted in spring 2004 and 2005 and in fall 2004; radar surveys were conducted in fall 2004 and spring 2005; a 2004 bird survey and a 2005 breeding bird survey were conducted in the prime candidate areas for WTG location.

33 Comment:  
#106, June, 17, 2005 USFWS

It is our understanding that a banding station has operated in the past at the Spring Hill Wildlife Sanctuary on Block School Road in the Town of Prattsburgh. We suggest that you contact the operators of that facility, Mr. and Mrs. Robert McKinney, for more information about avian resources in the Project areas. With their permission, you should acquire any pertinent avian data collected in the past and discuss with them avian use of the Project site, since turbines are proposed in the areas surrounding their sanctuary. Further, information from this facility is extremely important and relevant to the avian evaluation for this Project and should be included in the EIS. Of particular interest would be the timing and magnitude of migration observed at this station along with the information of any State- or Federally-listed species or species of conservation concern. In addition, a comparison of banding data from Spring Hill to the other two banding stations, as well as the acoustic and radar data, would be appropriate.

Response:

Mr. McKinney has provided the Project Sponsor with bird banding data collected at his Spring Hill Wildlife Sanctuary banding station from 1972 through 2003. In addition, Mr. McKinney has shared his personal observations of birds in the Project area. The results of Mr. McKinney’s bird banding studies are presented in Appendix Q of this FGEIS. There was no data presented that altered the conclusions of the avian studies conducted for the project.
Since the spring 2005 radar study is not yet available, we reserve the opportunity to provide additional comments on avian and bat issues.

Response:

The spring 2005 radar and acoustic study reports are presented in Appendix Q of this FGEIS. These studies were sent to both the USFWS and NYSDEC on August 15, 2005. The SCIDA submitted a letter on November 10, 2005 offering USFW the opportunity to discuss the results with SCIDA prior to issuance of the FGEIS Findings Statement. The NYSDEC provided their comments on the additional studies on October 27, 2005.

Recognizing the potential impacts to wildlife due to development of wind power projects, the Service developed *Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines* (Guidelines) (Service 2003). A copy of this document may be obtained from our (USFWS) office or is located on the Internet at the following website: [www.fws.gov/r9dhecfa/WindTurbineGuidelines.pdf](http://www.fws.gov/r9dhecfa/WindTurbineGuidelines.pdf). These Guidelines include recommendations for: 1) proper evaluation of wind resource areas; 2) proper siting and design of turbines within development areas; and 3) pre- and post-construction research and monitoring to identify and/or assess impacts to wildlife. We previously suggested that the Project sponsor review this information during the development of the Project design.

Response:

In developing a scope for studying wildlife usage in the Project area, the Project sponsor engaged in several meetings and teleconference calls with the NYSDEC and the USFWS.

In July 2003, the USFWS published its “Interim Guidance on Avoiding and Minimizing Wildlife Impacts from Wind Turbines” (hereafter, “Guidance”). The cover memo accompanying the Guidance specifically notes that use of the Guidance by the wind industry is “voluntary;” and that the USFWS field offices also have discretion whether to apply the Guidance “on a case-by-case basis.”

The Guidance contains, among other things, a recommendation that wind energy developers collect “3 years” of “pre-construction” data in order to determine “the presence and/or magnitude of bird and bat migration” in the area of a proposed wind energy project.

In April 2004, the USFWS prepared a memo to its Regional field offices with “more detailed direction” on the implementation of the Guidance (hereafter “April memo”). The April memo provides important clarification on the meaning of the Guidance and its use by USFWS staff involved in the review of wind energy development projects. On page 1, the April memo states that the Guidance does not contain “rigid requirements,”
but should be used as a “general guide” by professional consultants working on wind energy projects. Further, the April memo states throughout that “local conditions” at the proposed wind project site are controlling (pp. 1 and 2). In terms of the recommendation for “3 years” of “pre-construction” data, the April memo clarifies that this standard need only be applied in “areas of high seasonal concentrations” of bats and birds; or where the risk of impacts to bats and birds is “sufficiently high” based upon “weather variations, changing flight paths, or variable timing of migrations” (p. 2).

Throughout the USFWS comments on Section 3.0 of the DGEIS (“Assessment of Impacts”), in particular those addressed to Sections 3.3.1 – 3.3.3 regarding potential impacts of the project to birds and bats, the agency repeatedly asks for additional data (see, pp. 3, 4, 5 and 6). Relying on the Guidance, the USFWS comments also (p.6) “recommend… three years of pre-construction data be gathered” at the proposed Ecogen site (p.5).

After careful consideration of the USFWS comments and the relevant sections of the DGEIS and its Appendices (B-1 through B-8), the Lead Agency believes that the Guidance need not be strictly applied at the proposed Ecogen Project site. In particular, the Lead Agency believes that pre-construction data on potential bird and bat impacts collected to date by the Project sponsor is adequate to enable the Lead Agency to make the required findings under the New York State Environmental Quality Review Act (SEQR), and that the additional extensive site-specific data collection recommended by USFWS staff is not warranted.

Existing data do not indicate “High Seasonal Concentrations” of birds and Bats in the area of the Ecogen Project site.

Existing data gathered by the Project sponsor regarding local conditions at and near the Project site are consistent and indicate that the site is not an area of “high seasonal concentration” of birds and bats, and that the risk of bird or bat impacts from collision with proposed WTG is not “sufficiently high.” Based on these conditions and consistent with the Guidance (as clarified in the USFWS April memo), the Lead Agency does not agree that additional collection of data is warranted, or that three years of site-specific pre-construction data should be gathered.

NYSDEC, in a letter dated 10/27/05, indicated that after reviewing the acoustic avian and radar studies conducted in spring 2005, no significant avian issues were raised. NYSDEC staff found the spring 2005 results to be consistent with the spring 2004 acoustical study. NYSDEC staff has not found issues with respect to avian studies that would warrant the preparation of a supplemental GEIS.

The DGEIS and its Appendices contain the following information supporting this finding.

Page 3-25 (discussing “Bird-Banding Studies”): “… [A] significant number and variety of passerines [songbirds] pass through the Finger Lakes region, and by inference the Project area, during the Spring and Fall migrations… The Project area is not known to be a major stop-over or concentration area for migrating birds as it is along Lake Ontario.”
Page 3-27 ("Spring 2004 Acoustic Bird Study"): “… [L]arge flights of birds passed to the east and west of the Project area while little migration was evident over the Project area… In the spring of 1999, a radar study and an acoustic study were carried out in the Town of Wethersfield, NY, approximately 47 miles west of the Ecogen site. Both of these studies documented low migration rates.”

Page 3-29 ("Fall 2004 Acoustic Study"): “Data collected during the study suggested that the fall 2004 migration over the Project area was low to moderate.”

Page 3-30 ("Fall 2004 Radar Study"): “The Project area appeared to have moderate rates of fall migration compared to other location in New York where [the consultant] conducted studies using similar equipment and methods [citation omitted].”

Page 3-33 ("Spring and Fall Diurnal Migration"): “Among regional and local birders, the Project area is not a known stop-over concentration area for diurnal migrants (pers. comm.).”

Page 3-47 ("Avian Risk Assessment"): “Based on the results of collision mortality studies at other wind farms in the east that would be expected to have similar bird densities and migration dynamics, however, the risk of avian collision impacts at the proposed Project is likely to be minimal and not ecologically significant.” This conclusion is further supported by the discussion following on p. 3-48.

Page 3-52 ("Bats"): “If migrating bats fly in greater densities along mountainous ridgelines, greater densities would be expected to fly over the Hamilton wind farm [61 miles southeast of the Project site] as compared to the Project area. Based on the very low bat mortality data at the Hamilton wind farm and at other wind farms in the northeast, and based on the low level of tree bat activity recorded in the Project area, the probability of impacts to migrating bats during operation of the [Project] would be expected to be low.”

Page 3-56 ("Determination and Proposed Mitigation-Birds"): “The Project is not located proximate to shorelines or coastlines where significant numbers of waterfowl and migrating raptors are known to concentrate. Similarly, the Project is not located along the Appalachian ridgeline, a forested mountainous area that apparently serves as a significant corridor for night migrating birds.”

Appendix B-6, p. 32 ("Spring and Fall 2004 Acoustic Study, Discussion"). “There are now two spring nocturnal migration studies from inland west-central New York State and both indicate low nocturnal passage rate of birds (this study and Wethersfield, NY study.)”

Appendix B-7, p.i (ABR Radar and Visual Study of Nocturnal Bird and Bat Migration, “Executive Summary”). “Nine percent of all targets [birds and bats] during fall 2004 passed below the maximal height of the proposed wind turbines (125 m)... [a percentage] similar to that for a small number of comparable studies.”
Based on the above, the Lead Agency further concludes that the Project site is not located in or near a “flyway,” as defined in Appendix 2 of the Guidance (“a concentrated, predictable flight path of migratory bird species”).

Consistent with the Intent of the USFWS Guidance, the DGEIS Contains Multiple Years of Reliable Data Regarding Likely Bird and Bat Populations in the Project Area.

As noted, the Lead Agency does not believe that the recommendation in the Guidance for three years of site-specific “pre-construction” data collection should be applied to the Ecogen Project site. Nonetheless, consistent with the spirit of the Guidance, the Lead Agency finds that the conclusions recited above are supported by multiple years of data on birds and bats in the Project area, as well as citations to multiple years of study on appropriate monitoring methods:


Appendices B-4 and B-5, Bird Banding Studies (Birds passing through the Project Area in Spring and Fall Migrations): Data collected from two bird banding stations in the spring of 2003 and 2004, and fall of 2002, 2003 and 2004 (p. 3-25).

Appendix B-2, Christmas Bird Counts (Over-wintering birds in the region “including the Project area”): Data collected from 1999-2003 (p.3-26).

Appendix B-3, URS Field Survey, 2004 (Resident Birds in the Project area, and possible Federal or State listed threatened or endangered species, or State listed species of special concern).

Appendix B-6, Spring and Fall 2004 Acoustic Study: As noted above, this Study references and corroborates a 1999 nocturnal migration study in the region near the Project site. In addition, the Study report references (pp. 2-5) a number of other studies and published articles on “nocturnal bird migration,” the impact of weather and terrain on bird migration, and acoustic and radar monitoring methods, covering the period 1968 to 2004.

Recent Federal Agency Reports Support the Approach Taken by Ecogen on this Project Regarding the Study of Potential Impacts to Birds and Bats.

Recent reports by two Federal government bodies, both issued after the USFWS Guidance, support the methodology employed by the Project sponsor to address the question of potential impacts to birds and bats at the Project site; and also support, generally, the risk assessment in the DGEIS regarding these potential impacts.

In June 2005, the United States Department of the Interior, Bureau of Land Management (BLM), issued a “Final Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States” (“BLM report”). The document contains (section 2.2.3.2) a list of “best management practices” (BMPs) to be “applied to all wind energy development projects to establish environmentally sound and economically feasible mechanisms to protect and enhance natural and cultural resources” (p. 2-10). The BMPs related to “Wildlife and Other
Ecological Resources” (p. 2-12) contain the following recommendation regarding potential bird and bat impacts:

Operators shall evaluate avian and bat use of the project area and design the project to minimize or mitigate the potential for bird and bat strikes….Scientifically rigorous avian and bat use surveys shall be conducted; the amount and extent of ecological baseline data required shall be determined on a project basis.

The BLM report does not suggest, as does the Guidance, that a 3-year site-specific data collection effort at potential wind energy project sites should be the standard practice. Rather, BLM recommends that data needs be determined on a case-by-case basis. Further, the Guidance was not adopted by BLM as one of its BMPs. Both BLM and the USFWS are federal agencies within the United States Department of the Interior (DOI).

In September 2005, the United States Government Accountability Office (GAO) issued a report entitled “WIND POWER- Impacts on Wildlife and Government Responsibilities for Regulating Development and Protecting Wildlife” (“GAO report”). One of the purposes of the GAO report was to assess “what available studies and experts have reported about the impacts of wind power facilities on wildlife in the United States and what can be done to mitigate or prevent such impacts” (p.1). In carrying out this objective, GAO reviewed existing “major scientific studies” on this issue, interviewed experts from federal (including the USFWS) and state agencies, academia, industry and conservation groups (p.2). As stated by GAO (report, p.54), all studies evaluated in its report “were determined to have reasonably sound methodologies.” The studies utilized by GAO in its report are contained in the report Bibliography.

The GAO report concludes (p. 43) that,

In the context of other sources of avian mortalities, it does not appear that wind power is responsible for a significant number of bird deaths.

The report concludes on the same page that less is known about the “impacts of bat mortality from wind power relative to other sources,” and noted that significant bat mortality from wind power has occurred in Appalachia (West Virginia).

The GAO report suggests that the West Virginia incident may be anomalous, as it “stand[s] in contrast” to bat mortality studies at other wind power facilities (p. 2).

Finally, the Lead Agency notes that, in the GAO report (p. 52), DOI confirmed the “interim” and non-binding nature of the Guidance, with the observation that the USFWS would be soliciting “additional input” before deciding “whether or how” to finalize the Guidance.

As noted in the DGEIS and the GAO Report, available evidence suggests that wind power, in general, is a relatively minor source of avian mortalities.

The Lead Agency believes it is important to recognize that, on a relative scale, bird deaths annually from wind power facilities are small compared to other natural and man-made sources. Some of these other sources are discussed in the DGEIS (p. 3-46),
referencing a 2001 study, and include motor vehicles (60-80 million (deaths)), buildings and windows (98-980 million), utility lines (up to 174 million) communications towers (4-50 million), and domestic and feral cats (over 100 million). Wind generating facilities as of this writing are estimated to be responsible for between 10,000 and 40,000 bird deaths annually. The Lead Agency agrees with the Project sponsor’s conclusion that the risk of avian and bat collision impacts at the proposed Project site, relative to other known sources, is not “ecologically significant.” This risk does not justify additional data collection. Data collected to date and presented in the DGEIS and Appendices are sufficient for the Lead Agency’s purposes.

Finally, the Project sponsor will confer with the NYSDEC as part of establishing the required post-construction monitoring plan for the Project.

36 Comment:
#108, June 17, 2005       NYSDEC

Information from the fall 2004, 6-week study at the Backbone Mountain (Mountaineer) wind farm in West Virginia should be provided in the FGEIS.

Response:

The bat fatality study conducted at the Mountaineer Wind Energy Center in West Virginia and the Meyersdale Wind Energy Center in Pennsylvania (Arnett 2005)* can be found at (http://www.batcon.org/wind/BWEC2004finalreport.pdf). The study sites are located on forested ridges in the Appalachian Mountains. A total of 64 turbines were studied, 44 at Mountaineer and 20 at Meyersdale. During the 6-week study period from July 31 to September 13, 2004, 398 bat fatalities were recorded at Mountaineer and 262 at Meyersdale. Accounting for carcass removal by scavengers and searcher efficiency, daily searches at Mountaineer yielded 38 bats per turbine and an estimated 1,364-1,980 bats killed by the 44 turbines during the 6-week study. Numbers for Meyersdale were 25 fatalities per turbine and 400-600 fatalities for the duration of the study.


37 Comment:
#108, June 17, 2005       NYSDEC

The FGEIS should include a description of mitigation measures that can be taken during operation to reduce unanticipated environmental impacts not accomplished through the identified impact avoidance and/or minimization measures.

Response:

In consultation with the NYSDEC, unanticipated post-construction environmental impacts will be studied to determine what mitigation measures would be appropriate for the Project. It would be inappropriate to discuss in the FGEIS mitigation measures for
unanticipated impacts since neither the Project sponsor nor the Lead Agency know what these impacts might be or where they might occur.

38  **Comment:**
#108, June 17, 2005  NYSDEC

DEC staff request, with respect to Ecogen’s proposed multi-year industry-standardized, post-construction monitoring study for birds and bats, that the FGEIS clearly indicate that the study protocol will be developed in consultation with both DEC and USFWS staff prior to the commencement of Project construction. Furthermore, the study for bats should include appropriate methods/principles developed and/or employed during the Mountaineer study in Backbone Mountain, West Virginia (*Relationships between Bats and Wind Turbines in Pennsylvania and West Virginia: An Assessment of Fatality Search Protocols, Patterns of Fatality, and Behavioral Interactions with Wind Turbines*, dated June 2005). The post-construction monitoring study for bats should be conducted during the appropriate seasonal dates identified in the Mountaineer study.

**Response:**

Prior to Project construction, Ecogen will confer with NYSDEC staff as part of developing a post-construction monitoring plan. Information and protocols generated during the June 2005 study in West Virginia and Pennsylvania (Arnett 2005) will be evaluated in developing the plan.

39  **Comment:**
#108, June 17, 2005  NYSDEC

DEC staff further request that agency findings and approvals include provisions or conditions that clearly and completely allow access by NYSDEC and USFWS staff in order to fully evaluate the effectiveness of any post-construction monitoring studies.

**Response:**

Providing access to NYSDEC and USFWS staff for evaluation of post-construction monitoring studies will be included as part of the post-construction monitoring plan.

40  **Comment:**
#106, June 17, 2005  USFWS

Section 3.3.1.4 discusses bat species found in the Project area and potential impacts. As with the avian studies, sampling in one year does not provide sufficient information on density or use of the Project airspace. Further, it does not provide an adequate foundation for assessing risk. We note that mist net sampling and acoustic monitoring of the 33,000-acre site occurred over only 10 nights. While we believe the data collected are of value, they fall short of the necessary effort required to understand bat use of the Project airspace. The mist net and acoustic effort may not have documented all of the species found in the Project area. Therefore, we recommend additional data collection at the Project site.
Response:

The Lead Agency is not aware of any studies that have developed risk assessment procedures for determining the potential for bat collisions with wind turbines. The objective of the Project sponsor’s bat survey was to provide an inventory of bat species occurring in the Project area, including the federally endangered Indiana bat. The survey was designed with input from the NYSDEC. Mist net sampling took place in the beginning of July and at the end of August, the latter chosen to include possible migrating bats. At the suggestion of the NYSDEC, the sampling sites were located in areas of favorable bat habitat in order to catch as many species as possible. Existing studies suggest that the majority of bats killed at wind farms have been migratory tree bats which tend to be canopy and above-canopy feeders. Since these species are underrepresented in mist net surveys, the Project sponsor’s study also included the use of bat vocalization monitoring detectors. A review of the scientific literature indicated that very little is known about migrating bats. This is in large part due to the difficulty of studying night flying migrants. The range of detection of the bat vocalization detectors is very limited, typically 50 to 100 ft. The acoustic equipment used in the Ecogen avian acoustic monitoring survey is not designed to record bat calls. The Ecogen radar study of nocturnal migrants did not distinguish birds from bats. The radar study included personnel using night-vision goggles to determine the relative numbers of birds and bats flying within a narrow beam of light aimed at the night sky. For the spring 2005 study, approximately 4% of migrants flying below 150 meters were bats (n = 155 bats over 30 nights). For the fall 2004 study, approximately 6% of migrants were bats (n = 60 bats over 15 nights).

The Lead Agency does not believe that additional study at the Project site is warranted. There still are no reliable methods to study bat migration. Radar and acoustic studies cannot distinguish birds from bats during nocturnal migration. Additional mist net surveys would likely yield the same species. Identification of an additional species would not aid in establishing risk. Mist net surveys do not provide useful information on migrating tree bats.

41 Comment:

#106, June, 17, 2005 USFWS

The text suggests that bats can fly through the turbine rotor swept zone and actively avoid the blades based on thermal imaging studies in West Virginia. This is misleading because the text does not indicate that hundreds of bats were killed by turbines in less than two months of study at the West Virginia site. When adjusted for scavenging and searcher efficiency, the total killed would be between 1,500 and 3,000 bats. We note that the DGEIS does not provide an analysis on the risk of this Project to resident and migrating bats or the potential impacts expected. More discussion is needed in the document on this topic, especially since bats, in certain situations (such as forested ridgelines), appear to be highly vulnerable to collisions with turbines.

Response:

The cited text on page 3-53 in the DGEIS is referring to resident bats and the documented low level of mortality of resident bats at wind farm sites. The DGEIS (page 3-49) indicates that migrating tree bats are most at risk from collisions with wind turbines.
Several theories are offered in the text. In a fall 2004 study conducted by Bats and Wind Energy Cooperative (Arnett 2005)* along two Appalachian ridge sites near Mountaineer, West Virginia and Meyersdale, Pennsylvania, the majority of the mortalities were migratory tree bats, 58% at Mountaineer, and 73.4% at Meyersdale. On page 3-53 of the DGEIS, the text discusses why impacts to both resident and migrating bats would be expected to be far lower at the Project site than at sites along the Appalachian ridge.


**IMPACTS TO WILDLIFE**

42 Comments:

#054, June 6, 2005 Monier Manor
#056, June 9, 2005 Stephen and Gail Rowan
#059, June 13, 2005 Swain, Lesley, Carolyn
#082, June 15, 2005 Town of Italy
#085, June 13, 2005 William Curley
#101, June 17, 2005 Bond, Schoeneck and King

The comments can be summarized as stating that discussion of impacts to mammals, reptiles, amphibians and fish is overly general and pure conjecture. Required information should include species inventories, habitat mapping, area of disturbance calculations, quantification of habitat loss, and review of studies documenting displacement and habitation. Comments also included concern about impacts to the High Tor Wildlife Management Area.

Response:

Habitat disturbance calculations are provided in section 3.3.2.1 in the revised DGEIS. Over 80% of habitat disturbance will involve active and inactive farmland. Much of the remaining disturbance will be to secondary woodlots. Mammal species utilizing these habitats are common and far-ranging. Impacts to wetlands are anticipated to be less than 0.5 acres for the entire Project. Project area streams will not be disturbed during construction and operation of the wind farm. Appropriate erosion and sediment control practices will be in place during Project construction. As a result, risks to small mammals, reptiles, amphibians and fish are anticipated to be very low.

Paul Kerlinger’s avian risk assessment study in montane forest in New Hampshire was cited on page 3-48 of the DGEIS. In that study, Kerlinger made observations concerning the successful habituation of breeding birds in the area to existing man-made structures.

Section 3.3.2.2.5 in the DGEIS discusses the potential for impacts to wildlife species in the High Tor Wildlife Management Area.
Comment:
#078, June 11, 2005 Advocates for Prattsburgh

Bird/Bat Wildlife Impact

We propose that Prattsburgh Windfarm utilize the following procedure for evaluation of bird, bat and wildlife impacts. Data on wildlife use and mortality collected at one wind energy facility are not necessarily applicable to others; each site poses its own set of possibilities for negative effects on wildlife.

Regulatory Framework:

- Migratory Bird Treaty Act
- Bald and Golden Eagle Protection Act
- Endangered Species Act
- New York State Rare and Endangered Species Act
- Fish and Wildlife Coordination Act
- Fish and Wildlife Guidance Document on Large Commercial Wind turbines

Risk to bird, bat and wildlife: (includes but not limited to)

- Collision with structures, turbine blades and wires causing death or injury
- Electrocution by contact with live electrical wires
- Loss of natural vegetation
- Direct loss of habitat
- Indirect habitat loss as a result of increased human presence

Habitat loss as a result of the noise of operating turbines (both audible and inaudible)

- Habitat loss as a result of the motion of operating turbines
- Habitat alteration as a result of soil erosion
- Introduction of non-native vegetation
- Construction of obstacles to migration
- Fragmentation of Habitat
- Disturbance/displacement of avian populations during construction

Long-term disturbance/displacement of avian populations by construction of the proposed Project.

Certain weather patterns in combination with wind turbines can pose a risk to avian species. Poor visibility and wind turbines can be a deadly combination.

The size of swept area of the turbine blades which is easily over one acre in size.

Studies have shown certain types of lighting used on turbines above 199 feet used under poor visibility conditions have attracted birds to structures causing collisions and resulting injury or death.
Response:

Comment noted. The majority of the issues listed above have been addressed in the DGEIS. Others are not applicable to the Project (e.g. - Electrocution by contact with live electrical wires; Introduction of non-native vegetation; Habitat alteration as a result of soil erosion; Habitat loss as a result of the motion of operating turbines; Habitat loss as a result of the noise of operating turbines (both audible and inaudible)). The environmental studies conducted as part of the Project were designed and implemented in consultation with the NYSDEC and the USFWS.

The Lead Agency acknowledges that different sites are not identical regarding potential impacts to wildlife. The environmental resource, however, in this case migrating birds and bats and resident wildlife populations, is generally stable and widespread across the northeastern U.S. Information obtained from other sites concerning wildlife fatalities and displacement is useful for assessing potential risk. In fact, this information, combined with information gained from on-site environmental studies, is the only data available for assessing risk. Based on the information gathered to date from fatality and displacement studies at other sites in the northeast, and from on-site radar and acoustic studies and bird and bat surveys, there is no evidence to suggest that the Ecogen Project would have significant adverse impacts on migrating or resident wildlife populations.

METHODOLOGY

44 Comments:

#101, June 17, 2005 Bond, Schoeneck and King
PH#30, May 23, 2005 Carl Wahlstrom

The methodology for field studies and surveys referenced should be described. What will be the study methodology proposed on page 3-57? Clarification of the “scientific study” on page 3-58 that will occur if unanticipated environmental impacts occurred during the operation of the wind farm is requested.

Field studies to identify mammals, reptiles, amphibians and fish should have been undertaken.

Response:

An industry-standardized post-construction monitoring plan will be developed in consultation with the NYSDEC. The study will include concurrent radar and/or acoustic migration studies and fatality searches for both birds and bats. Avian point count surveys will be conducted in order to evaluate impacts of WTG on birds breeding in the area of the WTG. If significant unanticipated environmental impacts were to occur during the operation of the wind farm, a scientific study would be considered. The type of study and study protocol would depend on the nature of the environmental impact. The details of the study would be developed in consultation with the NYSDEC. Based on the results of the study, a determination would be made as to whether suitable mitigation is necessary, practicable and economically feasible. It should be noted that other than avian and bat
impacts at wind projects in the northeast, no other significant wildlife impacts have been observed.

Based on habitats observed and field guide range extension maps, Section 3.3.1.2.2 in the DGEIS provides lists of mammal, reptile, amphibian and fish species potentially present in the Project area. Section 3.3.2.1 of the DGEIS discusses the potential impact of the Project on these species. The NYSDEC has not commented on or indicated any wildlife concerns other than avian and bat issues.

PLANTS COMMUNITIES

45 Comment:
#101, June 17, 2005  Bond Schoeneck and King

The acreage or percent of the study area occupied by the eight types of plant communities should be quantified. The impact to all agricultural land should also be discussed.

Page 3-38 says that 42 acres will be impacted by construction while page 3-6 calls for over 75 acres to be impacted out of 33,000.

46 Comment:
#106, June, 17, 2005  USFWS

In section 3.3.1.2.1 of the DGEIS, the various plant communities found in the Project area are listed and described. However, there is no estimate of impact to each habitat type. In other sections of the document, it is estimated that approximately 75 acres of land will be disturbed by the Project. We suggest that the text be revised to provide the acreage of each habitat type impacted by the construction of Project features including turbine sites, staging areas, access roads, transmission lines, culvert and road upgrades, and any activity requiring earth disturbance or vegetation clearing. This basic information is necessary to understand the scope of habitat disturbance. As previously mentioned, all work in streams and wetlands, both temporary and permanent, should be identified in the text as well.

Response to 45 and 46:

An estimated 72 acres of the 24,000-acre Project area would be impacted by all Project activities as listed in Comment 46. The estimated impact to plant communities potentially impacted by the Project is presented in section 3.3.2.1 of the revised DGEIS. An estimated 61 acres of active and inactive (fallow and abandoned) farmland would be impacted. Impacts to active agricultural land, as discussed in section 3.4.2 of the revised DGEIS, are anticipated to involve approximately 17 acres. An estimated 12.6 acres of mostly secondary woodland would be impacted. Wetland impacts are anticipated to be less than 0.5 acres. No work will be conducted in area streams or within 50 ft. of the banks of State-protected streams. If the final design indicates impacts that are not consistent with this estimate, the Lead Agency reserves the right to require additional SEQR study prior to inducement of the PILOT agreement.
WETLANDS

47 Comment:
#101, June 17, 2005  Bond, Schoeneck and King

Wording in this section is vague and contradicts earlier assertions in the document. Impacts should be quantified. Wetlands within the Project area should be quantified.

Response:

Based on a preliminary site layout, section 3.2.1.2.3 has been revised in the DGEIS to include estimates of potential impacts to plant communities including wetlands. The final site layout will be designed with the intent of restricting wetland impacts to less than 0.5 acres if possible. When the final site layout has been determined, a wetland delineation will be undertaken and the results will be used to further avoid and minimize impacts to wetlands. The wetland delineation report along with a Joint Application for Permit will be submitted to the USACOE and the NYSDEC.

C.3.4 Agricultural Resources and Agricultural Districts

LAND LOSS

01 Comments:
#070, June 13, 2005  Maureen McAndrews
#079, June 15, 2005  Arthur J. Giacalone
PH#08, May 23, 2005  Maureen McAndrews

The comments are summarized by stating that the land lost to the project is underrepresented and that agricultural land is subject to conservation and preservation under NYS law.

Response:

The DGEIS estimated the total land area to be impacted from the construction and operation of the WTG and related facilities to be 75 acres of land out of approximately 33,000 acres (note that the 33,000-acre study area has been reduced to approximately 24,000 acres) in the defined overall study area. This estimate included acreage disturbed during construction and operation of the WTG and related facilities combined. Additional calculations have been made to further quantify the total land area to be impacted, and the project sponsor has obtained clarifications regarding logistics of construction and size of the proposed facilities. The results of these additional calculations and clarifications indicate that the total land area to be impacted as a result of the project is actually less than the original estimate of 75 acres provided in the DGEIS. Approximately 72 acres of land vs. 75 acres will be impacted from the construction and operation of the WTG and related facilities (note that the 72 acres includes all aspects of construction and operation including construction staging areas, lay down areas, crane paths and assembly areas, WTG pads, ECS, etc.). Moreover, only approximately 17 acres of active agricultural land out of the 72 acres will be disturbed.
Agricultural land disturbed during construction-related activities will be restored or mitigated pursuant to final resolution of the Notice of Intent and Agricultural Impact Statement coordinated with Department of Agriculture and Markets (A&M). Permanent impacts to construction will result from the WTG pad, crane travel path roads, general service roads, substation and equipment building. The project sponsor has also agreed to utilize a reputable Agricultural Restoration Contractor to restore agricultural lands temporarily disturbed during construction of the project.

The project sponsor will construct and operate the project in strict conformance with the provisions of New York State Agriculture and Markets Law. This includes filing of a Preliminary Notice of Intent with A&M (filed on March 11, 2004 by SCIDA) and preparation and submission of a Final Notice of Intent and Agricultural Impact Statement with A&M and the Steuben County Agricultural and Farmland Protection Board at least 65 days prior to advance of public funds for the project. In addition, the project sponsor will coordinate with A&M prior to construction and follow A&M’s Guidelines for Agricultural Mitigation for Wind Power Projects to ensure that siting, construction, restoration and monitoring measures are implemented during construction and operation of the WTG and related facilities.

02 Comment:
#079, June 15, 2005 Arthur J. Giacalone

The DGEIS ignores the State policy, expressed at Sec. 300 of New York Ag. and Market Law, to conserve and protect open agricultural land as a valued aesthetic resource. Rather than conserve and protect open agricultural land, the DGEIS concludes without substantive support that, “In general, views in the Project area would likely qualify as low sensitivity because of the low population density rural setting and the low number of viewers. (DGEIS p. 3-75).

Response:

See Section 3.5, Aesthetic Resources, for visual impact-related comments and responses. As described in the response to Comment 01 above, the project sponsor will construct and operate the project in conformance with the provisions of the New York State Agricultural and Markets Law which includes preparation and filing of Preliminary and Final Notices of Intent and an Agricultural Impact Statement and adherence to A&M Guidelines for siting construction, restoration and monitoring pre- and post-construction. This will minimize impacts to active agricultural district land. However, other siting criteria (setback from property lines and residences) will need to be followed as well. Of the total land impacted by the project (approximately 72 acres), only approximately 17 acres of active agricultural district land of the 72 acres will be impacted by the project.

The project will also allow local farmers to benefit financially from locating a WTG on their property. This will enable farmers to generate more revenue, thus ensuring that the land around the WTG will stay in production if it is currently utilized in that capacity, instead of becoming unproductive land if farming becomes unprofitable. By maintaining the productivity of farmland, the project preserves the general open space nature of agricultural lands.
SERVICE ROADS

03 Comments:
#070, June 13, 2005  Maureen McAndrews
#079, June 15, 2005  Arthur J. Giacalone
PH#08, May 23, 2005  Maureen McAndrews

Comments were directed at the accuracy of the width of the service roads being 16 feet wide, and also noting that the combination of WTG and associated support infrastructure can result in the significant loss of agricultural land.

Response:

As stated in the DGEIS, a typical service road will be 16 feet wide and constructed of gravel with a maximum grade of 10%. In addition, certain service roads utilized for crane operation will need a minimum cleared area of 35 feet. These road widths were taken into account when the areas of disturbance were calculated for the project. While the commenter conveniently ignores reference in the DGEIS to the 35 ft. crane travel service roads, the fact remains that service road widths are accurate.

As stated in response to Comment 02 above, the project sponsor will construct and operate the project in strict conformance with the provisions of New York State Agriculture and Markets Law. This includes filing of a Preliminary Notice of Intent with the New York State Department of Agriculture & Markets (filed on March 11, 2004 by SCIDA) and preparation and submission of a Final Notice of Intent and Agricultural Impact Statement with A&M and the Steuben County Agricultural and Farmland Protection Board at least 65 days prior to advance of public funds for the project. In addition, the project sponsor will coordinate with A&M prior to construction and follow A&M’s Guidelines for Agricultural Mitigation for Wind Power Projects to ensure that siting, construction, restoration and monitoring measures are implemented during construction and operation of the WTG and related facilities. These measures will minimize significant adverse impacts to agricultural land.

In addition, only approximately 17 acres of active agricultural land will be impacted by the project. This calculation includes WTG, ECS and service roads.

LOCATION

04 Comment:
#078, June 11, 2005  Advocates for Prattsburgh:

The comment is summarized by stating that the siting of the towers on the edges of parcels and roads affects non-leasing landowners and drivers. Ecogen therefore must eliminate the parcels that do not have multiple fields and those sites that will negatively impact non-leasing landowners.
Response:

As stated in response to Comment 03 above, the project sponsor will undertake the project in strict conformance with the provisions of the New York State Agricultural and Markets Law which includes preparation and filing of Preliminary and Final Notices of Intent and an Agricultural Impact Statement and adherence to A&M Guidelines for siting construction, restoration and monitoring pre- and post-construction. The provisions of A&M Law and A&M Guidelines require that certain mitigation measures be implemented to minimize the adverse impact of the project on the continuing viability of a farm enterprise or enterprises within an agricultural district. These mitigation measures include locating the WTGs along the edges of active agriculture fields and in non-agricultural areas as much as possible to reduce the loss of arable land and to prevent the fracturing of larger parcels into smaller parcels, which are more difficult to farm. These measures have been added as siting criteria as part of the FGEIS.

SOIL IMPACTS

05 Comment:
PH#27, May 23, 2005 Edward Maruggi (page 222± spoken comments)

The comment states that recent research from Princeton and Duke University indicates that massive wind farms would significantly increase local soil drying and soil heating. This would impact farmers by forcing them to irrigate more often.

Response:

This comment presents an issue that was not raised during the scoping process and thus is outside of the scope of the FGEIS. However, even if soil drying and soil heating were raised as potential environmental issues during the scoping process, it is important to note that the Princeton/Duke study is of limited value in that it did not analyze soil loss/heating associated with an actual operating wind farm. Rather, the study modeled local climate impacts from a simulated wind farm. Moreover, the study modeled a 10,000-turbine wind farm, which is in stark contrast to the relatively small 53-turbine Ecogen project.

GOLDEN NEMATODES

06 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

The comment acknowledges that this quarantined pest will be removed from all machinery according to USDA guidelines; it further requests that NYSDEC and NYS Agriculture and Markets also supervise treatment.
Response:

The project sponsor entered into a Compliance Agreement with the USDA to facilitate the movement of articles within designated golden nematode quarantined and infected areas during construction of portions of the project. The Compliance Agreement ensures that if the USDA makes a determination that treatment of equipment is warranted, certain treatment methods will be undertaken under the supervision of USDA and/or A&M. This will ensure that no significant impacts from the golden nematode will occur (see DGEIS p. 3-65). The USDA has full jurisdiction in this matter pursuant to 7 CFR 301.85 and will determine involvement, if any, of other agencies in the supervision of treatment in accordance with federal regulations and the Compliance Agreement.

C.3.5 Aesthetic Resources

SCOPE OF VISUAL ASSESSMENT

01 Comments:

#027, May 18, 2005 Village of Naples
PH#45, May 23, 2005 Steven Lewandowski (Village of Naples Trustee)

Scope should include all communities within sight of the towers (Italy, Prattsburgh, Cohocton, Naples, Middlesex, South Bristol, Naples, Ontario County). Request towers be 5 miles from Naples based on SHPO.

Response:

The visual impact study is consistent with DEC’s visual impact guidance document and studies the potential impacts of a 5-mile radius from each WTG location. DEC’s guidance suggests that a study area greater than 5 miles is only required if the nature of the project is likely to have a greater impact such as power plants that generate wet cooling tower plumes or large landscape alterations. WTGs do not create a plume and while the WTGs are tall structures, they have a limited mass and are not visible from distances greater than 5 miles as demonstrated in the DGEIS. The visual impact study in the DGEIS is consistent with the final scope for the project. Moreover, SHPO has agreed on a methodology for final siting assessment. Furthermore, as the supplemental analysis of the visual impact studies completed for the DGEIS shows, WTGs at distances greater than 2 miles become difficult to see. This supplemental visual analysis is presented in Appendix R of this FGEIS. The studies completed are adequate to assess the visual impact. There is no reason to extend the visual impact analysis past 5 miles.

Additional Visual Impact Analysis will be necessary if required by SHPO as part of cultural resource review; or if the equipment is significantly different in shape size and color; or if the view of the project from Naples is more than 5 turbines on Knapp Hill, as is in Appendix R.

Furthermore, if a scenic viewshed is officially designated by the Town of Italy or Prattsburgh through zoning, Ecogen will be required to abide by those regulations within the respective Town.
The SCIDA also acknowledges that a Comprehensive Plan was amended by the Town of Italy on July, 25, 2005. This plan will be considered when SCIDA reviews final design package.

02 Comments:
#101, June 17, 2005 Bond, Schoeneck and King
#108, June 17, 2005 NYSDEC

The comment states that 19 photographs for visual impact is inadequate and that all of the photographs were taken within 2.5 miles of the proposed sites as opposed to the 5 mile limit [Section V(B) of the DEC Program Policy, Assessing and Mitigation Visual Impacts (DEP-00-2)]. Clarification for the definitions of Area of Potential Effect and Zone of Visual Impact should be added. The photomontage should not apply since the final siting has not occurred. The visual resources mentioned on pages 3-72 and 3-73 should also be mapped. The comment also claimed that the visibility of the WTGs from the Finger Lakes Trail is understated.

In addition, WTG from the Prattsburgh WindFarm were not assessed for impacts in the DGEIS, nor were aesthetic resources having statewide impact.

03 Comment:
#108, June 17, 2005 NYSDEC

It would also be very helpful to indicate which of the 15 resource categories listed in section V (A) of the policy may be impacted by the project, as well as to provide the specific resources under each category.

Response to Comments 02 and 03:

As stated above, the visual impact analysis presented in the DGEIS was re-evaluated in a supplemental assessment. This supplemental assessment shows that WTG at distances greater than 2 miles distance from the viewer is difficult to see. An assessment of the towers at distances greater than five miles is not warranted. The area of Potential effect was determined to be an area of five-miles from the outside edge of the project study area as defined in the DGEIS. The photomontage used 99 potential tower locations. These montages were extremely conservative, as the final project will have only 53 towers. The use of 99 locations provides ample assessment to determine the potential visual impact from the 53. Additionally, the montage form the Finger Lakes trail used 99 potential locations. Therefore, the montage shows a very conservative assessment of the view from the trail. It should also be noted that the view is from an informal area called “jumpoff” that is not officially part of the Finger Lakes Trail. Locations of sites of statewide or local importance are presented in Figure 3.6-2 in the DGEIS and in Appendix D, Zone of Visual Influence Maps, of the DGEIS.

04 Comment:
#105, June 17, 2005 Rachel Treichler

Views should be addressed from village of Naples, hills around Canandaigua Lake, hills around Keuka Lake, and Hi-Tor.
Response:

The visual impact study followed the methodology approved in final scoping document. There is no requirement that every potential view be considered and in fact it is impossible to evaluate every potential view, particularly in the context of a generic impact review. The DGEIS presents an accurate representational sampling of the primary views and fully considers the areas that may be impacted. Section 3.5.2.5 specifically addresses the Hi Tor Wildlife Management Area and demonstrates that the project may be visible from certain areas; the views will be distant.

05 Comment:
#028, May 23, 2005 Vincent G. Johnson

In 1990 the Yates County Planning Board commissioned a study entitled *Yates County Looking Ahead*, which identifies and designates Scenic Districts and seven Scenic Viewsheds within the Town of Italy. The Wind Turbines would be prohibited within the scenic areas, as they are approximately 400 feet tall and would be seen in the designated areas. Proposed mitigation is unacceptable, as it does not mitigate the impact on these viewsheds.

Response:

Although the document “Yates County: Looking Ahead” has been referenced, the proposed local zoning ordinance for Italy, the final zoning has not yet been approved. When zoning has been approved Ecogen will be required to abide by those zoning regulations.

The northern portion of the subject area, from the Italy Turnpike – Bassett Road north, is no longer being assessed for this wind project. Based on this, the visual impacts for the Town of Italy has been greatly reduced. Visual impacts will only occur on the south side of the Italy viewshed.

GENERAL VISUAL DOMINANCE

06 Comments:
#033, May 27, 2005 Sue Sliwinski
#035, May 27, 2005 Russell Dudash
#047, June 7, 2005 Todd and Cynthia Wolfer
#056, June 9, 2005 Stephen and Gail Rowan
#057, June 6, 2005 Donald and Barbara Christmas
#059, June 13, 2005 Lesley and Carolyn Swain
#085, June 13, 2005 William Curley
#103, June 15, 2005 Richard Marx
PH#05, May 23, 2005 Sandra Johnson
PH#09, May 23, 2005 Russell Dudash
PH#12, May 23, 2005 Alice Sokolow
PH#16, May 23, 2005 Steven Brewer
PH#25, May 23, 2005 Carolyn Tinney
The comments are summarized by stating that the authors are concerned about the appearance and presence of the turbines on the local landscape. Several feel that the mitigation of “get used to it” is unreasonable and outrageous. Visual dominance over the Village of Naples, Town of Italy and Town of Prattsburgh is a serious concern.

**Response:**

Comment acknowledged. Visual impacts are unfortunately unavoidable. While the optimal approach is to avoid locating wind projects in highly visible locations, the best wind resources in New York State are located along shorelines and on ridges, each with very high visibility. In addition the FAA has set standards that mandate the use of the color white and the nighttime lighting requirements. The DGEIS identifies visual and aesthetic effects as an unavoidable adverse environmental impact.

The magnitude of visual impact is also a factor of project size, specifically the height of the WTG. If the WTG were reduced in height, a greater number of total WTG would be required to obtain the target project size of 79.5 MW.

The northern portion of the subject area, from the Italy Turnpike – Bassett Road north, is no longer being assessed for this wind project. Based on this, the visual impacts for the Town of Italy has been greatly reduced. Visual impacts will only occur on the south side of the Italy viewshed.

**07 Comments:**

#89/109, June 16, 2005  NYSDPS

The introduction states sensitive receptors include highway corridors State Routes 21, 53, and 245. As sensitive receptors, there is no indication in the DGEIS of the potential for viewers traveling these highways to see the proposed wind turbines, the context within which the wind turbines may be viewed, or the number of viewers traveling on the State Routes that may see the wind turbines. The FGEIS should contain such discussion.

**Response:**

Comment Noted. The DGEIS contains an assessment of a portion of Route 53 taken from Map Id point #3. The FGEIS contains a further discussion of the potential impacts to users of the State Routes. Views of the project, from towers potential located on Knapp Hill and off of Gay Road, will also be visible from Route 21 South of Naples. The Zone of Visual Influence map in Appendix D (view shed analysis) represents a worst-case analysis of 99 potential turbines and no vegetation screening views, including views from state highway corridors. Based on this analysis, WTG’s will be visible from portions of these highway corridors.
08 Comment:  
#101, June 17, 2005      Bond, Schoeneck and King

A map of all visual resources should be included in the DGEIS.

Response:

Section 3.5 and Appendix D of the DGEIS provide this data.

09 Comment:  
#108, June 17, 2005      NYSDEC

DEC staff wishes to reserve the right to comment on the inventory of visual resources until a detailed inventory, that identifies the exact location of the turbines, is provided to the NYS Office of Parks, Recreation, and Historic Preservation (OPRHP).

Response:

Comment acknowledged. NYSOPRHP has been consulting with Ecogen on the proposed project and has approved a work plan to complete this assessment. Documentation of the NYSOPRHP consultation and their determination will be provided to SCIDA in Ecogen’s final design package prior to SCIDA taking action on the PILOT agreement.

The documentation from the SHPO review will be provided to NYSDEC for their comment (30 day review period).

VISUAL IMPACT

10 Comment:  
#078, June 11, 2005      Advocates for Prattsburgh; page 169

Visual impact according to the NYSDEC should be considered at greater than 5 miles and include the impact to the area surrounding the project area.

Visual impact is dependent upon landscape arrangement. Mitigation measures should include community and individual input as well as guidelines for arrays and clusters.

11 Comment:  
#082, June 15, 2005      Town of Italy

Section 3.5.1 (Visual Impact Assessment) states, “The study area for the assessment was defined as the area within a 5-mile radius of the potential 99 WTG in the Project area.” This approach ignores repeated recommendations by the NYSDEC to increase the area of visual impact beyond 5 miles.
12 Comment:
#082, June 15, 2005 Town of Italy

In March 21, 2005 correspondence from NYSDEC’s Environmental Analyst II, Mr. Kevin Kispert, he again emphasized the importance of examining an area greater than 5 miles from the turbines if there are any potential sensitive receptors as described in section V (B) of the DEC Program Policy, “Assessing and Mitigating Visual Impacts.” The same recommendation was made in various other official NYSDEC correspondence such as the letter dated Oct. 15, 2004 from Mr. Rudyard G. Edick, Project Manager addressed to Mr. Sherron. This recommendation by the DEC seems to contradict the applicants’ assertion that visual impacts will be confined to a much smaller area.

Response to Comments 10, 11 and 12:

As stated above, the visual impact analysis presented in the DGEIS was re-evaluated in a supplemental assessment. This supplemental assessment shows that WTG at distances greater than 2 miles distance from the viewer are difficult to see. An assessment of the towers at distances greater than five miles is not warranted. It should be noted that at three miles, towers are relatively small on the horizon and depending on weather conditions, they are not visible though atmospheric haze.

13 Comments:
#89/109, June 16, 2005 NYSDPS

The FGEIS should provide the basis for the conclusion that “Significant visual impacts from wind farms are generally within 3.5 miles” (Section 7.3.5, p. 7-6, 2nd paragraph).

Response:

As stated above, the visual impact analysis presented in the DGEIS was re-evaluated in a supplemental assessment provided in Appendix R of this FGEIS. This supplemental assessment shows that WTG at distances greater than 2 miles distance from the viewer is difficult to see.

14 Comment:
#079, June 15, 2005 Arthur Giacalone

The Visual Impact Statement contained in the DGEIS, with its conclusory findings and one-sided assumptions, fails to meet the burden placed on the applicant in the DEC’s policy statement, as articulated in the DEC’s Policy Guide “Assessing and Mitigating Visual Impacts.”

Response:

The NYSDEC policy is guideline not a regulation. However, Ecogen’s visual analysis was consistent with the guidance and included the use of geo-referenced photo simulations; viewshed analysis and line of site drawings, expert analysis. In addition, subsequent to comments received following the DGEIS, modeling of what a WTG may look like at 1,000 feet, 1,500 feet, 2,000 feet and one mile was completed. These models
are provided in Appendix R of this FGEIS. SCIDA believes that these assessments have adequately met the intent of the guide and has substantively assessed the potential visual impact of the project.

**SITING CRITERIA**

**15 Comment:**
#079, June 15, 2005 Arthur Giacalone

The visual impact assessment demonstrates that the proposed wind turbines would be visible from many residential locations in the project area. This is shown in the maps included in Appendix D at pages 3, 6, 7, and 9 of 83. Despite the fact that the Final Written Scope includes “residence” on its list of locally important visual receptors, and the DGEIS itself includes residences as a category in its inventory of “sensitive receptors” the DGEIS declares, without any clear and convincing evidence, that the “views in the quality area would likely qualify as low sensitivity because of the low population density rural setting and the low number of viewers.” Such a conclusory statement disregards the significance of the area residents, permanent and seasonal, of the rural and natural vistas provided by the broad valleys, steep slopes, and rounded and gently rolling hilltops and ridge tops. SCIDA must insist that the applicant providing meaningful siting criteria and setbacks that will protect these aesthetic resources of importance to the Project area residents, tourists, and visitors. Unless and until such mitigation measures are incorporated as conditions to any decision to provide financial assistance to the proposed project, it will be impossible for SCIDA to honestly and convincingly certify that the action is one that avoids or minimizes adverse impacts to the maximum extent practicable as required by 6NYCRR 617.11(d)(5).

**Response:**

As the project siting is primarily dependent on sufficient wind resources that are located on prominent hilltops, there is no action that could effectively mitigate the visual impact. As such, SCIDA acknowledges these unavoidable impacts in its decision to provide financial assistance.

**16 Comment:**
#079, June 15, 2005 Arthur Giacalone

The biased, one-sided nature of the DGEIS’ visual impact analysis is underscored by the DGEIS’ failure to establish any siting criteria or thresholds relating to visual impacts, despite the numerous sensitive receptors (including residences) within and in close proximity to the study area.

**Response:**

See previous two comments.
17 Comments:
#028, May 23, 2005   Vincent G. Johnson
#039, May 31, 2005   Vincent G. Johnson
#057, June 6, 2005   Donald and Barbara Christmas
#076, June 14, 2005  Nancy and Carl Wahlstrom

These comments are summarized by stating that the authors want the exact locations of the turbines to be disclosed.

Response:

SCIDA believes the modeling of 99 potential turbine sites has sufficiently assessed the impact of the final 53 locations regardless of their location. Moving a WTG from one location to another merely shifts the visual impact from one location to another. The impact remains the same; therefore, this is not an effective mitigation. Using 99 potential locations confirmed that the visual impact is consistent regardless of location.

18 Comments:
#043, June 10, 2005   Thomas C. Johns
#045, June 6, 2005    Gail Baker
#049, June 8, 2005    Michael J. Costello
#066, June 13, 2005   Brenda Bemchuk and Jeffrey Smock
#097, June 14, 2005   Dave and Brenda Cooley

These comments are summarized by stating that the authors will be disturbed by the flashing red strobe lights on top of the towers and/or just the towers being lit.

19 Comment:
#079, June 15, 2005   Arthur Giacalone

The DGEIS does not provide a visual impact assessment of the effect of FAA-required lighting on the nighttime visual environment. It is impossible for SCIDA to take the requisite “hard look” at the project’s adverse impacts on this rural community’s aesthetic resources without a thorough and objective study of the project’s nighttime impacts.

20 Comment:
#082, June 15, 2005   Town of Italy

The DGEIS states in Section 3.5.3 (Determination and Proposed Mitigation), “Significant visual impacts from wind farms are generally within 3.5 miles.” The DGEIS does not address nighttime visual impacts other than to acknowledge that up to half of the towers will be fitted with red strobe light, per FAA regulations. There are no visual stimulations to show the projected change in the night sky. In the area with literally no municipal lighting, the change in the night sky will conceivably be more impacted than the daytime skyline.
Response for Comments 18, 19 and 20:

The Federal Aviation Administration requires all tall structures over 200 feet have markers (paint and/or lighting) that are visible from at least 4,000 feet and in all directions from which aircraft are likely to approach. In the DGEIS it is explained that approximately ½ of the WTG will be lit (approximately 25 turbines). In addition, new FAA regulations allow for lighting that is less intensive. These new regulations allow for fewer WTGs to be illuminated and reduce the number of lights required from two per turbine to only one. The lighting is visually similar to an LED (light emitting diode) light. The strobe effect often referred to in LED lighting is imperceptible to the human eye (reference). The lights will flash on and off based on FAA regulations. Daytime lighting will also be eliminated unless weather conditions warrant illumination. Visual simulations of nighttime illumination would be difficult because there would be no visual reference from the black background in order to assess the impacts. SCIDA acknowledges there will be unavoidable visual impacts for both the daytime, and due to FAA regulations, nighttime periods. Moving a tower to any other project location will not serve to mitigate the impact.

BALLOON STUDY

21 Comments:

#039, May 31, 2005 Vincent G. Johnson
#068, June 14, 2005 Town of Italy
#076, June 14, 2005 Nancy and Carl Wahlstrom
#101, June 17, 2005 Bond, Schoeneck and King
PH#31, May 23, 2005 Nancy Wahlstrom

These comments are summarized by stating that the authors are requesting a balloon study of the tower locations.

Response:

SCIDA believes the visual modeling for the 99 potential sites is acceptable for a Generic Environmental Impact Statement. A visible impact from the project has been acknowledged already within the DGEIS. Therefore a balloon study will not add any additional relevant information nor change the impact already noted. However, subsequent to comments received following the DGEIS, modeling of what a WTG may look like at 1,000 feet, 1,500 feet, 2,000 feet and one mile was completed. This subsequent analysis is provided in Appendix R of this FGEIS. Based on the studies provided in the DGEIS and in the supplemental analysis visual impact appears to be reduced at a distance of about 1.5 miles. However, the impact of WTG on a rural ridgeline is subjective and varies from person to person. SCIDA believes that these assessments have complied with the review standards of the DEC guidance and have substantively assessed the potential visual impact of the project.
SHADOW FLICKER

22 Comments:

#033, May 27, 2005  Sue Sliwinski
#057, June 6, 2005  Donald and Barbara Christmas
#066, June 13, 2005  Brenda Bemchuk and Jeffrey Smock
#069, June 14, 2005  Susan Saunders
#076, June 14, 2005  Nancy and Carl Wahlstrom
#079, June 15, 2005  Arthur J. Giacalone
#082, June 15, 2005  Town of Italy
#083, June 17, 2005  Ray Cavallaro
#085, June 13, 2005  William Curley
#100, June 17, 2005  R &C Cole
#101, June 17, 2005  Bond, Schoeneck and King
PH#04, May 23, 2005  Amanda Gorten
PH#10, May 23, 2005  Todd Sharrow
PH#11, May 23, 2005  Donna Farrington
PH#24, May 23, 2005  Dick Ginther
PH#25, May 23, 2005  Carolyn Tinney

These comments are summarized by stating that the authors generally do not agree with the idea of using blinds as a mitigation to shadow flicker or the health hazards from the flicker. Sue Sliwinski says there are computer programs to determine exactly locations where shadow flicker will occur and that results show that even 1000 feet away does not reduce shadow flicker. Several are requesting a supplemental EIS on shadow flicker. Commenters also stated that shadow flicker on their property, not their residence, precluded enjoyment. The actual level of shadow flicker cannot be determined until final siting occurs. The shadow flicker affecting receptors should have additional studies performed. The competence of the analysis of shadow flicker was called into question.

Response:

The health impacts from Shadow Flicker are responded to in Section C.3.10.

A shadow flicker program, WindPro, was utilized in determining shadow flicker for all of the potential 99 sites that were analyzed. Impacts were also based on worst-case scenario with each receptor (window of residence) oriented towards a WTG and the lack of any screening vegetation that typically exists in real-life. It should be noted that shadow flicker may occur 20 minutes a day at three specific locations and most locations that may experience shadow flicker will be affected between 1.5 minutes to 4 minutes per day (based on worst case scenario in DGEIS). Shadow flicker has only been known to be disruptive inside a residence where the flickering creates a strobe effect indoors, not outdoors. Consequently, the impact is limited to the interior of a residence. Based on these modeled findings SCIDA believes there is minimal risk to impacts to shadow flicker from this project. The impact of shadow flicker on these specific locations will be further reduced by the placement of a WTG in relation to the receptor, weather conditions and vegetation. The worst-case scenario in the DGEIS was for 99 WTG, not the 53 WTG that are proposed to be installed by Ecogen. Fewer wind turbine generators means less impact on sensitive receptors- the residents. SCIDA believes it is unreasonable and
impracticable to enforce a “zero tolerance” standard for shadow flicker. The DGEIS demonstrates the potential for a minimal impact under worst-case scenarios without consideration for intervening vegetation. The effects of shadow flicker are greatly reduced after approximately 1,000 feet. Siting criteria will maximize the distance of WTGs from non-participating properties and will minimize the potential adverse impacts to the maximum extent practicable. SEQR does not require that a project eliminate all potential adverse impacts and the project, as being developed properly balances the public benefits against the potential adverse impacts.

23 Comment:
#079, June 15, 2005  Arthur Giacalone

The legitimacy of the analysis and conclusions reached by Ecogen’s visual impact consultant, WIND Engineers, Inc. (WEI), regarding the proposed project’s potential impact on visual resources, as well as “shadow flicker” impacts, is substantially undermined by the fact that WEI “has not visited the site.” (DGEIS, Appendix G, page 1 of 6).

Response:

Shadow flicker analysis is based on topographic maps, photographs of the study area and computer modeling. Visiting the site would not change the outcome of the results.

24 Comment:
#078, June 11, 2005  Advocates for Prattsburgh page 121-122

The comment can be summarized by stating that the author disagrees with the methodology used for the shadow flicker study. The commenter argues that the DGEIS should have included a study of actual effects of shadow flicker on residents in the area of the Fenner Wind Project and proposed mitigation based on the findings.

Response:

The shadow flicker study looked at the subject area under “worse case scenario” conditions by assessing the effects within a 5-mile radius of any of the potential 99 WTG in the Project area. Additionally, the assessment did not include the effect of vegetation or other structures, which could obscure or block shadow flicker from effecting residences and/or receptors. As stated previously, based on this analysis SCIDA does not feel there are significant risks of shadow flicker in the study area.

25 Comment:
#079, June 15, 2005  Arthur Giacalone

Comment No. G7: The public, SCIDA and other involved and interested agencies are not provided sufficient information in the DGEIS to determine the adequacy and appropriateness of WEI’s use of “standard assumptions” when reaching its conclusions regarding “shadow flicker” impacts.
Response:

The standard assumptions referred to here are really the worst-case scenarios including no trees or obstacles, no mountains outside the study area that would block low elevation sunlight, no special morning and evening weather scenarios (i.e. fog). These assumptions all lead to more conservative results.

VISUAL IMPACT STUDY

26 Comments:

#101, June 17, 2005 Bond, Schoeneck and King
PH#28, May 23, 2005 Phyllis Hickney

The 300-foot representative line used for the WTGs is almost 100 feet short of the actual turbine height. This has made the model inaccurate. Some WTG currently invisible may become visible in different lighting conditions than the worst-case scenario.

Additional concerns from these commenters were also brought up:
1. Transmission lines should be modeled.
2. WTG from WindFarm Prattsburgh should also be modeled.
3. A photo log with all photos taken should be included.
4. The viewpoints for the photo log should include all sensitive receptors and from within the 5-mile viewshed.
5. The conclusion on page 3-75 describing the view of the WTG by passing motorists as an oblique and unnoticed view is unclear. How was this determined?
6. How were the impacts determined in Table 3.5-2?
7. The visibility of WTGs from the Captain Fox House on page 3-76 needs to be substantiated.
8. Substantiate the Smith-McCloud House visualization on page 3-77.
9. The accuracy of the line of sight model for visibility of WTGs from Hi-Tor is questioned.
10. On Page 1 of the ZVI report, replace the word would with could in the sentence “...no obstructions have been put into the model - such as buildings, trees, fences, etc. that eventually would obstruct the line of sight from a vantage point to wind turbines.”
11. Comments about WEI maps:
   o Map 041124 showing the 10-mile distance from any turbine should be clarified if only the numbered turbines are visible, or if it is cumulative turbines visible.
   o Map 050103 only shows 42 turbines. Why?
   o It is assumed that the map number corresponds to date of production. Why were maps generated seven weeks apart?

Response:

The representative height for the WTG was modeled incorrectly. There is almost a 100-foot difference between what was modeled and what needed to be modeled. WEI has rectified this and the changes will be made within the DGEIS. However, changing the height only affected the impact of the profiles analyzed. The profiles that changed were
Cohocton, Naples, Prattsburgh 1, Prattsburgh 2, Branchport, Hi-Tor, Italy, Italy Valley and Middlesex. These are provided in Appendix D.

(1) Transmission lines are not used between turbines. An ECS is used to connect the turbines. The majority of these ECS lines will be buried, the exception being road and stream crossings where the ECS system will mostly likely be obscured by overhanging vegetation.

(2) Ecogen had 99 potential WTG locations modeled for a “worse-case” scenario on all impacts to the study area. Ecogen will site 53 WTGs for the project. WindFarm Prattsburgh site had a potential of 49 WTGs sited. The additional 3 WTGs (99 WTG of Ecogen verses 102 WTG from combined Ecogen and WindFarm Prattsburgh) from both projects would not produce a noticeable increased impact on the study area.

(3) The photo log is provided in Table 3.5-1 in the DGEIS. Additionally, each photo used in the visual simulation also are presented and described in the Appendix D.

(4) The visual analysis was sufficient in its scope (photo simulations, line of site profiles and viewshed analysis to adequately assess the impact from sensitive receptors in the project area.

(5) WTGs will not be the only visible object along roadways. Utility lines, cell towers, and buildings are also seen from the road as well as obstructing some of the views. However, SCIDA acknowledges that in some instances, the WTG may be the predominant structure visible on the horizon from the roadways.

(6) The impacts were determined based on the visual profiles provided by WEI. Several structures were obscured by topography. It should be noted that vegetation might potentially obscure those structures indicated as “impacted”.

(7) Photomontages 031 and 34 are within ½ mile of the Captain Fox House and Smith-Cloud House, respectively and are within are within view of one of the primary candidate areas. Based on these photos as well as the distance of the turbines from these tow receptors (approximately one mile), it was surmised that the WTGs would appear distant and unobtrusive. Additionally, WEI provided a model showing the visual impact of turbines from a single location at 1,000 feet, 1,500 feet, 2,000 feet, 1 mile and 1.5 miles. This model is provided in Appendix R of the FGEIS.

(8) The line of site profile for the Hi-Tor was modeled based on standard assumptions including the type of turbine (GE 1.5 MW, 77 meter rotor turbine), and topography.

(9) Comment acknowledged. The sentence has been changed.

(10) Map 041124 contains shading which indicates the number of turbines seen from a given location. It does not indicate WTG identification number. The map was provided as supplemental information.

Map 050103 only shows those turbines within the primary candidate areas.
The maps were generated at different times as part of continuing analysis during preparation of the DGEIS.

PHOTOMONTAGE MODELING

27 Comments:

#101, June 17, 2005 Bond, Schoeneck and King
PH#28, May 23, 2005 Phyllis Hickney

No overhead transmission lines or substations are modeled. The type of GPS receivers used to pick vantage points needs to be documented as well as accurate descriptions of the vantage point. Balloons should have been used in the photomontage to reduce potential error. Focal length of the camera should not have varied and should have been set at approximately 50mm, which is the level of the human eye. Digital cameras should have been used to record the focal length on the image. In addition, various conditions should have been used to simulate the visual impacts at all times. The “worst-case” scenario was not followed because the images #25, #11, and #37 do not include the WTG that are immediately off camera. There are also no photomontage simulations for some areas that have photo modeling, such as the Hamlet of Prattsburgh and Hi-Tor WMA. Also, the photo descriptions do not describe the photos, which should be done.

WEI did not take the photos in the field and has not visited the site. The attached photomontage modeling results have been prepared using standard assumptions, terrain output, turbine dimensional and color data, etc.” Commenter questions the standard assumptions used.

Response:

No transmission lines are used between turbines. Electrical collection systems are used between turbines and to the substation. The majority of the ECS will be installed underground with the exception of road and stream crossings as well as slopes greater than 15% where directional borings are not possible. The buried ECS will require 15-foot right-of ways that will eventually be obscured by overhanging trees and therefore not a significant visual impact.

A Garmin® handheld GPS receiver was used. The definition of 20 ft is really “better than 20 ft 95% of the time”. Descriptions of vantage points do include GPS coordinates (in UTM NAD27).

SCIDA believes that the photomontage modeling, profile and viewshed analysis adequately and thoroughly assessed the potential visual impact. A balloon study would not provide additional data that would relevantly affect the modeling.

Comment acknowledged regarding focal length. WEI (the visual assessment engineer used in the DGEIS) agrees that a single focal length should have been used for the simulations but believes the various focal lengths did not adversely impact the quality of the photo-simulation analysis.
Visual assessment profiling does not typically include different lighting effects. It is accepted that there will be a visual impact regardless of lighting conditions. Changing conditions, such as lighting, fog, rain etc would likely reduce the visual impact of the turbines. The photo-simulations were based on clear, sunny viewing days, the most conservative approach possible for simulating views.

Due to the lenses used in the collection of photographs, not all turbines can be seen in any given photo. The directions selected for the photos attempted to include as many WTGs as possible to give the “worse-case” scenario.

Portions of the blades from some of the 99 WTGs modeled would be seen by the Hamlet of Prattsburgh as well as some turbines could be seen along the north hill. The view from the Hi-Tor WMA would be limited to the parking area and lower ½ mile of the southern trail.

Each photo describes the location or “view point” from where the photo was taken as well as the direction of the photo. Additionally Figure 3.5-1 of the DGEIS further illustrates the direction of the photo.

Photomontage analysis is based on the photographs of the study area, the standard turbine model that will be used in the project (GE 1.5 MW, 77 meter rotor turbine) and computer modeling. Visiting the site would not change the outcome of the results.

28  Comment:
#090, June 15, 2005    William and Judith Brooks

Commenter feels that the Kuhn Farm photo is not a fair representation of how a “receptor” would view a grouping of turbines. They also feel that the visual disturbance would be cumulative. They also question the accuracy of the turbine size represented in the picture [of Kuhn Farm].

Response:

The Kuhn farm simulations were simulated because that location looked up-hill providing the widest sweep of view for the Emerson Road area. Additional simulation of how a turbine may look from 1,000, 1,500, 2,000, 1-mile and 1.5 miles was prepared and included in Appendix R of this FGEIS. Additional, SCIDA acknowledges the visual disturbance would be cumulative, especially in areas adjacent to clusters. This is an unavoidable, adverse impact of the project.

The nearest turbine (close to the road) is 755 meters away (2,477 feet). The accuracy of the photo (photo 30) is limited due to only one reference point and that reference point being very close to the camera.

29  Comments:
#89/109, June 16, 2005    NYSDPS

The text states the photo simulations assume 99 wind turbines. The final generic environmental impact statement (FGEIS) should contain an explanation indicating the
selection process for the photo simulation locations. The explanation should include information and assumptions for Wind Farm Prattsburgh, LLC’s 49 WTG turbine locations.

Response:

As stated in the DGEIS, Section 3.5.2.1, the selection of photo simulations were based on a “worst case” scenario or maximum number of turbines seen from a given location, based on the 99 WTG simulations. These 99 locations also take into account what the potential impact if Wind Farm Prattsburgh, LLC (WFP) were constructed, as the two projects would be located in close proximity to each other. Reducing the number of WTG will result in a reduction or no change in the visual impact from same locations.

Locations were selected based on sensitive locations (i.e. Italy Valley, Finer Lakes Trail) or from areas that would likely have a broad view of potential WTG installations, such as valley views towards prominent hill tops (Knap Hill and Emerson road) as hilltop to hill top views.

PROFILE MODELING

30 Comment: #079, June 15, 2005   Arthur Giacalone

Comment No. G8: It is not clear whether the turbine height of 300 ft utilized by WEI is accurate, and therefore, whether the results of the study are flawed. According to the DGEIS’ Executive Summary, “The maximum height of the WTG will be approximately 119m (389 ft) with a blade in the perfectly vertical position.” (DGEIS page ES-1). It appears, therefore, that the 300 ft. tower height utilized by WEI was approximately 30% shorter than the actual tower height of 389 ft.

Response:

A new set of profiles were run using the 77 m (389 feet), base to tip height and are attached in Appendix D of this FEIS. Of the nine profiles, only one result changed (Prattsburgh 1), which shows a turbine within line of site. The other analysis (photo montages and Zone of Visual Impact) used the correct tower height.

31 Comment: #086, June 17, 2005   Phyllis Hickey

Under the “Subject – Profile Modeling” reference is made to “relevant turbine height of 300’…showing line of sight from vantage point to top of wind turbine.” This data and photo images are not accurately representative of the true visual impacts for two main reasons: 1) the height of the turbines being proposed is 400’, not 300’, and 2) the vantage points were carefully selected to reference visual impacts from locations in the valley below which is some 700-800’ lower in elevation to the proposed hill top locations of the turbines. This does not accurately portray the full range of potential visual impact, which
should include views from vantage points at the same elevation as the turbines would be.

Response:

The locations were selected based on the sensitive receptors, which is consistent with the NYSDEC policy on Assessing and Mitigating Visual Impacts. The WTG profile locations were chosen based on the highest point of the hilltop. The zone of visual influence maps indicates how many of the 99 potential turbines would be visible from any given point in the area.

Comment:
#101, June 17, 2005 Bond, Schoeneck and King

The model results and the implications of the results are not discussed. Why was 90-meter USGS Digital Elevation Model used when a 10-meter data is more accurate and available? The sight profiles from the Hi-Tor Wildlife Management Area and the Italy Valley Fox House do not intersect a proposed wind turbine. In addition, the 300-foot representative line is inaccurate as the WTG are almost 400 feet tall.

Response:

The profiles were calculated/shown using the XMap software (as opposed to WindPRO). XMap uses 90-meter data due to the massive amount of data otherwise required. The difference in analytical results is negligible.

The site profiles for Hi-Tor and Italy Valley Fox House did not use the 99 potential locations for its model but instead were conducted based on a worst case scenario that a WTG was present on the highest point of the opposing hill. Both Profiles show that in this instance, the WTG would be visible.

Comment acknowledged regarding model height of the profiles. The profiles were amended to represent the correct tower height.

Comment:
#101, June 17, 2005 Bond, Schoeneck and King

In order to improve the accuracy (and defensibility) of the Profile Model and the subjective interpretation of the model outputs that is provided in the test of the DGEIS, the following additional data needs to be provided and integrate 3D into any visual evaluation:

1. Base mapping that depicts known landmarks.
2. A legend should be included on all model outputs/graphics.
3. Points of orientation along the lines of sight, such as highways/roads, towns, rivers, or lakes should be added.
4. The line of sight cross-section should intersect as many wind turbines as possible.
5. The wind turbine numbers should be indicated.
6. The vertical exaggeration should be indicated.
7. The assumed viewer height should be indicated.
8. Line of sight cross-sections should be conducted from as many visually sensitive resources as possible. Resources that were not analyzed include the Finger Lakes Trail.

Response:

(1) Base mapping of known landmarks was done in ZVI. After 5 miles WTGs from landmarks become very hard to see. A formal cultural resource assessment will be completed through coordination with SHPO and submitted to SCIDA by Ecogen with the final design package.

(2) Legends and/or labels were added to model outputs and graphics.

(3) Points of orientation were added along lines of site such as roadways, and towns.

(4) This comment is not relevant since the actual tower locations are not known at this time. The proposed WTG located on the highest elevations were used.

(5) Wind turbine numbers will be added to the models and graphics.

(6) Vertical exaggeration notation will be added to models and graphics.

(7) Due to the vertical scale of the profiles, the 1.5 meter height of a human would be negligible. No change will be made.

(8) Resources such as the Finger Lakes Trail were analyzed using photomontages.

Comment:

#101, June 17, 2005 Bond, Schoeneck and King

Page 2 (Modeling Uncertainties) (1) states, “Normal handheld GPS receivers are usually accurate to 20 ft.”. It is not clear if a GPS unit was used to document the vantage point coordinates, and if so, what type of unit was used. Accurate descriptions of the vantage point should accompany GPS coordinated. These descriptions allow for micro-adjustments based on high-resolution aerial photography and can significantly reduce the margin of error from handheld GPS receivers.

Response:

A Garmin® handheld global positioning satellite (GPS) receiver was used. The definition of 20 ft is really “better than 20 ft 95% of the time”. Descriptions of vantage points do include GPS coordinates (in UTM NAD27).

Comment:

#101, June 17, 2005 Bond, Schoeneck and King

Page 2 (Modeling Uncertainties) (2) discusses photograph direction and the use of visible reference points to reduce the margin of error. However, it is apparent from the
photomontage simulations that visible reference points were not available for all of the simulations. One or more balloons should have been flown (at proposed wind turbine locations and height) at the time the photographs were taken to eliminate this margin of error.

Response:

Comment acknowledged. Although a balloon study would allow for visible reference points, in the few locations that visual reference points were not present the focal length of the photo provides and adequate estimate of the WTG size in relation to the view. The relative size to distance ratio was consistent with the ratio from photos that had more reference point control.

Comment:

#101, June 17, 2005  Bond, Schoeneck and King

Page 2 (Modeling Uncertainties) (3) discusses focal length. While it is not clear if the report is suggesting the use of varying focal lengths or a set focal length, it is clear that a range of focal lengths were used during the photo documentation (ranging from 35 mm to 60 mm). It is generally accepted that the focal length should not vary but rather be fixed and equivalent to human eyesight in terms of scale and view (i.e. 50mm). Digital SLR cameras, which record the exact focal length onto the digital image, should have been used.

Response:

Comment acknowledged. The change of focal length would change the relative size of an object, which would be subsequently apparent in relation to vertical reference points. However, the range in focal lengths does not appreciably alter the WTG’s appearance of relative size to the existing landscape in the photomontage.

Comment:

#101, June 17, 2005  Bond, Schoeneck and King

Page 2 (Modeling Uncertainties) (5) indicates that the computer model “…works best under normal light conditions (as opposed to special conditions like sunset, rain and fog…)”. To fully and accurately evaluate visual impacts, a range of light conditions (early morning, mid-day, and late afternoon) should all be captured to display the effect of different light conditions on the proposed wind turbines, including front, top, side and back lighting.

Response:

Visual assessment profiling does not typically include different lighting effects. It is accepted that there will be a visual impact regardless of lighting conditions. The photographs were taken on a day with extremely good visibility. Such clear days are typically limited to the fall season. On a regular basis, visibility is significantly reduced by haze in the summer, rain and fog in the spring and snow and cloud cover in the winter.
38  **Comment:**  
#101, June 17, 2005  Bond, Schoeneck and King  

All simulations refer to a “photo description” number; however, an actual description of 
the selected photo/viewpoints is not provided in the report.

**Response:**

See Table 3.5-1 Visual Assessment Photo of the DGEIS (page 3-75).

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**DOCUMENT INCONSISTENCIES**

39  **Comment:**  
#101, June 17, 2005  Bond, Schoeneck and King  

Page 3-78 incorrectly identifies the Project as containing 52 WTG.

**Response:**

Comment acknowledged. The FGEIS will reflect the change and read as “The final 
Project will only construct 53 WTG. Shadow-flicker impacts on potential receptors 
(residences) are significantly reduced when wind turbines are placed in increased 
distances from the potential receptors.”

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**SHPO CONSULTATION**

40  **Comment:**  
#101, June 17, 2005  Bond, Schoeneck and King  

Comment is summarized as stating that they are unable to understand the intent of 
SHPO’s request due to grammar: “Through ongoing consultation and after their review of 
the information presented in Appendix E, the SHPO office has requested that additional 
information on architectural resources, including photography, maps and photo keys for 
structures within the APE that may be eligible for inclusion in the NRHP.” Correspondence with SHPO was also not provided in the appropriate appendix.

**Response:**

Comment acknowledged. The sentence will be changed in order to reflect the nature of 
SHPO’s request to send them additional information: “Through ongoing consultation and 
after their review of the information submitted on November 12, 2004, the SHPO office 
requested additional information on architectural resources including photographs, 
maps, and photo keys for structures within the APE that may be eligible for inclusion in 
the NRHP.”
There have been numerous informal phone conferences, faxes and e-mail correspondence with SHPO regarding information presented in Section 3.6. These consultations occurred throughout December 2004 and January 2005 and included:

- December 8, 2004 phone conference
- January 4, 2005 faxed comments
- January 5, 2005 phone conference
- January 7, 2005 phone conference
- January 10, 2005 phone conference
- January 13, 2005 phone conference
- January 27, 2005 faxed comments
- January 29, 2005 phone conference

In addition, since the submittal of the DGEIS for public review, formal correspondence has been received from SHPO regarding requirements for SHPO studies following final siting. This correspondence is included in Appendix S of the DGEIS.

**MISCELLANEOUS**

**41 Comment:**

#079, June 15, 2005 Arthur Giacalone

SCIDA, as Lead Agency, has the authority to deny Ecogen financial assistance application due to significant adverse impacts on the project area’s aesthetic resources.

**Response:**

Comment acknowledged.

**C.3.6 Historical and Archaeological Resources**

**GENERAL COMMENTS**

**01 Comments:**

#078, June 11, 2005 Advocates for Prattsburgh
#101, June 17, 2005 Bond, Schoeneck and King
PH#12, May 23, 2005 Alice Sokolow

The comments can be summarized as stating:

SHPO was not included in the preliminary review of the DGEIS, even though they have the most relevance in this section. The list of included structures in the NRHP appears to be solely from the NRHP webpage, but does not appear to include eligible structures. The inventories structures in the DGEIS are only within a ½ mile radius, not a 5-mile radius of the WTG potential sites. A comprehensive architectural survey is necessary to document structures that may be eligible for listing on the NRHP. Tables 3.6-1 and 3.6-2 do not include structures eligible for the NRHP. Section 3.9.6 only addresses structures
listing in the NRHP, not eligible structures. The DGEIS must evaluate visual impacts for eligible structures.

Page ES-6 indicates: “In accordance with the requirements of SEQRA, potential impacts that may result from the Project on environmental and cultural resources were identified and evaluated. A summary of potential Project impacts is presented in Table ES-1.” – Yet based on discussions with SHPO and evidenced in correspondence included in the appendix and dated 5/4/1005 (AFP-Appendix 3.6) this project is in Step 1 of the 4 step process of section 106 (AFP-Appendix 3.6).

All Historic and Archaeological Resources of this report are inconsequential and do not provide the substantive information required for the SEQRA review. Sites must be identified and all phases of review must be complete in order to make a determination of impact. A public review, after these steps occur, must be mandated.

On page 3-84 it is not clear whether the radius is ½ mile or 5 miles. Vernacular structures may be NRHP eligible and schoolhouses are probably not examples of the earliest architecture in the community.

The last paragraph’s veracity is questioned on page 3-87. Commenter counter-claims that evidence of early habitation can be found in the uplands.

A commenter stated that Ecogen’s archeological section uses Global Winds’ study, although it covers 1/15th the area of Ecogen. The section is deficient and should not have been approved.

Response:

SHPO was consulted throughout the SEQR process in order to guide the development of the Historic and Archaeological Resource section. In a letter to the SCIDA dated June 27, 2005, SHPO agreed with the contents of a letter from the Project sponsor’s attorney (Young, Sommer…LLC) dated June 16, 2005 outlining the proposed cultural resource investigation at the Project site. The scope of work for the cultural resources investigation is presented in Appendix S.

Tables 3.6-1 and 3.6-2 show the structures in Italy and in the surrounding area that are already included in the National Register of Historic Places. Section 3.9.6 does address structures eligible for NRHP inclusion. There are no temporary impacts that will affect those structures.

The historical and archaeological resources documented in the DGEIS provide sufficient information for SCIDA and other involved agencies to make the necessary generic SEQR determinations by providing the information to properly assess the potential impacts to historical and archaeological resources. A cultural resource assessment will be prepared including consultation with SHPO, as final site selection proceeds will assure that there will not be any inadvertent or previously unconsidered impacts to such resources.

On page 3-84 there is no radius for the Area of Potential Effect as this particular section is only addressing the historic structures and development within the Study Area.
Vernacular (local) structures will most likely not be eligible for inclusion in the National Register for Historic Places.

The last paragraph on page 3-87 was based on the information generated for Wind Farm Prattsburgh by the Public Archaeology Facility at SUNY University at Binghamton. The report mentions that some hunter/gatherers used the high ground as hunting camps to watch for herds of animals, however most of the permanent settlements with increasingly larger populations were established along major rivers and lake valleys near rivers. They represent the areas more likely to find artifacts due to their higher population and longer settlement time.

The large Ecogen study area was selected in order to determine the best potential areas for WTG siting. That has been accomplished through the DGEIS. The areas selected as potential development sites by Wind Farm Prattsburgh are located along ridges that lie in between clusters of Ecogen’s primary candidate areas. While the study areas are very different sizes, the actual project areas are similar and contiguous. Therefore using Wind Farm Prattsburgh’s study to determine archaeological significance for the potential WTG sites is acceptable. However, Ecogen will conduct archaeological testing as part of the cultural resource assessment once final sites have been selected for the WTG and access roads.

Ecogen will be required to complete all SHPO consultation prior to SCIDA approving the application. The work plan for the SHPO studies was approved by SHPO in a letter dated November 2, 2005 and is included in Appendix S of this FGEIS.

**MITIGATION**

**02 Comments:**

#078, June 11, 2005  Advocates for Prattsburgh  
#101, June 17, 2005  Bond, Schoeneck and King

Page ES-13 shows a table of issues and mitigations. Ecogen will not move the Project and SHPO has stated that relocation of the Project will have the same or more impact on cultural resources and historical architecture. The commenter feels that the inventory has not been completed and that there are numerous sites throughout Western New York that have historical significance. It should be noted that there could be impact to historic districts and those impacts should be evaluated. In addition, will Ecogen mitigate potential impacts due to subterranean excavation?

Page ES-14 continues mitigation and indicates Phase 1b investigations prior to construction, but what about the additional phases that may be required based on Phase 1 evaluation? In addition, it is noted that Kevin Kispert of the DEC has indicated that an area greater than 5 miles may apply to Aesthetic resources (Appendix A, page 12) and SHPO might also reserve that same right for review. All evaluations should be based on a guarantee of turbine to be used.

Page 3-81 acknowledges that final siting of turbines and associated equipment have not yet been determined and that additional study may be required. Additional study is
required in order to identify the resource, define the potential impact, and evaluate means of avoiding, minimizing and mitigating the impacts.

Response:

While there are numerous sites identified by SHPO as having historical significance and as archaeologically sensitive areas in western and central New York, the area where Ecogen is proposing its Project has very few known areas of archaeological significance. Ecogen will complete an archaeological survey in order to determine if any historically significant artifacts are located at the proposed sites, regardless of their location.

Ecogen will be required to complete all SHPO consultation prior to SCIDA approving the application. The work plan for the SHPO studies was approved by SHPO and is included in Appendix S of this FGEIS. As noted in the responses to comments on visual impacts, the DEC guidance document “Assessing and Mitigating Visual Impacts” only requires going beyond a 5 mile range for activities that create large plumes and large landscape alterations. As noted in the DGEIS, even at 5 miles, the WTGs are barely discernable; thus a visual assessment and an assessment of impacts on historical resources beyond 5 miles is not necessary.

PHASE 1B

03 Comments:
#078, June 11, 2005 Advocates for Prattsburgh
#101, June 17, 2005 Bond, Schoeneck and King

Page ES-17 once again refers to the Phase 1B studies but does not indicate that there is a possibility that turbines may need relocation. It seems that the DGEIS accepts the fact that studies will be done, but will in no way mitigate any problems that are identified. In addition, any changes in eligibility status will have to be updated and additional archaeological work may need to be done for those sites previously identified if they are in the Project area. Phase 1B testing will be done under the guidance provided by OPRHP in 2005. A Phase 2 site examination and/or Phase 3 data recovery may also be necessary prior to construction. Will access roads and cable trenches be addressed as well under a Phase 1A and B?

Was the Phase 1B begun in spring of 2005 as was mentioned in the DGEIS? If so, are the results available?

Response:

The Phase 1B has not begun and would be completed after final site selection. This would be submitted as part of the “Final Design Package”. If SCIDA determines that this Final Design Package as well as other submittals comply with the Statement of Findings, SCIDA would then take action on the PILOT. If these submissions do not comply with the Findings Statement, SCIDA may require supplemental SEQR.
Within archaeologically sensitive areas with slopes of less than 15%, access routes will be tested along the centerline and the ECS route will also have shovel tests dug along the centerline as required by SHPO. As such, SHPO consultation (including shovel testing) will need to be completed prior to submittal of the Final Design Package.

METHODOLOGY

04 Comments:
#078, June 11, 2005 Advocates for Prattsburgh
#101, June 17, 2005 Bond, Schoeneck and King

Section 3.5. Starting on page 3-70 outlines the method used for Appendix D. Appendix D does not seem to include the probability of all sites elected by Global Winds (the other wind developer) and though it has been presented as a “worst case scenario”, the project sponsor has already discussed a phase two of the project, as has Global Winds. Also, the methodology would be completely useless should a larger turbine be used. There should be third party monitoring and a guarantee under recommissioning that any criteria outlined would be for a specific turbine and any change in turbine would require a new evaluation which will certainly have a cumulative affect on the impact of the project.

On page 3-88, there should be a decrease in the shovel testing intervals from 50 feet to 25 feet. OPRHP requires that an archaeological survey be conducted along the entire project if any portion of the project lies within 1 mile of a known archaeological site. OPRHP also usually wants a sample of STPS in order to evaluate the soil stratigraphy of the area.

Response:

The Project will be built in one phase only. A larger turbine will not be used. The WTG that Ecogen has selected to use is the 77-meter rotor diameter model used consistently throughout the DGEIS and the supplemental analysis.

Ecogen will be required to complete all SHPO consultation prior to SCIDA approving the application. The work plan for the SHPO studies was approved by SHPO and is included in Appendix S of this FGEIS.

NATIONAL REGISTER OF HISTORIC PLACES

05 Comments:
#078, June 11, 2005 Advocates for Prattsburgh
#101, June 17, 2005 Bond, Schoeneck and King

Page 3-73 outlines the National Register of Historic Places (or proposed for listing) seems to imply that the process has been completed, when in fact; it has not been done at all. In addition, there are no listings for Prattsburgh, even though the town park that has been around since 1808. This is the same park outlined on pages 3-118 and 3-132 that will need to have an easement for truck turning radii. The development indicates that it is not anticipated that they will have to remove any permanent structures or trees! Other
historic sites include, The Muck 1936, Harvest Chapel, Narcissa Prentiss house, War of 1812 cemetery, and a very old schoolhouse on Block School Road that is in the center of the project area. Many sites of historical significance are outlined in the Writings of Stephen Bert Merrit 1878 – 1963 Published by Prattsburgh Community Historical Society.

It is important to note that although many historic sites are not listed in the National Historic registry, (including the Narcissa Prentiss house which seems to have gotten funding, acknowledged by Governor Pataki, and then was not registered) there are likely many sites that are eligible for registration that are not included in the report. A balloon test is requested.

Section 3.6 seems to suggest that all required inventories have been completed. It goes on to list sites, and on page 3-86 indicates how the archaeological sensitivity assessment done for the other wind farm company is adequate for this project. This should not be acceptable since the projects do not cover the same area. Ecogen lists 33,000 acres of potential sites, the Wind Farm Prattsburgh, LLC project is not the same area, although it may overlap in some areas of the Wind Farm Prattsburgh, LLC indicates, it will cover 1,800 acres; a fraction of the Ecogen site.

Response:

Structures listed on page 3-73 were retrieved from the National Register of Historic Places database, meaning that they are currently listed and that no further inventory is necessary. There are no listings for the Town of Prattsburgh because there are no records of any Prattsburgh structures in the National Register of Historic Places database. This does not mean that there are no eligible structures; it means there are no structures within the Town that have been listed. The historic Village Green will no longer be on a transportation route and will not be impacted by moving the WTG to their final sites. While historic structures may exist within the Town of Prattsburgh, they have not been nominated for inclusion in the National Register.

As per the scoping document, for a visual impact assessment to historic structures, no balloon tests will be done. The DGEIS has already acknowledged that there will be a visual impact to many places within the Area of Potential Effect; therefore a balloon test will not change the evaluation of the impact. As requested by SHPO, once the final sites are selected, Ecogen will assess the impact of the WTG on NRHP-listed structures, NRHP-eligible structures; and structures determined to be potentially NRHP-eligible. The protocol for this study is presented in a work plan, provided in Appendix S. This work plan has been revised per comments received and approved by SHPO in a letter dated November 2, 2005 from Nancy Herter of SHPO.

The areas that the Global Winds project covers are in very close proximity to the primary candidate areas for the Ecogen Project. Most of Global’s proposed WTG sites are between Ecogen wind farm clusters, which would make Global’s study relevant to the Project. Approximately 99.7% of the 24,000 acres in the study area will be left undisturbed so archaeological studies in areas where there will be no WTG is unnecessary and will not be done. Archaeological studies will be completed for all of the 53 final sites and their connecting access roads prior to commencement of construction.
Within archaeologically sensitive areas with slopes of less than 15%, access routes will be tested along the centerline and the ECS will also have test pits along the centerline. The use of Global Winds’ Phase 1A was at the request and concurrence of SHPO.

**HISTORICAL CONSULTATION/SHPO CONSULTATION**

06 **Comments:**

#078, June 11, 2005  Advocates for Prattsburgh
#101, June 17, 2005  Bond, Schoeneck and King

Section 3.6.2.3 outlines a one-time payment of $25,000 to each Town, which is unacceptable since the impact on resources has yet to be identified. The amount may or may not be acceptable to SHPO, depending on the type and extent of impact.

Section 3.6.3 once again reiterates that the cultural value will likely be equal or greater in other areas of the state. Since study of the area has not yet been done, it is impossible to make that determination. Since there are miles and miles of uninhabited hillsides in the state with no town or historical building that have the same wind resources or better than the Prattsburgh area, it seems likely that this will be the final determination.

In a telephone call with Barbara Shaver, town historian, on May 5, 2005, she indicted that no one with the wind company has been in contact with her regarding this project. One might think that this would be a key place to start any research, if there was real concern about the town history; this was also included in AFP’s response to the scope and has not been responded to.

**Response:**

The $25,000 one-time payment to each Town is to be used for any suggested improvements to historic structures, sites related to a significant event in the community’s past, or for memorials recognizing important people or events associated with the community’s heritage. SCIDA acknowledges that SHPO may request different types of mitigations as part of their review of the project.

Wind resources necessary for the economic viability of the Project are not evenly distributed across the state and there are not that many potential sites that have the wind potential that Italy and Prattsburgh have. SCIDA is unaware of any place in the State of New York that does not have historic resources within 5 miles of a given location. SHPO has looked at the Project and determined that moving the Project to another location within the state would impact the same if not greater historical resources than if the Project remained in Yates and Steuben Counties.

Extensive consultation was conducted with OPRHP. Ecogen and OPRHP have agreed upon methodology to conduct cultural resource investigations for archaeological and historic architectural resources. This agreement is memorialized in correspondence from Young, Sommer, LLC dated June 16, 2005 and from OPRHP dated June 27, 2005. All historically significant structures within the Area of Potential Effect will be considered.
through this process. Ecogen will be required to contact local historical societies as part of the OPRHP process.

TRIBAL HISTORIC PRESERVATION OFFICE (THPO) CONSULTATION

07 Comments:  
#078, June 11, 2005 Advocates for Prattsburgh  
#101, June 17, 2005 Bond, Schoeneck and King  

The report does not mention consultation with Indian tribes. The Prattsburgh area was a portion of the territory which is considered the birthplace of the Senecas and artifacts such as arrowheads have been found by local residents. Further investigation in this area seems warranted as indicated by the ACHP. While actual sites are not presently identified, this does not negate the significance of the Native American history of the area and artifacts thereof.

Response:  

SCIDA is sensitive to the potential impacts to archaeological sites of Native Americans and has coordinated with SHPO in the siting criteria. SHPO is the state agency with expertise on this subject and as the commentors note, there is no indication of known sensitive sites in the project area. During construction, standard precautions developed in consultation with SHPO will be in place to assure a proper response in the event a previously unknown archeological site is discovered.

VIEW FROM HISTORICAL STRUCTURES

08 Comment:  
#103, June 15, 2005 Richard Marx  

The comment is summarized as stating that the commenter resides in a historical home identified in Appendix E of the DGEIS. While the process for inclusion in the NRHP has not been completed at this time, it will be upon completion of renovations. There are serious concerns about the proximity of the Project to this structure and personal mitigation will be necessary to offset the view from the structure.

Response:  

Comment acknowledged. Ecogen will include an assessment of this property in its consultation with SHPO.

09 Comment:  
#089, June 16, 2005 NYSDPS  

Section 3.5.2.4 (p. 3-77; Last paragraph) states “Due to the location of historic structures on roads at lower elevations and their locations outside the primary candidate area, it is not anticipated that the view of these 17 historic resources will be diminished by location
of the proposed WTG.” The FGEIS should include an explanation of how this conclusion was determined. For example: Was a field verification undertaken? Were sections drawn and assumptions made about the types of intervening vegetation and topography and times of year that the WTG would or would not be visible?

Response:

The DGEIS contains the methodology employed in the visual analysis in accordance with NYSDEC Visual Guidance that includes using topographical maps which present line-of-sight analysis and demonstrates intervening geographical features. SHPO has approved Ecogen’s approach and the conditions for further review as site selection progresses as per their letter dated November 2, 2005 (Appendix S).

C.3.7 Noise Impacts

NOISE IMPACT STUDY

Comments:

#006, April 30, 2005 Sue Sliwinski
#015, May 11, 2005 Terry Matilsky
#017, May 12, 2005 Terry Matilsky
#020, May 13, 2005 Kris Allison
#028, May 23, 2005 Vincent Johnson
#057, June 6, 2005 Donald and Barbara Christmas
#061, June 13, 2005 Robert Allison
#068, June 14, 2005 Town of Italy Zoning Commission
#073, June 13, 2005 Ruthie Matilsky
#075, June 13, 2005 Advocates for Italy
#079, June 15, 2005 Arthur Giacalone
#094, June 11, 2005 John Servo
#101, June 17, 2005 Bond, Schoeneck and King
PH#12, May 23, 2005 Alice Sokolow
PH#18, May 23, 2005 Terry Matilsky
PH#25, May 23, 2005 Carolyn Tinney
PH#37, May 23, 2005 Bob Allison
PH#38, May 23, 2005 Kris Allison

The comments are summarized by stating that the authors do not agree with the noise impact study’s methodology (assumptions and modeling), or results and therefore, the mitigative setbacks from residences.

1. sound propagation ignores radiative cooling (the dominant source of error)(Matilsky).
2. “increases in ambient and background noise levels are expected during warmer seasons…”(Matilsky).
3. missing data (for locations where FLNIE would be exceeded at night).
4. “…seems to draw conclusions for setback conditions for quite areas from data gathered at noisy locations and vice versa.”
5. “… the use of ‘one size fits all’ mitigation strategy is not appropriate”.

11/22/05

130 of 299
6. …establishing ambient noise zones for “quiet area” and “noisier areas” is flawed.

7. The use of the “residential receptor” location rather than the property line (as called for in the Town of Italy Local Law (draft) #1 dated March 9, 2005) is not appropriate.

8. In practice, in most rural areas, my rule of thumb is that the nearest turbine needs to be at least 1¼ miles from any house. However, these are areas where the background noise level can be 20dBA at night. (Bowlder)

9. All noise studies should be done from property lines, and should include everyone (full and part-time residents) (Donald and Barbara Christmas).

10. Utilization of property lines when determining sound levels and setbacks would be consistent with the position expressed by SCIDA’s Executive Director, James P. Sherron, in his 2/20/04 letter to Ecogen (Arthur Giacalone).

11. Noise assessment data for 6652 Baker Road is missing (Robert Allison).

12. It is noted in the DGEIS that there is less than a 1 dB margin of error in the measurements. A worst-case scenario would increase any measurements by 1 dB.

13. It is unclear if the technicians responsible for moving the noise collection equipment also cleaned the equipment of any ice buildup, which would impact results.

14. Other studies used 99 sites. This study, using 53, is inconsistent and should be noted in the DGEIS text.

15. The hub height used for measurements is unclear: is it 60 meters or 80 meters?

16. Additional studies are requested, as according to the noise study readings above 6 dB would be heard at a setback distance of 880 meters (Appendix 8 of the Noise Study in Appendix F of the DGEIS).

17. Noise criteria were not followed from the scope and this is noncompliance. There is also no noise compliance process.

18. The receptor points chosen did not follow the scoping requirements nor NYSDEC’s recommendations for determining what a receptor is.

Response:

(1,2) Environmental background noise levels are affected by sources of noise that are close and distant to the receptor. Typically, the level of background noise will be determined by noise sources such as traffic on local and distant roads, streams, leaves in the trees, etc.. During the winter time, natural sources such as leaves on trees, long grass or even water passing down streams will be greatly reduced. This will be caused by seasonal factors such as:

- no leaves on trees;
- no grass coverage;
- snow on the ground;
- snow covering streams;

The effect of snow covering the ground is significant when assessing background noise levels. Snow is an acoustically soft ground condition. Therefore, sound propagating from noise sources located far from the measurement location will be subject to additional ground attenuation. This is the primary reason why it always sounds so quiet when snow is on the ground. Furthermore, a blanket of snow covers noise sources such as streams.
and the needles of coniferous trees. The effect of the snow is, therefore, to cover noise sources that normally add to the natural background noise.

The descriptions of radiative cooling is not unknown to us, however, it is not the reason for the change in background noise levels to which we refer within the text of the report. Radiative cooling may result in a higher potential for stable atmospheric conditions that may result in the potential for increased wind shear during night-time periods. However, such an effect is dependent upon a number of factors. Where this phenomenon has been reported to give rise to problems with wind turbines and the emitted noise from the wind farm, the topography is flat. In these circumstances, “stable atmospheric conditions” will occur and the effects of high wind shear can be experienced.

Within hilly landscapes, turbulence is introduced into the air flow from the hillsides and valleys, i.e. the changing topography over which the air passes. Since the issue of the reports by van den Berg, which identify this as a potential reason for noise problems at the Rhede Wind Farm located on the Dutch/German border, we have reviewed wind speed and wind shear data for sites in the UK, Australia and New Zealand. For landscapes that are flat then such effects have been noted, but not to the degree described by van den Berg. However, what has become clear is that hilly topography limits the potential for such effects that are associated with high wind shear as described by van den Berg.

Some commenters (Matilsky) indicate that radiative cooling explains everything from sound propagation over land/water boundaries to understanding the calling distances of the African Elephant. What is being described/referred to by Mr. Matilsky is the effect of temperature inversions. A temperature inversion may result in a sound being “channeled” within an acoustic duct. This effect is well known but occurs for specific weather conditions, primarily when wind speeds are low, i.e. when the wind turbines would not normally be operating. Temperature inversion effects are more likely to result in an increase in ambient noise levels than for the lapsed condition, i.e. noise source located further away will have a greater potential effect. However, these conditions require low wind speeds when the turbines will not be operating. When considering measurements of background noise levels before the construction of the proposed wind farm, a temperature inversion is more likely to lead to an increase in background noise levels at the receptor location due to improved propagation of distant noise sources to the receptor location. The diurnal variation of the measured noise levels reported within the Environmental Statement are associated with changes in activity in the area rather than changes in wind speeds and wind shear, i.e. noise associated with local sources rather than specific weather conditions.

Finally, a wind turbine needs a minimum wind velocity before the creation of any noise associated with its operation. This requirement for wind eliminates, to a substantial degree, the potential for temperature inversion effects associated with radiative cooling.

(3,11) There was limited data for 6652 Baker Road due to a power failure to the collection unit. Only four days worth of data was recorded. However, two of those data tables were omitted in Appendix 6 of the noise study. Those tables have now been added in the amended version of the DGEIS, provided in Appendix F. Because of the limited
data set, this data was not a significant factor in the results of the Hayes McKenzie noise study.

(4,5,6) The approach of the Noise Assessment in the DGEIS was to determine final siting criteria to mitigate potential noise impacts. Without a set standard that can be applied equally and fairly, abuses can occur and unfair locations can result. Applying the same standard to particular circumstances (i.e., 1375-foot setback from “quiet” non-participating residences), is a consistently fair way to determine which potential WTG sites are acceptable as implemented. It is a way to protect both the residents and Ecogen from potential abuses and accusations of unfair practices.

There is a misunderstanding of what a “quiet area” and “noisy area” means. A quiet area is defined as a residence or receptor that is sheltered by trees from the prevailing winds, which places that receptor in a low wind area with a resulting quieter ambient sound level. Based on this, a greater setback is used for mitigation in order to protect the receptor. Should the wind change direction so that the receptor becomes a “noisy area,” the receptor has an added mitigation with the noise of the wind. Sound does not “carry in the wind” like a smell so it is not “blown” towards a receptor. The sound of a WTG at full speed should not be intrusive to non-participating “quiet area” residents.

(13) Instrumentation was inspected every other day in order to prevent ice build up on the data recording instruments. No evidence of ice build-up was ever reported. It should be noted that if ice did build up on the data recording microphones, the net result would be very quiet ambient noise readings, which would have skewed the analysis to a more conservative result.

(12) SCIDA believes that the Noise assessment was sufficient to determine the potential impacts. The Noise assessment contained numerous conservative estimates, including placing the hypothetical receptor in the center of 53-WTG layout and, most significantly, assuming that seasonal background noise levels would match the more conservative winter background noise levels that were collected for the assessment. SCIDA does not believe that additional conservatism was warranted for the noise assessment.

(14) The study was based on a theoretical receptor placed within the center of a 53-tower layout. Since this is the proposed number of towers, this approach is appropriate for assessing potential noise impacts to a receptor.

(15) The hub height used in all measurements is 80 meters with a 77-meter rotor diameter.

(16) The NYSDEC noise guidance policy does not end at the 6dB threshold but rather, recommends an additional tier of analysis should indication of an exceedance of the 6dB threshold be identified. This additional level of analysis was conducted by using the Modified Composite Noise Rating method, as prescribed in the NYSDEC guidance. This analysis was used in assessment of impact as well as in the development of mitigation criteria. Furthermore, the NYSDEC has determined that the analysis was adequate, professional and done in a manner consistent with NYSDEC Noise Assessment Guidelines.
It should be noted that, as indicated in PSC correspondence to Advocates for Prattsburgh, the Department of Public Service uses the Modified Composite Noise Rating to assess noise impacts of proposed power plants. This method predicts the level of potential noise complaints from the operation of a proposed plant, and considers the nature of the existing sound environment, the nature of new noise, and how the community views the proposed plant, among other factors (Advocates for Prattsburgh, 2005).

SCIDA believes the use of a residence is an appropriate approach to evaluate noise impacts for the project. The noise assessment was completed according to the NYSDEC assessment guidelines, as was required in the Final Written Scope. The DGEIS proposed a 1,000-foot setback for permanent residences in noisy (i.e., high wind) areas and a 1,375-foot setback from residences in a quiet, or sheltered residence. SCIDA has evaluated the noise study and comments and believes that the noise study follows the scope as well applicable NYSDEC guidance requirements and is adequately assessed the potential noise impacts that may be related to the proposed project. In reviewing the studies SCIDA has determined the following mitigation will be required for proper siting of the project:

- A 1,200-foot setback from a non-participating receptor located within an area defined as windy (i.e., noisy).
- A 1,375-foot setback from a non-participating receptor located within an area defined as sheltered (i.e., quiet, sheltered).
- Noisy and sheltered locations will be determined by the Figure 3.7-1 as presented in the DGEIS.
- A receptor is defined as a residential structure that is serviced by municipal electric (i.e., utility service), has a potable water supply and a sanitary sewer or septic system. Any structure that has these three requirements as of January 1, 2005, as indicated on the Town’s Tax Assessors’ records will be considered a noise receptor and will be included as part of the final site design layout.

Ecogen will be required to show in their final design package that the above requirements have been met. Deviation of the above requirements would result in subsequent SEQR review of the proposed project prior to SCIDA approving a PILOT agreement.

02 Comment:
#015, May 11, 2005 Terry Matilsky

These turbines have a sound emission of 103 dB. To put this into perspective, what this means (according to the NYSDEC definition of hearing damage) is that if you were to go up to the hub of one of these machines, your ear would be exposed to ten times the sound intensity necessary to induce hearing damage within eight hours. These generators are louder than jackhammers at their source. They are louder than jet planes approaching take off. These are measured sound intensities.

Response:

The quoted level, a Sound Power Level (SWL) of 103 dB, is the total amount of acoustic energy emitted by the wind turbine. The levels described by the NYSDEC for hearing damage are Sound Pressure Levels (SPL). To derive the SPL from the SWL one must
take into account the distance between the source and receiver. For a wind turbine where the noise source is at height, 80 meters, then the SPL at ground level will be around 50 dB and not 103 dB. Even sitting within the nacelle of a working wind turbine will not subject the listener to levels in excess of 85 dB. Other examples are given as noise, which is equivalent, i.e. jackhammers (SWL = 114 dB derived from Table D NYSDEC) or a jet plane at take-off (SWL = 163 dB derived from Table E NYSDEC).

03 Comment:
#073, June 13, 2005 Ruthie Matilsky

On page 3-90, and Appendix f, page 28, the SPL’s for the turbine prediction impact is given. Where do these numbers come from?

Response:

The source noise levels used for the prediction of wind turbine noise at neighboring receptors was determined from independent source noise level test reports for the GE 1.5sl wind turbine. The report references are as follows:

- Messbericht Nr. 27132-2.002 über die Ermittlung der Schallemissionen der Windenergieanlage Nr.6 vom Typ GE 1.5sl am Standort 48565 Hollich“ By Kötter Consulting Engineers, Mr. Dipl Ing. Oliver Bunk, Rheine, Germany, 2003-12-01
- Report WICO 280SEA703/01 Measurement of Noise Emission of Wind Turbine GE 1.5sl according to IEC 61400-11 Ed.2 Location: Nielebock (Saxony-Anhalt)“By Wind Consult, Mr. Dipl.-Ing. Wolfgang Wilke, Bargeshagen, Germany, 2004-01-26

The measurements were performed in compliance with IEC61400-11:2002. The measurement uncertainty was reported as ± 1.5 dB.

Tonal noise emissions from the wind turbines under test were assessed as being below the limit values of the IEC61400-11:2002. This means that the assessed tonality of any energy associated with mechanical plant is a minimum of 3 dB below the threshold of audibility for any audible tonal noise.

04 Comment:
#073, June 13, 2005 Ruthie Matilsky

Ecogen must address the added noise levels expected for non-optimized and aging turbines.

Response:

The experience of the noise consultant, Hayes McKenzie Partnership, on long term operation of wind farms, especially in the UK, indicates that changes in noise levels associated with ageing have not occurred over the operational life of some wind farms, currently 12 years and still running. As part of ongoing monitoring studies Hayes Mackenzie has participated in for wind farms in the UK, we have found no change in emitted noise levels associated with aging.
05 Comment:
#073, June 13, 2005 Ruthie Matilsky

Missing Data- Even though 7 receptor locations were included in their ‘study’, calibration data for only 4 sound level meters and 3 FF microphones were provided. Some of the meters were used in different locations on different days, but we still do not have calibration curves for one of the microphones. It is unaccounted for in appendix F-2. Given the problems with the equipment stated on page 14 of Appendix F, we need to see the results of ALL calibrations.

Response:

Comment acknowledged. Calibration of the equipment is the responsibility of the equipment supplier, i.e. certificates of conformance can be supplied by The Modal Shop. The problems referred to by Mr. Matilsky were associated with the disconnection of the power supplies to the sound level meters and have nothing to do with the calibration or faulty operation of the sound level meters.

06 Comment:
#073, June 13, 2005 Ruthie Matilsky

Missing Data-Ecogen states that they used 3 towers to measure wind speed. Yet there are no separate plots of what speeds these towers measured. So we really have no idea of the true correlation between measured wind speed, and ambient noise levels (and hence turbine impact) at each location. The vast area of this proposed project requires a better understanding of the range of wind speeds that might be expected at any given time. Furthermore, if this variability is significant, it would likely increase the times when turbine noise will be at a maximum, while ground level noise will be a minimum, even beyond those times predicted by radiative cooling effects. Furthermore, it has been shown that in a stable atmosphere the turbines run almost synchronously, because the absence of large scale turbulence leads to less variations or rotor blade speed. Thus, coherence effects and beat phenomena (both ignored by Ecogen) will exacerbate the noise levels predicted by Ecogen. This variability data can show us what we might expect for the coherent sounds that would be produced by the turbines. All these additional sources of noise are ignored entirely by Ecogen.

Response:

The Met. Mast data used to correlate the noise levels with on-site winds speeds was the mast that was the highest located on the site. Using the Met. Mast for the wind speed data ensures that the maximum potential noise impact may be assessed. The assumption that all the wind turbines will experience the maximum site wind speed ensures that a worst-case noise impact has been assessed. Turbines located at low altitudes will experience lower wind speeds and thereby radiate a lower level of noise for the assumed wind speed.

The comment again, refers to the work undertaken by van den Berg (VdB) and the effects of stable atmospheric conditions and the potential of turbines running almost synchronously. The Rhede wind farm wind turbines are arranged as two parallel lines of turbines in a north/south direction. VdB has indicated that he believes that the
“synchronization” between different turbines occurs that increases the potential for noise disturbance associated with the operation of the Rhede Wind Farm. Our experience would indicate that this is not occurring at any UK wind Farms. However, the mechanism described by VdB for the emission of high levels of amplitude modulation of the aerodynamic noise is correct. This is caused by the high wind shear found at the Rhede Wind Farm rather than an effect of the wind turbine tower. Where such a noise has been noted within the UK, it is related to topographical wind shear effects caused by inappropriate placement of turbines. The level of amplitude modulation, ± 4 - 5 dB, is significant. However, as a significant number of wind turbines have been installed in the world (20,000+) and only very few sites have been found to exhibit high levels of modulation, it is clear that very site specific issues are causing this noise to be generated.

VdB has also analyzed the noise emissions for the Rhede Wind Farm and determined that the greatest level of aerodynamic noise modulation occurs in the 300 – 1000 Hertz (Hz) frequency range. This frequency range indicates that the noise is generated from the trailing edge of the wind turbine.

Aerodynamic noise from wind turbines is not a coherent noise source and, as such, wave forms will not add up in the manner envisaged by the commenter. If the noise were infrasonic and developed along the complete length of the blade then this might be the case. For the mid-high frequencies described by VdB found at Rhede, this is not what is occurring, i.e. not a 6 dB increase for two sources adding together.

07 Comment:
#061, June 13, 2005 Robert Allison

This comment summarizes another response from Terry Matilsky titled “Ecogen Noise Study in a (Large) Nutshell”. In essence Mr. Matilsky repeats many of the points outlined in previous comments.

Response:

In general, Mr. Matilsky repeats numerous points already addressed. However, he raises the issue of Appendix 5, which is the Third Octave Band Regression Analysis, and not predictions. It is unclear as to the point that Mr. Matilsky is making with respect to this Appendix.

08 Comments:
#015, May 11, 2005 Terry Matilsky
#017, May 12, 2005 Terry Matilsky
#061, June 13, 2005 Robert Allison
#073, June 13, 2005 Ruthie Matilsky

“Increases in ambient and background noise levels are expected during the warmer seasons…”
Response:

The commenters have fundamentally misunderstood the issues associated with background noise levels, noise predictions of incident noise at receptor locations and the influence of “radiative cooling” on noise emissions from the wind turbines. This misunderstanding has continued throughout all the submissions made by Mr. Matilsky and with anyone who has relied upon his statements when submitting representations concerning noise.

Background noise levels are, as they are described, the residual ambient noise, which is within the environment, and have a specific definition. This is the level that is exceeded for 90% of the measurement period. The background noise is affected by noise sources both close and distant from the measurement location. Distant noise sources may take the form of conurbations, traffic noise from freeways and roads. Noise sources close to a measurement position that may influence the background noise include water in streams, leaves on trees, heating flues, and local traffic along busy roads.

Comments:

09

#020, May 13, 2005 Kris Allison
#061, June 13, 2005 Robert Allison

Of the six data bearing appendices contained within Appendix F, there is no data represented in four of those appendices for 6652 Baker Road. There is no mention of 6652 Baker Road in appendices 3, 4, 6 or 7 of Appendix F. Of the information found on 6652 Baker Road in Appendix 5, it seems to be labeled incorrectly or at least inconsistently with other data in that appendix.

Response:

Noise measurements were performed at 7 locations. Noise data has been presented for 7 locations within Appendix 3, 4 and 5 of the Noise Impact Report. Noise measurements however are limited for the Location 6652 Baker Road due to a failure of the sound level meter, i.e. battery failure not meter failure.

It should be noted that a two tier test is undertaken to determine the acceptability of the noise associated with the operation of the wind turbines. The first is to assess what may be the potential change of the ambient noise levels at properties neighboring the proposed development. When this assessed level change is greater then 6 dB then a second test is applied. This second test takes account of the spectrum shape of the incident wind turbine noise, the shape of the spectrum of the existing background noise level and the operating conditions of the noise source, i.e. day/night/spring/summer, etc. The criterion which is then adopted for this assessment of to not exceed a missed component to noise ratio (mCNR) assessed level of C. Therefore, although the ambient noise levels may be increased by 6 dB or more, the assessed potential effect of the wind turbine noise still falls at or below a mCNR “C” classification. This classification level is considered to be acceptable for the wind farm noise impact.

Appendix 6 is missing the mCNR Background assessment and we now include it within the attached document revised portion of Appendix F of the DGEIS.
Appendix 7 is a prediction of the turbine noise spectral levels for a range of set back distances to allow an assessment of the mCNR rating for different set backs from the proposed wind turbines.

10 Comment:
#061, June 13, 2005 Robert Allison

Ecogen’s choice of sensitive noise receptors that they used for sound level measurement and will use as reference points from which they will apply setbacks are neither consistent with nor supported by the NYSDEC Guidance document “Assessing and Mitigating Noise Impacts DEP-00-1.

Response:

SCIDA believes the use of a residence is an appropriate approach to evaluate noise impacts for the project.

11 Comment:
#061, June 13, 2005 Robert Allison

The comments have been summarized below regarding the Assessment of Potential Noise Impacts.

- No correlation between what Ecogen considers noisy/quiet areas with the data collected at the receptor locations.
- Ecogen’s analysis of Modified Composite Noise Rating shows a problem with choice of setback distances.
- Why was a seasonal correction factor applied for noise from WTGs when they will be operational year round?
- Why is a “D” classification at 420 meters at ¼ power condition acceptable?

Response:

As was indicated in previous response, a two-tier approach has been adopted when assessing the potential noise associated with the operation of the wind turbines. The first is to consider the potential change in the ambient noise levels at the neighboring noise sensitive receptors. The second is, where the change is predicted to exceed 6 dB that a second test of acceptability is performed, this being to determine when wind turbine noise will exceed a D category rating when assessed using the Modified Composite Noise Rating method. This follows the guidance within the NYSDEC, (see c. Thresholds for Significant Sound Pressure Level (SPL) Increase).

Mr. Allison has raised the issue of a correction for winter operation in that if the noise source is to operate all year round, then no correction should be applied. This compares with the assessment undertaken by Hayes McKenzie, which applied a 5 dB penalty for winter operations. It will be noted within our assessment report that we consider this issue in detail. As background noise levels have only been undertaken during the winter period we have assessed the operation of the wind turbines based upon winter conditions. We accept that during the spring/summer/autumn periods that this reduction would not be
applied. However, the existing ambient noise levels will be higher than those recorded during the noise survey. As such, we consider it appropriate to compare like with like, i.e., winter backgrounds with winter predicted noise levels and assessment method. Background noise levels will rise during the spring/summer/autumn periods due to increased leaf cover, water, and bird song. Ecogen therefore consider the assessment appropriate for these specific conditions.

The collection of background noise data at receptors locations and the relationship between these measured backgrounds and wind speed at the hub height of the wind turbines is to allow determination of potential locations sheltered from the wind where background noise levels will not increase due to wind effects. As such, we consider that our survey methodology provides a means by which to account for potential sheltering effects of topography to receptor locations.

The noise test reports for the proposed wind turbines provide an assessment of any tonal noise emissions from the wind turbines. These indicate that tonal noise is assessed as being at least 3 dB below the threshold of audibility, i.e. not audible. Therefore, an account has been taken of the potential for tonal noise character from the wind turbines.

Comment:
#075, June 13, 2005 Advocates for Italy

The methodology for selection of the locations at which noise measurements were to be made in the occupied areas was not discussed. Specifically why was each site chosen and do they truly represent the most sensitive location?

Response:

The locations for measurement were selected on the basis of wind speed and location relative to a tentative turbine layout for the project. Selected locations covered the situation of a dwelling located on a hilltop and sheltered by valley walls. As no significant noise sources exist in the region, there is unlikely to be a great difference between locations except that caused by shelter due to topography.

Comment:
#075, June 13, 2005 Advocates for Italy

My sense is that many of the complaints of the noise from the wind generators are often due to the repetitive whooshing sound caused by the blade passage frequency and the repetitive noise caused by the gearbox. Treating them like broad banded noise is in error. These cyclic noises are composed of pure tones at multiples of the blade passing frequency and gear mesh frequencies. Since the noise energies are contained in discrete frequencies the background noise at the resident’s site is not effectively masked. This is due to the fact only the background noise in the critical bandwidth at that frequency is available to mask the noise. This can only be done if the tonality of the wind generator has been examined. This could be corrected by using the methodology published by the Environmental Protection Authority for Tonalities (Pure Tones) produced by Wind Farms.
Response:

Modern wind turbines are dominated by aerodynamic noise associated with the movement of the blades through the air. This aerodynamic noise is heard at ground level and described as swishing sound. With increased separation between the turbines and the receptor location, this swishing sound becomes less audible due to attenuation of the higher frequencies by atmospheric absorption and general masking of noise from the local environment.

Mechanical noise associated with the gearbox, generator, cooling fans and yaw motors are not a problem. Tonal noise emissions are assessed for the wind turbines using the method contained within IEC 61400-11, which provides a detailed means of assessing the audibility of any tonal noise emitted, by a wind turbine under test. Such a method will be used to determine the acceptability of any turbine to be installed at the site. The suggested guidance within the South Australian Environmental Noise Guidelines: Wind Farms does not provide an objective means by which to test for tonality although it does advise that a penalty should be applied if such a noise is heard. This is in line with any assessment method for a noise, which exhibits a tonal character. Such an assessment should form part of any warranty agreement obtained from the wind turbine supplier.

It is suggested that the blade passage frequency of the wind turbine should be assessed for tonality. This is inappropriate because the blade passage frequency for the range of turbines that may be installed at the site will be between 0.25 – 1 Hz at most. The threshold of audibility of sound in this frequency range is between 115 – 130 dB. A modern wind turbine does not radiate noise of this level in this frequency range.

14 Comment:

#075, June 13, 2005 Advocates for Italy

Mr. Ebbing’s comments regarding factors to consider when assessing noise emissions from a development are summarized below.

- Since a significant portion of the noise from wind generators is tonal it should be evaluated that way and not as a broadband noise as was done in the impact statement.
- Sharp or startling noises such as noise produced by the mechanisms which keep the wind generator aligned into the wind, the starting or stopping noises produced on startup or shutdown were not discussed.
- Audible tones produced by the rotor passing frequency, and tones produced by the gearbox were not discussed. Measurements and analysis of these tones must be evaluated to determine the maximum noise level that is acceptable at a given site.

Response:

As was indicated above, tonal noise do not form a significant portion of the noise from a wind turbine generator and the fact that Mr. Ebbing has written this statement indicates his general inexperience with wind turbine generators.

Yaw motors do not result in sharp or startling noise. The wind turbines will not suddenly start up. If we assume that the wind speed is increasing in strength during the day, the
wind turbines would be motionless, then start to gently turn until the wind is of sufficient strength of generate electricity. At this point the wind turbines will start to make noise. As the wind speed continues to increase, the rotor of the turbines will increase in rotation speed until the wind speed is of sufficient strength as to reach rated power. Wind turbine revolutions per minute (rpm) will not increase beyond this point and noise levels will stay fairly constant until the cut-out wind speed is reached at which point the wind turbines will shut down.

There are no audible tones produced at the rotor passing frequency. Tonal noise emissions are considered within the independent noise test reports for a wind turbine. These indicate that no prominent tones exist within the noise emitted by modern wind turbines.

15 Comment:
#075, June 13, 2005 Advocates for Italy

The chart (Table E within NYSDEC Policy Document) alludes to the fact that achieving 40dBA in a living room would be considered by most people as quite acceptable. This is not the case when significant level of pure tones or transient noises are present. The levels shown for the Very Quiet portion of this chart are misleading in the context of the current problem.

Response:

There are no tones associated with the operation of the wind turbines. Therefore the comments at this point are not relevant for this situation.

16 Comment:
#075, June 13, 2005 Advocates for Italy

If you increase the ambient noise level in a very quiet setting by adding an additional constant noise level like you might do for instance in an office environment to increase the acoustical privacy, the noise has to be of a certain spectral broad banded noise shape. You certainly can’t add machinery noise that produces significant pure tones and or transients like that produced by a wind generator and not have a significant impact.

Response:

It is incorrect to assume tonal noise will dominate the noise from the wind turbine.

17 Comment:
#075, June 13, 2005 Advocates for Italy

The analysis alludes to the acceptability of wind generators at 1000 feet from the nearest residence. It also makes the point that the noise environment in many rural settings is in the range of 40 to 50dBA. If the impact of wind generators of the model proposed is minimal at 1000 feet from the nearest residence then there should be available or obtainable field data from real wind farms to establish this and publish it in the impact statement.
Response:

While the studies, based on conservative assumptions (i.e., all ambient noise would be at the level of winter conditions), indicated that 1,000 feet are sufficient, SCIDA has determined an additional 200 feet will be added to the 1,000 foot setback for a total of 1,200 feet from the base of a tower to a non-participating permanent residence. This further adds to the conservatism of the original noise assessment.

18 Comment:
#075, June 13, 2005 Advocates for Italy

If the character of the intruding noise from the noise from the wind generators was truly of the same character as the background noise sources then perhaps an intrusion level of 5dB might be appropriate. However, I don’t believe they are alike.

The noises from the wind induced background noise seldom if ever are cyclic and with few transient noises. However, wind generators operate tones and transients along with some broad banded noise from the propellers. The tones are not masked as well as the broad banded noise from the wind generators. This is due to the fact that the masking of the tone by background noise is only effective in the narrow critical bandwidth of the ear.

So as previously shown level adjustments should be of the order of –5dB rather than the +5dB used in this study, a difference of 10dB. This means that the allowable levels should have been 10dB lower intrusion levels.

Response:

Again, Mr. Ebbing continues to be mistaken as to the tonal emissions from wind turbines. SCIDA does not agree with the comment.

19 Comment:
#075, June 13, 2005 Advocates for Italy

The rationale for the choice of the measurement location is not clear. What assurances do we have that these locations are truly representative of the background noise in this area?

It is asserted that the winter noise conditions under which the noise survey was conducted produced conservative conditions for measurement of the residual ambient noise at each site. Mr. Ebbing does not think this is valid since atmospheric conditions like temperature inversions can produce a lens like effect of concentrating the noise radiated noise close to the ground can easily produce an increase by 10-15dB louder than when they are not present. Unfortunately, the noise survey was taken in the winter, which is not the worst case, and people are more likely to be outside their houses in summer than in winter so summer data needs to be evaluated.

Response:

In the same manner as Mr. Matilsky, Mr. Ebbing has made the error in believing that the background noise level will be dominated by distant noise sources. However, unlike Mr.
Matilsky, Mr. Ebbing suggests that the effects of temperature inversions will increase background noise levels by 10 – 15 dB whereas, Mr. Matilsky suggests that it will result in reduced noise levels. Neither is correct, as the noise environment in snow conditions will be dominated by local noise sources and not distant sources. This is because snow conditions provides a very soft acoustic environment that will reduce noise levels propagating from distant sources and will cover local noise sources such as branches, streams and grass for example.

People are more likely to be outside their dwellings during the warmer periods of the year. However, ambient noise levels will increase due to leaf cover, grass, exposed streams, etc. This will increase background noise levels by 5 – 15 dB, which will increase the level of masking at neighboring receptors to the development.

20 Comment:
#075, June 13, 2005 Advocates for Italy

How was the audible noise identified at all sites?

Response:

Audible noise was identified by listening by the technician at the time of meter deployment.

21 Comment:
#075, June 13, 2005 Advocates for Italy

Was the data monitored well by direct listening at the site or listening to the data? Atmospheric conditions which result in concentrating the noise radiated noise close to the ground can often be of the order of 10-15dB louder than when temperature inversions exist. Unfortunately the noise survey was taken in the winter, which is not the worst case, and people are more likely to be outside their houses in summer.

Response:

Noise was identified from listening and from the spectra, which was collected at all the measurement locations.

Mr. Ebbing repeats his errors associated with the effects of atmospheric conditions for the noise surveys undertaken for this project.

Additionally, winter is the worst case scenario for noise modeling as the ambient noise levels are at their lowest. The model always assumes that people are outside and assumes that the ambient noise levels from the winter also exist in the summer.

22 Comment:
#075, June 13, 2005 Advocates for Italy

All noise surveys were taken close to occupied spaces. No discussion was made of establishing that there were no significant contamination noises by noise sources in or
outside of the residence. If there was contamination this results in non-conservative residual background noises being measured.

Response:

The measurement locations were selected to be representative of locations where people live. The background noise levels are representative of the level that is exceeded for 90% of the time, therefore; only noise sources such as boiler flues are likely to affect the measured data. Inspection of the third octave band levels indicates that no such sources can be seen during the day or night. What can be detected are the effects of distant truck noise, which results in an increase in the measured levels between 40 – 100 Hz. This increase is caused by the exhausts of the trucks.

23 Comment:

#075, June 13, 2005 Advocates for Italy

What evidence do we have that the methodology works for estimating the noise produced from a given installation of wind generators? For instance, when you have environmental effects such as temperature inversions and other environmental effects they are not taken into account by the model.

#094, June 11, 2005 John Servo

No information was presented in the noise impact analysis of the applicability of the use of the ISO prediction acoustical model, which was used to model noise level produced in a wind farm. (Ebbing Acoustics via John Servo)

Response:

The acoustic model used was clearly explained within the report and which may be further inspected within ISO9613 Part2. This model has been used and verified within the UK to determine the level of noise from wind farms and reported within ETSU Report W/13/00385/REP A Critical Appraisal of Wind Farm Noise Propagation. Within the conclusions the following is stated:

*The more advanced empirical model tested was that set out in ISO 9613-2. This method generally provide high levels of accuracy to within 2 dB(A) in predicting received noise levels under “conditions favorable to noise propagation”, or downwind propagation;*

It should be noted that predicted levels were generally higher than actual measured levels for this model, i.e. it is conservative with respect to received noise levels at neighboring receptors.

Temperature inversion effects are more likely to occur in stable atmospheric conditions, i.e., when wind speeds are low and wind turbines may not be operating. Cold pooling in valleys may also result in similar temperature inversion effects which again are more likely to occur during low wind speed conditions, i.e., when the wind turbines are not operating or operating at the low speed region of the turbine.
The data presented here for the noise source sound power levels are apparently measured for one wind generator. It is well know that all machinery sound power levels are not the same for each and every unit that is produced but have some variability, which is logistically difficult for the manufacturer to establish practically. In the fan industry it is common practice for the AMCA or ARI to assume a variability of the manufacture’s data of +-3dB for the higher bands and as much as +-6dB for the very low frequencies.

The second point main point is that no data wind generator data is shown for the 1/3 octave bands or any results from narrowband analysis. In order to document the presence or absence of dominant pure tones it is mandatory that this be reexamined.

Response:

Measurements of wind turbines indicate that the uncertainty of the source noise may be measured to 0.7 dB. Declaration of the source noise level of a wind turbine is currently under discussion within the IEC Wind Turbine Measurement Group, however, measurements performed by Hayes McKenzie Partnership Ltd. indicate that repeatability and variation between turbines of the same model is within 1.5 dB. As such, wind turbines appear to be a very constant noise source with good repeatability as compared to Mr. Ebbing experience with fans. This may relate to the very high levels of quality control imposed by wind turbine manufacturers on the blade construction and finishes.

The source noise level used for this analysis is based upon the warranted sound power level for a machine of this size, i.e. it accounts for measurement uncertainty and turbine variability.

As noted in previous responses, tonal noise is not an issue with modern wind turbines nor are transient noise events.

Response:

The issue identified is associated with the covering of noise sources by snow which results in a reduction of the ambient noise and, through the soft ground condition, the reduction of the ambient level by absorption of noise as it travels over the ground from distant sources. As was indicated earlier, the greatest effect upon ambient noise levels is the suppression of noise sources local to the measurement position by the snow cover.
26 Comment:
#079, June 15, 2005 Arthur Giacalone

SCIDA must insist that Ecogen’s DGEIS utilize “the most conservative approach” for measuring sound levels, identifying appropriate receptor locations, and developing appropriate setback criteria. If SCIDA were to allow a lesser standard than “the most conservative approach”, it will have failed to adequately protect and promote the health of Steuben County inhabitants and effectively control noise pollution.

Response:

The DGEIS did utilize the most conservative approach for measuring sounds. Ambient sounds levels were taken during the winter months, which are quieter due to the snow on the ground, the lack of leaves on trees and no small wildlife (birds and insects). Most wildlife such as songbirds have also migrated away from the region so their background calls are not present. Insects such as crickets and cicadas, which contribute to background noise in the summertime, were obviously not present in the wintertime. Using this lower ambient noise level, the setbacks were calculated in order to avoid increasing the sounds at the receptors by more than the maximum recommended 6 dB over ambient levels.

27 Comment:
#079, June 15, 2005 Arthur Giacalone

SCIDA, as Lead Agency has the ultimate authority to determine which standards, conditions, and criteria are applied to the proposed project. Although use of “neighboring non-participating residences” as the receptor location for measuring ambient noise levels (rather then property lines) may meet the minimal requirements of the NYDEC’s Program Policy “Assessing and Mitigating Noise Impacts”, the NYDEC’s Policy not only permits utilization of the property line as the appropriate receptor, it characterizes use of the property line as the “most conservative approach.” For the benefit of the inhabitants of Steuben County, and to further Article 18-A’s policy of promoting health and controlling noise pollution, SCIDA is urged to utilize the most conservative approach, and require measurement of sound levels and determinations of setbacks from the property lines of non-participating parcels.

Response:

Since the property lines in Prattsburgh and Italy can be quite distant from the primary use of the property (i.e., the residence), setbacks based on where people will spend the most time were used. Using a lower ambient noise level than would be expected to be encountered when outdoor activity picks up with the fair weather in spring/summer/fall is extremely conservative. SCIDA believes this approach is appropriate, meets the objective of SEQR, as well as the NYSDEC guidance policy.
The DGEIS contains no data or substantive analysis to support its conclusions that “the location of a wind farm in a rural setting means that locations of interest would be dwellings and the environment surrounding these locations,” and that noise at property lines “is unlikely to be relevant.” (DGEIS p. 3-91). Such a statement is illogically premised on a belief that people living in, working in, or visiting a “rural setting” do not spend any significant time outdoors.

The full statement: “Property lines may be significant distances away from adjacent land uses, and as such, noise at these locations is unlikely to be relevant” is used according to Part V, Section B.1.b of the NYSDEC Policy for Assessing and Mitigating Noise Impacts. The relevant text states that “reference points at other locations on adjacent properties can be chosen after determining that existing property usage between the property line and the reference point would not be impaired by noise, i.e., property uses are relatively remote from the property line.” As per the DGEIS on page 3-92, there is existing precedent for using habitable dwellings or residences rather than property lines. Furthermore, the NYSDEC has determined that the analysis was adequate, professional and done in a manner consistent with NYSDEC Noise Assessment Guidelines per their letter to SCIDA on March 21, 2005. In addition, the NYSDEC noise assessment guide has no enforceable authority, only guidelines.

Significant categories of data referred to and purportedly relied upon by Ecogen’s consultant when reaching its findings and arriving at its conclusions are missing from the DGEIS and Appendix F. The public cannot adequately analyze and comment upon Ecogen’s noise impact study and conclusions unless and until it has the opportunity to review all the purported supporting data. Furthermore, the omission of a required item from a DEIS cannot be cured simply by including the item in the FEIS.

The appendix within the Hayes McKenzie noise analysis report has been provided and is the modified copy of the DGEIS as presented in Appendix F. Additional data that supports data already presented in the DGEIS can be supplied in the FGEIS. Newly generated data that does not support existing data cannot be included in the FGEIS. In that case a supplemental SEQR review is required. However, only supporting data will be included in the FGEIS, which does not qualify for a supplemental SEQR review.

In order to constitute a “hard look” mandated by SEQR, site-specific testing and analyses should have been performed at all proposed WTG sites, not just a handful of selected
ones, thereby providing the Lead Agency, the applicant and the public with adequate information upon which to include or exclude the various proposed wind turbine sites. AFP once again urges SCIDA to adopt the scoping recommendations made by John J. Earshen of Angevine Acoustical Consultants, Inc. to the Town of Westfield and Ripley pertaining to the proposed Chautauqua Wind Farm Project. Among the significant points that we request SCIDA to adopt are as follows: a) Site-specific background noise levels and characteristics must be collected at each proposed turbine location under various weather and temperature conditions. b) Data on noise generated by specific units to be installed must be obtained from the manufacturer’s literature and field testing, including amplitude, frequency (pitch) impulse patterns and duration, etc. c) Sensitive receptors should include, but not be limited to, adjoining property lines and all hereby residences. d) Predicted noise must be evaluated with regard to amplitude and perception (sound quality factors), as well as anomalous propagation conditions. e) Predicted impacts from noises generated during operation of the wind turbines and during construction should be evaluated against specific DEC guidance criteria.

Response:

As per the Scoping Document, an examination of “typical” scenarios was conducted. Locations included a variety of situations within the project area including high wind speed and sheltered (i.e., valley) locations. These examinations did not include individual receptors, but rather “typical” receptors: homes near roads, homes set back, homes with woods surrounding them, homes near open fields, etc. This was done in order to create likely scenarios in which to base potential noise mitigations upon.

Noise data was collected assuming the worst possible conditions for the Project: very quiet ambient noise (i.e. no birds, insects, leaves rustling, etc.), assuming the receptor was outside of the house, no regard for seasonal use (no difference between summer and open windows/outdoor use and winter’s closed windows and lessened outdoor activity), and no buildings, berms, hills and foliage to deaden or deflect the sound. These produced rather quiet base conditions to compare the noise levels generated by the WTG and to determine appropriate mitigations. These conditions were used to establish the background noise level for all seasons. Taking additional noise ambient noise measurements in other seasons would only result in a less conservative noise impact model.

31 Comment:
#082, June 15, 2005  Town of Italy

There are a number of discrepancies within the DGEIS where noise is concerned. The DGEIS states that “The background noise levels were then assessed, again taking into account of spectral content, and level, and further modifiers were applied to determine the final related level of the noise source” (DGEIS se. 3.7.2 “Assessment of Potential Noise Impacts”). What modifiers were used? Ecogen uses power plant noise as the basis for its noise level assessment in the Hayes McKenzie Noise Impact Assessment Report. (1508-R1). The DGEIS goes on to state that “Power plants usually operate continually; therefore, no correction should be included in evaluating continuous power plant noise” (DGEIS Volume III, Appendix F, Hayes McKenzie Partnership, Appendix 9: Modified Composite Noise Rating Method, p. 12 of 22).
Response:

As stated in the Hayes McKenzie report, modifiers included mathematical constant adjustments to compensate for terrain type. For instance, sound will propagate differently over terrain that is barren (i.e., desert) compared to terrain that is heavily landscaped. The statement regarding power plant noise reflects the fact that the study took into account that wind farms are an intermittent noise source (operating only during appropriate wind speeds), where conventional power plants operate 24 hours per day, 7 days per week.

Section 8.2.6 of the Noise Impact Assessment provides a detailed summary of the modifiers that were used for the mCNR analysis. This analysis assumed that the power plant would be operating all the time although this is clearly not the case. It should also be noted that the study provided an assessment of the potential impact based upon a range of wind speeds. If we were to consider the noise associated as an average, i.e. over the life of the project, for example, then the percentage of time that noise may be generated by the wind turbines may range between 60 – 80% of the time. Furthermore, the average impact would be based upon a wind speed of around 6 – 8 m.s\(^{-1}\) @ 10 m agl. This would indicate an additional correction for intermittency of -1 to 0, i.e. a potential reduction of a single assessment category.

A description of noise character modifier is also proposed. However, tonal noise associated with the operation of the wind turbines will not be audible and wind turbine noise is not impulsive. Therefore, no character modifier was used for the mCNR analysis.

Comment:

#082, June 15, 2005 Town of Italy

The Hayes McKenzie Report then goes on to state that noise penalties are actually applied to power plants in “[q]uiet suburban or rural community (remote from large cities and from industrial activity and trucking,” and further penalties are allotted in communities with “[n]o prior experience with intruding noise” (DGEIS Volume III, Appendix F, Hayes McKenzie Partnership, Appendix 9: Modified Composite Noise Rating Method, Table 2.2, p. 8 of 22). These same corrections are given to the developer again and again in almost every noise table and conclusion in assessing noise levels. The study goes as far as to acknowledge that the noise levels exceed the thresholds of NYSDEC Noise Policy, but “even though the change in ambient levels may exceed 6dB, the absolute level of noise associated with turbine operations is not high” (HMP 8.2.8). Again, this is not an arbitrary or negotiable figure. The NYSDEC has a clear policy with clear guidelines.

Even at set backs of 2887 feet, NYSDEC noise criteria cannot be met. This set back distance is assigned a “C” classification for its modified composite noise rating, which is described in the HMR as having “no reaction although noise is generally noticeable; Sporadic complaints will be the design aim for the developers” (DGEIS Volume III, Appendix F, Hayes McKenzie Partnership, Table 5, p.13 of 42). The same paragraph continues to explain that a C classification is in fact still greater than the DEC recommendation of 6dB(A) of change: “This assessment will be performed for specific
wind speeds and locations where the predicted change in ambient noise levels is greater than 6dB.”

**Response:**

The NYSDEC policy provides only guidelines for assessing impacts. It should be noted, however, that the noise guidance policy does not end at the 6dB threshold but rather, recommends an additional tier of analysis should indication of an exceedance of the 6dB threshold be identified. This additional level of analysis was conducted by using the Modified Composite Noise Rating method, as prescribed in the NYSDEC guidance. This analysis was used in assessment of impact as well as in the development of mitigation criteria. As noted in Comment 1, the Department of Public Services uses the Modified Composite Noise Rating to assess noise impacts of proposed power plants. Furthermore, the NYSDEC has determined that the analysis was adequate, professional and done in a manner consistent with NYSDEC Noise Assessment Guidelines.

**Comment:**

#082, June 15, 2005 Town of Italy

The collective noise concerns stated above constitute grounds for an in-depth supplemental EIS to study and resolve (effectively mitigate) these significant potential negative noise impacts including increased set back and/or alternate site location(s) recommendations. The Town of Italy therefore requests this Supplemental EIS review, based upon specific Wind Turbine Tower siting, to address the concerns states here.

**Response:**

The purpose of the Generic EIS is to determine the siting criteria and thresholds that must be met in order to settle upon final siting. Final siting will not occur until the Final design Package is released, which is after the FGEIS and Statement of Findings are published. A supplemental SEQR review is not likely to be required unless the Final Design Package does not meet the criteria issued by the Statement of Findings.

**NOISE IMPACTS**

**Comments:**

#028, May 23, 2005 Vincent G. Johnson
#068, June 14, 2005 Town of Italy
#082, June 15, 2005 Town of Italy
#101, June 17, 2005 Bond, Schoeneck and King
PH#04, May 23, 2005 Amanda Gorten
PH#07, May 23, 2005 Tim Slack
PH#10, May 23, 2005 Todd Sharrow
PH#16, May 23, 2005 Steven Brewer
PH#24, May 23, 2005 Dick Ginther
PH#27, May 23, 2005 Edward Maruggi
PH#41, May 23, 2005 Laura Pierce
PH#50, May 23, 2005 Richard Joki
The comments are summarized by stating that the establishment of two noise zones is flawed. Suggested ambient noise levels for the Italy Hill Turnpike is 30 dB and that the noise generated by the Wind Turbines be limited to a maximum of 36 dB. Additional comments:

1. The noise survey was ‘flawed’ through use of what defined a ‘quiet zone.’
2. The use of 325 Italy Hill Turnpike as “sheltered effect” is flawed and depends on direction of the wind (Town of Italy).
3. Setback mitigation efforts should be rethought to accommodate the ‘worst case.’
4. Mention was made of how part-time residents were not being treated the same as full time residents and how they were unfairly being treated by the noise.
5. The cumulative effect of all of the multiple Wind Turbines (specifically sited as opposed to generally located in the DGEIS) on all impacted properties should be evaluated in the Town of Italy.
6. Recommend that the Turbine units should not exceed 2 dB of the ambient noise level for low frequency (20-400 Hz) noise, as it does not dissipate nearly as much as higher frequency sounds.
7. Calls for a supplemental EIS to study and effectively mitigate significant negative noise impacts based upon specific Wind Turbine tower siting.
8. Based on the noise analysis conducted, the project developer cannot conclusively say that the project will comply with NYSDEC noise policy, which requires that no receptors experience noise levels above 6 dB above the ambient noise level. Maps are requested showing the “loud” ambient noise levels and the “quiet zones” that have low ambient noise levels.
9. People located to Italy to hear nothing around them and now they have the threat of hearing WTG in the distance.

Response:

(1,2) The use of 325 Italy Hill Turnpike was for a location that was sheltered from the wind. A majority of the wind experienced during the noise survey was from the south and west, i.e. when this location was sheltered. As such, this represents the wind conditions when the receptor is most sheltered and reflects the wind conditions when the lowest ambient noise levels are likely to be recorded.

(3) The Noise Assessment in the DGEIS did in fact analyze the worst case. The Noise Assessment contained numerous conservative estimates, including placing the hypothetical receptor in the center of 53-WTG layout and, most significantly, assuming that seasonal background noise levels would match the more conservative winter background noise levels that were collected for the assessment.

(4) SCIDA has determined that a sensitive receptor would be a location that would be used as a permanent residence as this location represents the highest use and most frequent use of property within the project area.
(5) While the noise for the WTG located in Italy may have cumulative effects, it will be less than 3 dB and more likely 1 dB or less according to Table A in the NYSDEC publication Assessing and Mitigating Noise Impacts. As stated previously, the Noise Assessment was based on a theoretical receptor placed within the center of a 53-tower layout. This assessment did in fact look at the cumulative effect of multiple towers within the project. The results apply to both the Town of Italy and the Town of Prattsburgh.

(6) Low Frequency Noise has been predicted. If the reader considers the predicted wind turbine noise curves contained within the mCNR figures, it will be seen that predictions of noise down to the 31 Hz Octave Band have been performed. It will also be seen that the predicted levels fall below the lowest rating curve, i.e. acoustic energy in this region is not the determining level for the assessment of wind turbine noise for this project. This analysis agrees with low frequency noise and infrasound measurements made at existing wind farms which all indicate that it is noise in the 200 – 1000 Hz region which is audible and that low frequency noise is at or below the threshold of audibility for most normal hearing persons.

Noise at very low frequencies will not be subject to the same level of atmospheric attenuation as that experienced by sound at higher frequencies. Measurements of low frequency noise propagation performed as part of the study undertaken by the University of Keele (http://www.esci.keele.ac.uk/geophysics/dunlaw/), indicate that low frequency and infrasound propagation may be considered to follow the standard dispersion rate of 6 dB / doubling of separation distance.

(7) SCIDA has evaluated the noise study and comments and believes that the noise study follows the scope as well applicable NYSDEC guidance requirements and is adequately assessed the potential noise impacts that may be related to the proposed project. In addition, the NYSDEC has determined that the analysis was adequate, professional and done in a manner consistent with NYSDEC Noise Assessment guidelines and indicated no concerns with the results of the analysis. Ecogen will be required to show in their final design package that the setback requirements have been met. Deviation of the above requirements would result in subsequent SEQR review of the proposed project prior to SCIDA approving a PILOT agreement.

(8,9) As stated previously, the NYSDEC policy provides only guidelines for assessing impacts. However, the noise guidance policy does not end at the 6dB threshold but rather, recommends an additional tier of analysis should indication of an exceedance of the 6dB threshold be identified. This additional level of analysis was conducted by using the Modified Composite Noise Rating method, as prescribed in the NYSDEC guidance. This analysis was used in assessment of impact as well as in the development of mitigation criteria. Furthermore, the NYSDEC has determined that the analysis was adequate, professional and done in a manner consistent with NYSDEC Noise Assessment Guidelines. Based on the assessment, SCIDA has determined that the setback of 1,200 feet from a non-participating residence in a noisy/exposed and 1,375 from a non-participating residence in a quiet/sheltered area provides sufficient mitigation for potential noise impacts.
A map of the windy (i.e., noisy/exposed) and sheltered (i.e., quiet) areas was provided in Figure 3.7-1 in the DGEIS. The wind resources shown on Figure 3.7-1 were generated by the following analyses:

AWS Truewind developed the wind resource estimates by analyzing a set of proprietary numerical weather models that have been optimized for wind prediction near the earth's surface. The models take into account the regional meteorology as defined by climatological surface and upper air databases, as well as on-site measurements from within the study area. They also account for variations in local terrain and ground cover (surface roughness), and the influence of local water bodies. This approach has been successfully utilized and independently validated throughout the United States for wind resource prediction and mapping purposes. Consequently this approach has been endorsed by the National Renewable Energy Laboratory (on behalf of the U.S. Dept. of Energy) and by the New York State Energy Research and Development Authority.

The resultant analysis provided average annualized wind speed data at the tower hub height. This data was presented to URS in the form of geographically referenced point data. Each point referenced an average annualized wind speed for that particular geographic location within the study area. The data points were plotted on State Plane 1983, New York Central. The point source was provided in a 100 by 100 foot grid. This point data set was converted into a modeled wind speed surface using ESRIs Spatial Analysis software (Spline with Tension algorithm, with a cell size of 100 ft).

This modeled wind speed surface was generally presented in Figure 3.7-1 and will form the basis for determining which non-participating residences are located in the noisy and quiet zones in the final design package.

35 Comments:
#89/109, June 16, 2005 NYSDPS

An assessment of the existing sound levels and the potential for noise associated with the substation operation that considers the proximity of existing residences, any sound level standards that may be contained in local noise control ordinances and land use controls should be undertaken and discussed in the FGEIS.

Response:

The substation will only be operating during times at which the towers are generating electricity (i.e., when the wind is blowing). This is also the time where the background noise will be high. Substation noise is produced by the sound from the cooling fans when the machine is under load. These fans typically run most often in the summer months, which is also a time of high background noise. As such, SCIDA does not consider the noise from the substation to be a significant environmental impact from the project.

36 Comment:
#082, June 15, 2005 Town of Italy

The standard rule used by the wind energy community has variables that affect those calculations. According to the American Wind Energy Association’s “Wind Energy Fact
"Sheet" (passed out by Mr. Hagner at the Prattsburgh public school on 1/26/04), “The only occasional exception to this general rule occurs when a wind plant is sited in hilly terrain where nearby residents are in dips or hollows downwind that are sheltered from the wind; in such a case, turbine noise may carry further than on flat terrain.” This precisely describes topography within the entire project area and has not been taken into consideration in any of Ecogen’s noise studies.

Response:

The noise assessment conducted by Hayes McKenzie for the DGEIS did in fact consider the terrain in its analysis. Both windy and sheltered locations were assessed to determine the background noise for the project. These different conditions resulted in appropriate mitigations for both types of sound environments.

**COMPLIANCE WITH NYSDEC GUIDANCE**

37 Comments:
#025, May 20, 2005  Thomas C. Johns  
#028, May 23, 2005  Vincent Johnson  
#034, May 27, 2005  John Servo  
#043, June 10, 2005  Thomas C. Johns  
#056, June 9, 2005  Stephen and Gail Rowan  
#079, June 15, 2005  Arthur J. Giacalone  
#082, June 15, 2005  Town of Italy  
#094, June 11, 2005  John Servo  
#101, June 17, 2005  Bond, Schoeneck and King  
PH#01, May 23, 2005  John Servo  

In general, the comments summarized by stating that the proposed results do not meet the NYSDEC policy or that the noise study was not conducted in accordance with the NYSDEC policy. Those concerned suggest that supplemental noise surveys be conducted on their properties in accordance with NYSDEC Noise Guidelines (October 2004), which recommend noise studies from property lines and employ a criterion of >6 dBA above-background. The 6 dB level is violated in one location in the daytime and at four during the nighttime. Once final siting occurs, a noise propagation analysis should be conducted. The noise contour study should be conducted to determine the increase in noise levels at receptors throughout the Project Area.

It appears that the “thresholds of significance” adopted by Ecogen’s consultant is an increase in sound pressure level in excess of 5 dB, the amount characterized by the DEC Policy as “Intrusive”. Rather than consistently applying this “threshold of significance”, Hayes McKenzie Partnership discards this criteria when adherence to it would dictate that, “an even greater set back criterion would be required.” (For example, see Appendix F, page 33 of 42). According the DGEIS, a greater set-back requirement is unnecessary when the ambient turbine noise is in the “Very Quiet to Quiet range, even if the increase in sound pressure level exceeds 5dB. (For example, see Appendix F, page 41 of 42). This approach, that is, the discarding of the in-excess of 5dB “threshold of significance”
is unacceptable, and would subject residents within the subject area to “intrusive” noise levels.

**Response:**

As stated previously, the NYSDEC policy provides only guidelines for assessing impacts. It should be noted, however, that the noise guidance policy does not end at the 6dB threshold but rather, recommends an additional tier of analysis should indication of an exceedance of the 6dB threshold be identified. This additional level of analysis was conducted by using the Modified Composite Noise Rating method, as prescribed in the NYSDEC guidance. This analysis was used in assessment of impact as well as in the development of mitigation criteria. Furthermore, the NYSDEC has determined that the analysis was adequate, professional and done in a manner consistent with NYSDEC Noise Assessment Guidelines.

**38 Comments:**

*#89/109, June 16, 2005 NYSDPS*

The Renewable Portfolio Standard Generic Environmental Impact Statement (RPS GEIS), discussed in Section 3.7.3 at page 57, states: “As a general rule, MW scale wind generators located at least 1000 feet from the nearest residence have been found to produce minimal sound impact, or about an increase of 5 decibels, at that distance”. The text in the RPS GEIS reported information found during research. It was not meant to be a guidance value. A distance of 1000 feet from the nearest residence to the wind turbine as reported in research conducted during the preparation of the RPS GEIS should not be construed as “Appropriate Mitigation”. The appropriate distances are determined on a case-by-case basis based upon ambient sound level measurements, calculations/software modeling and analysis. The FGEIS should be changed accordingly.

**Response:**

Comment acknowledged, the mitigation of the noise impacts was based on the results of the noise assessment and not on the values presented in the RPS GEIS.

**39 Comment:**

*#079, June 15, 2005 Arthur Giacalone*

The DGEIS misleads SCIDA and the public when it suggests that the NYSDEC Policy recommends that noise impacts be assessed at the site of “principal” property usage, and also provides that establishing noise limitations at property lines is necessary only when the “principal” usage is proximal to such property lines. (DGEIS page 3-92). The NYSDEC Policy never uses the term “principal” usage. The modifier was inappropriately added by Ecogen’s consultant. The NYSDEC Policy speaks in terms of “the location or use or inhabitance on adjacent property,” and recommends use of the property line as a point of reference “when adjacent land use is proximal to the property line.” It does not limit its concerns to the adjacent property’s “principal” use.
Response:

Comment acknowledged. The NYSDEC has determined that the analysis was adequate, professional and done in a manner consistent with NYSDEC Noise Assessment Guidelines. SCIDA believes the use of the residence, as a potential receptor is appropriate as the primary location for property usage would be at the residence.

MITIGATION OF NOISE IMPACTS

40 Comments:
#033, May 27, 2005  Sue Sliwinski
#034, May 27, 2005  John Servo
#045, June 6, 2005  Gail E. Baker
#076, June 14, 2005  Nancy and Carl Wahlstrom
#078, June 11, 2005  Advocates for Prattsburgh
#079, June 15, 2005  Arthur Giacalone
#103, June 15, 2005  Richard Marx
#105, June 17, 2005  Rachel Treichler
PH#11, May 23, 2005  Donna Farrington
PH#12, May 23, 2005  Alice Sokolow

1. Wind farms, once constructed, cannot practicably have noise reduced at source or by barriers.
2. A setback of 3000’ for noise has been suggested.
3. The noise caused by the turbines would force nearby residents to keep their windows closed all year long.
4. The Advocates for Prattsburgh (“The commenters”) want assurances that the SCIDA will adhere to their statement in a letter dated 11/16/04 regarding NYSDEC setback policies, which says, “that SCIDA will adhere to such recommendations”.
5. Those concerned want personal mitigation for not only the noise generated by the WTGs themselves, but for the noise generated by their construction (i.e., road, construction vehicles, turbine assembly, etc.).
6. Noise impacts should be restricted to near-ambient noise levels at the closest residence. In addition, SCIDA and the Towns of Italy and Prattsburgh adopt legally binding mechanisms to guarantee noise control.
7. Even if SCIDA were to determine that residences should be the point of reference when measuring noise levels and determining setbacks, it would be unfair and irresponsible to narrowly define “residence” as “a structure that is used as a permanent residential dwelling [with] a certificate of occupancy.” (DGEIS p. 3-91). For example, the occupants of “seasonal residences” deserve as much protection from adverse noise impacts as individuals who reside year-round in the subject area. Furthermore, landowners who purchased property with the intention of building one or more residents, whether permanent or seasonal, should be allowed to demonstrate such intention and to receive assurance that wind turbines will be set back an appropriate distance from the site of their prospective dwelling(s). (Arthur Giacalone)
Response:

(1,2,5) Comments acknowledged. SCIDA is requiring appropriate setbacks previously discussed in Response to Comment 1 as part of the final siting criteria. Construction noise was determined to be a temporary impact that will be localized and limited in nature. See section C.3.9 for a summary of responses to this issue.

(3,4,6) The Noise Assessment has demonstrated that noise impacts will not have a significant impacts as the highest noise impacts from a sensitive receptor would be generally less than 50 dB (which is the sound of normal conversation). The mitigation of the required setbacks will further prevent intrusive noise impacts from occurring at residences.

As stated previously, SCIDA has evaluated the noise study and comments and believes that the noise study follows the scope as well applicable NYSDEC guidance requirements and is adequately assessed the potential noise impacts that may be related to the proposed project. In addition, the NYSDEC has determined that the analysis was adequate, professional and done in a manner consistent with NYSDEC Noise Assessment guidelines and indicated no concerns with the results of the analysis.

SCIDA cannot adopt legally binding mechanisms on noise control, as SCIDA does not have the authority to impose zoning regulations within a municipality. However if Ecogen cannot meet the mitigative setback criteria as part of its final design, subsequent SEQR review would be required by SCDA prior to approving a PILOT agreement.

(7) SCIDA has determined that a sensitive receptor would be a location that would be used as a permanent residence as this location represents the highest use and most frequent use of property within the project area. As such, SCIDA is requiring mitigative setbacks as outlined in the response to Comment 1. Additionally, as was outlined in the responses to comments in section C.3.1, for non participating properties without a residence a sliding scale of setbacks will be required.

SETBACKS

41 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

On Page 3-96 setbacks of 1375 to 1968 feet are mentioned. Will they be required and is so, under what circumstances?

Response:

As noted in comment 01, the maximum recommended setback is 1375 feet from non-participating residences in “quiet or sheltered” areas. The setback for participating residences is set at 489 feet.
The DGEIS states, “There is a risk that, by complying with the letter of the guidance with respect to allowable increases in ambient noise levels, all new development in rural areas might be severely restricted” (DGEIS Sec. 3.19). This is unacceptable. The threshold is established and it is the responsibility of the developer to meet that threshold. The Town of Italy finds the suggested set backs of the greater of 400 feet from a non-participating lot line or 1000 feet from a non-participating primary residence unacceptable. Without going into fundamental flaws associated with arbitrarily deeming a year-round tax payer as inherently more worthy of set back considerations than a seasonal tax payer, The Town of Italy’s position is that all the residents of Italy should be considered equally in the SEQR process. This can only happen with uniform setbacks based in property lines, not structure location on said lots. The Health and safety of the citizens of Italy must come before the financial well-being of the developer.

Response:

The receptor used is a permanent residence, not permanent resident. All permanent dwellings will be treated equally in determining impacts, regardless of who owns it, as has always been the case. The setbacks have been determined in order to protect the non-participating owners more than the participating owners since Ecogen will financially compensate the participating owners for leasing their property.

Italy also requests that the NYSDEC’s initial recommendation, which promoted the conservative approach of using property lines as the receptors, be employed.

Response:

See response to Comment #42.

IMPACT TO WILDLIFE

Sounds travel, will the noise produced by the windmills upset local wild bird and animal populations?

Response:

Animals are very adaptable creatures. Should they find that their new environment is too noisy, they will move to where they are comfortable. However, animals will most likely return to the area as soon as construction is terminated. Wild animals such as deer, songbirds, squirrels, skunks, rabbits, hawks, and raccoons are all known to reside
naturally in urbanized areas such as Buffalo or Rochester, which has a much higher ambient noise level and much sharper spikes (due to emergency vehicles, etc) than will be experienced in Italy and Prattsburgh.

MISCELLANEOUS

45 Comments:

#049, June 8, 2005 Michael J. Costello
#058, June 13, 2005 Swain, Lesley, Carolyn
#066, June 13, 2005 Brenda Bemchuck and Jeffery Smock
#069, June 14, 2005 Susan Saunders
#080, June 17, 2005 Carl and Michele Raymond
#085, June 13, 2005 William Curley
#090, June 15, 2005 William and Judith Brooks
#093, June 16, 2005 Carl and Michele Raymond
#099, June 17, 2005 Sue Sliwinski
#101, June 17, 2005 Bond, Schoeneck and King

The comments are summarized by stating that the authors are concerned about the effects of the “excessive” noise cause by the WTGs:

1. They are noisy (Costello & Carolyn).
2. “….may affect my child’s hearing in a detrimental way” (Bemchuck and Smock).
3. “…The noise, shadow flicker, strobe-flashing and ice throw associated with giant wind turbine operation are well documented (though barely recognized for what they are in the Ecogen-sponsored DEIS). These effects, singly and in combination, disrupt the normal pattern of life for those forced to live next to or near them.” (Susan Saunders);
4. “…could present a danger to the residents through Ice throw, noise, and visual flicker.” (William Curley);
5. “With this larger number of turbines in this location, the visual impact (and the impact of noise) is cumulative and more disturbing than if just one turbine were there.” (William and Judith Brooks);
6. “There is a question about noise pollution and the decibel level created by the windmills.” (Carl and Michele Raymond)
7. A conversation between Ed Sliwinski and Russ Cary (Fenner Town Supervisor) regarding the complaints generated by the Fenner windmill farm…“Noise (especially down wind), flicker, strobing and shadows are among the complaints.” (Sue Sliwinski).
8. Page 27 of 42 states, Noise predictions have been based on the sound power level of the GE 1.5 sle wind turbine. Based upon additional text on this same page it appears that this analysis was based upon a hub height of 60 meters, not the proposed hub height of 80 meters. Page 30 of 42 goes on to state. Our predictions have been carried out using a source height corresponding to the proposed height of the turbine nacelle and a receiver height of 1.2m. It is not clear if the proper nacelle (hub) height was used in the calculations.
Response:

(1,2,6,7) As noted in the noise impact study, wind turbine generators generate a large amount of noise at the generator on the monopole. Much of this noise is dissipated by the time it reaches ground level. To lessen the impact, mitigation such as setbacks are the most efficient. The Noise Assessment in the DGEIS analyzed the worst case. The Noise Assessment contained numerous conservative estimates, including placing the hypothetical receptor in the center of 53-WTG layout and, most significantly, assuming that seasonal background noise levels would match the more conservative winter background noise levels that were collected for the assessment. This assessment resulted in SCIDA requiring mitigative setbacks for project siting as discussed in the response to Comment 1.

Children’s hearing would not be adversely affected by exposure to ambient WTG sounds. Problems with hearing loss would begin when exposed to loud sounds. In order for that level of sound to be experienced, one would have to be physically on the monopole in close proximity to the actual generator. Since this will not be the case, there will be no risk for hearing loss even underneath the WTG.

(3,4) Ice throw, noise, shadow flicker and strobe-flashing can all be concerns. However, several mitigation measures can be enacted to reduce if not eliminate these potential problems. The main mitigation is setbacks. Mitigation measures for ice throw, shadow flicker and strobe flashing are presented in response to comments in Section C.3.10.

(5) The study was based on a theoretical receptor placed within the center of a 53-tower layout. Therefore the noise study assessed potential cumulative impact from noise.

(8) As discussed previously, the 80 meter hub height was used in the model.

C.3.8 Energy Resources

COST INCREASES

01 Comments:
#031, May 23, 2005 Kathleen C. D’Ambra
#063, June 13, 2005 James C. Tronsden
#071, June 13, 2005 Ruthie Matilsky
#078, June 11, 2005 Advocates for Prattsburgh
#096, June 15, 2005 James Tronsden

The comments can be summarized as follows:

- The existing power grid is not designed to handle the intermittent power generated by the WTGs, and would have to be upgraded. There are concerns that the cost of such an upgrade would be passed on to the local residents via an increased rate on their electric bills.
- The intermittent power is also a concern because it could raise the expense per output beyond its economic feasibility, thus passing the cost onto the consumer.
• The operation of the WTGs would also produce a demand on the local power grid, in the form of lighting, maintaining transmission lines, etc. Such demand could offset the savings estimated by Ecogen, and be reflected in the consumers electric bill.
• When electric rates go up it will affect not just the private rate payer, but will affect industry and retail businesses who will pass along the increased electric rates to the consumer.

Response:

As part of the requirements by the Independent System Operators (ISO), Ecogen has completed an interconnection study to ensure that the local power transmission grid can support the power supply.

Local power demand for operation of the wind farm would be minimal. There will be no maintenance of transmission lines as the NYSEG grid connection is located within the Project area. No transmission lines will be required.

Power generated from this project will be sold on the wholesale market; therefore, the price is dependent on the variable electric demand and the regional cost of power production by all involved generating facilities. Electricity costs will not be passed onto Town of Italy or Prattsburgh residents as a way of recouping investment expenditures. The cost to produce wind energy per kilowatt-hour is comparable or cheaper than hydroelectric, gas, coal, and biomass. Nuclear energy, which supplies nearly 30% of New York State’s electricity, costs more than twice as much as wind energy and has to contend with highly toxic waste disposal.

A recent study published by the NYS Energy Research and Development Authority (NYSERDA) in early 2005 concluded that the current power grid would not have to be upgraded to accept wind power until the energy produced by wind accounts for 10% of all electricity produced in New York State. That level is currently about 3,000 MW with this project at maximum accounting for 79.5 MW. Until the 10% limit is reached, the ‘intermittent’ power produced by WTGs can be handled by the existing infrastructure.

A study prepared for the NYS Renewable Portfolio Standard (RPS) Proceeding concluded that the addition of renewable sources in New York would help stabilize volatile electric prices and save consumers in approximately $14 million in 2006 and $110 million by 2013 (Case 03-E-0188- Proceeding on the Motion of the Commission Regarding a Retail Renewable Portfolio Standard).

MITIGATION

02 Comment:
#076, June 14, 2005    Nancy and Carl Wahlstrom

The comment can be summarized as a proposal for mitigation in the form of free energy for those who would be impacted by the Project.
Response:

It would be inappropriate to force the project sponsor to give away “free” energy as a means of mitigation.

GENERATING CAPACITY

03 Comments:
#071, June 13, 2005 Ruthie Matilsky
#078, June 11, 2005 Advocates for Prattsburgh
PH#13, May 23, 2005 Hazel Hanna
PH#19, May 23, 2005 Ruthie Matilski
PH#21, May 23, 2005 Bob Radell

This comment expresses concern that since the maximum generating capacity of the Project (79.5 MW) is <0.001% of the total state demand of 158,014,000 MWh (2003), average consumers would save more on their electric bills through their own energy conservation efforts (i.e. switching from incandescent to fluorescent lighting).

Comments can be summarized as stating that nowhere in the document does Ecogen come out and say how much electricity the wind plant can be expected to produce as opposed to rated capacity. More importantly, it does not say how much emissions will be cut. In addition, how much electricity is produced annually and seasonally, how many days are the wind turbines down due to maintenance problems, icing and accidents, and how much energy will be used to build the turbines, transport, install them and compare this to the expected life of the turbines. In addition, WTG only produce about 30% of their rated capacity, which means that they will have to be backed up by conventional power plants.

Response:

While the project size compared to statewide demand is small, at full capacity it can provide enough electricity for approximately 30,000 homes based on average U.S. household consumption. Net summer electricity capacity within New York in 2002 was 36,041 MW for a total of 139,591,687 megawatt hours (MWh), which was a result of a statewide generation capacity of 44% for that year (U.S. Department of Energy/Energy Information Administration). The Project will optimally generate 79.5 MW with an anticipated generation of approximately 200,000 MWh operating at about 30% of capacity. New York State has the capacity to generate an estimated 7,080 MW/62,000,000 MWh of wind power, which is enough to power 20% of the state or between 2,400,000 to 3,000,000 homes (NYSERDA). Ecogen is seeking to tap into this relatively untouched resource to produce electricity.

The energy that will be consumed in the manufacture, construction, operation, and removal of the WTGs can typically be “paid back” within 3 to 8 months of operation depending on the average wind speed at each particular site (source: American Wind Energy Association [AWEA]).
Electricity generation facilities in New York State have an average age of 31 years and not only do not necessarily comply with the environmental protections passed after they were constructed, but also do not contain the latest fuel-efficient technology which makes these existing plants inefficient, polluting and more prone to maintenance issues. New York generating capability is at such a stage that demand is outpacing new generation plants coming online to meet the needs of the populace.

A typical Wind Power Plant operates at about 25-40% of rated capacity, although that can increase during the winter season. While the project will provide its rated capacity 79.5 MW of new power at certain peak times, Ecogen estimates that as a general matter this project will generate approximately 30-35% of its rated capacity for each year of operation. For comparison purposes, most conventional fossil-fuel burning plants operate at approximately 40-80% capacity, including down time for maintenance and repair. A WTG will run most of the time, but it will not operate at full capacity on less windy days, which is why the capacity factor is also lower. Wind power plants also have an availability factor of over 98%, meaning that they are shut down less than 2% of the time, during sufficient wind speeds to operate the turbine. This is higher than most other conventional power plants.

Individual energy conservation efforts combined with renewable energy will not only lower home energy costs, but will also help protect the natural environment of the state through a reduction in acid rain and airborne pollution, while reducing New York’s need to import fossil fuels for electricity production. Based on New York’s current energy production mix, each megawatt-hour of electricity production results in 1.5 pounds of NOx emissions, 3 pounds of SO$_2$ emissions, and 882 pounds of CO$_2$ annually (NYS Energy Research and Development Authority). Wind power produces zero emissions that are harmful to the environment. The Ecogen project can annually reduce New York’s emissions by over 300,000 pounds of NOx emissions, 600,000 pounds of SO$_2$ emissions, and 176,400,000 pounds of CO$_2$ based on the 200,000 MWh generated by Ecogen.

A “spinning reserve” is maintained equal to the largest generating facility on the grid, regardless of power source. Therefore, no additional capacity will have to be maintained in order to provide wind energy with a backup in case the wind decreases. That reserve would exist with or without the presence of the wind farm (source: The Effects of Integrating Wind Power on Transmission System Planning, Reliability, and Operations).

COMMUNITY BENEFITS

04 Comment:
PH#26, May 23, 2005  Tom Golisano

How does the community benefit since the electricity generated will be put into the national grid. What happens when the nation’s energy needs change and wind power is no longer needed or Ecogen goes out of business?
Response:

The communities will benefit from the additional revenue paid on the land, in the form of the PILOT agreement, which the wind farm will occupy. This will enable the Towns of Italy and Prattsburgh to collect more funds than would otherwise be the case. The Wind Farm would provide enough electricity at the 30% capacity rate to power all of the homesteads in Yates County or a quarter of the homesteads in Steuben County.

The energy generated will be sold wholesale into New York State’s power supply - not into the “national grid". The costs for power on the wholesale level are determined by state demand, electrical availability and segmented for sale on a regional basis. Based on the current rise in energy demand, it is expected that the new energy source will be needed. However, if the plant should become inoperable a decommissioning bond will be established. This bond is discussed more in Section C.3.16.

C.3.9 Temporary And Short-Term Impacts

SCHOOL BUS ROUTES

01 Comment:
#024, May 13, 2005 Prattsburgh School

The school asks that the contractors be aware of school bus routes and times so school children are not disrupted from their accustomed arrival/departure times.

Response:

Ecogen will ensure that the contractors will schedule/coordinate their deliveries so as to minimize any impact to local school bus arrival/departure times.

CONSTRUCTION TIMES

02 Comments:
#032, May 27, 2005 Sandra B. Johnson
#103, June 15, 2005 Richard Marx
PH#05, May 23, 2005 Sandra Johnson

Comments are summarized as stating that construction times be limited to no later than dinner time to minimize the noise impact on young children. Additional comments note that the later construction hour is unfair to non-participating homeowners.

Response:

Ecogen will work with the contractors to minimize the construction noise generated. However, occasional extenuating circumstances (i.e., field conditions, amount of daylight, etc.) may dictate that construction extend past daylight hours.
CONSTRUCTION REQUIREMENTS

03 Comments:
#89/109, June 16, 2005 NYSDPS

While Section 3.11.2.2 (p.3-116) recognizes three of the largest WTG components to be delivered to each WTG site, it does not discuss the weight and size of the cranes necessary for erection at each site and the costs associated with crane tear-down and erection at a new site. The use of cranes and associated impacts should be included in the delivery of the WTG components. Often cranes are moved across lots to the next site to avoid this cost. This method of crane moving should be discussed with an evaluation of the impacts associated with this technique.

Response:

The crane will be transported to the site in several sections. Once within a cluster of WTG, the crane will be assembled. It will then move from WTG to WTG on a larger path located between the WTG locations and will not move on local roads. Once the WTG are assembled within a cluster, the crane will be disassembled and moved to the next section of the Project, where it will be reassembled to continue the process. This is done to limit the amount of land disturbance as each crane assembly area would require a 400 foot by 50 foot gravel assembly area.

The impacts that the cranes will have on local roads will be minimal, as the crane will be delivered in sections to the assembly site within the wind farm cluster. Discussing the financial costs associated with the private contract with the crane company regarding the set up and take down of the crane is neither pertinent to SEQR nor appropriate for public discussion. Ecogen is committed to repairing any damage that is causes to local roads as a consequence of moving WTG components and construction vehicles over them. See Part C, Section C 3.11.

04 Comments:
#89/109, June, 16, 2005 NYSDPS

There is no discussion of the amount of crushed stone and concrete needed at each WTG site for access road and WTG foundation construction, and the numbers, size and weights of fully loaded transport vehicles. Appropriate text should be included in the FGEIS.

Response:

Information on the weights, lengths and types of vehicles that will move parts to the WTG sites is discussed in Appendix I. The amounts of crushed stone and concrete that the Project will require will not be known until the Final Design Package is presented after any Statement of Findings and FGEIS is released.
ROAD WEAR/MAINTENANCE

05 Comments:
#071, June 13, 2005      Ruthie Matilsky
#076, June 14, 2005      Nancy and Carl Wahlstrom
#078, June 11, 2005      Advocates for Prattsburgh

The comments are summarized as stating that heavy equipment traveling over paved and unpaved roads not designed for their weight will adversely affect their integrity and greatly increases the potential for damage to personal vehicles. Repairs to damaged roads are requested to be accomplished quickly. Assurances are requested that the roads will be repaired soon enough, continually monitored throughout the life of the project and a predetermined time after the termination of the project to prevent any additional threats to vehicle maintenance.

Response:

Repairs to local roads due to movement of heavy equipment during construction will be the responsibility of Ecogen. Normal road repair and maintenance due to normal driving and weather conditions will remain the responsibility of the Towns.

Ecogen will prepare a “Road Assessment” of the project area following final site selection and prior to construction. This assessment will include the local town, county and state roads within the Towns of Prattsburgh and Italy that are used for project access.

WILDLIFE DISRUPTION

06 Comment:
#078, June 11, 2005      Advocates for Prattsburgh

Comments are summarized as stating that wildlife disturbance may be understated in the DGEIS and that fish in particular have a hard time finding other places to seek refuge if their stream habitat is disrupted. Questions were also posed as to where exactly local mammals and other animals will go to seek refuge during construction. Concerns about construction impacts during hunting season were also brought up.

Response:

Stream habitat will not be impacted by the Project. No crossing of streams or work in streams by heavy equipment will occur. The Stormwater Pollution Prevention Plan for the project will include appropriate erosion and sediment control measures for Project construction near streams. This will be included in the Water Resources Assessment that will be submitted to SCIDA as part of the final design package.

The amount of land impacted during construction, at any given time, is a fraction of a percent of the combined acreage of the Towns of Italy and Prattsburgh. The local mammals should have no problem seeking temporary refuge during construction.
The participating landowners will have their properties posted to prevent hunters from trespassing during construction. In addition, construction workers will be donning highly visible clothing (i.e., traffic vests, etc.) to prevent any accidents.

AGRICULTURAL DISRUPTION (See Section 3.4)

07 Comment:
#078, June 11, 2005 Advocates for Prattsburgh

The comment is summarized by stating that the siting of the towers on the edges of parcels and roads affects non-leasing landowners and drivers. Ecogen therefore must eliminate the parcels that do not have multiple fields and those sites that will negatively impact non-leasing landowners.

Response:

The wind resources available within the Project area govern the siting of the towers, as do the proposed setbacks discussed in Section 3.1 of the DGEIS. The NYS Department of Agriculture and Markets has requested that the Project be located along the edges of agricultural fields and along non-agricultural properties in order to conserve farmland. Access roads should follow existing roads or locate along the edges of active agricultural fields in order to avoid fracturing the fields into smaller parcels, which are more difficult to efficiently farm. Access roads are also to follow ridgelines, where possible, in order to avoid impacting the existing drainage. Furthermore, the Project sponsor will complete a final notice of intent with New York State Department of Agriculture and Markets as part of the design package, which will respect the mitigations as set forth prior to inducement by the Lead Agency.

The purpose of the GEIS process is to identify the siting criteria and to ultimately choose sites that balance the locational needs of the project and minimize and avoid potential adverse impacts to the extent practicable.

HISTORICAL/ARCHAEOLOGICAL IMPACTS

08 Comment:
#078, June 11, 2005 Advocates for Prattsburgh

Comments are summarized as stating that additional research and planning to avoid or remediate disturbance of all landmarks not already identified in Prattsburgh must be undertaken.

Response:

All historical/archeological research has been performed in accordance with applicable regulations/guidelines (i.e., SHPO, etc.). In addition, in conversations with SHPO has agreed with the general conclusion that relocation of the Project to any other part of New York State will likely have the same or more effect on cultural resources and historic
architecture. SHPO has also agreed with the work plan presented in identifying archaeologically and historically significant places within the construction areas as per their letter dated November 2, 2005 (Appendix S).

HEALTH IMPACTS FROM HEAVY TRAFFIC

09 Comment:
#078, June 11, 2005 Advocates for Prattsburgh

The comments are summarized as stating that all possible impacts should be looked at, especially emergency response as they would be affected by the heavy vehicles on the roads. Taxpayers should also not be negatively impacted for any costs associated with the wind farm. The people living on the roads may also be adversely affected by traffic moving down otherwise empty roads.

Response:

Repairs to local roads due to movement of heavy equipment during construction will be the responsibility of Ecogen. Ecogen will make certain that the contractors will schedule/coordinate their deliveries as not to impede emergency response vehicle traffic.

The potential of construction traffic moving down local roads is unavoidable. Ecogen will coordinate with their contractors to mitigate impacts to school bus routes and emergency vehicle traffic.

IMPACTS TO PRATTSBURGH VILLAGE GREEN

10 Comment:
#078, June 11, 2005 Advocates for Prattsburgh

Comments are summarized as stating that the “small public park” is in fact a historic village green and cannot be replaced if destroyed. If Ecogen cannot come up with a plan to preserve the park, then it must form an alternative traffic plan that will not impact local citizens.

Response:

Due to the importance of the historic village green, Ecogen will implement an alternative traffic plan that will not impact the park.

As such, following site selection, Prepare a “Road Assessment” after final site selection and prior to construction. Coordination with appropriate highway superintendents will be required. The assessment will document: all haul routes; exiting conditions and structural adequacy of roads, bridges, culverts, etc; required permits; necessary improvements including “envelope” clearing requirements; requirements for maintaining roads during construction; impacts to private property (if any); a plan for post construction inspections and remedial action. This assessment will include the local...
town, county and state roads within the Towns of Prattsburgh and Italy that are used for project access. The Plan will be reviewed by SCIDA prior to approving the project.

**ABANDONMENT AND DECOMMISSIONING**

**11 Comment:**
#078, June 11, 2005  Advocates for Prattsburgh

The comment is summarized as stating that the decommissioning fund has not specifically detailed how much money will be available, nor the specifics about the account. Plans to recycle the parts from the wind farm should be published as well as who would take them, as it was noted that developers have been running into difficulty in attempting to recycle the parts.

**Response:**

As stated in Section 3.16.3 of the DGEIS “The proposal estimates the scrap salvage value of the WTG would be greater than their removal cost. The assumption of the WTG’s having only scrape salvage value is extremely conservative. Most likely the tower and generating unit would have a significant resale value on the used WTG market, considering the current cost of the equipment from the vendor is in excess of $1,000,000 per WTG. Therefore, in the unlikely case abandonment results, it is anticipated that the salvage value of WTG scrap materials will ensure that the sites will be decommissioned. However, a decommissioning bond will be established to decommission the Project net any salvage value, as determined by an independent engineer salvage contractor.

Ecogen will prepare a “Decommissioning and Restoration Plan” after final site selection and prior to construction. The Plan will include: anticipated life of the project; estimated decommissioning cost in current dollars; method of and schedule for updating the costs of decommissioning and restoration; method of ensuring that funds will be available for decommissioning and restoration; and, anticipated manner in which the project will be decommissioned and the site restored.

The value of the bond will be compared to the salvage value of the equipment every 5 years and if necessary will be adjusted to cover decommissioning cost. SCIDA, or successor agency, is to be designated the beneficiary of the decommissioning bond and will be responsible for determining the bond remains sufficient to recover decommissioning costs.

**SECTION PLACEMENT**

**12 Comment:**
#101, June 17, 2005  Bond, Scheoneck, and King

The comment can be summarized as stating that the placement of this subchapter in the middle of the chapter before other sections are talked about is poor placement.
Response:

Comment acknowledged. This section was originally listed last in the scoping document. However, additional sections were added after the scoping document was released. In order to follow the scoping document, this section was maintained in place, creating a reading discontinuity but maintaining the continuity of the DGEIS as presented to the Lead Agency in the scoping document.

C.3.10 Health And Safety Impacts

ICE THROW

01 Comments:
#015, May 11, 2005 Terry Matilsky
#017, May 12, 2005 Terry Matilsky
#042, June 7, 2005 John Passantino
#045, June 6, 2005 Gail Baker
#047, June 7, 2005 Todd and Cynthia Wolfer
#051, June 7, 2005 NYSDOH
#053, June 17, 2005 Frederick Bays
#056, June 9, 2005 Stephen and Gail Rowan
#057, June 6, 2005 Donald and Barbara Christmas
#059, June 13, 2005 Lesley and Carolyn Swain
#066, June 13, 2005 Brenda Bemchuk and Jeffrey Smock
#069, June 14, 2005 Susan Saunders
#073, June 13, 2005 Ruthie Matilsky
#080, June 17, 2005 Carl and Michelle Raymond
#079, June 15, 2005 Arthur Giacalone
#083, June 17, 2005 Ray Cavallaro
#084, June 14, 2005 John Paust
#085, June 13, 2005 William Curley
#093, June 16, 2005 Carl and Michelle Raymond
#099, June 17, 2005 Sue Sliwinski
#100, June 17, 2005 R & C Cole
#103, June 15, 2005 Richard Marx
PH#01, May 23, 2005 John Servo
PH#15, May 23, 2005 Sarah Mack
PH#18, May 23, 2005 Terry Matilski
PH#25, May 23, 2005 Carolyn Tinney
PH#49, May 23, 2005 Reverend John Paust

The comments are summarized by stating that the authors are concerned about the hazards of potential ice throw. Several comments refer to the 1600 feet at over 100 mph throws.
Response:

There are two types of icing: rime icing and glaze icing. Rime icing occurs when supercooled moisture in the air contacts cold surfaces below 32°F (0°C). This type of icing does not typically occur at the Project location. Glaze icing, which can occur in the project area, forms on the blades of the WTG as a result of rain freezing on cold surfaces at temperatures close to 32°F (0°C). This is typically the type of ice that is the result of an ice storm. This ice usually falls of the blades shortly after the icing event due to warmer temperatures and/or direct sunlight. This ice will typically fall straight down off of the blades rather than be thrown.

AWS Truewind has determined that the Project site is not located in a heavy icing environment. By using climatological reports and Air Force data, icing events were determined to last only hours when they occur with most of the ice melting and falling to the ground. Some icing will occur periodically in winter, but it will only have a minor impact to electricity production.

According to the University of Berkley risk assessment study and the AWS ice throw study conducted for the DGEIS, there is less than a 1:1,000,000 chance of being hit by a piece of flying ice. If an icing event does occur, there are five fail safe controls that will prevent ice throw from occurring. These controls are described below.

As icing occurs on the blades of the WTG, there is a change in the aerodynamic shape of the blade, which causes a change in the lift to drag ratio, which in turn causes the rotor to slow down. This drop in power output causes the WTG’s sensors to shut down the turbine, preventing ice throw. Depending on weather conditions, the melting ice will fall straight down before the WTG resumes operations, or the ice that is thrown will fracture in flight resulting in small pieces landing.

The five independent and redundant fail-safes are integrated into the Wind farm system in order to stop the blades and prevent ice throw. These are:

- Blade icing imbalance: when the blades become unbalanced due to ice, the WTG shuts down.
- Loss of power: when power produced by the WTG drops due to the change in aerodynamic characteristics, which causes the power output to drop, the WTGs are shut down.
- Icing on the unheated versus heated anemometers: when the unheated anemometer shows a loss of wind speed compared to the heated anemometer, this indicates ice buildup and the WTG are subsequently shut down.
- Vibration: when the blades become unbalanced and produce vibrations, it is detected and shut down.
- MET Tower ice detection: when the meteorological tower’s ice detector is tripped, the WTG will be shut down until the machines and meteorological tower can be inspected.

With the project area icing conditions limited to glaze icing and inclusion of the five redundant fail safe controls there is no significant risk of ice throw to the general public from the operation of the turbines.
02 Comment:  
#015, May 11, 2005 Terry Matilsky – no data on icing:

Next, with respect to ice throw, arguably the most important health, safety and economic concern of the project, the four page presentation authored by Bruce Bailey, a consultant with AWS Truewind (!) is a complete joke. In these pages, Bailey does little more that define rime ice and glaze ice, and then say that there is no problem. No data, no model, no analysis, no numbers, no nothing!

Response:

The section produced by AWS Truewind was to assess the likelihood of ice buildup on the blades. Defining the type of ice likely to build up upon the blades and determining what the cast-off ice will most likely comprise of was the focus of the report. The report was not to determine effects, potential hazards or mitigation, which was addressed in the DGEIS in Section 3.10. Recommended mitigations for ice-throw, which include setbacks and icing detection systems that will shut down the WTG, were in both the Executive Summary and Section 3.10 of the DGEIS and have been described in the previous response. The proper citations linking to relevant studies are contained within the document and available for reference either through the Internet or a local library.

03 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS does not reflect through and systematic researching, documentation and/or evaluation of any of the topics identified during the scoping process. The only “study” included in the DGEIS appendices is the 4-page memorandum prepared in July 2004 by Bruce Bailey if AWS Truewind and included as Appendix G. As is addressed in the written comments of Terry Matilsky, Professor of Physics at Rutgers University, the AWS Truewind report is deeply flawed. Ecogen has failed to provide SCIDA adequate information, data, and analysis to allow the Lead Agency to take a “hard look” at any health and safety issue.

Response:

See above response.

04 Comment:  
#079, June 15, 2005 Arthur Giacalone

According to AWS Truewind, “No direct on-site measurement of icing frequency and amount have been taken to our knowledge.” (Appendix G, p. 1 of 4). No effort was undertaken by Ecogen’s consultant to actually measure on-site icing frequency during the winter of 2004-2005 as part of its report. As Professor Matilsky concludes in his written comments, “Ecogen must explicitly use data indigenous to the region to estimate their icing potential. Any other data are misleading at best, and deceptive, at worst.”
Response:

See above response. AWS Truewind utilized the United States Air Force global cloud data set in order to determine the frequency of low-level clouds that would help create the conditions necessary for ice to form on the blades. AWS Truewind also used climatological records of the region to determine both frequency and duration of icing events. Icing conditions typically were present on the order of hours or less and most icing events ended with temperatures warming to above freezing, which resulted in ice melting.

Comment:

05
#017, May 12, 2005 Terry Matilsky:

Setbacks based on the turbine height are completely inadequate because ice hurtled at speeds in excess of 100 mph can travel distances in excess of 1500 feet, onto adjacent property, with enough momentum to do real damage.

Response:

See above response.

06
#078, June 11, 2005 Advocates for Prattsburgh:

(29) Rime icing will occur more than 20% of the time, not 4-8% as quoted by Ecogen
(30) How will Ecogen deal with icing events?
(31) The duration of icing events is incorrectly calculated.
(32) Ecogen ignores completely the problems associated with rime ice buildup. Specifically, what are their criteria for stopping and restarting the turbines? Where is their assessment of economic impact during these times of idle machinery?
(33) Amount of potential ice throw fragments are not calculated by Ecogen,
(34) No setback criteria are given to take into account ice and blade throw

Response:

1(29). The commenter is misinterpreting cloud frequency statistics and how they are translated to estimate the frequency of rime icing.

The primary database used for the Ecogen rime icing analysis was a low-cloud climatology for the northern Appalachian Mountain region using a U.S. Air Force global cloud data set. The data set included the Finger Lakes region of NY, and the results are indicative of regional atmospheric and contributing factors such as the Great Lakes.

The Air Force data set allowed for the determination of frequencies of low-level cloud base altitude as a function of terrain elevation. For the range of terrain elevations appropriate for the Ecogen project (590-650 m), plus the structural height of the wind turbines including blades (up to 770 m above sea level), the incidence of low cloud during the cold season was estimated to be 7-13%. [The commenter’s suggestion of 20-
25% low-cloud frequency is found in the data set well to the northeast in the Adirondack Mountains at elevations exceeding 1000 m. Such elevations are not present in the Finger Lakes region.]

Riming can only occur when temperatures are below freezing. Therefore, the 7-13% frequency of cold-season low cloud in the vicinity of the Ecogen project was next differentiated for temperatures above and below freezing. Based upon multi-year temperature measurements taken on-site, the frequency of freezing conditions is 61 percent (i.e., the frequency of warmer than freezing temperatures during the cold season is 39 percent). Hence, the frequency of cold-season low cloud in the vicinity of the Ecogen project should be multiplied by 0.61 to determine the frequency of cold-season low cloud that could cause rime icing. This product gives a range of 4-8% of potential riming frequency during the cold season.

Finally, on an annual basis, this range should be reduced by half to account for the fact that the cold season comprises only half the year. Therefore, the annual exposure of the Ecogen site to low-level rime producing cloud is estimated to be 2-4 percent.

This result is consistent with prior publications (as cited in Ecogen’s original submittal) and with the presentation that Dr. Bruce Bailey gave at AWEA’s Siting Workshop in Boston in March 2005.

2(30). Wind turbines operations are sensitive to icing. The accumulation of ice on the blades of a wind turbine affects their aerodynamic properties and leads to reductions in electrical output. This can result in slower rotational speeds of the turbine rotor and reduced electrical output. When the actual turbine output becomes significantly less than the predicted output based on wind speed measurements (using a heated speed sensor), the wind turbine will trip off on a power curve alarm. Significant accumulations, which are expected to be quite infrequent, can cause an imbalance that automatically trips the wind turbine into a shutdown mode. Ecogen plans to utilize commercial wind turbines that have been designed for cold weather operations, which include icing conditions.

As a redundant mitigation measure, Ecogen plans to incorporate an ice-detecting sensor at the 80 m level of the reference meteorological tower. The ice detector will be functioning continuously (24 hours per day; 7 days per week) and will be used to indicate when significant accumulations of ice are occurring. This information will be used to assist in determining when to shut down wind turbines. One sensor model under consideration is the Goodrich Model 0871KB1 ice detector (www.aerospace.goodrich.com).

The frequency of icing, as explained in Response 1, is expected to be relatively low, with corresponding minor impacts on energy production.

3(31). A 20-year climatology of weather conditions associated with freezing precipitation events was studied for several northeastern United States cities, including two in central New York; the 1990 reference for this climatology was given in Ecogen’s submittal. Uniformly the results showed that the duration of such events typically is on the order of hours or less, and that the majority of such icing events ended with
temperatures warming to above freezing, resulting in ice melting. The commenter is incorrect in the claim that Ecogen’s findings are “without any merit or data to back it up.”

4(32). Ecogen ignores completely the problems associated with rime ice buildup. Specifically, what are their criteria for stopping and restarting the turbines? Where is their assessment of economic impact during these times of idle machinery?

After studying the climatology of expected icing, and having maintained tall meteorological towers in the area for several years, **AWS Truewind** has determined that rime icing is not expected to be a significant operational problem for the planned wind turbines. Likewise, Ecogen has accounted for expected minor icing-related energy production losses in its economic planning.

Wind turbine operations during cold weather conditions will follow protocols that have been established by wind turbine manufacturers with experience in similar icing regimes. As explained above, vibration or power curve alarms caused by significant icing will trigger turbines to shut down.

5(33-34). In surveys conducted by Garrad Hassan, it was determined that the tendency is for ice fragments to drop off, rather than be thrown from, the turbine rotor. In addition, most ice fragments found on the ground are smaller in mass than the 1 kg (2.2 lbs) stated by the commenter. Modern wind turbine control strategies, as described above, are intended to curtail operation whenever there is significant icing on the blades. These strategies are an improvement over turbines installed in the 1990s, which were the basis of the assumptions derived by Garrad Hassan. In terms of risks to the public from potential ice throws, even the Garrad Hassan study referred to by the commenter indicates that the risks are very low.

It should be clearly understood that the risk of an ice throw is a function of several variables:

- The probability of ice build-up on the blades
- The probability of ice fragments being detached from a blade
- The wind and weather conditions existing at the time
- The operational status of the turbine (a function of turbine control strategies & alarms, wind speed, and grid availability).

Should there be an ice throw, the risk of a person being hit and injured by an ice fragment thrown from an operating wind turbine also depends on:

- The point where the detached ice fragment lands (function of wind speed & direction, rotor speed, radial position on blade, blade azimuth, etc.)
- The mass, shape, and speed of the fragment
- The structural integrity of the fragment (i.e., may it break up in flight?)
- The probability of a person being in time at the exact point of landfall.

**AWS Truewind** has also determined that Ecogen’s project site is not located in a heavy icing environment. Although some turbine icing will occur at a given frequency, this frequency will have a minor impact on energy production. Ecogen also intends to use
wind turbines incorporating heated sensors and improved control strategies compared with earlier technologies so that the turbines do not operate during significant icing events. Given the combination of circumstances required for ice throws to occur during significant icing events, and given the utilization of modern wind turbine technology tailored to cold climates, AWS Truewind concludes that public risks from ice throws are extremely low.

Ice shedding can pose a risk to people located directly below the wind turbines and their blades when they are iced. Maintenance personnel will be instructed on safety procedures when such conditions occur.

07 Comment:

#079, June 15, 2005 Arthur Giacalone:

DGEIS does not reflect a thorough and systematic researching documentation or evaluation of the topics identified during scoping process specifically for health and safety. He indicates that no actual measurements were collected on icing frequency during the winter of 2004-2005. Specific comments follow:

Comment No. H1: SCIDA’s Final Written Scope provides that existing literature on health and safety impacts from professional sources will be researched, documented and evaluated. Despite this requirement, the DGEIS does not reflect thorough and systematic researching, documentation and/or evaluation of any of the topics identified during the scoping process. The only “study” included in the DGEIS appendices is the 4-page memorandum prepared in July 2004 by Bruce Bailey of AWS Truewind and included as Appendix G. As is addressed in the written comments of Terry Matilsky, Professor of Physics at Rutgers University, the AWS Truewind report is deeply flawed. Ecogen has failed to provide SCIDA adequate information, data and analysis to allow the Lead Agency to take a “hard look” at health and safety issues.

Comment No. H2: According to AWS Truewind, “No direct on-site measurement of icing frequency and amount have been taken to our knowledge. [Appendix G, page 1 of 4] Despite the lack of such information, no effort was undertaken by Ecogen’s consultant to actually measure on-site icing frequency during the winter of 2004-2005 as part of its report. As Prof. Matilsky concludes in his written comments, “Ecogen must explicitly use data indigenous to the region to estimate their icing potential. Any other data are misleading at best, and deceptive, at worst.”

Comment No. H3: Although the Final Written Scope calls for the DGEIS to “provide recommendation for distance and setbacks” as mitigation measures to address health and safety issues, the DGEIS simply adopts the “fall zone” distance of 400 feet from public road right-of-ways and property lines of non-participating landowners. (See DGEIS at page 3-107 [page 178 of 25].) An adequate effort has not been made to tailor mitigation measures to the actual hazards created by the potential for ice throws, blades throws, etc. It will be impossible, therefore, for SCIDA to honestly and convincingly certify that the action is one that avoids or minimizes adverse impacts to the maximum extent practicable as required by 6 NYCRR 617.11(d)(5).
Comment No. H5: The Final Written Scope states: “The Draft GEIS will include an assessment of the potential psychological effects that may result from noise and shadow flicker (strobe).” Despite this requirement, the DGEIS does not contain an analysis and assessment by a competent professional regarding “the potential psychological effects that may result from noise and shadow flicker,” depriving SCIDA of the information needed to take a “hard look” at this important issue.

Response:

The DGEIS provides a thorough summary of the current knowledge in the field and demonstrates that ice throw will be a rare occurrence with a very low chance of a threat to health and safety.

08 Comment:
#086, June 14, 2005 Phyllis Hickery

Requests the references (literature as well as weather station locations) for icing phenomenon referred to in the DGEIS.

In Appendix G – Icing Exposures:

Information on Icing phenomenon relevant to the Project Area was obtained for this analysis from historical weather observations taken at regional National Weather Service stations, and from anecdotal reports from other wind energy plants in the northern U.S. and southern Canada. “Exactly what literature sources and what specific weather station locations were referenced, and how close in actual proximity to the proposed turbine locations were they??”

Anecdotal reports are not strongly credible scientific evidence and coming from precisely what locations in the northern U.S.?? Reports from Canada are entirely irrelevant here.

Response:

A list of appropriate references can be found on page 4 of Appendix G in the DGEIS. Data was collected from the United States Air Force global cloud data set and local meteorological records and used to determine the potential for significant icing conditions to occur.

09 Comment:
#051, June 7, 2005 NYSDOH

In the DGEIS mention is made of Christmas Tree Farms (page 2-1). Are any of these farms, or other facilities that may be frequented by the public, situated such that they would be within 400 meters of proposed tower sites?

Response:

The existing Christmas tree farm is a commercial operation and not a cut-your-own facility. Therefore the general public would not be exposed to any impacts if a WTG were located in or near the farms.
WINTER OPERATIONS

10 Comment:
#071, June 13, 2005 Ruthie Matilsky

The comment is summarized as stating how often will the wind turbines be “down” due to icing? If winter is the best time to produce electricity due to higher wind speeds, how productive will the turbines be if they are not operating due to ice buildup?

Response:

As per AWS Truewind’s calculations, the WTG will be “down” approximately 2-4% of the year due to icing conditions or 4-8% during the cold season. This is calculated by determining the amount of time that low cloud cover is present (7-13% frequency) multiplied by sufficient freezing temperatures (61% of the time). Using this equation, rime-icing conditions persist for 4-8% of the six-month cold season.

While the WTG will be down for icing between 4-8% of the time during the winter months, the higher winds produced during the winter will also enable the WTG to operate at a higher operational efficiency meaning that the capacity factor will be higher than the benchmark of 30-35% anticipated for the project.

ICE DETECTION

11 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS fails to adequately explain why “ice detectors” will only be installed on “selected wind turbines” rather than on each WTG.

Response:

See above response. Icing is a regional event. The meteorological tower will be in the same area and elevation as the surrounding WTG and therefore provides adequate information on an icing event. In addition the remaining four fail-safe controls for ice detection apply to all WTG locations.

BLADE THROW/TOWER COLLAPSE

12 Comments:
#017, May 12, 2005 Terry Matilsky
#045, June 6, 2005 Gail Baker
#051, June 7, 2005 NYSDOH
#076, June 14, 2005 Nancy and Carl Wahlstrom
The comments are summarized by stating that the authors are concerned about the hazards from blade throw and tower collapse. In particular Nancy and Carl Wahlstrom are concerned that the foundation (of a turbine) will prove inadequate and the towers will collapse. They also request proof of insurance or protection prior to construction.

Response:

Tower collapse and blade throw are very rare occurrences today. Better engineering, design and construction have considerably reduced the chances of this happening. The foundations typically are engineered to have a large margin of safety and redundancy built in.

However, in response to comments received, the University of Berkley, in California, conducted an Analysis of Potential Safety Risks. The purpose of the analysis was to evaluate the potential human health risks to the public of operating the proposed project by: 1) performing actual risk calculations on the supposed risks posed by wind turbines and comparing those risk levels with the risks of other common activities and 2) quantifying the risks and evaluate whether they are significant or not.

In summary, with regards to blade throw/tower collapse, the individual risk (per year) of being struck by a trajectory is between $1 \times 10^{-6}$ and $1 \times 10^{-7}$ for a 1.5 MW turbine from a distance of 400 feet (122 m). The proposed project will pose a lower risk to the public than for instance being struck by an automobile (1 in 20,000), a bike accident (1 in 333,000), or a motor vehicle accident (1 in 6,250). The analysis also looks at placement of turbines with respect to roads and calculated maximum throwing distances. The minimum tolerable distance between the turbine and the road is between 328 feet and 492 feet (where the individual risk is 1 per million) and the maximum throwing distance of a projectile. A complete discussion of the analysis can be found in the University of Berkeley report in Appendix T.

Based on this data, the setbacks of 489 feet from public road right of ways and 489 feet to property lines of non-participating landowners along with setbacks of 1,000-1,375 feet from residences of participating land owners would be sufficient to mitigate any potential hazard.

Insurance certification will be included in the individual owner lease agreements.

**Comment:**

Although the Final Written Scope calls for the DGEIS to “provide recommendation for distance and setbacks” as mitigation measures to address health and safety issues, the DGEIS simply adopts the “fall zone” distance of 400 feet from public road right-of-ways and property lines of non-participating landowners. (DGEIS at 3-107). An adequate effort has not been made to tailor mitigation measures to the actual hazards created by the
potential for ice throws, blade throws, etc. It will be impossible, therefore, for SCIDA to honestly and convincingly certify that the action is one that avoids or minimizes adverse impacts to the maximum extent practicable as required by 6NYCRR 617.11(d)(5).

Response:

Comment noted. The response is addressed in the above paragraph, which refers to calculations performed to determine if the setbacks proposed in the DGEIS are sufficient to address the potential risk. If collapse were to occur at the base, its maximum risk would be to if the blade was in its full vertical position (389 feet). Using a fall zone safety factor the maximum WTG height plus 100 feet results in a property line set back of 489 feet (389 feet + 100 feet). Therefore, 489 feet will be the property line setback for any non-participating landowner.

Additionally, as was outlined in the responses to comments in section C.3.1, for non-participating properties without a residence a sliding scale of setbacks will be required from the base of the WTG tower.

VISUAL

14 Comments:
#033, May 27, 2005  Sue Sliwinski  
#069, June 14, 2005  Susan Saunders

These comments are summarized by stating that the authors believe there will be adverse effects from the turbines that will cause emotional and physical stress and/or illness (not in related to shadow flicker).

Response:

No analysis documenting ‘emotional and physical stress and/or illness’ has been found from a scientific source (i.e. university research, documented scientific studies, published journal articles, etc) linking the sight of WTGs to any ailments. Claims linking ailments to the sight (view) of WTGs have only been found on websites opposing a wind farm proposal. As these claims are not supported by documented medical research, these claims cannot be verified.

SHADOW FLICKER

15 Comments:
#028, May 23, 2005  Vincent G. Johnson  
#082, June 15, 2005  Town of Italy

Notes that due to the lack of specific siting, the shadow flicker assessment is general and should be followed up with a Supplemental Study and EIS to study the impact on specific receptors. In addition, the receptor as a ‘window’ is called into question rather than using the property line as the receptor and is not appropriate due to Town of Italy Local Law
(draft) #1 dated March 9, 2005. A ‘zero tolerance’ of shadow flicker is called upon for the entire property and should apply equally to full time resident, part time resident and outdoor uses of the property. It was also noted that in the Kittitas County, Desert Claim Wind Project cited in the comment, that shadow flicker was experienced up to 2,000 feet away. As a result, the Town of Italy special use permit will require a shadow flicker of 0 hours per year within a 2,000 foot threshold.

Comments were also directed at the mitigation process which state that “To suggest that impacted property owners stay inside, ‘cover the window(s)’ and illuminate the room (in the daytime) as potential mitigation strategies makes a mockery of the entire (true) mitigation process.” Mitigation measures proposed are to shut down the turbines during greatest shadow flicker potential or to move the project to an alternate site where this development is desired and wanted.

Response:

The DGEIS was approved for this project by the Lead Agency (SCIDA) because its meets the criteria for a generic approach in accordance with Part 617.10(a)(1) because the project consists of “a number of separate actions in a given geographic area which, if considered singly, may have minor impacts, but if considered together may have significant impacts”.

Please see Section C.3.5 for response to Shadow / Flicker mitigation.

16 Comment:

#082, June 15, 2005 Town of Italy

Additionally, there seems to be no consideration for residents to enjoy the full benefits of their properties free of shadow flicker. The citizens of Italy should not be asked to compromise the right to utilize all of their property. Residents use their properties for work, recreation, pleasure, solitude and personal enjoyment. Is the assumption truly that people do not go outdoors or use their property in the early morning or late evening? A set back of 400 feet from the property line of a non-participating land owner is simply unacceptable to ensure the health and safety of the citizens of the Town of Italy. Ecogen’s own documentation states that shadow flicker can be experienced at distance of 1000 feet from the tower itself. Set backs of approximately 400 feet potentially expose 600 feet of one’s property to this effect. This is not acceptable mitigation for such a serious health and safety issue and makes a mockery of the entire mitigation process.

Response:

Shadow flicker is primarily a nuisance indoors where the flicker hitting a window produces a strobe-like effect indoors. Outdoors the effect is less intrusive and is mitigated by the presence of nearby tall trees, clouds, or even a deck umbrella open to protect against the sun. In addition, the receptors that most likely will experience shadow flicker will do so between 1.5 minutes to 4 minutes per day (based on worst case scenario in DGEIS) and less than five total receptors will experience up to 20 minutes. The receptors that experienced the most shadow flicker were inside of the proposed setbacks, so they most likely would not be in such close proximity to a WTG. The worst-case
scenario in the DGEIS was for 99 WTG, not the 53 WTG that are being proposed to be installed by Ecogen. Fewer wind turbine generators means less impact on sensitive receptors, the residents.

To mitigate the effects that shadow flicker will have on local receptors, Ecogen is proposing various setbacks for health/safety reasons and noise abatement. SCIDA has determined that certain setbacks are appropriate mitigation. These setbacks can be viewed in Section 3.1.

**Comment:**
#082, June 15, 2005    Town of Italy

The Town of Italy can only assume that the SCIDA will not give any serious consideration, what-so-ever, to the notion that curtains, blinds, shutters, or shrubbery are acceptable mitigation to health and safety, as is suggested in the DGEIS (Flicker intensity discussion p. 3 or 6). These are prime examples as to why set back considerations should be based on the Property lines and not from permanent residences.

**Response:**
See above response.

**Comment:**
#082, June 15, 2005    Town of Italy

The collective “shadow flicker” concerns discussed above constitute grounds for an in-depth supplemental EIS to study and resolve (effectively mitigate) these significant potential negative impacts including increased set back and/or alternate site location(s) recommendations. The town of Italy therefore requests this Supplemental EIS review, based upon specific Wind Turbine Tower siting, to address the concerns stated in the above sections.

**Response:**
A supplemental SEQR review is not necessary.

**Comment:**
#079, June 15, 2005    Arthur Giacalone

The DGEIS does not contain any analysis and assessment by a competent professional regarding the “potential psychological effects that may result from noise and shadow flicker,” as required in the Final Written Scope, depriving SCIDA of the information needed to take a hard look at this important issue.

**Response:**

The noise study was completed following the NYSDEC Noise Assessment guidelines, and as such evaluates the potential noise impact as it pertains to health and nuisance noise impact issues. The shadow flicker analysis completed for the DGEIS determined that this
phenomenon would not be a significant impact for the project. Since shadow flicker was not determined to present an impact to the surrounding residences, there would be no “psychological” effects that would need to be assessed.

The section characterizing and assessing the impacts of shadow flicker indicates that "(t)he Epilepsy Foundation has made a statement that frequencies below 10 Hz are not likely to trigger epilepsy seizures." Please identify the original reference for this statement and/or the scientific basis for the statement. Our review of the scientific and medical literature has identified other physiological effects (e.g., retinal vasodilatation, neural oscillations in visual cortex) at flicker frequencies less than 10 Hz, but did not identify the basis for considering 10 Hz as a threshold below which seizure induction would be unlikely. The concern relative to epileptic seizure should be explained.

Response:

According to the Epilepsy Foundation website (http://www.epilepsyfoundation.org/answerplace/medical/seizures/precipitants/photosensitivity/photosensitivites.cfm), “flashing lights most likely to trigger seizures are between the frequency of 5 to 30 flashes per second (Hertz)”. This information was updated on September 15, 2005. As per the DGEIS, the proposed WTG have a maximum rotor speed of approximately 20 revolutions per minute, which translates, into a frequency of 0.87 Hz. Since the blade frequency is anticipated to be less than 1 Hz, the risk of triggering an epileptic seizure is minimal and therefore the potential psychological effects of the shadow flicker would not be a significant impact.

Additional information can be found at the following site:

http://www.sciencedaily.com/directory/Health/Conditions_and_Diseases/Neurological_Diseases/Epilepsy/Photosensitive

It is unclear how the assertion on page 3-111 stating “Fewer residences are located on higher elevations near areas potentially used for WTG” was made, as there was no supporting information provided. Additionally, using the 99 Ecogen sites will not account for both wind projects is incorrect as shadow flicker is relative to specific locations. It is also not clear how the location of receptors was determined. While it seems that USGS maps and aerial photos were used, their dates were left out so receptors may have been left out of the analysis. Houses that are within wooded areas screened from WTG should be quantified.

The predicted level of shadow flicker cannot be determined until the project layout is finalized and additional studies are conducted. A threshold of acceptable shadow flicker
(i.e. shadow flicker not exceed a certain number of hours per receptor) should be included in the DGEIS.

The citation on page 3-115 (GE Wind Energy, October 2002) is not provided in Section 10.0 References.

Response:

Aerial photos were used to determine both residential and non-residential structures within the project area. Based on these aerials, a drive-by study was performed to verify residential structures. Figure 3.10-1 was developed which shows that there are fewer residences on higher elevations near potential WTG sites. Additionally, it was clear from the drive-by study that majority of permanent residences are located in valleys and associated hamlets.

Aerial photographic coverage was obtained from two sources. The initial coverage was developed through publicly available data sets at the NYS geographic information system (GIS) clearing house and were dated between 2001 and 2002. A contracted aerial flyover by Land and Mapping Company in 2004 subsequently supplemented this coverage. Land and Mapping flew over the project area and completed an analysis that identified permanent structures in the project area. These two data sets were used in the analysis of potential structures and residences.

The shadow flicker analysis was generic in that it evaluated 99 potential locations within the project area. The study indicated that even at the 99 potential locations, there was no significant impact to the area. The 99 potential locations are more than the Project Sponsor’s and WFP’s combined and therefore this analysis was sufficient to identify whether a shadow flicker was a significant impact to the project area. No further analysis is required.

SCIDA acknowledges that the citation on page 3-115 (GE Wind Energy, October 2002) is not provided in Section 10.0 References although it was referenced directly in the text.

**LIGHTNING/FIRE**

**22 Comment:**

#057, June 6, 2005 Donald and Barbara Christmas

The comment expresses concern over the possibility of forest fires resulting from lightning strikes and the absence of any plan for fire containment in the DGEIS.

Response:

As stated in the DGEIS, per the manufacturer’s specifications, the rotor blades are equipped with a lightning strike sensor mounted in the blade tip. Additionally, a solid copper conductor from the blade tip to root provides a grounding path that leads to a grounding system located at the base of the tower foundation. In the unlikely event that a lightening strike damages the tower due to the unpredictability of nature, or a fire
begins, the general public will be protected by the appropriate setbacks. The region is a generally humid wet portion of the country that is typically not susceptible to forest fires. Additionally, the area immediately surrounding the tower will be devoid of vegetation and will be covered in gravel, eliminating fuel and reducing the chance of spreading a fire. In addition, WTG operations will be monitored 24 hours/day. If a fire were to start, Ecogen personnel would be aware of the situation and would be able to respond in a timely manner.

Prior to construction, Project and contractor representatives would meet with local emergency providers to discuss the potential response for fires associated with WTGs. The Project will provide the necessary equipment for rescue operations involving the nacelle or tower.

23 Comment:
#078, June 11, 2005 Advocates for Prattsburgh

The comment states that fire hazards are not included in the DGEIS or scope (page 104). It refers to the Kittitas County Desert Claim Wind Power Project EIS which goes into detail about the service providers, capacity to respond, brush control, containment plans, design prevention, etc. The concern is the remote locations of these turbines. Also request each nacelle has a fire suppression system.

Specifically on pages 115-118:

The SCOPE states that “potential for impacts resulting from lightning strikes will be evaluated in the Draft GEIS. Grounding and installation details to prevent damage from lightning will be provided by the manufacturer. Power industry requirements in this regard will be identified.”


This is missing in the GEIS along with other electrical hazards.

The GEIS does not detail the specific model of turbine, nor the manufacturer’s grounding and installation details, nor are the power industry requirements identified with the exception of the 2002 Energy Conservation Construction Code of NYS.

Ecogen’s DGEIS is lacking the guidelines for reduction of Lightning Hazards at Wind Farms and therefore the DGEIS has not properly and transparently addressed the issue of lightning.; the interested parties reserve the right to comment after sufficient transparency, parameters, locations, research, “stringent guidelines” and “worse case scenarios” are addressed in a supplemental EIS.

Specially on page 171, it states:

Lightning strikes increase with increasing numbers of turbines therefore increasing the potential for fire. This has not been addressed under cumulative impacts.
Response:

Ecogen will construct WTG in accordance with all applicable local, state and federal regulations. A discussion of the grounding and lightning protection was presented in the DGEIS and discussed again in the preceding comment.

**ELECTROMAGNETIC FIELD (EMF)**

24 Comments:
#051, June 7, 2005 NYSDOH,
#078, June 11, 2005 Advocates for Prattsburgh (pages 118-120)

In the SCOPE, the health effects from electromagnetic fields...will be conducted and documented in the DGEIS.

In the DGEIS, “the EMF’s are not considered a significant adverse impact for the Project Area; hence no mitigation is required.” This is unacceptable.

On Nov 5, 2004, after a request for guidance from the NYSDOH, I received a twelve page report outlining protective measures and major studies (AFP Appendix 3.10). The public should be protected from high extremely low frequency (ELF) field exposure. “Government and industry should provide clear and comprehensive information on potential EMF risks, as well as safe and low cost ways to reduce exposures. Increasing the distance of human exposure to the source of high fields. Consultation with local authorities, industry and public when siting new power lines; also taking into account aesthetics, public sensibilities and reduced exposure.”

The DGEIS should include some additional information to more completely describe the findings in the 1999 National Institute of Environmental Health Sciences report (NIEHS 1999). For example, the report indicates, “the scientific evidence suggesting that ELF-EMF (extremely low frequency electro-magnetic field) exposures pose any health risk is weak.” However, page 10 of the report states.” The NIEHS concludes that ELF-EMF exposure cannot be recognized as entirely safe because of weak scientific evidence that exposure may pose a leukemia hazard." The NIEHS authors went on to state, "because virtually everyone in the Unites States uses electricity and therefore is routinely exposed to ELF-EMF, passive regulatory action is warranted such as continued emphasis on educating both the public and the regulated community on means aimed at reducing exposures." The statements in the DGEIS are not entirely consistent with the NYS DOH policy of advocating prudent avoidance with regard to exposure to EMF. The applicant should describe any measures it will take to help minimize people's exposure to EMF associated with the proposed project.

Response:

Above comment noted, however, the exact quote from the referenced NYSDOH November 5, 2004 letter, Mr. Mark Virgil, references the 1999 National Institute of Environmental Health Sciences report (NIEHS, 1999), which was referenced in the
DGEIS. He quotes, “the scientific evidence suggesting that ELF-EMF (extremely low frequency electro-magnetic field) exposures pose any health risk is weak”. Additionally the report states: “The NIEHS concludes that ELF-EMF exposure cannot be recognized as entirely safe because of weak scientific evidence that exposure may pose a leukemia hazard. In our opinion, this finding is insufficient to warrant aggressive regulatory concern. However, because virtually everyone in the United States uses electricity and therefore is routinely exposed to ELF-EMF, passive regulatory action is warranted such as continued emphasis on educating both the public and the regulated community on means aimed at reducing exposures. The NIEHS does not believe that other cancers or non-cancer health outcomes provide sufficient evidence of risk to warrant concern”.

ELF-EMF is strongest closest to their origin and rapidly decreases at greater distances from the source. Electrical fields (such as from power lines) are reduced by walls, buildings and trees. Magnetic fields are not attenuated by most materials. Several steps can be taken to reduce exposure to the general public and personnel.

- The majority of the transmission lines will be constructed below ground, thereby negating exposure.
- Since both fields are greatly reduced at distance from the source, the proposed setbacks would mitigate potential exposure to the general public.
- Areas immediately surrounding the WTGs and substation would be restricted to authorized, trained personnel only.

However, although EMF is not a concern, there is a concern regarding unintended contact with buried cables. As such Ecogen will be required to mark buried ECS locations every 300 feet and will be required to register the buried ECS locations with the Underground Facility Protection Organization.

C.3.11 Impacts On Local Roads

TRAFFIC

| Comments |
|-----------------|------------------|
| 01 | #076, June 14, 2005 | Nancy and Carl Walstrom |
| | #082, June 15, 2005 | Town of Italy |
| | #089, June 16, 2005 | NYSDPS |
| | #101, June 17, 2005 | Bond, Schoeneck and King |
| | #103, June 15, 2005 | Richard Marx |
| | #109, June 16, 2005 | NYSDPS |
| | PH#44, May 23, 2005 | Margaret Dunn (Town of Italy Supervisor) |

These comments express concern over possible heavy traffic, blocked roads and road closings associated with the project. Such problems are viewed as inconveniences to residents and visitors as well as a safety risk, since emergency vehicles may not be able to move easily and quickly. Jurisdictional activities that result from roadway improvements should be quantified and the permit implications of these activities should be discussed. The geometric improvements to the 14 intersections necessary for the WTGs to pass and mentioned on 3-119 need to be evaluated and quantified. In addition,
winter access will be limited since Italy will not plow/maintain seasonal roads due to safety concerns for the Town employees.

The Town of Italy requests a joint meeting with Italy Town Officials, the Italy Town Highway Superintendent, the Project Sponsor and emergency services personnel should be arranged before any approvals are given to the DGEIS. The results of this session should be included in a new DGEIS and presented for appropriate review and comment.

Response:

Permitting is addressed in Section 1.7 of the DGEIS and lists the various agencies that have approval or permitting authority over the Project. The exact routes for transporting the WTG have not been set yet as the final site selection is still pending. An analysis of the geometric improvements to each intersection at this point would be premature. However some of the known alterations include increasing the turning radius of intersections to handle the long sections that will need to be transported, bridge reinforcing to strengthen structures to accommodate up to approximately 45 tons travel across it, and possibly regarding some access routes to level dips and bumps to accommodate low-boy trailers. Upon final site selection, final routing will be determined. At that time applicable plans and permit applications will be prepared and presented to the towns, highway superintendents and emergency personnel.

For WTGs that are sited off seasonal roads, it will be Ecogen’s sole expense and responsibility to either plow the roads as necessary or utilize snowmobiles or snow cats to access individual turbines. In the Town of Prattsburgh, WTG located on Knap Hill Road would have limited access. Ecogen will bear the responsibility to keep winter access open to their sites.

TRAFFIC IMPACT STUDY

02 Comment:
#078, June 11, 2005 Advocates for Plattsburgh

This comment deals with the lack of a traffic impact study per NYSDOT Highway Work Permit stipulations. Such a study is required if Ecogen is planning to build access routes connecting the WTGs directly to State Route 53.

Response:

NYS Highway Law, Article 3, Section 52, does not require a traffic impact study for all highway work permits. However, upon final siting, all appropriate permits and requirements will be addressed prior to the commencement of construction, including highway work permits from New York State Department of Transportation (NYSDOT).
ROAD STUDY

03 Comments:
#071, June 13, 2005 Ruthie Matilsky
#089, June 16, 2005 NYSDPS
#101, June 17, 2005 Bond, Schoeneck and King
#103, June 15, 2005 Richard Marx
#109, June 16, 2005 NYSDPS

These comments are concerned with the lack of a sufficient road study included in the DGEIS. Comments include complaints that there is a lack of road description, investigation and research. Commenters request that further road studies and analyses be carried out in order to determine whether the local roads, bridges and culverts can withstand the expected traffic and heavy vehicle weights. Load ratings for bridges along the transport route should be provided in the DGEIS. Comments inquire as to the basis for Ecogen’s proposed $60,000/year payment to the Town of Prattsburgh for road repair. Comments were also made concerning misrepresentation of the road width as too narrow for what will actually be required, specifically that the roads will need to be larger than the 16 feet reported in the DGEIS.

Response:

Initial analysis of the road network leading to the Project area was reported in Section 3.11 of the DGEIS and in Appendix I. Those initial road studies examined culverts that will have to be crossed and road intersections that will have to be upgraded for travel by the transport trailers. A road Assessment will be required as part of the final site design package presented to SCIDA.

The estimated $159,000 per year payment to be shared between the Town of Italy and the Town of Prattsburgh will go towards repairs necessary from the wind farm's maintenance vehicles that will use local roads to get to each wind farm cluster after the project is built. This is based upon a payment of $3,000 per WTG. The payments will be sent to the Towns in proportion to the actual WTG locations.

Upon further consultation with the NYS Department of Agriculture and Markets, it was determined that the types of roads will be constructed. The primary road type will be a 34-foot wide crane travel path (gravel road). Where the crane does not need to travel, a 16-foot wide gravel road will be required. Both of these road types are included in the estimate of land impacts present in Section C.3.1. Town roads will be sufficiently wide enough to handle construction vehicles.

04 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

The citation on page 3-115 (GE Wind Energy, October 2002) is not provided in Section 10.0 References.
Response:

The reference date in the DGEIS is incorrect and should read GE Wind Energy, October 2004. The document referenced is 1.5 MW Wind Turbine Generator Typical Road, Crane Pad & Turbine Assembly Area Requirements, GE Energy, 2004.

05 Comments:

#89/109, June 16, 2005 NYSDPS

The text in the Executive Summary of the DGEIS provides no basis in facts, investigation, or analysis that “Area Roads are built to withstand such loads”.

Response:

The transport trailers each have a maximum load weight per axle of 20,000 pounds as per NYS 23 CFR 658.17(c), which is the limit set for heavy-transport vehicles. That equates to approximately 10 tons per axle, which is well within the construction standards of roadways, including unimproved roads. Upgrades to culverts, bridges, roads and intersections will be made as needed at the sole cost and expense of the project sponsor.

06 Comments:

#89/109 June 16, 2005 NYSDPS

The comments are summarized as stating that there is one State and one County Highway that will be used to gain access to the individual Town roads and then to the individual WTG sites. The text does not indicate whether unpaved town road is just gravel or a gravel base with oil and chip. Knowledge of the road’s construction aids the determination of the road’s ability to withstand the truckloads as well as the number of trips necessary to construct the WTG.

Response:

The local unpaved roads are comprised of compacted gravel. The roads are crowned for drainage, regularly maintained by the towns and generally structurally sound. However, seasonal impacts may change road conditions prior to the final project design. As proposed in the DGEIS, post-construction any damaged roads will be returned to their pre-construction state at the sole cost and expense of the project sponsor.

07 Comments:

#89/109, June 16, 2005 NYSDPS

DPS Staff has observed that construction at the wind farms will involve trucks hauling crushed stone for access roads to the generator sites and concrete for generator foundations. Knowledge of the existing road composition aids the determination of the road's ability to withstand the truck loads as well as the number of trips necessary to construct the wind turbine generator and whether measures to improve the road's ability to handle the loads and traffic are necessary before construction commences or whether the municipalities should plan for the rebuilding of its roads upon completion of wind farm construction. Appropriate road analysis and text should be included in the FGEIS.
Response:

Ecogen will repair all roads as necessary at its sole cost and expense if damaged during construction as per Section 3.11 of the DGEIS.

As road conditions may change with seasonal use and local maintenance, it would be premature to conduct a detailed road condition assessment prior to final siting and submittal of final design documents to the SCIDA. Section 3.11 of the DGEIS describes the assessment of existing bridges and culverts.

Ecogen will be required to prepare a “Road Assessment” of the project area following final site selection and prior to construction. Coordination with appropriate highway superintendents will be required. The assessment will document: all haul routes; exiting conditions and structural adequacy of roads, bridges, culverts, etc; required permits; necessary improvements including “envelope” clearing requirements; requirements for maintaining roads during construction; impacts to private property (if any); a plan for post construction inspections and remedial action. The Plan will be reviewed by SCIDA prior to approving the project.

08 Comment:
#082, June 15, 2005 Town of Italy

Of utmost concern is a comment made regarding the use of seasonal roads in the Town of Italy. The DGEIS states, “Operation of the Project may require seasonal road access to be accessible for all seasons. The Project Sponsor will be responsible for maintaining access to WTG locations from seasonal roads” (DGEIS, sec. 3.11.2.6, Operations and Maintenance, p. 3-119). Though seasonal road maintenance is a concern, the cost associated with bringing seasonal roads up to DOT regulations are staggering. The seasonal roads in this area are so remote and so degraded, that the Town’s Highway Budget is in no way capable of opening these roads year-round so the developer can be responsible for “maintaining access to WTG locations from seasonal roads.”

Response:

According to NYS Highway Law and CHPS there are no NYSDOT minimum design standards that would apply to reconstruction of seasonal roads. Local road design is the responsibility of the local municipality unless the road is owned by a higher government. For WTGs that are sited off seasonal roads, it will be Ecogen’s sole expense and responsibility to either plow the roads as necessary or utilize snowmobiles or snow cats to access individual turbines. In the Town of Prattsburgh, WTG located on Knap Hill Road would have limited access. Ecogen will bear the responsibility to keep winter access open to their sites.

ROAD DAMAGE

09 Comments:
#057, June 6, 2005 Donald and Barbara Christmas
#071, June 13, 2005 Ruthie Matilsy
These comments express concerns regarding repairing road damage caused by vehicles servicing the WTGs. Specifically, they ask who is going to be responsible for repairing the WTGs’ access routes, and what are the assurances for local drivers that the access roads will be fixed immediately upon damaging. Any upgrades to culverts are the jurisdiction of the Army Corps of Engineers and should be noted. Impacts to the ecological communities adjacent to the roads to be widened should be evaluated as well. Any wetlands impact because of moving drainage culverts to accommodate the widened road should be discussed and evaluated.

Response:

Culverts are not under the jurisdiction of the Army Corps of Engineers, only the “waters of the United States” that pass through the culvert. If a culvert or bridge associated with a jurisdictional water requires upgrade or replacement, a USCOE or NYS DEC permit may be required. Ecogen will be responsible for repairing any damage that its vehicles cause to the roads, as per the Executive Summary and Section 3.11 of the DGEIS. The access roads to the WTG will be maintained by Ecogen as needed. Permitting and approval from the Army Corps of Engineers will be sought out and secured as needed prior to project commencement. Impacts to adjacent to a wetland area would be addressed with the Army Corps of Engineers. However, areas impacted, such as a protected stream, would be addressed by the NYSDEC. Impacts to the ecological communities adjacent to the roads that will be widened will be minimal as the access roads will be constructed of materials that will complement the local environment and the disturbances are kept to a minimum.

HAZARDOUS SUBSTANCES

10 Comment:

#070, June 13, 2005  Maureen McAndrews

This comment is regarding Ecogen’s definition of “hazardous substance”. It inquires as to what precautions will be implemented to mitigate potential public exposure to these hazardous substances during transport and storage. Clarification of the hazardous substances to be used, certification for transporting hazardous waste, legal liability issues, and protection for residents is requested.
Response:

No bulk transportation of hazardous materials will occur. Any hazardous materials that are shipped for the WTG will be self-contained in the nacelle housing or other parts. All materials will be handled in accordance with appropriate federal and state regulations such as NYSDEC, United States Environmental Protection Agency (USEPA) and OSHA.

Other hazardous materials mentioned are those found associated with the engine and hydraulic system for the heavy transporter trucks and other vehicles to be used in the Project. It is the same materials found in a personal car: antifreeze, battery acid, diesel fuel, hydraulic oil, transmission fluid, oil, brake fluid, etc. They are listed as hazardous materials because they have the potential to be exposed to the environment in the event of a crash or leak. Minimal impact is expected, if any, and site monitoring combined with best management practices will mitigate any potential problems.

NUMBER OF ACCESS ROADS

11 Comment:
#031, May 23, 2005 Kathleen C. D’Ambra

The comment suggests that the amount of access roads be minimized by having the WTGs all in one location, within a large 200-acre parcel.

Response:

In the Project area there are no large flat areas where wind energy can be harnessed as suggested. In the Midwest the large-scale wind farms are on parcels that span thousands of acres without trees or structures in order to allow the wind to build up to maximum velocity before reaching the WTG. The best places in the Project Area are on the ridges where the primary candidate areas are located. The WTGs will be spread out because of available property and to take advantage of optimal wind resources. The access roads will mostly follow existing farm trails and can be utilized by the farm operators to access their property.

MISSING TABLE

12 Comment:
#070, June 13, 2005 Maureen McAndrews

The comment states that Table 2, which outlines the locations of 14 intersections that will have to be modified, was missing from the CD copy of the DGEIS, meant for public distribution.
Response:

Comment acknowledged. The table was inadvertently omitted from the copies on CD and Internet versions of the report, but was included in the official hardcopy report available to the public through libraries and government agencies.

MISCELLANEOUS

13 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

Page 3-118 incorrectly refers to Appendix H instead of Appendix I.

Response:

Comment acknowledged. The edit has been made.

C.3.12 Blasting and Seismic Issues

NOTIFICATION

01 Comment:
#051, June 7, 2005 NYSDOH

Comments are summarized as stating that should blasting be necessary:

- A plan should be prepared describing all blasting operations, including location, measures to inform people when blasts will be occurring, measures to ensure safe transportation, storage and handling of explosives and coordination with local safety officials.
- An assessment should be prepared consisting of potential impacts of blasting to environmental features, aboveground structures and below-ground structures such as any pipelines or drinking water wells.

Response:

Due to the soft nature of the weathered shale zone above competent rock, Ecogen does not anticipate any blasting during the project. The presence or absence of the weathered shale zone was confirmed by two limited geotechnical investigations, which consisted of excavating several test pits and the advancement of several soil borings. When weathered shale was encountered, it was easily penetrated with a backhoe or hollow stem auger. Ecogen anticipates being able to complete excavation activities with a track excavator.

However, if during any phase of the project, blasting becomes necessary, Ecogen and its contractors will adhere to all applicable regulations pertaining to the blasting, including, but not limited to, NYSDOL explosive handling regulations (12 NYCRR Part 39) and NYSDEC blasting/mining regulations. Ecogen’s blasting subcontractor would follow
best industry practices and assess potential risks to adjacent property as matter of standard protocol prior to blasting.

**EFFECTS ON WELL WATER**

**02 Comments:**
#076, June 14, 2005    Nancy and Carl Walstrom
#103, June 15, 2005    Richard Marx

The comments are summarized as stating that Ecogen must guarantee that no impact on well water production for individual wells will occur should blasting be called for. Should any damage or disruption of well water flow occur, Ecogen must make restitution.

**Response:**

As stated in the above response, if after final siting, blasting is required, Ecogen and its contractors will adhere to all applicable regulations pertaining to the blasting, including, Ecogen’s blasting subcontractor would follow best industry practices and assess potential risks to adjacent property as matter of standard protocol prior to blasting. Due to the shallow nature of the foundations (as shown in Figure 1.2-1), if blasting were required, it would be localized and limited in nature.

**BLASTING**

**03 Comment:**
#101, June 17, 2005    Bond, Schoeneck and King

Page 3-125 indicates that subsurface geotechnical investigations will be conducted for each tower site prior to construction. Ideally, such investigations should be done now so blasting impacts (and other soils/bedrock related impacts) can be evaluated during the SEQR process.

**Response:**

The DGEIS is designed and approved for the Project because the project meets the criteria of 617.10(a).

However, as reported in the DGEIS, a limited geotechnical investigation was conducted to investigate subsurface conditions within the project area. Following release of the DGEIS, a second geotechnical investigation was conducted at specific addresses within the candidate areas. These included 500 Clute Road, Naples; 11231 Gay Road, Prattsburgh; and 2869 Emerson Road, Branchport New York. The investigation included the advancement of one test boring and one test pit at each location.

The second geotechnical investigation confirmed that overburden soils consisted of silty clay (observed during the first investigation) and were underlain by weathered shale
and/or competent shale bedrock. Localized differentiations in weathering of the shale were observed between boring locations. Total boring depths ranged from 30 to 35.5 feet bgs. Test pit depths ranged from 4 to 12.5 feet bgs.

Several soil and/or rock core samples were submitted for geotechnical analysis, which included moisture content, wet density, United States Geologic Survey (USGS) classification and/or unconfined compressive strength. Based upon field observations and the geotechnical analysis, recommendations for foundation design and construction were included in the report for each location. Copies of the reports are included in Appendix U.

C.3.13 Socio-Economic Impacts

TOURISM AND TOURISM-RELATED BUSINESSES

01 Comments:

#027, May 18, 2005 Village of Naples
#045, June 6, 2005 Gail Baker
#047, June 7, 2005 Todd and Cynthia Wolfer
#048, June 8, 2005 Jodi Larkin
#054, June 6, 2005 Monier Manor
#056, June 9, 2005 Stephen and Gail Rowan
#069, June 14, 2005 Susan Saunders
#070, June 13, 2005 Maureen McAndrews
#078, June 11, 2005 Advocates for Prattsburgh
#097, June 14, 2005 Dave and Brenda Cooley
#101, June 17, 2005 Bond, Schoeneck and King
PH#09, May 23, 2005 Russell Dudash
PH#45, May 23, 2005 Steven Lewandowski (Village of Naples Trustee)
PH#49, May 23, 2005 Reverend John Paust

Comments relate to the proposed project’s potential adverse impact on the local and regional tourism industry including impacts on tourist-related businesses and the building trades. Authors state that tourists will no longer be attracted to the area. One commenter recommends that an assessment of the proposed project’s impact on the tourism industry be conducted and that the negative impacts discovered be avoided or mitigated. In addition, it was noted that there are recreation areas (Hi-Tor and Finger Lakes Trail) not within the study area but within 5-miles of the Project.

Response:

A visual analysis was conducted in the DGEIS and demonstrated that while there is a visual impact, the visual impact is limited to areas within the immediate vicinity of the WTG. Using the data from the DGEIS visual analysis, additional analysis was conducted to demonstrate tower visibility from near and distant WTG locations. This supplemental analysis is presented in Appendix R. Visual analysis of the towers within the proposed project area shows that WTG become very unobtrusive on the horizon at a distance of approximately 2 miles. Furthermore, tower visibility from the Village of Naples would
be very limited based on topography, vegetative cover and distance (approximately 2.8 miles to the nearest location where WTG could be located and potentially visible). Based on this analysis, a study of the effects of the WTG on tourism is not warranted. This issue is further discussed in the response to Comment No. 2.

**Comment:**  
#079, June 15, 2005  
Arthur Giacalone

Despite the requirement in the Final Written Scope that the DGEIS contain an “impact assessment” that includes “impact on existing businesses, including but not limited to tourism,” the DGEIS fails to substantively address potential adverse impacts, short-term, long-term or cumulatively, on tourism. At a minimum, the DGEIS should have gathered information and data that would allow an objective estimate of the potential loss in revenues to local businesses who provide fuel, food, lodging, etc., for seasonal visitors, guests and residents if the noise, aesthetics and health concerns relating to the “wind energy farm” adversely impact the scenic and aesthetic attributes and recreational uses in either the Town of Prattsburgh or the Town of Italy.

**Response:**

As stated in the response to Comment No. 1 above, the visual analysis conducted as part of the DGEIS and the additional visual analysis indicates that the visual impact is limited to areas within the immediate vicinity of WTG and that the WTG become very unobtrusive on the horizon at a distance of approximately 2 miles. Based on this analysis, a study of the effects of the WTG on tourism is not warranted. In addition, for near WTG locations, as stated below, there is no reasonable expectation that local businesses will lose revenue as a result of the project and may, in fact, benefit from increased activity by tourists to the Finger Lakes region generally.

An inventory of existing land uses within the project area was conducted and indicated the presence of only one commercial use. As stated in the DGEIS, this business will not be adversely affected by the project. Outside the project area, an analysis of businesses is not warranted because there is no reasonable expectation that businesses outside the project area will be adversely affected by the project. In fact, contrary to the commenter’s suggestion that the project will result in a loss of business, there is a body of evidence that shows an overall benefit to local businesses.

Several commenters raised the issue that the project will have an adverse affect on tourism. SCIDA’s research has been unable to confirm that the Towns of Prattsburgh and Italy are major tourist attractions. Moreover, while the project has the potential to impact tourism outside the study area, the supplemental visual analysis referenced in the response to Comment No. 1 concludes that the WTG’s will have minimal visual impact to the key tourist area of Naples or to other areas greater than approximately 2 miles from the WTGs. Where there is no factual basis to find a visual impact in the area, there is no reason to undertake a more detailed assessment of the extent and potential impact on tourism as the visual assessment demonstrates minimal visibility of the project. Additionally, there is a body of evidence and studies that indicate that wind farms do not have a significant adverse impact on tourism. That is, study after study conducted to determine the potential impact of wind farms on tourism in the United States, Europe and
Australia all reach the same conclusion – wind farms do not adversely impact tourism and, in fact, typically increase tourist activity. For example, the DEIS for the 130-turbine Cape Wind project in Cape Cod, Massachusetts for which the U.S. Army Corps of Engineers is Lead Agency, reached this same conclusion (see www.nae.usace.army.mil/projects/ma/ccw/deis.htm). Additional evidence of the positive impacts of wind farms on tourism is overwhelming:

- Madison County, New York, the location of the Madison and Fenner wind power projects, have had a positive effect on tourism since their completion and, in fact, Madison County Tourism, the primary tourism attraction organization in the county, lists both projects as attractions on its Web site at www.madisontourism.com.
- In Searsburg, Vermont, an 11-turbine wind farm has attracted more tourists since it was constructed in 1997 and every announced educational tour of the facility has been filled almost immediately (see www.searsburgwind.com).
- Near Palm Springs, California, a major tourist destination, a local touring company, Palm Springs Windmill Tours, runs tours of the 4,000-turbine wind farm and estimates that up to 10,000 people tour the wind farm each year (see www.windmilltours.com/index.htm).
- The British Wind Energy Association (BWEA) and Scottish Renewables Forum commissioned a study titled “Tourist Attitudes towards Wind Farms” which surveyed visitors in Argyll and Bute, two towns in Scotland that are frequently visited due to their high landscape value. The study concluded that the wind farms have had a positive effect on visitors’ impressions of the local town, with 43% of those polled saying that the wind farms had either a completely positive effect or a generally positive effect and 43% saying that the wind farms made no difference. When asked if the wind farms would affect their likelihood to visit the town in the future, 91% said that it made no difference. The study is available at www.bwea.com/pdf/MORI.pdf.

03 Comment:
#079, June 15, 2005 Arthur Giacalone

Despite the requirements in the Final Written Scope that the DGEIS contain an “impact assessment” that includes “recreational desirability”, the DGEIS fails to substantively address potential adverse impacts, short-term, long-term or cumulatively on the attractiveness of the Towns of Prattsburgh and Italy as “recreational” destinations, including seasonal residences, hunting, etc.

Response:

Similar to the positive impacts wind farms have on tourism as demonstrated by numerous studies throughout the United States, Europe and Australia, there is no evidence that the project will impact the recreational desirability within or outside the project area. The predominant recreational activities in the area are hunting (shotgun & archery), snowmobiling, riding all terrain vehicles (ATVs) and hiking, which will be unaffected by the wind farm project. To the contrary, the studies suggest that tourist activity increases once a wind farm is operational and similarly, there is a reasonable expectation that recreational desirability will not be adversely impacted by the project.
PROPERTY TAXES

04 Comments:
#024, May 13, 2005 Prattsburgh School
#049, June 8, 2005 Michael J. Costello
#050, June 9, 2005 Richard and Helen Pellet
#058, June 13, 2005 Stephens R. Johns
#069, June 14, 2005 Susan Saunders
#071, June 13, 2005 Ruthie Matilsky
#078, June 11, 2005 Advocates for Prattsburgh
#079, June 15, 2005 Arthur Giacalone
#097, June 14, 2005 Dave and Brenda Cooley
#101, June 17, 2005 Bond, Schoeneck and King
#105, June 17, 2005 Rachel Treichler

Comments relate to the proposed project’s potential to increase local property taxes and the project’s potential to adversely impact tax revenue. Specifically, one commenter noted that the DGEIS does not provide an objective assessment of the potential adverse impacts on property values of non-participating landowners in close proximity to and/or within the view shed or “hearing-range” of the turbine sites, and the impact of reduced property values on local tax assessment and revenues. One commenter requests that all mechanisms SCIDA has taken into account to insure and protect taxpayers and the State be included in the DGEIS. Another commenter requests additional information about the extent to which future subsidies or tax incentives are required for profitable operation of the project.

Another commenter stated that while the Town of Prattsburgh will receive a PILOT payment, there are no details of expenses that will be incurred by the town due to the wind turbines. The tentative PILOT payment of existing NYS wind farms, including the proposed PILOT for Ecogen was not detailed in the DGEIS. The comment further asserts that Ecogen is using this wind project as a tax shelter, which will continue when the next company buys the wind farm, thus not only ensuring that no property taxes are paid on the property but that the wind farm exists for tax reduction purposes. In addition, the concept of lease-leaseback is not explained as required by the rules of SEQR.

When discussing PILOT payments to the host towns it is indicated the 33 WTG will be located in the Town of Prattsburgh and 23 WTG will be located in the Town of Italy (page 3-128). This results in a total of 56 wind turbines, which is inconsistent with the 53 turbines total referenced throughout the rest of the document.

Response:

There is no evidence that the proposed project will increase local property taxes or adversely impact tax revenue. To the contrary, the proposed PILOT payments to the Towns of Prattsburgh and Italy, Steuben and Yates Counties, Prattsburgh and Naples School Districts and Prattsburgh and Naples Special Fire Districts will provide a significant economic benefit to those governments/districts.

See responses to comments related to Property Values in section 3.14.
It is anticipated that the project as proposed will be a privately financed, profitable venture and, therefore, no future economic assistance will be required. The project sponsor will be arranging private sources of debt and equity capital for the project and there will not be any public funds at risk.

It is not anticipated that the Towns of Prattsburgh or Italy will incur any significant expenses as a result of the project as the project sponsor has committed to improving roads and repairing any road damage resulting from construction. Furthermore, the project will not result in an increased demand for other community services, which could otherwise effect local tax burdens. However, both the Towns of Prattsburgh and Italy will benefit from the proposed project by receiving a portion of the annual PILOT payment and will be the beneficiaries of the road mitigation fund which will provide several million dollars over the 20-year life of the PILOT to the Towns of Prattsburgh and Italy to offset any potential road maintenance costs.

The PILOT agreement between Ecogen and SCIDA will be unique to the proposed project. PILOT agreements associated with other wind farm projects in New York State are negotiated on a case-by-case basis, are unique to those projects, and are not applicable or relevant to this project.

The fact that the project sponsor will be structuring the financing of the project in order to efficiently utilize the federal production tax credit and accelerated depreciation does not necessarily create some type of improper "tax shelter". The Federal Government is offering these types of tax incentives in order to promote the production of clean renewable energy, which Congress has determined to be a socially and economically desirable pursuit. Further, the economic incentives that the project sponsor is requesting from SCIDA are the same incentives that are available to any other qualified industry.

The use of a lease-leaseback provision is a common procedure in projects involving IDA and other types of financing and does not alter in any manner the potential environmental impacts studied in the DGEIS nor does it alter the discussion of the financial benefits of the project to the local communities.

Comment regarding the number of WTG referred to on page 3-128 of the DGEIS is acknowledged and will be corrected to read 53 turbines.

05 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS does not provide an objective estimate of the amount of annual tax revenue that will NOT be collected by the local tax-collecting entities (town, county, school district) as a result of IDA-related tax abatements. More specifically: a) a comparison should be made between the tax revenues that could be collected if each turbine site were to be fully assessed and taxed by local tax-collecting entities, and the revenues generated by the proposed PILOT agreement. b) A comparison should be made between the 20-year PILOT agreement that Ecogen has proposed with the Steuben and Yates County IDA’s and the 15-year tax exemption and PILOT arrangements that would apply to this project if financial assistance were not to be provided by the two local IDA’s.
Response:

The benefits of the proposed project on local tax revenue are clear – the project will result in a net increase in revenue for the recipient government and district entities through annual PILOT payments.

The commenter’s suggestion that a comparison should be made between the tax revenues that could be collected if each turbine site were to be fully assessed and taxed by local tax-collecting entities, and the revenues generated by the proposed PILOT agreement is irrelevant. This is due to the fact that the project would not be economically viable because wind farms are a capital-intensive form of electrical generation, which if assessed at the cost of construction, would result in a financially overwhelming burden for the project.

The commenter’s suggestion that a comparison should be made between the 20-year PILOT agreement that Ecogen has proposed with the Steuben and Yates County IDA’s and the 15-year tax exemption and PILOT arrangements that would apply to this project if financial assistance were not to be provided by the two local IDA’s is a moot point. This is due to the fact that the project sponsor has made a decision to request a PILOT agreement and other economic assistance from the IDA’s compared with attempting to negotiate PILOT agreements with all of the different taxing jurisdictions. (i.e. Town of Italy, Town of Prattsburgh, Yates County, Steuben County, Prattsburgh School District, Naples School District). Essentially, attempting to negotiate this number of agreements with the various taxing authorities was not deemed to be a viable alternative by the sponsor.

06 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS asserts, at paragraph 3.123.2.2.2 (p. 205 of 256), that the PILOT payments and special district taxes will help offset any reduction in tax revenues. This statement appears to imply that PILOT payments and special district taxes may only partially offset any reduction in tax revenues. It is imperative that the applicant be required to provide details regarding all real property that “will be removed from the tax rolls to accommodate the WTG and related facilities,” the assessed value of each such property, and the corresponding loss in tax revenue from each such property. The applicant should explain why the proposed wind farm project should be given tax exemption for the maximum period allowed under SCIDA’s Uniform Tax Exemption Policy (20 yrs), especially when the project will, at most, generate only 6 to 8 jobs during full operation. Additionally, a comparison should be made between the total tax revenues that would be generated during the 20 yr period covered under the tax exemption scenario proposed by Ecogen, and the total revenues that would be generated during the same 20-year period if Ecogen obtained a 15-year tax exemption from SCIDA and YCIDA, and paid full taxes during years 16 through 20.

Response:

The DGEIS will be corrected to state that the project will not result in a reduction in assessed value of the subject land parcels or corresponding taxes paid or the removal of
real property from the tax rolls. To accommodate the project, Ecogen will either purchase land parcels outright or lease a portion of land parcels from existing property owners. In either case, each land parcel purchased or leased to accommodate the WTG and related improvements, will continue to be assessed at its present value and be subject to current taxation levels before and after operation. While the proposed WTG and related improvements will not be subject to local taxes, additional revenue associated with these improvements will be generated through the annual PILOT payments. Therefore, the project will not result in a decrease in tax revenue and will, in fact, result in an overall net increase in tax revenue.

A 20-year PILOT is appropriate and would provide the project sponsor with some degree of specificity and predictability with respect to project financing. Moreover, the mission of the IDA is to provide economic assistance to not only those companies that create jobs but also those companies that make significant capital investments and generate new tax dollars. The "6 to 8 jobs" to which the commenter refers are high paying skilled jobs as opposed to a large volume of unskilled poorly paid job opportunities.

See response to Comment 5 regarding comparison of the PILOT to a standard taxing scenario.

07 Comment:  
#082, June 15, 2005  Town of Italy

The Town of Italy has passed a local law to “Opt Out” of the 15-year tax exemption for this project pursuant to Section 487 of the NYS Real Property Tax law. This is another indication that Italy does not wish to host the project. The Town does not wish to participate in “PILOTS,” but intends to assess and tax this project within Italy as its full taxable value (which is its right under Section 487 “local option”). The Town of Italy has not agreed to accept any PILOTS associated with this project and has no plans to do so. With this in mind, Ecogen should revisit the section dealing with PILOT and include concrete figures pertaining to assessable and taxable values of all turbines as they pertain to the portion of the project in Italy. These figures should be available for public review and comment in a new DGEIS before approval of the Project is granted.

Response:

Section 487 of the New York State Real Property Tax Law is not applicable to this project for two reasons. First, pursuant to Article 18-A of the General Municipal Law, this will be a SCIDA project and Ecogen will be obligated to enter into a PILOT agreement with SCIDA, which will provide proportional payments to the respective taxing jurisdictions. While the Town of Italy has the right to “opt out” of Section 487 of Real Property Tax Law and assess and tax facilities at their full taxable value, the Town cannot opt out of Article 18A and Sections 858 and 874 of the General Municipal Law which provides IDA’s with the authority to provide certain property and sales tax benefits to applicants. Second, Section 487 of the RPTL would not be applicable to this project in any event since it only applies to wind energy systems constructed prior to January 1, 2006 unless renewed by NYS legislative action.
08  **Comment:**
#079, June 15, 2005  Arthur Giacalone

The DGEIS is silent regarding the amount of sales tax revenues that would be lost to counties and State as a result of the sales tax exemption Ecogen has requested from SCIDA and YCIDA. At a minimum, Ecogen should confirm the accuracy of the “estimated sales tax exemption” of $185,625-$352,688 contained in its SCIDA Financial Assistance application. Similarly, the DGEIS is silent regarding the amount of mortgage tax revenues that would be lost to the counties (and state?) as a result of the mortgage tax exemption Ecogen has requested from SCIDA and YCIDA. At a minimum, Ecogen should confirm the accuracy of the “estimated mortgage tax exemption” of $168,750-$320,625 contained in this SCIDA Financial Assistance application.

**Response:**

While both renewable energy generation equipment and the capital cost of manufacturing equipment are exempt from sales taxes, this is a new project which will not result in a decrease in sales tax or mortgage taxes collected by Steuben and Yates Counties and the State and, therefore, there will be no adverse impact on these forms of tax revenue. The project will result in an overall tax benefit to governments/districts in the form of PILOT payments described in previous responses to comments.

09  **Comment:**
#058, June 13, 2005  Stephen R. Johns

The comment is summarized as stating that recreational property users are already paying high taxes. The commenter’s concern is that with all of the infrastructure costs associated with the project, his property tax will become prohibitively high and he will not be able to build and remain in the area.

**Response:**

There is no evidence that the project will increase real estate taxes of recreational property owners. Moreover, the upgrade of any infrastructure associated with the project within the Towns of Prattsburgh and Italy will be funded by Ecogen. Further, the Road Maintenance Mitigation Fund will provide more than $3 million for on-going maintenance cost over the life of the PILOT agreement.

**TAX ADVANTAGES**

10  **Comment:**
#097, June 14, 2005  Dave and Brenda Cooley

The comment raises the question of what tax advantages are available to the towns and citizens affected by the project.
Response:

As stated in other responses to comments, Ecogen will enter into a PILOT agreement with SCIDA and YCIDA, which will include annual payments to be distributed to government/district entities. This, in turn, will provide additional revenue to the government/district entities not otherwise available without the project.

EMPLOYMENT/LOCAL ECONOMY/INCOME

11 Comments:

#047, June 7, 2005 Todd and Cynthia Wolfer
#056, June 9, 2005 Stephen and Gail Rowan
#069, June 14, 2005 Susan Saunders
#070, June 13, 2005 Maureen McAndrews
#071, June 13, 2005 Ruthie Matilsky
#097, June 14, 2005 Dave and Brenda Cooley
#047, June 7, 2005 Todd and Cynthia Wolfer
#056, June 9, 2005 Stephen and Gail Rowan
#097, June 14, 2005 Dave and Brenda Cooley
PH#42, May 23, 2005 David Snaith
PH#47, May 23, 2005 Tom Tyo (Italy Planning Committee Chair)

Comments relate to the proposed project’s potential adverse impact on employment including the potential reduction of jobs in and related to the construction industry (e.g., building trades, realtors, lawyers, bankers and architects) and tourism-related jobs (e.g., hotels, B&B’s, restaurants, gas stations, artists, shopkeepers, festival vendors), the local economy generally, and personal income.

Response:

Commenters concerns that the project will reduce employment are without merit. The DGEIS summarizes the positive impact the project will have on employment levels within and outside the project area and states that the project will create approximately 75 to 100 construction jobs with more than $1 million in wages and 6 to 8 permanent jobs upon completion of construction. As stated above in responses to comments on tourism and tourism-related employment, the visual analysis concludes that the visual impact of the project is limited to areas within the immediate vicinity of WTG and that the WTG become very unobtrusive on the horizon at a distance of 2 miles. Based on this analysis, a study of the effects of the WTG on tourism is not warranted and therefore, no significant adverse impacts to tourism or tourism-related jobs are anticipated. Moreover, numerous studies assessing the impact of wind farm projects on tourism is overwhelmingly positive and presents the real possibility that tourist activity will increase, with a resulting net increase in tourism-related employment and income.

In order to promote local workforce involvement in the project the following will be accomplished:
• For short term construction jobs, a policy of “first among equals” will be implemented, and
• For permanent jobs, Ecogen will coordinate the search for potential local job candidates with Chemung Schuyler Steuben Workforce New York.

ELECTRICITY COSTS

12 Comment:
#078, June 11, 2005 Advocates for Prattsburgh

This commenter states that the DGEIS lacks an adequate discussion of the SCIDA’s objective of reducing electricity costs.

Response:

The electrical generation market in New York State is a deregulated competitive free market. The wind farm project will increase the supply of electricity generated in the central zone of the NYISO. Based on the law of supply and demand, any time the supply curve of a commodity shifts down and to the right, there is a corresponding reduction in price which is a function of the slope of the demand curve. Given that wind generation, with its free fuel, will be a price taker in the NYISO market, more expensive forms of generation will be curtailed in the market place.

INCREASE IN NUMBER OF AFFECTED COMMUNITIES

13 Comment:
#027, May 18, 2005 Village of Naples

The comment is summarized as stating that the DGEIS did not adequately address either the scope, zone, or types of economic impact. The scope should also include all of the communities within sight of the towers including the Towns of Italy, Prattsburgh, Cohocton, Naples, Middlesex, South Bristol, the Village of Naples and Ontario County.

Response:

The visual impact analysis considers a radius of 5 miles and determined that there would not be a significant adverse impact for distant views (greater than approximately 2 miles). A supplemental review of the photosimulations and viewshed maps demonstrated that there would be no significant visual impact from the project on the Village. This analysis is presented in Appendix R. Given the lack of significant visual impact, or any other environmental impact, there is no basis to assume that the identified towns and villages will suffer adverse economic impact.
NO COMMUNITY BENEFIT

14 Comments:
#069, June 14, 2005    Susan Saunders
#078, June 11, 2005    Advocates for Prattsburgh

The comment is summarized as stating that the wind turbines do nothing to enhance the general prosperity of the area and provides a base for corporate profit taking from tax abatement, energy credit re-sale and sale to another energy corporation.

Response:

The project benefits the area by providing construction and permanent jobs and revenue to government/district entities in the form of annual PILOT payments to be distributed to various municipalities, schools and special districts. Moreover, the project may increase tourist activity and related employment in the area as evidenced by numerous studies supporting this conclusion.

15 Comment:
#049, June 8, 2005    Michael J. Costello

The comment states that any money realized by the "industrial development" in Steuben County will be negative because of the impact to current uses for land in these areas.

Response:

There is no evidence that the project will have an adverse impact on the current uses of land within and outside the project area. However, there is evidence of numerous benefits from the project including landowner revenue, increase in revenue to local governments through the PILOT payments and the creation of jobs.

EMERGENCY RESPONSE

16 Comment:
#101, June 17, 2005    Bond, Schoeneck and King

Regarding page 3-133, it should be clarified whether the project operator will be conducting the rescue or providing the equipment necessary for the local emergency service providers to perform such rescues.

Response:

The project operator will provide all necessary and prudent rescue equipment as may be required by the wind farm project from time to time that the local emergency service providers are not capable of providing.
C.3.14 Property Values

PROPERTY VALUES

Comments:

#049, June 8, 2005    Michael J. Costello
#054, June 6, 2005    Monier Manor
#070, June 13, 2005   Maureen McAndrews
#097, June 14, 2005   Dave and Brenda Cooley
#027, May 18, 2005    Village of Naples
#031, May 23, 2005    Kathleen C. D’Ambra
#034, May 27, 2005    John Servo
#041, June 7, 2005    Carolyn Penner
#042, June 7, 2005    John Passantino
#045, June 6, 2005    Gail E. Baker
#047, June 7, 2005    Todd and Cynthia Wolfer
#048, June 8, 2005    Jodi Larkin
#050, June 9, 2005    Richard and Helen Pellet
#059, June 13, 2005   Lesley and Carolyn Swain
#064, June 17, 2005   The Keenan Group
#066, June 13, 2005   Brenda Bemchuk and Jeffrey Smock
#067, June 13, 2005   Joseph E. LaBarca
#071, June 13, 2005   Ruthie Matilsky
#078, June 11, 2005   Advocates for Prattsburgh
#080, June 17, 2005   Carl and Michele Raymond
#085, June 13, 2005   William Curley
#093, June 16, 2005   Carl and Michele Raymond
#099, June 17, 2005   Sue Sliwinski
#103, June 15, 2005   Richard Marx
PH#08, May 23, 2005   Maureen McAndrews
PH#24, May 23, 2005   Dick Ginther
PH#26, May 23, 2005   Tom Golisano
PH#43, May 23, 2005   Mike Keenan
PH#45, May 23, 2005   Steven Lewandowski (Village of Naples Trustee)
PH#47, May 23, 2005   Tom Tyo (Italy Planning Committee Chair)
PH#49, May 23, 2005   Reverend John Paust

Comments relate to the proposed project’s potential to lower property values, resulting in an increase in property assessments/taxes to make up the difference. Some commenters take issue with the methodology and findings of the GAR report and several commenters’ request mitigation including an appraisal of affected properties and compensation for loss of property value. One commenter wanted Ecogen to put up a bond in order to compensate landowners if their property value fell. Additional comments state that it will be shown that Ecogen’s research into property values do not apply to the Prattsburgh/Italy area.

Specifically, one commenter requests, the project’s zone of influence on real estate values needs to be properly studied, and increased to include all communities within site of the
towers, including in this case the towns of Italy, Prattsburgh, Cohocton, Naples, Middlesex, South Bristol, the Village of Naples, and Ontario County.

**Response:**

Initially, GAR thoroughly analyzed sales data from 2000 to September 2004. An updated analysis using sales data for the period from October 2004 to June 2005 is provided as an Appendix to this FGEIS. GAR’s analyses are clear and unequivocal - over the 5 ½ year period, residential and land values increased in each consecutive year in both the Towns of Prattsburgh and Italy and there is no supportable evidence that the proposed wind farm has negatively impacted the real estate market.

As there is no anticipated impact to property values, SCIDA will not require that Ecogen put up a bond or any other mitigation. Moreover, as GAR has demonstrated, property values are increasing, and using this analyses as a key indicator, there is a reasonable expectation that property values will continue to increase regardless of whether the project is constructed.

The GAR analyses’ zone of influence included average sale prices within the Towns of Prattsburgh and Italy as well as comparables from nearby towns. Given that GAR demonstrated that sales are not declining within the Towns of Prattsburgh and Italy where the proposed project will be most visible and prominent, it would be unreasonable to conduct an additional analysis or widen the zone of influence.

See additional responses to comments below.

**02 Comment:**

#071, June 13, 2005 Ruthie Matilsky

The comment requests that Ecogen pay every landowner in a five-mile radius of each wind turbine to have an appraisal done. Ecogen must then sign a contract with every landowner to make up the difference in value should home prices drop.

**Response:**

See response to comment above.

Requiring that Ecogen pay every landowner in a five-mile radius of each wind turbine to have an appraisal done and sign a contract is unreasonable. As indicated in the response to the comment above, property values are increasing, and using these analyses as a key indicator; there is a reasonable expectation that property values will continue to increase regardless of whether the project is constructed. Moreover, property values are contingent on many external (e.g., interest rates, economy) and internal (e.g., property upkeep) factors. Requiring Ecogen to determine a particular factor in the change in property values for every property within five miles would be onerous and subjective.
03 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS fails to take a “hard look” at the issue of property values, and instead, misleadingly and inadequately focuses on the question of whether there was a supportable decline in average market values or number of transactions since the wind farm was “announced.” That inquiry should be considered, if at all, as merely a portion of the assessment of “temporary and short-term impacts.”

Response:

The comment that the DGEIS fails to take a “hard look” at the issue of property values is unsubstantiated and essentially ignores the thorough analysis conducted by GAR Associates. GAR analyzed sales data, which is a key indicator of whether a project, once announced, will influence or change property values. The conclusion of GAR’s analyses is indisputable – that property values have and continue to increase and that there is no supportable decline in average market values or number of transactions since the Ecogen project was announced. The date or year the project was announced is insignificant since sales data was analyzed initially through September 2004 and updated through June 2005, long after the project was announced, publicized and the SEQR process commenced.

04 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS utilizes, without adequate justification, the year 2001, the purported year the “project was announced,” as the starting point for its analysis re property values. A reasonable starting point for the analysis would be the date at which: a) a vast majority of the public was aware of the project’s scale and preferred sites; b) a vast majority of the public was convinced that the project was likely to go forward; c) potential buyers, whether from the Prattsburgh and Italy area or from outside the area, were aware of the project’s sale and preferred sites; and d) the real estate professionals involved in buying and selling the properties were aware of the project’s scale and preferred sites, were convinced that the project was likely to go forward, and advised potential purchases of those facts. The “reasonable” starting point for the analysis contained in the DGEIS was the year 2004, not 2001, considering that 1) Ecogen’s “Application to SCIDA For Financial Assistance” was not filed with the agency until after 10/17/03; 2) SCIDA did not adopt a resolution accepting Ecogen’s application until 10/23/03; 3) SCIDA did not adopt a resolution declaring itself “Lead Agency” until 2/19/04; 4) SCIDA did not issue a Positive Declaration until 3/25/04; 5) The first official public meeting at which residents were provided a detailed description of the proposed project was not held until 4/22/04, the date of the scoping public hearing.

Response:

The GAR report, dated October 28, 2004, analyzes the Ecogen project’s potential impact on residential housing and land values including the Towns of Prattsburgh and Italy from 2000 to 2004. The results of the analysis show no supportable decline in average market values or number of transactions since the project was announced in 2001 when Ecogen
applied for a building permit in the Town of Italy to install a meteorological tower. At that time, informal meetings with both the supervisors from the Town of Italy and the Town of Prattsburgh were held to discuss the project.

Contrary to commenter’s suggestion that the starting point of GAR’s analysis should be 2004, not 2001, the project along with the WFP project was in fact announced in 2001 as numerous news articles related to both the Ecogen and WFP projects were published in local newspapers prior to 2004, which makes GAR’s use of an earlier starting point appropriate.

GAR’s use of 2001 as a starting point was also appropriate to determine whether any sales trends could be gleaned over several years through and including Ecogen’s application to SCIDA and the public scoping meeting in 2004 and activities through 2005. Analyzing only one year of sales data as the commenter seems to suggest would have compromised the analysis and may have put into question whether SCIDA, as Lead Agency, took a “hard look” at the potential impacts on property values as mandated by SEQR. It is important to note that the GAR report did analyze sales data for 2004 including sales after the SEQR process was well under way, which indicated no adverse effect on property values. In fact, the GAR analysis revealed that property values continued to increase, particularly within the Towns of Prattsburgh and Italy. Therefore, regardless of whether the starting point is 2001 or 2004, GAR’s analysis included the year 2004 when the public, potential buyers and real estate professionals were aware of the project and the likelihood that it would move forward. The results of GAR’s analysis clearly show that property values have increased and continue to increase over time and therefore, no evidence exists that the project will have an adverse impact on property values.

To further analyze the project’s potential impact on residential and land values in the Towns of Prattsburgh and Italy and further lengthen the period of time for analysis, GAR prepared an updated analysis dated July 1, 2005, which examined sales between October 2004 and June 2005 and compared the results to the previous analysis of sales from 2000 to September 2004. The results of this updated analysis “… indicate the average market values and the number of transactions over the past year have not been negatively impacted by the announcement of the wind farm project.”

These conclusions are substantiated by the fact that residential sales in the nine-month period from October 2004 to June 2005 in the Towns of Prattsburgh and Italy had the highest average sale prices since September 2004 ($80,663 in the nine-month period vs. $76,521 in the preceding nine months of 2004), a sale price/list price ratio between 94% and 100% over the past two years, with nine of the 20 sales listed selling at or above the asking price, and a lower average days on the market in the two towns compared to the county averages. In addition, residential land sales in the nine-month period from October 2004 to June 2005 revealed that land sales showed a significant increase (after a slight decrease in late 2004) in the Towns of Prattsburgh and Italy ($1,256 per acre in the nine-month period vs. $911 in the preceding nine months of 2004).
05  **Comment:**  
#079, June 15, 2005  Arthur Giacalone

The DGEIS fails to “assess possible changes in property values” that may result from the construction and, most importantly, operation of the proposed 53-turbine wind farm. The Final Written Scope did not limit, and could not lawfully limit, inquiry to merely the potential decline in average market values or number of transactions since the wind farm was announced.

**Response:**

The initial property values analysis conducted by GAR for the period from 2000 to September 2004 and the updated analysis conducted by GAR for the period from October 2004 to June 2005 uses sales data to establish whether the Ecogen project would have an adverse impact on property values. Through GAR’s demonstration that trends in residential and land values have been favorable during the 5 ½ year period from 2000 to June 2005, arguably these positive trends will continue into the future since property values continued to increase even after the planned project was well publicized in the two towns and surrounding communities. Moreover, it is virtually impossible to assess the potential impact of the project during the construction or operation phases, which have not yet occurred. However, current trends indicate that sale prices will continue to rise into the foreseeable future.

SCIDA believes that the most accurate indicator of property value change is to assess up-to-date sales data over a number of years to establish positive or negative trends. In this instance, GAR conducted a thorough and appropriate analysis, which revealed an increase in property values and thus no adverse impact on property values. The other important indicator of property value change is an examination of the impacts on property values from other completed wind power projects. In fact, GAR took into consideration other completed wind power projects, which are based on the findings of the Renewable Energy Policy Project (REPP) report. The findings of the REPP report are discussed in responses to comments below.

06  **Comment:**  
#079, June 15, 2005  Arthur Giacalone

The DGEIS fails to focus on “similar projects”, as required in the Final Written Scope, that is, wind farm projects comparable in number and scale to Ecogen’s proposed project, in an environment similar to that found in Prattsburgh and Italy.

**Response:**

In accordance with the Final Written Scope, the DGEIS includes a review of “similar projects” by GAR Associates. This review is included in the GAR report, which is provided in the Appendices to the DGEIS. The GAR report states that the two wind farms in Madison County, New York examined in the REPP report revealed no significant evidence that the presence of wind farms had a negative effect on residential property values. The GAR report also states that similar results were found in other areas of the country. A detailed discussion of the results of the REPP report is provided in other responses to comments below.
07 Comment:
#079, June 15, 2005 Arthur Giacalone

There is no evidence in the DGEIS that the applicant followed the instruction in the Final Written Scope to contact the New York State Office of Real Property Services in order to obtain information pertinent to assessing the likely impact of the wind farm’s construction and operation on property values of non-participating property owners close enough to hear and/or see the wind turbines.

Response:

GAR obtained and examined the most currently available sales data for the project area as well as comparable communities outside the project area. GAR’s data sources included records provided by a commercial information service that provides county and town information based on public sources, local records, realtors’ multiple listing services, town assessors’ records and county clerk records. These sources are up-to-date, accurate and appropriate. While the New York Office of Real Property Services is another possible source of sales data information, such information would be redundant and would not change GAR’s analysis.

08 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS includes no evidence that the applicant conducted a meaningful survey of municipalities hosting other wind farm projects in New York State to obtain substantive data regarding potential impacts on property values.

Response:

As stated in the response to comment above, GAR reviewed the REPP Report, which included the two Madison County, New York wind farm projects, which showed that property values in the respective municipalities have not been adversely effected.

09 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS fails to include sufficient data or analysis to support a rational conclusion regarding the likely impact of the wind farm’s construction and operation on property values of non-participating property owners close enough to hear and/or see the wind turbines.

Response:

This comment is unsubstantiated. As stated in previous responses to comments, sales data over 5 ½ years were analyzed to establish trends in property value changes as a result of the project. GAR concluded from its analysis that property values have increased and continue to increase over time. Moreover, the REPP report, particularly with respect to the two Madison County, New York wind farm projects, reveals no
significant adverse impacts to property values in the respective municipalities post construction and operation.

10 Comment:
#079, June 15, 2005  Arthur Giacalone

The statements found in table ES-1 (“Summary of Potential Impacts, Mitigation, and Siting Criteria”) at page ES-22, Section 3.9.13 (“Temporary and short term Impacts on Property Values”) at page 3-104, Section 3.14 (“Assessment of Impacts on Property Values”) at page 3-138, and Section 7.3.12 (“Cumulative Impacts on Property Values”) at page 7-10 are misleading and inadequate because they focus on whether there was a supportable decline in average market values or number of transactions since the wind farm was “announced” rather than the real issue that needs to be addressed. Questions to be asked include: What is the potential impact of the construction and operation of the proposed wind farm on the property values of non-participating property owners close enough to hear and/or see the wind turbines.

Response:

See responses to comments above.

11 Comment:
#079, June 15, 2005  Arthur Giacalone

The statements found in table ES-1 (“Summary of Potential Impacts, Mitigation, and Siting Criteria”) at page ES-22, Section 3.9.13 (“Temporary and short term Impacts on Property Values”) at page 3-104, Section 3.14 (“Assessment of Impacts on Property Values”) at page 3-138, and Section 7.3.12 (“Cumulative Impacts on Property Values”) at page 7-10 are misleading and inadequate because they treat, without adequate explanation or justification, the year 2001 as the appropriate starting point for GAR’s analysis.

Response:

See responses to comments above.

12 Comment:
#079, June 15, 2005  Arthur Giacalone

The statements found in table ES-1 (“Summary of Potential Impacts, Mitigation, and Siting Criteria”) at page ES-22, Section 3.9.13 (“Temporary and short term Impacts on Property Values”) at page 3-104, Section 3.14 (“Assessment of Impacts on Property Values”) at page 3-138, and Section 7.3.12 (“Cumulative Impacts on Property Values”) at page 7-10 are misleading and inadequate because they refer to “significant increases in residential and land values over a five year period”, when the “data” indicates that unimproved land sales decline from 31 in 2003 to 12 in 2004 (the year the public became aware of the project’s scale and location), a 61.3% decrease, and the price per acre declined from $968/acre in 2003 to $911/acre in 2004, a 7.6% drop.
Response:

The initial GAR report was completed in October 2004 and analyzed only nine months of data for 2004 (i.e., January through September) compared to 12 months for 2003. Therefore, it is logical that there would be fewer land sales in the shorter 2004 period. While it is accurate that the number of land sales have declined in 2004 and 2005 compared to the previous three years, the price per acre increased significantly indicating that the proposed Ecogen project had no adverse impact on land values. This is evident in the updated GAR analysis completed in July 2005 which shows a significant increase in land sale prices, increasing from $911 for the nine-month period of 2004 to $1,256 for the nine-month period of 2004/2005.

The commenter ignores residential sales, which show no appreciable decline in number (30 sales for nine months of 2004 vs. 42 sales for 12 months of 2003) but a significant increase in average sale price ($66,943 in 12 months of 2003 vs. $82,470 in nine months of 2004). Moreover, as evidenced in the updated GAR report, average sale prices continued to rise in 2004/2005 nine-month period.

13 Comment:
#079, June 15, 2005 Arthur Giacalone

The statements found in table ES-1 (“Summary of Potential Impacts, Mitigation, and Siting Criteria”) at page ES-22, Section 3.9.13 (“Temporary and short term Impacts on Property Values”) at page 3-104, Section 3.14 (“Assessment of Impacts on Property Values”) at page 3-138, and Section 7.3.12 (“Cumulative Impacts on Property Values”) at page 7-10 are misleading and inadequate because they give the impression that the GAR study makes a causal connection between the existence of the wind farm project proposal and the purported “significant increases in residential and land values over a five-year period,” when GAR provides no explanation or interpretation for the purported results.

Response:

The DGEIS does not suggest a causal connection between the Ecogen project and an increase in property values but merely states the fact and provides supporting analysis that property values have increased over a five-year period. While this commenter may disagree with the “starting point” of when the project was announced, the facts speak for themselves – property values are increasing and there is no evidence based on the GAR analysis that the Ecogen project has caused or will cause a decline in property values. The updated GAR analysis further bolsters this conclusion.

14 Comment:
#079, June 15, 2005 Arthur Giacalone

The statements found in table ES-1 (“Summary of Potential Impacts, Mitigation, and Siting Criteria”) at page ES-22, Section 3.9.13 (“Temporary and short term Impacts on Property Values”) at page 3-104, Section 3.14 (“Assessment of Impacts on Property Values”) at page 3-138, and Section 7.3.12 (“Cumulative Impacts on Property Values”) at page 7-10 are misleading and inadequate because they state that, “GAR conducted an
analysis of the REPP report (see p. 3-138), when, in fact, GAR’s report merely refers to
the REPP study and its conclusion, but provides no critical analysis of any kind regarding
the methodology, data or conclusions of the REPP report, and provides no assessment of
that study’s weaknesses.

Response:

The REPP report, issued in May 2003, is perhaps the most comprehensive study to date
regarding the effect of operational wind power projects on local property values. While
the commenter may disagree with the level of analysis of the REPP report conducted by
GAR, the fact remains that it is available to consider in this environmental review
process. SEQR requires that SCIDA take a “hard look” at the potential impact on
community character and a “hard look” was taken with the issue of property values in
GAR’s thorough analysis. Property values serves as one means of determining impact to
community character. Furthermore, the REPP report is an unbiased technical analysis of
the effect of wind development on local property values and does not supplant the
analysis conducted by GAR. Rather, the REPP report effectively supplements GAR’s
analyses and further bolsters GAR’s conclusions that wind farms do not adversely affect
property values. Finally, the conclusions of the REPP report are clear – that with respect
to the Madison and Fenner Wind Farms located in Madison County, New York, “there is
no significant evidence in these cases that the presence of the wind farms had a negative
effect on residential property values.”

15 Comment:
#079, June 15, 2005  Arthur Giacalone

The statements found in table ES-1 (“Summary of Potential Impacts, Mitigation, and
Siting Criteria”) at page ES-22, Section 3.9.13 (“Temporary and Short Term Impacts on
Property Values”) at page 3-104, Section 3.14 (“Assessment of Impacts on Property
Values”) at page 3-138, and Section 7.3.12 (“Cumulative Impacts on Property Values”)
at page 7-10 are misleading and inadequate because they refer to the fact that “local
residents believed local property values have not been affected because of the belief that
the Project will not go forward,” but then neither assesses the relevance of such
statements nor explain that a belief by local residents that the Project will not go forward
invalidates the vary premise of the GAR analysis.

Response:

The statement to which the commenter refers was one of several comments made in
GAR’s interviews with real estate professionals. The fact remains that both local realtors
and residents in the community were well aware of the potential of the project going
forward. This knowledge clearly did not cause a “fire sale” mentality among potential
sellers. Further, potential buyers were not materially reluctant to proceed with real estate
transactions, as evidenced by the fact that real estate sales continued in the area steadily
and at higher prices since the project was announced. In totality, the conclusions of the
GAR analysis are clear and indisputable – that property values have increased and
continue to increase over time. Moreover, the July 2005 GAR analysis includes an
updated analysis of sales data through 2005, which shows a continued upward trend in
residential and land sale prices, long after the project was announced, publicized, and
while the DGEIS was being completed and circulated for public comment. The July 2005 updated analysis further substantiates GAR’s conclusions that the project will not have an adverse impact on property values.

16 Comment:

#079, June 15, 2005 Arthur Giacalone

The statements found in table ES-1 ("Summary of Potential Impacts, Mitigation, and Siting Criteria") at page ES-22, Section 3.9.13 ("Temporary and Short Term Impacts on Property Values") at page 3-104, Section 3.14 ("Assessment of Impacts on Property Values") at page 3-138, and Section 7.3.12 ("Cumulative Impacts on Property Values") at page 7-10 are misleading and inadequate because they underestimate the impacts of the proposed wind farm on prospective purchasers by referring to the fact that “few potential buyers had concerns about location near the Project,” but failing to directly state that interviews with local real estate professionals within the market revealed that, “A couple of sales were withdrawn due to their location near the proposed wind farm.”

Response:

In totality, the GAR analysis is overwhelmingly positive to support the contention that there will not be significant impact from the proposed project. While it may be accurate that a couple of sales were withdrawn due to their location near the proposed project, these are significantly outweighed by the overall sales over the past 5½ years which reveal that property values have increased and continue to increase.

17 Comment:

#079, June 15, 2005 Arthur Giacalone

The statements at p. 7-10 of the DGEIS that “the influence on property values from the WFP project was indirectly part of [GAR’s] evaluation”, and that the combined effects of both projects will not have a cumulative impact on property values, are conclusory at best, and complete conjecture. And the DGEIS acknowledges, “GAR did not include the WFP project in its analysis.” To deny a potential adverse cumulative impact is to disregard the potential significance of project scale on property values. A “hard look” must be taken at the cumulative impact of adding WFP’s 49 proposed tower locations and 1,800 acres of leased private land to Ecogen’s project, especially when approximately half of the WFP towers are proposed within Ecogen’s primary candidate areas.

Response:

While GAR did not include the WFP project in its analysis specifically, GAR’s analysis and conclusions would not change if the WFP project were referenced. Both projects are widely known and have been publicized throughout the project area and surrounding communities and therefore, the sales data analyzed by GAR would logically apply to both projects. In addition, GAR’s conclusions are supported by sales data through June 2005, which indicates that property values have increased and continue to increase and that there is no adverse impact on property values. These conclusions would apply to both projects since both have been announced and publicized. Finally, the SCIDA does not anticipate adverse cumulative impacts on property values, particularly in light of the fact
that GAR has successfully demonstrated that residential and land values are increasing in the Town of Italy and Prattsburgh.

18 **Comment:**
#079, June 15, 2005  Arthur Giacalone

The conclusion that the Project will not have an adverse impact on property values, and that no mitigation is necessary, is not supported by substantial evidence in the DGEIS. The GAR report is flawed, and fails to meaningfully address the real issue: What is the potential impact of the construction and operation of the proposed wind farm on the property values of non-participating property owners close enough to hear and/or see the wind turbines?

**Response:**

See responses to comments above.

19 **Comment:**
#079, June 15, 2005  Arthur Giacalone

Neither the REPP report, nor the DGEIS, adequately reviews the studies that have concluded that proximity to wind turbines adversely impacts property values (page “14”; 69 of 135). For example, Great Britain Royal Institute of Chartered Surveyors (RICS) released a survey in 2004, entitled “Impact of Wind Farms on the Value of Residential Property and Agricultural Land” which provided a number of findings of potential significance to the Ecogen DGEIS (The report can be found on-line at the RICS homepage: [http://www.rics.org](http://www.rics.org)).

**Response:**

See responses to comments above.

The comment that neither the REPP report nor the DGEIS adequately reviews the studies that have concluded that proximity to wind turbines adversely impacts property values is without merit. The 78-page REPP report was prepared by a credible organization and comprehensively examined the effects on local property values of ten wind power projects in the United States, including two projects in New York State. REPP conducted a literature review, data analysis (e.g., analysis of actual sale prices), regression analyses and interviews with local assessors for each project, and the overwhelming conclusion of its analysis was positive – that property values rose in the view shed than in the comparable community; property values increased faster after the projects came on-line than they did before; and, property values increased faster in the view shed than in the comparable community. The REPP report is quantitative, comprehensive, focuses specifically on U.S. projects and is the most thorough and current analysis undertaken to date on the impact of wind development on local property values.

To the contrary, the 11-page RICS survey to which the commenter refers, is not a quantitative analysis, is not comprehensive, is focused on projects located in Great Britain, not the United States, and is actually a report summarizing the results of a survey,
not a quantitative analysis of actual sales data. Moreover, only 20% of the “surveyors” responding to the survey as part of the study were involved in transactions affected by wind farms. This translates into 80% of survey respondents having no involvement with transactions affected by wind farms, an extremely large portion of the total sample. Therefore, the RICS report is of limited value and no further comment on this report is warranted.

20 Comment:
#079, June 15, 2005 Arthur Giacalone

The RICS Surveys finding that: The most important reason for a negative impact on the value of residential property is the visual impact after completion,” is a critical factor that must be closely analyzed by Ecogen if SCIDA is to take a “hard look” at the potential impact of the proposed wind farm(s) on property values. The data gathered during the DGEIS’ visual impact assessment should be utilized by Ecogen to assist in conducting a real assessment of the potential impact of the construction and operation of the proposed wind farm on the property values of non-participating property within the proposed wind farm(s) view shed.

Response:

See responses to comments above. SCIDA is using the complete EIS, and the visual impact analysis in particular, to determine the potential adverse impacts of the project.

21 Comment:
#079, June 15, 2005 Arthur Giacalone

Ecogen’s insistence that GAR merely provide a “Summary Report” makes it virtually impossible for the public to fully and adequately review and comment on the analysis, conclusion, and opinions reached by GAR. As stated in Appendix K, the so called summary report “is limited in scope in that only a summary of the factual market data used has been included” and “supporting documentation, together with reasoning supporting the analysis, conclusions and opinions has been retained in [GAR] file memoranda.” (Appendix K, p.5, 7, 11 of 135). Whether Ecogen insisted on a “limited analysis” to save money, or to conceal unfavorable or inadequate data and reasoning, the Lead Agency must insist that the applicant submit a full report, including all supporting documentation and GAR’s reasoning, and then make the additional information available for review and comment. If the applicant refuses to submit the complete report and supporting documentation and reasoning, the DGEIS’ assessment of property value impacts should be deleted in its entirety from the FEIS.

Response:

This comment is factually inaccurate and mischaracterizes the nature and content of the GAR report. Ecogen did not direct GAR to take any short-cuts or avoid any relevant aspect of its report. The reference to a summary report is standard for an appraisal report that is not being offered in the context of litigation where opposing appraisers are being presented for expert testimony. The Appendix to the GAR report includes a comprehensive list of all the comparables studied including the addresses, sale prices, acreage and date of sale, thus providing sufficient information for the public and involved agencies to review the basis of the GAR conclusions. What are omitted are the actual
deeds and transfer reports for the respective transactions as such detail would unnecessarily add to the length of the DGEIS. If there is any question as to the accuracy of the summary tables presented by GAR, the commenter is free to inspect the original documents on file at the respective offices of the county clerk.

SCIDA has thoroughly reviewed the initial 2004 GAR report which can be found in Appendix K of the DGEIS and the updated 2005 GAR report which can be found in Appendix V of the FGEIS and is of the belief that the analytical analysis is comprehensive, extensive and complete.

22 Comment:
#079, June 15, 2005  Arthur Giacalone

Contrary to the intent of the Final Written Scope, the GAR report has not provided research and documentation from “similar projects”. None of the 5 “currently existing projects located within New York”, nor any of the project sites detailed in the REPP report, is similar in both scale and environmental setting to the Ecogen project. For example, the Fenner project in Madison County 20 turbines, 328' in height, and produces only 30 megawatts.

Response:

See responses to comments above.

As stated in previous responses to comments above, the GAR report did examine similar projects. The commenter’s statement that none of the five currently existing projects located within New York or any of the project sites detailed in the REPP report is similar in both scale and environmental setting to the Ecogen project is incorrect and without merit. Moreover, to suggest that the project site is somehow unique in scale and environmental setting compared to other wind power projects and sites in New York and across the United States is disingenuous.

The scale of the projects in both New York and the United States vary and include some projects that are both smaller and larger than the Ecogen project in terms of number of wind turbines and megawatts. These sites represent a large spectrum of small, medium and large projects and therefore, represent an adequate sample for comparison to the Ecogen project. For example, in New York, the Madison project includes seven turbines with a total of 11.6 megawatts; the Fenner project includes 20 turbines with a total of 30 megawatts; and the Maple Ridge Wind Farm (Flat Rock) includes 187 turbines at approximately 300 megawatts. The REPP report examines other wind power projects throughout the United States and reveals a wide range of small, medium and large projects in terms of number and total megawatts. In the majority of instances, property values increased once the projects came on-line.

The environmental setting of the New York and U.S. projects also vary and range from relatively flat topography to mountainous areas. The environmental setting of the Ecogen project is similar to several of the projects analyzed in the REPP report. More importantly, the results of the REPP analysis overwhelmingly show an increase in property values regardless of the environmental setting in which the projects are located.
23  Comment:
#079, June 15, 2005    Arthur Giacalone

The GAR report claims at page “6” (p. 15 of 135), that the towns of Prattsburgh and Italy are “over 100 miles” from major metropolitan areas in New York State, disregarding its proximity to the Rochester metropolitan area.

Response:

Comment acknowledged. The actual distance from the proposed project to the Rochester metropolitan area is approximately 53 miles.

24  Comment:
#079, June 15, 2005    Arthur Giacalone

The “Land Analysis” figures at page “10” (p. 20 of 155) of the GAR report states that there were 18 land sales in 2004, whereas the “Supporting Sales Data” attached to the report shows a total of only 12 land sales in 2004 (p. 37 of 135).

Response:

The “land analysis” figure at page 10 of the GAR report showing 18 land sales in 2004 is a typographical error. The “Supporting Sales Data” attached to the report listing 12 sales in 2004 is correct. The sales price per acre of $911 in 2004 listed on page 10 of the report is correct.

25  Comment:
#079, June 15, 2005    Arthur Giacalone

The GAR report misleadingly claims at page “10” (p. 20 of 135) that “The data also indicates that the number of land sales has been increasing since 2000”, when the supporting data, as noted above, indicates that land sales decreased from 31 in 2003 to 12 in 2004.

Response:

The GAR report is accurate in that land sales have been increasing overall since 2000, with 13 sales in 2000, 17 sales in 2001, 27 sales in 2002, and 31 sales in 2003. The GAR report indicates that there were 12 sales in 2004; however, the 12 sales are only for a nine-month period compared to 12 months for the previous four years. While it is noted that the number of sales in the 1 ½ year period from 2004 to June 2005 are fewer than in previous years, the decline is not significant. Moreover, sale prices overall have increased and continue to increase as mentioned in previous responses to comments.

26  Comment:
#079, June 15, 2005    Arthur Giacalone

The GAR report does not explain the rationale for combining sales figures for Prattsburgh and Italy, given the nearly 30% difference between the median value of a
Town of Prattsburgh single-family house ($54,600) and a Town of Italy single-family house ($70,400).

Response:

The sales data was combined for the two towns in question because they are in the same project area and there were an insufficient number of sales to analyze the towns separately.

27 Comment:

#079, June 15, 2005 Arthur Giacalone

When mentioning the REPP report, GAR reiterates the conclusion that, “there was no significant evidence that the presence of the [two Madison County wind farms] had a negative impact on residential values,” but fails to advise the Lead Agency or the public that the comparison of the sales prices in the Fenner view shed before and after the wind farm went on-line shows that “average monthly sales prices increase in the view shed prior to the on-line date, but decrease after the on-line date (See REPP report p. “30”; 84 of 135).

Response:

The commenter fails to point out the positive conclusions of the REPP report which states that, with respect to the Madison projects, “[i]n five of six regression models, monthly average sales prices grew faster or declined slower in the view shed than in the comparable area.” Moreover, the report states “Madison County assessors Carol Brophy and Pricilla Suits said they have not seen any impact of the turbines on property values, and Suits added, ‘There’s been no talk of any impact on values.’”

28 Comment:

#079, June 15, 2005 Arthur Giacalone

The GAR report never makes mention of any effort to determine whether purchasers of property between 2001 and 2004 were fully informed of the scale and proposed location of the Ecogen and/or WFP wind farms.

Response:

See responses to comments above.

As discussed in responses to comments above, both the Ecogen and WFP projects were announced and well publicized during this period. Furthermore, sales data show no effect on property values in both 2004 and 2005 when the SEQR process for these projects was well under way.

29 Comment:

#079, June 15, 2005 Arthur Giacalone

When analyzing sales data, the GAR report fails to distinguish between sales within or outside of the project boundaries. This distinction is significant given the fact that
apparently only 56% of the total square mileage of the towns of Prattsburgh and Italy are within the 33,000 acres of the “Project Area”.

Response:

This comment is without merit. GAR analyzed sales data for the Towns of Prattsburgh and Italy as well as comparable municipalities, which provide an accurate basis for an assessment of property values within and outside the “Project Area.”

30 Comment:
#079, June 15, 2005  Arthur Giacalone

The GAR report fails to provide a satisfactory baseline rate of change in property values PRIOR to the purported 2001 “announcement”, making it impossible to discern the significance of the changes between 2001 and 2004.

Response:

This comment contradicts previous comments made by commenter in that he first takes issue with the “starting point” of 2001, recommends a starting point of 2004, and now requests an analysis of sales data prior to 2001. The GAR report analyzes sales data over a 5 ½ year period, which is adequate to establish trends in residential and land sales, and therefore, the “hard look” test in accordance with SEQR has been met.

31 Comment:
#082, June 15, 2005  Town of Italy

The Town of Italy finds fault with the way in which property values are addressed in the DGEIS. Initially, there are problems with the time frame used in the studies. GAR Associates was engaged by Ecogen to perform studies on property values as they relate to the proposed wind farm. GAR uses real-estate sales from 2001-2004 to justify their findings. The inherent flaw here is that the project was not actually “outed” in the Town of Italy until late 2003 to early 2004. This Project was not “general knowledge” in the Town of Italy before this time and sales figures proceeding this time are not reflective of the Project’s effects. Furthermore, GAR found that individuals still do not believe the project will go through. This belief would reflect the lack of change in the market. The DGEIS itself states, “GAR’s interviews with real-estate professionals indicated that few potential buyers had concerns about location near the Project and that residents believe that local property values have not been affected because of the belief that the Project will not go forward.” (DGEIS, sec. 3.14.1, p. 3-139). This statement proves that no solid conclusions regarding property values can be drawn as the general public does not believe that there is anything to react to. To suggest that there is any correlation to be drawn is negligent.

Response:

See responses to comments above.
32 **Comment:**
#082, June 15, 2005   Town of Italy

The Town of Italy would like to note that no professional source documentation is provided anywhere in the GAR study. Though there is the claim that various professionals in the area were interviewed regarding the effects of the project, none are named.

**Response:**

GAR had verbal communications with various assessors and realtors to discuss various sales and listings in the Project area. These discussions were summarized in the GAR report and further supplemented the thorough sales data analysis conducted by GAR. The summary of communications with assessors and realtors is accurate and was prepared by GAR, a reputable, certified real estate appraiser.

33 **Comment:**
#082, June 15, 2005   Town of Italy

The Town of Italy questions the use of “Limited Analysis” in the summary report. The DGEIS states that, “at the request of the client, a ‘Limited Analysis’ presented in a summary report has been made, with certain backup information and some details of the reasoning of our conclusions retained in our file memorandum” (DGEIS, Vol. III, Appendix K, Statement of Objective, p. 3). The Town of Italy requests that there be full disclosure of GAR’s file memoranda as it pertains to all real estate analysis with regard to the proposed Project.

**Response:**

All pertinent information was disclosed in the GAR report.

34 **Comment:**
#079, June 15, 2005   Arthur Giacalone

The DGEIS provides no critical analysis of the REPP report, despite its numerous flaws.

**Response:**

See responses to comments above.

35 **Comment:**
#079, June 15, 2005   Arthur Giacalone

The wind farms discussed in the REPP report cannot fairly be characterized as “similar projects”. For example, five of the ten sites have 20 or fewer towers, including the two in Madison County, New York projects; the two California sites are in areas already saturated with wind towers; the 80-tower Carson Co., Texas site is “dead flat” and “completely rural” with “large agricultural farms and small herds”; the 31-tower Kewaunee Co., Wisconsin site is actually 3 small projects, and; the 2 projects with a total
of 257 towers in Iowa are located on land that is “flat with minimum elevation changes” consisting of mostly cleared land form agriculture production in a community where proximity to a large hog farm did not change property values.

Response:

See responses to comments above.

The SCIDA considers the REPP Report to be a reputable study and acknowledges its limitations.

36 Comment:
#079, June 15, 2005 Arthur Giacalone

The REPP report claims to compare the sale price of homes within five miles of wind turbines, the purported “view shed”, with the sale price of homes in a comparable region, but homes are treated as being in the “view shed’ whether or not they actually have a “view” of the turbine (page “12”; 67 of 135). This approach distorts and underestimates the potential impact of turbines on property values by including many properties not affected at all by the wind turbines.

Response:

See responses to comments above.

The SCIDA considers the REPP Report to be a reputable study and acknowledges its limitations.

37 Comment:
#079, June 15, 2005 Arthur Giacalone

The REPP report acknowledges the fact that it would be desirable in the future to “refine the view shed in order to look at the relationship between property values and the precise distance from development.” Failure to include such “refinements” in this study renders its conclusion unreliable, at best (page “3”; 59 or 135).

Response:

See responses to comments above.

The SCIDA considers the REPP Report to be a reputable study and acknowledges its limitations.

38 Comment:
#079, June 15, 2005 Arthur Giacalone

The REPP report appears determined to assert its conclusion that wind development does not adversely impact property values, whether or not that conclusion is warranted. It repeatedly concludes despite “the underperformance” of a number of view sheds that
“there is no significant evidence that the presence of the wind farms had a negative effect on property values.” This conclusion is reasserted simply because the “statistical fit”, using standard statistical regression analysis, is “poor”. No adequate attempt is made to explain the reason(s) for the “poor fit,” or to assess the non-statistical significance of the “underperforming view sheds”.

Response:

See responses to comments above.

The SCIDA considers the REPP Report to be a reputable study and acknowledges its limitations.

39 Comment:
#079, June 15, 2005 Arthur Giacalone

As with the GAR report, the REPP report fails to provide a satisfactory baseline rate of change in property values PRIOR to the development, making it impossible to discern the significance of the change after the turbines are on-line. This report also fails to adequately address the statistical significance of non-wind-related factors that may have impacted property values within the various view sheds.

Response:

See responses to comments above.

The SCIDA considers the REPP Report to be a reputable study and acknowledges its limitations.

C.3.15 Groundwater

WATER TABLE

01 Comments:
#031, May 23, 2005 Kathleen C. D’Ambra
#076, June 14, 2005 Nancy and Carl Walstrom
#086, June 14, 2005 Phyllis Hickery
#103, June 15, 2005 Richard Marx
PH#18, May 23, 2005 Terry Matilski
PH#25, May 23, 2005 Carolyn Tinney

These comments are summarized by stating that the authors are concerned about the effect of the turbine foundations on the water table, the effect of blasting and turbine installation on groundwater flow. Walstroms request a flow test on their well.

Response:

The majority of the WTG foundations are anticipated to approximately six feet below grade. These foundations would be similar in area, depth and displacement of a
residential basement, which are often located adjacent or in near proximity to a potable water supply well. In contrast, the WTG are required to be a minimum of 1,200 feet from a non-participating residence. In certain instances, depths may reach a maximum of 14 feet on slopes with a maximum of 15% grade. As stated in the DGEIS, soils within the project area where WTG would be constructed (hill tops) are a clay, silty clay till with very low permeability. Most are classified by the Soil Conservation Service as hydric or potentially hydric. These soils have a low transmissivity that prevent them from being a productive source of drinking water supply. Potable water supply wells on hills and ridges are typically drawing water from >60 feet bgs, from within the bedrock. Geotechnical investigations of the project area show that where bedrock is to be removed for foundations, the rock is fissile and fractured enough to be removed mechanically with a track excavator. In the rare instance where blasting may be required, the blasting would be shallow and limited in nature and would not impact bedrock structures at depth or away from the WTG construction area.

SCIDA concurs with the URS’s analysis presented in the in the DGEIS, that the geologic characterization of the area and nature of the construction does not indicate there will be a significant impact to groundwater resources.

WATER QUALITY

02 Comments:
#056, June 9, 2005     Stephen and Gail Rowan
#076, June 14, 2005    Nancy and Carl Walstrom
#080, June 17, 2005    Carl and Michele Raymond
#085, June 13, 2005    William Curley
#093, June 16, 2005    Carl and Michele Raymond
PH#25, May 23, 2005    Carolyn Tinney

These comments are summarized by stating that the authors are concerned that there is no study on hazardous impacts to well and well water systems, that blasting and installation will affect groundwater quality, that the hydraulic fluid used in turbines will contaminate water supply. Walstroms request a quality test on their well.

Response:

There is very little risk to release of hazardous or petroleum materials from construction as only the only hazardous materials anticipated to be used would be fuels contained in the construction vehicles.

According to the manufactures specifications, approximately 50L (13.2 gallons) of hydraulic fluid and 20L (5.3 gallons) of gear oil are housed within the nacelle. If a hydraulic leak were to occur, the fluid would likely be contained within the nacelle. However, if the oil were to leak outside the nacelle, it would likely travel down the inside of the tower and remain contained within the base of the tower on the concrete floor until appropriate spill clean-up can occur. There is no material threat of a release to groundwater from the operation of a WTG.
SCIDA concurs with the URS’s analysis presented in the DGEIS, that the geologic characterization of the area and nature of the construction does not indicate there will be a significant impact to groundwater resources.

GEOLOGY

03 Comment:

#088, June 13, 2005 Claire Quadri

Site-Specific Geology and Hydrology are Not Evaluated
The DGEIS includes a broad description of the geology and general hydrology of the 33,000-acre project area, based on a review of published sources and an apparent interview with a single local drilling company. The DGEIS also includes a cursory subsurface exploration program consisting of only 9 shallow test pits for the entire project area, which is slated for construction of about 53 wind turbines.

It is critical that site-specific geology be determined as a key first step in the environmental review process. The DGEIS does not provide this critical information. It is standard practice for characterization of subsurface conditions to be done using actual site-specific data, not generalizations and assumptions. Typical hydrogeologic studies require at least three groundwater monitoring wells or piezometers for each locale to evaluate the depth to groundwater and estimated groundwater flow direction. Test pits are sometimes used as a first step because they are less costly and time-consuming to complete. However, the information provided by a properly-installed and logged boring and monitoring well cannot be duplicated with a test pit. The distribution of 9 test pits as representative of 53 turbine locations is also inadequate.

The data are insufficient to determine final foundation design and construction techniques.

Foundation design is contingent upon the site-specific geology and hydrology of each turbine location. What is the depth to bedrock? What is the thickness of the unconsolidated deposits? What are the groundwater flow directions? Are there significant seismic areas and faults?

Response:

The GEIS was produced as a generic impact report. The final site selection for each WTG has not been completed. Once the final tower siting is complete, a site-specific geotechnical investigation will be conducted for each WTG location. The geotechnical investigation will include all applicable components to determine the proper design of WTG foundations.
Since release of the DGEIS, a second supplemental geotechnical investigation was performed. The investigation was conducted at three locations within the candidate areas and included 11231 Gay Road, Prattsburgh; 2869 Emerson Road, Branchport; and 500 Clute Road, Naples. The investigation included the advancement of one test boring location at each location.

The test borings were advanced to between 30 to 35.5 feet bgs. As observed in the first limited geotechnical investigation, overburden soils consisted of clay (till) with some silt and varying amounts of sand and gravel. The clay was described as moderately plastic and generally moist. Standard Penetration Test (SPT) N-values for the till equated to between very stiff to hard material.

Weathered bedrock was encountered in the boring from 11231 Gay Road at approximately 2 feet below grade. Hollow stem auger refusal was not encountered till approximately 11.5 feet bgs. Once competent rock was encountered, several core runs were advanced till termination at 31.3 feet bgs. One core sample was submitted for analysis of moisture content (%) and unconfined compressive strength. The moisture content of the bedrock (shale) was found to be very low (0.8%). Groundwater was not observed in the test boring.

Weathered shale was not observed at the 500 Clute Road location. Competent bedrock was observed at approximately 15.5 feet bgs below the clay. The remainder of the boring was cored through bedrock to a total depth of 35.5 feet bgs. One soil sample (clay) was submitted for moisture content and wet density analysis. The moisture content of the clay was relatively low (9%). One core sample was submitted for moisture content and unconfined compressive strength. The moisture content for the bedrock (shale) was very low at 0.5 %. Groundwater was observed in the boring at approximately 9.9 feet bgs at the overburden bedrock interface. However, as noted in the analytical data, the clay samples analyzed have low moisture contents.

No competent bedrock was observed at the 2869 Emerson Road location. Weathered shale (penetrated by hollow stem augers and split spoon samplers) was observed from approximately 12 feet bgs to 30 feet bgs. The weathered shale was described as also having some silt and little clay. A total of 15 samples were submitted for moisture content analysis. The percent of moisture ranged from 6.6 to 14.6 %. Groundwater was observed from within the weathered bedrock in the boring at approximately 20 feet bgs.

The information gathered from the second investigation strengthens the argument that shallow groundwater limited within the overburden, is not uniform, and is not a source of potable water. The full geotechnical reports are presented in Appendix U.

The project area is not an area of high seismic activity, especially when compared to existing projects on the west coast of the United States. The USGS lists the seismic hazard of the project area as the lowest in New York State (http://neic.usgs.gov/neis/states/new_york/hazards.html). However, the geotechnical investigation has concluded that the probability of liquefaction or settlement during a magnitude VI earthquake for the soils in the project area is extremely low.
As discussed previously, geologic maps of the surficial deposits indicate that soil types are consistent through the hilltops of the project areas and consist of a glacial till of high clay and silty clay content with low permeability. The test pits and borings advanced in separate hill top locations support this data.

Additionally, as discussed in the DGEIS, the region is part of the Alleghany Plateau region of New York State. This region consists of a former high plains plateau underlain by horizontally orientated, interbedded, shales and siltstones that over time was eroded into broad valleys and steep gullies and hillsides. As such, bedrock lithology from similar elevations on different hills within the project area will be consistent. The project area consists of shale and siltstone of the West Falls Group that is between 500 and 2,500 feet thick. Because of the formation’s bedding direction and thickness, the current geotechnical investigations can adequately assess the geologic conditions of the project area. In fact, the geotechnical studies confirmed publicly available information that was widely studied and published through the New York State Museum of Science.

Based on the studies conducted and the publicly available information, SCIDA believes that the impact to groundwater has been adequately assessed.

**GROUNDWATER**

<table>
<thead>
<tr>
<th>04</th>
<th>Comment:</th>
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<tr>
<td>#088, June 13, 2005</td>
<td>Claire Quadri</td>
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**Private Water Supplies are not Sufficiently Evaluated**

The DGEIS relies on an informal interview with a local well driller to evaluate private water wells in the area. The DGEIS does not provide an inventory of the actual private wells that exist in the vicinity of the proposed turbines. Without such an inventory, the DGEIS makes the broad regional assumption that supply wells on hilltops are drawing water from greater than 60 feet below the ground surface (bgs), and concludes that “no impact is anticipated” from the foundations, which may be installed at about 14 feet bgs. Because of its “generic” nature, the DGEIS does not evaluate the potential for older shallow “hand-dug” wells or spring-fed water supplies on nearby properties. Additionally, the potential effect on the future development of adjoining properties is not evaluated. Many properties do not yet have developed residential use, but the value of the property is contingent upon the ability to effectively develop this water resource in the future. There is no public water supply option for most of these property owners. Site-specific knowledge of water supplies is essential to sound decision-making. The DGEIS does not provide the needed information.

Additionally, the DGEIS does not address the potential adverse impacts dewatering can have on residential water supplies if there is hydraulic communication between the groundwater in the dewatered area and the residential water supply. This must be evaluated prior to construction.
Response:

Property values were analyzed by GAR Associates and the data was presented in the DGEIS and additional data was compiled and is presented in the FGEIS. GAR analyzed sales data, which is a key indicator of whether a project, once announced, will influence or change property values. The conclusion of GAR’s analyses is that property values have and, continue to, increase. Additionally since it has been determined that there is no adverse impact to groundwater from the construction and operation of the WTG, there would be no impact to property values from this issue.

The SCIDA agrees with URS conclusion that the geology of the area does not support the assumption that construction of the WTG would have a significant impact on shallow overburden or deep bedrock wells.

As discussed in the previous two answers, the assessment of groundwater impacts was thorough and complete and it has been determined that there is no significant adverse impact to residential groundwater supply from the construction of the WTG.

05 Comment:

#088, June 13, 2005 Claire Quadri

Inadequate Conclusions/Recommendations Result From Insufficient Data
As detailed above, the DGEIS provides only cursory, generalized information for an enormous project area, and then makes sweeping conclusions about the lack of anticipated impacts on surface water, groundwater and private water supplies. The DGEIS does not even require mandatory detailed site-specific studies as a condition of future approval. The SCIDA is asked to leave the gathering of this important information to a later date, to be supervised by an independent engineer without any clearly-mandated public accountability, responsibility, public notice or public comment.

Because of the iterative nature of environmental studies, it is imperative that specific turbine locations be determined, the specific geologic conditions be determined, and then the resulting environmental impact be studied. The SCIDA needs this level of site-specific information to take a “hard look” at the environmental issues and make its funding decision. The DGEIS fails to provide enough site-specific information to the SCIDA.

Response:

Although, two limited geotechnical investigations have been performed to date. Once final siting of each WTG is determined, a site-specific geotechnical investigation will be conducted to determine WTG foundation designs. However, both geotechnical investigations conducted to date have revealed similar subsurface conditions. It should be noted that the foundation design will be reviewed and signed by a Professional Engineer (PE) licensed in New York State prior to construction, and as such the PE is clearly mandated by his or her license to be publicly accountable.
RECOMMENDATIONS
Based on the above inadequacies, the following is recommended.

Either:

(1) Require that this DGEIS include a site-specific groundwater, private water supply and geotechnical investigations at each turbine location (using the scopes of work included in the Attachment A – Modifications to Table ES-1), or

(2) Enhance the findings and recommendations for the DGEIS (especially those presented on summary table ES-1) to include specific requirements for study of the environmental impacts of EACH TURBINE LOCATION, and provisions for automatic requirement for a supplemental EIS for additional evaluation of conditions encountered in these studies.

If the SCIDA chooses to avoid completing more detailed studies as part of this DGEIS (Recommendation #1 above), then at a minimum, the DGEIS report should be corrected and modified to include the additional issues and recommendations, which are, detailed Attachment A – Modifications to Table ES-1. Additionally, it is recommended that the supplemental issues identified in the attached table should be included in appropriate sections of the DGEIS report text.

Response:

As discussed previously, the assessment of groundwater impacts was thorough and complete and it has been determined that there is no significant adverse impact to residential groundwater supply from the construction of the WTG. No mitigation or additional siting conditions are required.

Comment:
#088, June 13, 2005 Claire Quadri

AS referenced in the comment above, Ms Quadri makes recommended edits to the following sections of the ES table of Impacts, Mitigation and Siting Criteria. The changes/additions are noted below.

“3.2 Surface Water Resources”
Impacts – Possible impact of runoff on natural and man-made ponds since the runoff may have a different chemical composition than the natural ponds and streams. Also addresses the fact that runoff created during dewatering could create localized flooding and erosion.

Mitigation – Recommends an additional wetland delineation to “be prepared for each proposed turbine location (and associated roads, powerlines, etc.) to evaluate whether wetlands are present in the construction area. This will be prepared prior to finalizing individual site plans.”
Siting Criteria – “Avoid turbine placement in areas in which construction runoff and/or dewatering will result in potential flooding, sedimentation, or degradation of water quality of non-participating lands owners’ properties, and/or area wetlands, farm ponds, and water supplies. If the turbine locations cannot be altered to avoid these impacts, then a supplemental EIS will be required. Avoid ECS layouts in which perpendicular stream crossings are not possible.”

Response:

During construction all applicable laws and regulations regarding erosion control will be employed. See Part C.3.2 for a discussion of these requirements. Such erosion control measures may involve silt fencing, berms, hay bales, rock-check dams, temporary drainage ditches, and erosion control blankets. Ecogen is required by law to follow State Pollution Discharge Elimination System (SPDES) construction requirements (GP-0201). These measures will be required whether or not stormwater control impacts a participating or non-participating property. Since groundwater in excavations is not expected to be a significant issue, no other mitigation will be required.

As requested by the NYSDEC, if ECS will cross streams overhead, the crossings will be perpendicular to the streams to minimize impact to the vegetative cover.

Once final siting has been determined, Ecogen will consult with USACE to determine if wetlands are present in the construction area and will be required to obtain any approvals necessary through the USACE. At a minimum, this will require Ecogen to complete a delineation of wetlands in or near final project components, including WTG and service roads.

08 Comment:

#088, June 13, 2005 Claire Quadri

“3.9 Temporary and Short Term Impacts”
Mitigation – Author recommends that “approval of each location should be contingent upon site-specific groundwater studies.”

Siting Criteria – “Should site-specific studies indicate a potential impact to water supplies or water resources of non-participating landowners or the public, the turbine location will be abandoned or relocated to an area without such impact. If the turbine locations cannot be altered to avoid these impacts, then a supplemental EIS will be required.”

Response:

As discussed previously, the assessment of groundwater determined that there is no significant adverse impact to groundwater resources from the construction of the WTG. No mitigation or additional siting conditions are required.
Comment:

#088, June 13, 2005 Claire Quadri

“3.10 Health and Safety Impacts”
Impacts – “Poor design, materials, and construction supervision may result in tower collapse or failure.” and “Blasting may be necessary for turbine foundation construction in areas of shallow bedrock. Rock fragment projectiles and noise can be a safety hazard during blasting.”

Mitigation – Recommends a “site-specific geotechnical study” to be completed at each turbine site. The author recommend that the study include:

- at least one boring at each turbine location
- continuous collection of soil samples to a depth of 10 feet below the proposed depth of the foundation or into the bedrock
- soil testing and analysis by an experienced NYS geotechnical laboratory
- a separate geotechnical report for each turbine prepared by a NYS PE
- information on lateral loads, soil bearing capacity, seismic stability, soil classification, soil shear strength, analysis of suitability of the soils/rock for the turbine foundation, whether blasting will be necessary, and whether soils maybe used as backfill
- “Appropriate notification of neighbors, landowners and public safety officials will take place well before any blasting is to take place.”

Siting Criteria – “If the geotechnical study results in a foundation design that differs from that described in the DGEIS, and/or results in the necessity of dewatering or blasting for foundation construction, then a supplemental EIS will be completed to evaluate the impacts of this change.

Response:

Responses to similar questions can be found in Part C.3.10 as well.

Barr Engineering (Structural Engineers) have noted that in order to support a pad and pier foundation, that the minimum soil sheer strength must be in excess of 2,500 pounds per square foot and a sheer modulus greater than 5,000 pounds per square inch. As part of the final siting, a site-specific geotechnical investigation will be conducted which will include recommendations for foundation design and safety. These recommendations include a safety factor at least three times the bearing capacity failure. In addition, based on the subsurface material an evaluation of long-term settlement is presented and any additional recommendations are presented.

If blasting is required, a plan will be developed in accordance with all applicable federal, state and local regulations. In response to the comment of rock fragment projectiles, according to NYSDOL Regulation 23-11.4 Blasting and Firing Operations, (f) Blasting Mat, “Wherever any person may be endangered from the material being blasted, such material shall be covered on all exposed sides with a strong woven matting of wire rope not less than one-half inch in diameter, or other equivalent covering which will be effective in preventing particles from being projected into the air by the blast”.

11/22/05
After final siting has been determined, a site-specific geotechnical investigation will be conducted for each tower location. Prior to construction of the foundations, these studies will be conducted to provide sufficient information to meet the design criteria for WTG foundations and will be approved by a NYS registered PE.

10 Comment:
#088, June 13, 2005 Claire Quadri

“3.12 Blasting and Seismic Issues”
Impacts – Author adds: “the necessity for blasting is not known at this time because site-specific geotechnical studies have not yet been completed. If blasting is required, it may have impacts on nearby structures, bedrock fractures (and thus groundwater flow).

Mitigation – “If blasting is planned for any construction activity, notice will be made to all adjoining property owners one month prior to the scheduled activity. Additionally, the condition of all structures on properties of non-participation adjoining landowners must be photo-documented (or video-documented) prior to blasting activities, and a copy of the documentation provided to the adjoining landowner. Adjoining landowners must be compensated for any damage to their property.”

Response:
At this time, is not anticipated that blasting will be required. However, if after final siting, blasting is needed, a plan will be developed in accordance with all applicable federal, state and local regulations, most specifically, NYSDOL Regulation 23-11.4 Blasting and Firing Operations.

11 Comment:
#088, June 13, 2005 Claire Quadri

“3.15 Groundwater and Wells” –
Ms. Quadri requests detailed groundwater study at each tower location. The proposed study would include a survey of water supply wells within 1,000 feet of a WTG, monitoring well installation and seasonal groundwater monitoring.

Response:
As discussed previously, the assessment of groundwater determined that there is no significant adverse impact to groundwater resources from the construction of the WTG. No mitigation or additional siting conditions are required.

C.3.16 Abandonment and Decommissioning

MECHANISM FOR DECOMMISSIONING

01 Comments:
#031, May 23, 2005 Kathleen C. D’Ambra
#040, June 3, 2005 Steven C. Brewer
#054, June 6, 2005 Monier Manor
The comments are summarized by stating that the authors disagree with how the DGEIS presents decommissioning plans. Comments question if there is a mechanism for decommissioning post project-life or assurance that WTG will be dismantled/removed and the site restored. There are concerns regarding the absence of guidelines for WTG removal (how long would WTG be idle before they are decommissioned).

Response:

In the unlikely event that the WTG need to be decommissioned for whatever reason, a decommissioning bond will be set up by Ecogen to cover any costs above the salvage value of the project. The bond amount will be reevaluated every five years in order to ensure that there are enough funds to cover decommissioning costs should the need arise. This decommissioning bond will be held by SCIDA or its successor agency(ies) for the life of the project. Ecogen will not leave unused WTG in the Towns of Italy and Prattsburgh.

As stated in the DGEIS, the salvage contractor will be required to remove the WTG and towers, remove the tower foundation pedestal to a depth of three feet, remove the electric collection system, and re-grade the area above the pedestal with topsoil and re-seed.

The threshold for commencing decommissioning is to be one year after the project ceases to produce electricity.

Ecogen will be required to Prepare a “Decommissioning and Restoration Plan” after final site selection and prior to construction. The Plan will include: anticipated life of the project; estimated decommissioning cost in current dollars; method of and schedule for updating the costs of decommissioning and restoration; method of ensuring that funds will be available for decommissioning and restoration; and, anticipated manner in which the project will be decommissioned and the site restored. The plan will reviewed by SCIDA prior to approving the project.

02 Comment:

#082, June 15, 2005 Town of Italy

The DGEIS states, “It is anticipated that the individual lease agreements between Ecogen and individual property owners will assign decommissioning in the case of abandonment to be the responsibility of Ecogen” (DGEIS, sec. 3.16.3, p. 3-146). The official DGEIS should make no allowances for “anticipated...agreements.” The Town of Italy cannot operate under such assumptions and should not be asked to.
Response:

Lease agreements between participating property owners will include language regarding decommissioning. However, as described above, a decommissioning bond will be held by SCIDA or its successor agency for the life of the project.

03 Comment:
#082, June 15, 2005 Town of Italy

The Town of Italy finds fault with the notion that “salvage value” will facilitate the decommissioning of the proposed wind turbines should the project be abandoned. If salvage value were enough incentive to clean up abandoned properties, there would be no need for numerous state and local laws currently in existence to aid municipalities in enforcing such clean up. The Town of Italy can in no way accept “salvage value” as acceptable mitigation for the abandonment and decommissioning of industrial wind towers. If this project is abandoned, the health and safety of the residents of Italy will become the responsibility of the Town. Italy will not be held accountable for decommissioning the portion of the project abandoned in the Township if “salvage value” does not inspire the leaser to restore the project site. The entire section in the DGEIS pertaining to “Abandonment and Decommissioning” within the Town of Italy is currently unacceptable. A joint meeting with Italy Town Officials and the Project sponsor should be arranged to discuss suitable decommissioning standards before any approvals are given to the DGEIS. The results of this section should be included in a new DGEIS and presented for appropriate review and comment.

Response:

As stated above, Ecogen will prepare a “Decommissioning and Restoration Plan” after final site selection and prior to construction. The Plan will include: anticipated life of the project; estimated decommissioning cost in current dollars; method of and schedule for updating the costs of decommissioning and restoration; method of ensuring that funds will be available for decommissioning and restoration; and, anticipated manner in which the project will be decommissioned and the site restored. The plan will be approved by SCIDA.

THRESHOLDS THAT WOULD TRIGGER DECOMMISSIONING

04 Comment:
#078, June 11, 2005 Advocates for Prattsburgh

The comment is summarized by stating that the DGEIS does not include a specific decommissioning process or guidelines (thresholds) when decommissioning would be required (based on length of time WTG are not operational).

Response:

See response to Comment 03 above.
BONDING

05  Comment:
    #078, June 11, 2005    Advocates for Prattsburgh

    The comment can be summarized with the suggestion that a trust/bond be set up by
    Ecogen to ensure that there will be financial support for such decommissioning.

    Response:

    See response to Comment 03 above.

RECOMMISSIONING

06  Comment:
    #078, June 11, 2005    Advocates for Prattsburgh

    The comment can be summarized by stating that the author suggests that if the WTG are
    to be replaced, they should be replaced via comparable turbines with no increased
    negative impacts.

    Response:

    Comment acknowledged. In the unlikely event that the WTG are replaced with newer
    models, the same site criteria established in this GEIS would apply. If any of the
    thresholds in the Finding Statement are exceeded, an additional evaluation in accordance
    with SEQR Part 617.10(d) will take place.
C.3.17 Mandated FAA Lighting

LIGHT POLLUTION

01 Comments:
#066, June 13, 2005 Brenda Bemchuk and Jeffrey Smock
#076, June 14, 2005 Nancy and Carl Wahlstrom
#078, June 11, 2005 Advocates for Prattsburgh
#097, June 14, 2005 Dave and Brenda Cooley
#101, June 17, 2005 Bond, Schoeneck and King
#103, June 15, 2005 Richard Marx

Comments are summarized by stating that light pollution from the anti-collision lights would adversely affect quality of life and property values. Respondents were also against having to take any personal mitigation measures such as installing blinds/shades when they do not need them now. Mitigation suggested includes synchronized strobe lights, no daytime/dual lighting of the nacelles and installing warning lights on every other nacelle or one every ½ mile, whichever results in less impact. A comment questioned the veracity on page 3-148 of the three-mile limit of visibility of the original red lighting and requested analysis to support the conclusion.

Response:

SCIDA acknowledges that this is an unavoidable visual impact to the night sky. Until relatively recently, FAA regulations stipulated that the anti-collision lights placed on WTG be red or white and be either steady or flashing. This is for the safety of small aircraft. The original guidelines were designed when WTG were less than 200 feet tall and had not been organized into wind farms. As a result of the anticipated FAA rule change, the following actions may now be taken by Ecogen:

- Anti-collision lights may be placed on the periphery of the wind farm clusters with the interior unlit. Pilots are to treat the entire wind farm as one obstruction and go around rather than over or through it. Gaps for unlit turbines must be no larger than ½ mile around the perimeter of the project. Therefore, approximately one-half of the 53 WTG will be furnished with anti-collision lights to mitigate visual impacts at night.
- Red strobe lights will now be permitted. Red steady lights are to be discontinued due to lack of effectiveness and safety. The strobe lights will be less intrusive to residents than the traditional flashing lights. There will only be one strobe light required as opposed to two steady/flashing lights previously required. The strobe lights will not be active in the daytime unless conditions warrant it. In addition, the presence of the meteorological tower and associated anti-collision lights will also aid in pilot safety. The strobe lights will flash simultaneously, last for 100 to 2,000 milliseconds and flash 20 to 40 times per minute. These strobe effects will not be perceptible to the human eye.
**BIRD IMPACT**

**02 Comments:**

#009, May 2, 2005  Kestrel Haven
#106, June 17, 2005  USFWS

The comment is summarized by stating that steady or flashing lights are most dangerous to migratory birds, especially during inclement weather conditions. The comments questioned the need for the standard lighting when strobe lights mitigate the problem and are acceptable to the FAA.

**Response:**

Please see the response to Comment #01. With the anticipated FAA ruling, the WTG used by Ecogen will have red strobe lights. The reason the red strobe lights are preferred is that the light filament goes completely dark during each flash cycle. The residual glow of flashing incandescent light has a propensity to attract night migrating birds. In essence, migrating birds will not use the red strobe lights as a navigation aid. This will reduce attraction to migrating birds.

**C.3.18 Obstruction of FCC Regulated Signals**

**DISRUPTION OF SERVICE**

**01 Comments:**

#031, May 23, 2005  Kathleen C. D’Ambra
#076, June 14, 2005  Nancy and Carl Wahlstrom
#099, June 17, 2005  Sue Sliwinski
#101, June 17, 2005  Bond, Schoeneck and King
#103, June 15, 2005  Richard Marx

These comments are summarized by stating that the authors are concerned with the potential that there will be a disruption of service for television, satellite and cell and/or telephone reception. Marx feels that mitigation is required for the potential adverse impact. Additional comments focus on the lack of surveys and mitigation done for television as opposed to the microwave analysis that was completed. Mitigation for the five WTG sites that will impact microwave transmissions is also requested.

**Response:**

Comsearch was retained to perform two studies within the project area. One study, *Off-Air TV Reception Analysis at the URS Proposed Win Farm Turbine Facility (ECOGEN) at Prattsburgh/Italy, NY*, identified all the off-air television stations within a 100-mile radius of the subject area. The study examined the coverage of the TV stations as well as the communities that may be affected by degraded TV signals. Based on the information obtained thought that study, Comsearch then performed a *TV Broadcast Off-Air Reception Measurement Report*, which established baseline characteristics for the
reception of each Off-Air TV Channel within the project area. This report is provided as Appendix W in this FGEIS.

It is possible that in some instances television interference could occur as a result of project operation. If future complaints relative to degraded television reception due to project operation arise, the project developer will investigate such complaints and address any such problem resulting from such operation. Mitigation actions could include adjusting existing receiving antennae's, install community step up signal antenna and related equipment, providing cable (if available), satellite reception, or other measures to the affected households who were utilizing a household antenna for their broadcast television reception needs as of the date of the FGEIS.

The low number of cell towers limits cellular reception within the project area. Landline telephone connections are not effected by vertical obstructions such as a WTG.

MITIGATION

02 Comment:

#078, June 11, 2005 Advocates for Prattsburgh

The comment indicates a concern for the lack of mitigation of potential interferrance of communication signals.

As stated in the DGEIS “The FCC prohibits the operation of devices (including wind turbines) that cause harmful radio interference.” Ecogen would be required to comply with these regulations upon notice by the FCC that one or more of the WTGs caused harmful interference to authorized users.

In the Determinations and Proposed Mitigation section of the DGEIS, it says that 22-microwave paths intersect the Project area and that five WTGs within four microwave path areas have the potential for microwave path interference. A table is also provided Table 3.18-1.

The document says, “Based on Comsearch’s analysis, Ecogen will, IF POSSIBLE, avoid siting WTG 17, 51, 52, 55, and 84.” THIS IS NOT MITIGATION!!!!

This statement is unclear making it sound like Ecogen is saying they will spend the money to erect the WTGs and then render them powerless if they interfere with signals as mandated by the FCC.

MITIGATION IS: ELIMINATING THE SITES BEFORE CONSTRUCTION BECAUSE THEY HAVE ALREADY BEEN ADVISED THERE IS A POTENTIAL PROBLEM.

The DGEIS then says, “In the event that WTG will need to be sited in the future, Ecogen will engage Comsearch to undertake a detailed interference study which would consider vertical height clearance objectives.” This statement is confusing and unclear because it sounds as if this has not already been done.
COMMENTS: During the permitting phase of wind power plants, developers routinely say television reception is not affected by wind turbines. Just as routinely, nearby residents complain of the problem once the turbines are built. (The exceptions, I should add, are the landowners leasing lands for the turbines.)

The developer and operator of the Top of Iowa Wind Farm announced that it would offer free cable TV service to 145 residents in and around the project near Mason City, Iowa, because of signal interference created by the towers and whirling generator blades.

During a ceremony at which the Secretary of Pennsylvania’s Department of Environmental Protection handed a permit to the British developer of the Waymarl wind power plant, the company’s representative affirmed that there is evidence turbines can interfere with radio and television reception.

Satellite service could also be affected. Here are two excerpts from an environmental impact statement for a wind power project in Kittitas Valley, WA:

Other potential forms of television interference generated during turbine operations are signal reflection (ghosting) and signal blocking caused by the relative locations of the turbine structures and the receiving antenna with respect to the incoming television signal. Television signals that operate at higher frequencies, such as satellite receivers, are not affected by corona-generated television interference. However, because they are line-of-sight systems, physical interference from the turbine towers or blades is a possibility.

Based on a turbine blade radius of approximately 130 feet, the study concluded that 12 proposed turbines could potentially obstruct five existing microwave paths in the project area.

Ecogen offers no mitigation for interference.

There is no mention of interruption of cell phone service. Many of the Prattsburgh taxpayers use their cell phones as their primary form of communication. This is a health and safety issue if the signal is disrupted. An emergency situation could be life threatening if cell phone use was interrupted or unavailable because of WTG turbine interference. There is no proposed mitigation.

This section of the DGEIS is confusing and misleading and does not clearly specify mitigation measures for radio, TV, satellite or cell phone interference. It does not conform to SEQR guidelines.

**Response:**

There is no evidence that WTGs affect cell phone service or coverage areas. At the Fenner Wind NY Wind Farm, service technicians regularly use their cell phone while troubleshooting and servicing WTGs. Further, it is anticipated that the project sponsor would work with a local cell phone company in order to improve the service in the area for their own communication needs.
However, Ecogen contracted with Comsearch to perform a Television Reception Ground Survey of the subject area (Appendix W). The study determined the signal strength of the 12 major television stations that service the subject area prior to construction of the WTG. Based on the results of the survey, there is poor or marginal TV service currently within the project area. This is confirmed by the presence of satellite and cable service in the area. According to Comsearch, just within Prattsburgh 60% of the homes have satellite dishes and 20% have off-air antennas.

The project sponsor will locate more precisely [direction and elevation] the microwave path(s) in the area of the potential WTG Nos. 17, 51, 52, 55 and 84. The WTG in this area will be sited to avoid microwave interference by maintaining existing point to point transmission paths. As such Ecogen will prepare a “Micro Wave Transmission Study” after final site selection and prior to construction. The analysis will demonstrate to SCIDA that the WTG’s are situated so as not to interfere with point to point transmission of microwave signals.

03 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

Page 3-151 states that Ecogen will, if possible, avoid siting five turbines in the microwave paths identified. Relocation or elimination of these turbine sites should be a firm commitment.

Response:

As stated above, the project sponsor will locate more [precisely direction and elevation] the microwave path(s) to avoid WTG microwave interference by maintaining existing point to point transmission paths.

C.3.19 Land Title

EMINENT DOMAIN

01 Comment:
#078, June 11, 2005 Advocates for Prattsburgh

The comment is summarized as stating that eminent domain should not be used in order to acquire wind farm parcels nor should it be used as a tool for mitigation. Eminent domain should not be used for private gain. Should eminent domain be used, a SEQR should be triggered as seizing property can have a negative effect on the socioeconomics and character of an area.

Response:

Eminent domain will not be utilized to acquire land parcels.
COVENANTS PROHIBITING INDUSTRIAL/COMMERCIAL DEVELOPMENT

02  Comments:
    #076, June 14, 2005   Nancy and Carl Walstrom
    #078, June 11, 2005   Advocates for Prattsburgh

The comments are summarized as stating that there are covenants attached to property deeds that prohibit commercial or industrial development, similar to the covenants included in Clarkson University properties. It was noted that construction could only take place on lands having marketable title, which Ecogen needs to ascertain using title searches for subject properties.

Response:

As detailed in section 3.19 in the DGEIS, title searches will be conducted prior to construction. If these title searches yield deed restrictions, Ecogen will address these restrictions via methods ranging from agreements between the landowner and original seller, to moving project components to a property with marketable value. The project will not place any commercial uses on a property restricted from such use.

HISTORICAL VALUE

03  Comment:
    #066, June 13, 2005   Brenda Bemchuk and Jeffrey Smock

The comment is summarized as stating that the above homeowners reside in a residence that is NRHP eligible.

Response:

Comment acknowledged.

C.3.20  Solid Waste Management

There were no public or agency comments on the Solid Waste Management section of the DGEIS.
C.3.21 Miscellaneous

TOWN OF ITALY OPPOSITION

01 Comments:
#028, May 23, 2005 Vincent G. Johnson
PH#21, May 23, 2005 Bob Radell
PH#48, May 23, 2005 David Ferry (Italy Zoning Commission)

The comments are summarized as stating that:

- The Town of Italy opposes the SCIDA as Lead Agency for the project as the IDA has no jurisdiction in Yates County.
- There is a moratorium in place in the Town of Italy pending adoption of a zoning code.
- In three public hearings, the overwhelming majority of the citizens have spoken out against the project.

A commenter states that the only way that the Town of Italy would find the project acceptable would be if the substation and required underground connections were located within the town while no Wind Turbines would ever be erected within the town’s borders.

Response:

Even though the SCIDA was named the Lead Agency in the DGEIS, the Yates County Industrial Development Agency was listed in Section 1.7.3.5 of the DGEIS as “having some level of review or approval authority over the Project”. Additionally, none of the involved parties objected to SCIDA’s Lead Agency role within the 30-day period for determining Lead Agency. The Town of Italy was listed as an interested agency, not an involved agency, since at the time the Town of Italy did not possess any regulatory capabilities in the form of zoning. SCIDA, while acting as Lead Agency, is responsible for coordinating the SEQR review. However, SCIDA’s “jurisdiction” is limited to inducing PILOT agreements for those towers located within Steuben County. In addition to the requirements set forth in the FGEIS and Findings Statement, Ecogen’s siting of towers in Yates County will be subject to agreements and approvals with Yates County agencies, including both Town and County entities.

The moratorium will not apply to the Project until Ecogen applies for local permits. The Project will comply with future applicable Town land use regulations. However, the extent of the applicability of these regulations cannot be determined until those regulations are prepared and adopted by the Town. If the Town of Italy enacts zoning regulations that are more restrictive than the Findings Statement, Ecogen will be required to follow the more restrictive regulations.

Local public opinion, both positive and negative, about the Project presented at the public hearings has been recognized by the SCIDA.
02 Comment:
#082, June 15, 2005 Town of Italy

After referring to article 18-A of the Gen. Mun. Law § 895(I), entitled “Steuben County Industrial Development Agency,” and Article 18A of the Gen. Mun. Law § 858(4), entitled “Purposes and power of the agency,” the Town of Italy questions the authority of the IDA to force an unwanted project upon the Town of Italy. The Italy portion of the Project proposal (as written) is not contained in Steuben County. Italy is located in Yates County and outside the jurisdiction of the SCIDA. Consent was never granted to the SCIDA by the Town of Italy to represent our town, and the Italy Town Board formally asks that, due to the many issues mentioned, the portion of Ecogen’s Windfarm Prattsburgh/Italy within the borders of the Township be rejected in its entirety.

Response:

The SCIDA is the best candidate to assume Lead Agency. Neither the Town of Italy nor the Town of Prattsburgh had zoning at the time of the submission of the Project, and therefore lacked discretionary approvals subject to SEQR. The SCIDA is best suited for Lead Agency because of its role in providing funding for the project (approval of PILOT) and is therefore Lead Agency. Even though the SCIDA was named the Lead Agency in the DGEIS, the Yates County Industrial Development Agency was listed in Section 1.7.3.5 of the DGEIS as “having some level of review or approval authority over the Project”. Additionally, none of the involved parties objected to SCIDA’s Lead Agency role within the 30-day period for determining Lead Agency. The Town of Italy was listed as an interested agency, not an involved agency, since at the time the Town of Italy did not possess any regulatory capabilities in the form of zoning. SCIDA, while acting as Lead Agency, is responsible for coordinating the SEQR review. However, SCIDA’s “jurisdiction” is limited to inducing PILOT agreements for those towers located within Steuben County. Ecogen’s siting of towers in Yates County will be subject to agreements and approvals with Yates County agencies, including both Town and County entities.

LIABILITY

03 Comments:
#025, May 20, 2005 Thomas C. Johns
#043, June 10, 2005 Thomas C. Johns
PH#31, May 23, 2005 Bill Curley

Who assumes liability in the event of ice throws, falldown zones and power lines? Some information says that the landowners leasing the property are ultimately responsible, which means that they can be sued for blade throw or visual nuisance.

Response:

Comment acknowledged. Liability issues are outside the purview of the SEQR process; however they will be addressed in the leases with Ecogen. The Project sponsor shall maintain and pay for (i) general liability insurance with limits of not less than $1,000,000
per occurrence and $2,000,000 aggregate and (ii) excess liability insurance with a limit of not less than $5,000,000 in the aggregate, in each case for injury to any person and for damage to property.

SEQR COMPLIANCE

04 Comments:
#071, June 13, 2005 Ruthie Matilsky
#078, June 11, 2005 Advocates for Prattsburgh

In order to comply with SEQR, Ecogen must study areas that already have turbines built in order to study the impact on local roads and vehicles.

The siting recommendation of the interested agencies’ pre-DGEIS reviews were not consistently applied. The siting criteria was “no specific siting criteria or thresholds” in approximately 25 out of 32 Finding Statements. In addition, due to noncompliance with SEQR 617.10(d), insufficient detail and the lack of information, a subsequent SEQR process/compliance is requested.

As substantive responses by interested agencies and parties to criteria cannot be given if turbine specifications are vague and manufacturer’s specifications are not included in the DGEIS. The siting criteria, mitigation, and Findings Statement do not reflect the WTG differences in rotor diameter.

Response:

Because the post-construction traffic would consist of operation and maintenance crews servicing the WTG on an “as-needed” basis, it was determined through scoping that a traffic impact study was not warranted. However, to compensate the local Towns for maintenance from the use of roads by several light maintenance trucks, Ecogen will provide both Towns a road maintenance mitigation fund. This is discussed in more detail in Part C, Section C.3.11 of this report.

To clarify, Executive Summary, Conclusions-Recommended Criteria/Thresholds/Conditions refers to the Siting Criteria/Thresholds found in Table ES-1 to be considered for inclusion in the FGEIS and Findings Statement. Siting Criteria/Thresholds were not applied for 25 of the 32 statements because impacts in these circumstances could not be addressed through setback or threshold standards. In these cases the Table identified Mitigation Measures/Conditions for inclusion in the FGEIS/Findings Statement. The FGEIS/Finding Statement released by the Lead Agency will establish the final Siting Criteria/Thresholds as well as Mitigation Measures/Conditions for Approval for the WTG.

While the DGEIS listed two rotor diameters, 70.5 meters and 77 meters, the larger diameter was used in all of the calculations as a worst-case scenario. The purpose of a Generic EIS is to establish the criteria by which the specifics will be created. Those specifics will be determined by the Lead Agency (SCIDA) when site plans and applications are submitted. The Lead Agency will be able to determine if the thresholds or criteria are exceeded and will be able to require a supplemental SEQR review at that
time, as per 617.10 (c) and (d). Several assessments will be required as part of the final design package and have been identified throughout the FGEIS.

05 Comment:
#079, June 15, 2005       Arthur Giacalone

Whether or not SCIDA reluctantly assumed the role as Lead Agency for the Ecogen project, its Board of Directors must unequivocally embrace the agency’s role as “steward” of the air, water, and living resources, fully aware of its obligation “to protect the environment for the use and enjoyment of this and all further generations.” 6 NYCRR 617.1(b).

Response:

Comment acknowledged. SCIDA fully intends to follow the spirit and the letter of 6 NYCRR 617.

06 Comment:
#079, June 15, 2005       Arthur Giacalone

Given the Town of Prattsburgh’s decision to relinquish any control over the proposed action by refusing requests to adopt a comprehensive plan and zoning law, SCIDA, as Lead Agency, must act as the conscience of the community, adopting strict standards and criteria for assessing the potential impacts of the proposed wind farm, and, if the financial assistance package were to be approved, the construction and operation of the proposed project.

Response:

The purpose of the GEIS is to establish standards and thresholds while documenting the potential impacts to the Project site. The GEIS must also contain mitigations to potential problems and determine ways to minimize any adverse impact to the affected community to the maximum extent practicable. SCIDA will comply with all sections of 6 NYCRR Part 617. SEQR does not change the jurisdiction of and between public agencies. Being Lead Agency does not empower SCIDA to overrule or determine the land-use regulatory policies of individual towns. SCIDA will meet its statutory obligations under SEQR but is not in the role of a “super-planning agency” to impose a land use program on the Town of Prattsburgh.

07 Comment:
#079, June 15, 2005       Arthur Giacalone

The “Anticipated SEQR Chronology” found at Table 1.7-1, at p. 1-13 of the DGEIS, includes as an action/activity, “Submit Final EIS to Lead Agency.” It is unclear whether this phraseology is meant to imply that the applicant, Ecogen, will prepare and submit the FEIS to SCIDA. Given the fact that the most important component of an FEIS is “the Lead Agency’s response to all substantive comments” on the DEIS, it would be irresponsible of SCIDA to allow the applicant to prepare the FEIS and provide responses to the comments raised by the public and other agencies. The SCIDA Board of Directors,
as Lead Agency, must exercise its critical judgment on all issues presented in the DEIS, and may not delegate its responsibilities or abandon its role as ultimate decision-maker on matters of environmental significance.

Response:

SCIDA, its consulting engineer and the applicant’s consulting engineer have worked together to prepare the draft of the FGEIS as is consistent with SEQR guidelines. However, the GEIS is the responsibility of SCIDA, not Ecogen. The phrase “Submit Final EIS to Lead Agency” refers to the formal presentation of the document to SCIDA for adoption. Once the final submittal is completed, a notice is sent out notifying the public of the FGEIS and a Findings Statement is then issued.

08 Comment:

#079, June 15, 2005 Arthur Giacalone

SCIDA may not approve a financial assistance package for Ecogen’s project “until it has complied with the provisions of SEQR.” 6 NYCRR 617.3(a). The requirement of SEQR will not have been complied with unless and until the Lead Agency conducts an adequate environmental review to allow it to determine the proper location of the 53 units, related electrical collection system and substation. If SCIDA relinquishes responsibility for determining the site-specific adverse impacts to other agencies, it will have improperly delegated its duties and responsibilities under SEQR.

Response:

The SCIDA has not relinquished any responsibility for the determination of thresholds and siting criteria. Final siting will be a result of the criteria set forth in the DGEIS as well as the environmental review for the 53 final sites. These criteria will be established within the Findings Statement that will be released by the Lead Agency (SCIDA). Those specifics will be determined by the Lead Agency (SCIDA) when site plans and applications are submitted. The Lead Agency will be able to determine if the Siting Criteria/Thresholds as well as Mitigation Measures/Conditions of Approval are met and, as appropriate, will be able to require a supplemental SEQR review at that time, as per 617.10 (c) and (d).

09 Comment:

#079, June 15, 2005 Arthur Giacalone

The implication at pages ES-2 and ES-3 (p. 19 &20 of 256) and page 1-14 of the DGEIS (p. 58 of 256) that the criteria established in the Findings Statement would be treated as “preset thresholds” or a “practical” or “effective tool” for assessing the impacts for individual WTG locations that could be disregarded in the future, and would not hold the status of mandatory requirements, violates the letter and spirit of SEQR. Pursuant to 6 NYCRR 617.10(c), “Generic EIS’s and their findings should set forth specific conditions or criteria under which future actions will be undertaken or approved, including requirements for any subsequent SEQR compliance.” Additionally, 6 NYCRR 617.11(d) requires a Lead Agency to certify in its Findings Statement that “adverse environmental impacts will be avoided or minimized to the maximum extent practicable by
incorporating as conditions to the decision those mitigative measures that were identified as practicable.” In light of these provisions, as well as the intent of the SEQR review process, the criteria, setback requirements, etc. established in SCIDA’s Findings Statement must be attached as conditions to any resolution approving a financial assistance package for the Ecogen project, and must be treated as mandatory requirements that have to be complied with at all 53 wind turbine sites.

Response:

Comment acknowledged. Consistency with the of Findings Statement will be determined by the Lead Agency (SCIDA) when site plans and applications are submitted. The Lead Agency will be able to determine if the Siting Criteria/Thresholds as well as Mitigation Measures/Conditions of Approval are met and will be able to require a supplemental SEQR review, if appropriate, at that time, as per 617.10 (c) and (d).

In order to mitigate the additional inspection costs that may be required for each town to oversee construction issues related to SEQR compliance, Ecogen will provide a fund of $30,000 to cover these costs. The $30,000 will be divided between the municipalities based on the number of turbines built for each town.

10 Comment:

#079, June 15, 2005 Arthur Giacalone

The impropriety of treating decisions regarding the precise location of the 53 wind turbine sites as “future actions” that may not need to comply with the criteria and requirements set for in SCIDA’s Findings Statement, and that may be addressed in the future through the Supplemental EIS process, is underscored by the reality that there may be no “discretionary decision” triggering the SEQR review process for many, if not all, of the individual sites:

- SCIDA assumed the Lead Agency role for the Ecogen wind farm project because, purportedly, no other state or local agency has a discretionary decision to make triggering the SEQR review process.
- As SCIDA is well aware, the Town of Prattsburgh has no zoning ordinance or site plan review process to apply to the siting of individual wind turbine sites.
- Pursuant to 6 NYCRR Sec. 617.5(c)(19), “official acts of a ministerial nature involving no exercise of discretion, including building permits, where issuance is predicated solely on the applicant’s compliance or noncompliance with relevant local building codes,” are Type II actions not subject to SEQR review.
- Even if one were to construe an application for a building permit to construct a wind turbine as “discretionary” decision triggering SEQRA, the NYS Department of State, in an advisory opinion dated November 2, 2004, concluded that neither the Building Code of New York State (BCNYS), not the Uniform Fire Prevention and Building Code (UFPBC), applies to the installation of a remote wind power generator.
- Given the nature of the proposed project, and Ecogen’s financially motivated and regulation-driven goal of constructing and operating a wind power project that generates approximately 79.5 megawatts of electricity, Ecogen is unlikely to apply to any community for permission to construct “a unit” within its jurisdiction. Ecogen’s plan is to construct and operate the entire 53-WTG project, and nothing less.
Response:

SCIDA acknowledges that, as stated in the DGEIS “Project Description,” the project is to construct a 53-WTG, 79.5 MW project. Upon completion of GEIS process, Ecogen will be required to submit to the Lead Agency final siting plans, including discretionary permits and/or regulatory approvals. At that time, SCIDA will need to make an independent evaluation to determine whether the DGEIS/FGEIS adequately assesses the potential adverse environmental impacts from the project. If impacts have been adequately addressed, no further SEQR review will be necessary. If impacts have not been adequately addressed due to site-specific issues, the Lead Agency will require a supplemental SEQR review before the PILOT agreement is executed. The Lead Agency’s responsibility will carry over to involved agencies through proper notification whether a supplemental GEIS is required or not.

INAPPROPRIATENESS OF A GENERIC DEIS

11 Comments:

#101, June 17, 2005 Bond, Schoeneck and King
PH#31, May 23, 2005 Nancy Wahlstrom

The comment is summarized as stating that the generic DEIS is not an appropriate tool to evaluate impacts from Ecogen’s proposed Project and only highlights the incompleteness of the environmental impact evaluation performed by Ecogen and its consultants. Ecogen’s use of the DGEIS tool for this Project runs counter to the Legislature’s intent and fails to incorporate environmental considerations into the Lead Agency’s decision making process at the earliest possible time. The commenter continues by stating that a number of studies have not been performed or completed such that impacts have either not been identified or were inadequately identified and that Ecogen is attempting to bypass the comprehensive review that SEQR regulations require.

Response:

In a letter to SCIDA dated April 29, 2004, NYSDEC indicated that a generic environmental impact assessment would be “in accordance with the criteria set forth in 6 NYCRR Part 617.10(a). The proposed wind farm will be spread out over several thousand acres but the individual turbine sites typically cover less than one acre (not including access road or access to the power collection grid. Therefore, it would meet the criteria of Part 617.10(a)(1) ‘A number of separate actions in a given geographic area which, if considered singly, may have minor impacts, but if considered together may have significant impacts.’”

In addition, a GEIS contains specific conditions or criteria under which future actions will be undertaken or approved, including requirements for any subsequent SEQR compliance such as setting conditions, criteria, thresholds and mitigation measures for future site selection and construction, all in accordance with Part 617.10(c). As stated previously, SCIDA acknowledges that the project is to construct a 53-WTG, 79.5 MW project. Upon completion of GEIS process, Ecogen will be required to submit to the Lead Agency final siting plans, including discretionary permits and/or regulatory
approvals. At that time, the SCIDA Board will need to make an independent evaluation to determine whether the DGEIS/FGEIS adequately assesses the potential adverse environmental impacts from the project. If impacts have been adequately addressed, no further SEQR review will be necessary. If impacts have not been adequately addressed due to site-specific issues, the Lead Agency will require a supplemental SEQR review before the PILOT agreement is executed. The Lead Agency’s responsibility will carry over to involved agencies through proper notification whether a supplemental GEIS is required or not.

Additional studies are being conducted in order to further assess the impacts that the WTG may have on the surrounding populace. Ecogen is in no way attempting to bypass State law and will fully comply with any regulation.

12 Comment:
#082, June 15, 2005 Town of Italy

Further complicating review of the Project’s impact in the Town of Italy is the lack of specific tower locations. Due to the nature of the GEIS, specific tower locations are not disclosed in this project area. The Town of Italy cannot fully assess the impact this project will have on the town without knowing the exact number of turbines being proposed in the Town of Italy and the exact location of each tower. The collective siting concerns stated above constitute grounds for an in-depth supplemental EIS to study and resolve (effectively mitigate) these significant potential negative impacts including increased set back and/or alternate site location(s) recommendations. The Town of Italy therefore requests this Supplemental EIS review, based upon specific Wind turbine Tower siting, to address these concerns.

Response:

Final siting will occur with the criteria and thresholds, mitigation measures, conditions for approval established in the FGEIS. Until the FGEIS is released, the final sites cannot be determined. Until the FGEIS and Findings Statement are complete, the siting criteria will not be finalized. Once the siting criteria are finalized, sites will be selected. Pending final site selection, specific site plans and discretionary permit applications will be prepared. Therefore, it cannot be determined if a supplement SEQR review to the FGEIS will be necessary until site specific plans are reviewed against the criteria and thresholds in the Findings Statement.

Also refer to response to comment #11.

13 Comment:
#079, June 15, 2005 Arthur Giacalone

The DGEIS, in attempting to justify use of a generic EIS format, is misidentifying and obfuscating the “action” under consideration by SCIDA. To treat each separate turbine site as a separate “action,” simply because the precise location of each site has not yet been identified, constitutes segmentation and is contrary to the intent of SEQR. We are not dealing with some hypothetical or theoretical “future actions” that may or may not be undertaken at some point, but a real project for which the only present “discretionary”
approval under consideration belongs to SCIDA. The project and physical activity described in Ecogen’s October 17, 2003 application for financial assistance from SCIDA and its FEAF constitute the “action” under SEQR. The “approval” or “discretionary decision” that triggers the need for compliance with SEQR is SCIDA’s decision whether to grant or deny the financial assistance requested by Ecogen. The Ecogen project must not be treated as 53 “separate actions,” one for each turbine site, as implied in the DGEIS at p. 1-14.

Response:

According to correspondence with NYSDEC available in Appendix A and upon consulting 6 NYCRR 617.10 (a)(1), a Generic EIS is an acceptable to be used. Each WTG is not treated as a separate “action,” rather the entire project is the “action” which will create impacts that will need to be mitigated when cumulatively assessed. The 53 final sites are in close enough proximity that they will have one cumulative impact as well as 53 individual impacts. Assessing the overall impact is what the DGEIS is required to do.

While SCIDA is acting in the capacity of Lead Agency, it does not possess the sole approval under SEQR. As mentioned in the DGEIS on pages 1-16 through 1-18, the following additional agencies possess either a level of review over the Project, or approval authority:

- Federal Aviation Administration
- Army Corps of Engineers
- U.S. Department of the Interior: Fish and Wildlife Service
- New York State Department of Transportation
- New York State Department of Environmental Conservation
- New York State Office of Parks, Recreation and Historic Preservation: State Historic Preservation Office
- New York State Department of Agriculture and Markets
- Yates County Industrial Development Agency
- Yates County Department of Public Works
- Steuben County Industrial Development Agency
- Steuben County Department of Public Works
- Town of Italy
- Town of Italy Highway Department
- Town of Prattsburgh
- Town of Prattsburgh Highway Department

14 Comment:
#079, June 15, 2005      Arthur Giacalone

It would be inappropriate for SCIDA to make its decision whether or not to provide financial assistance to the project without first deciding the location of the 53 units. Unless and until SCIDA specifies the precise properties to be acquired by it or under its jurisdiction or control or supervision to which tax exemptions would apply, any resolution approving the financial assistance package would fail to adequately identify
the “project,” as that term is used in the State’s General Municipal Law at § 854(4) & (14), § 859-a, § 874, etc.

Response:

As stated previously, SCIDA acknowledges that the project is to construct a 53-WTG, 79.5 MW project. Upon completion of GEIS process, Ecogen will be required to submit to the Lead Agency final siting plans, including discretionary permits and/or regulatory approvals. At that time, the SCIDA will need to make an independent evaluation to determine whether the DGEIS/FGEIS adequately assesses the potential adverse environmental impacts from the project. If impacts have been adequately addressed, no further SEQR review will be necessary. If impacts have not been adequately addressed, due to site-specific issues, the Lead Agency will require a supplemental SEQR review before the PILOT agreement is executed. The Lead Agency’s responsibility will carry over to involved agencies through proper notification whether a supplemental GEIS is required or not. This process is consistent with SEQR and the State’s General Municipal Law.

SCIDA will not be making a decision whether or not to provide financial assistance to the project until the turbine locations have been established pursuant to the FGEIS and related findings statement.

15 Comment:
#079, June 15, 2005 Arthur Giacalone

To the extent that comments received by SCIDA from the public, its own consultant(s), and/or the other involved and interested agencies reveal the failure to adequately address any one or more potential significant adverse environmental impacts, and/or any other significant deficiency in the DGEIS, SCIDA, as Lead Agency, must insist that the applicant provide a Supplemental DGEIS that provides the omitted information and analyses and otherwise rectifies the current DGEIS deficiencies. Unless and until such additional information and analyses are provided by the applicant, and then made available to the public for review and comment, the public will not have had an adequate opportunity to assess and comment on the DGEIS.

Response:

Additional information requested or generated as a result of any public comments received about the DGEIS will be released as part of the FGEIS. Public comments, questions and concerns will be addressed and additional studies will be included in order to refine the siting criteria and thresholds necessary to establish the final placement for the 53 sites.
INCOMPLETENESS OF DGEIS

16 Comment:
#101, June 17, 2005  Bond, Schoeneck and King

The comment is summarized as stating that the DGEIS as submitted was incomplete. Problems include inadequate surveys, wetland impacts, impacts with burying the ECS, impacts to surface waters, cultural resources, visual impacts, noise, and endangered species. The criteria for impact evaluation and thresholds for future action are not defined. The worst-case scenario of 99 WTG should also be applied to all surveys and methodologies, not just some.

Response:

The 99 WTG sites are potential places for the final location for the 53 actual WTGs. Ecogen has no intention of installing 99 WTG and using the 99 sites for all measurements such as land use and access roads is inappropriate. The “worst-case” scenarios using 99 sites regarding visual, noise and others are intended to establish thresholds and siting criteria that will lessen the impacts to the local residents. Assessing additional roads to service WTG above the 53 that will actually be installed or land that will not be claimed by more than 53 WTG and will not require mitigation or setbacks from the residents is unnecessary.

17 Comment:
#082, June 15, 2005  Town of Italy

Volume II Appendix A: Agency Correspondences should include all agency correspondences as they relate to this project. Neither SCIDA, Interested Parties, Involved Agencies or the general public can fully review and comment on this project without full disclosure. The omission of the above-referenced correspondence (NYSDEC to SCIDA 5/19/04) as well as the omission of numerous other correspondences (the Town of Italy was copied on during this process) shows a lack of disclosure and transparency. In light of these known omissions the Town of Italy officially requests that Volume II Section A be rejected in its current form. Italy asks that the SCIDA insist that Ecogen produce a full and a comprehensive listing of all agency correspondence for proper review. Italy asks that in addition to Ecogen and SCIDA’s own full disclosure, a FOIL request be submitted to any and all involved and interested governmental agencies, as well. According to FOIL, emails would fall under this umbrella and should be included as well.

Response:

SCIDA has provided copies of correspondence that has occurred between SCIDA, the public, the applicant, and agencies as well as any correspondence to which SCIDA was copied. FOIL responses between the applicant and the respective agency are the responsibility of the respective agencies.
COST-BENEFIT ANALYSIS

18  Comment:
#071, June 13, 2005   Ruthie Matilsky

Ecogen has not stated how much emissions will decrease from the project. Since the project will be run with tax dollars, a serious cost-benefit analysis needs to be done.

Response:

The Project will be constructed with private financing. The overall economics and environmental benefits of, including renewable sources such as wind in New York, are evaluated in The Public Service Commission’s FGEIS entitled, Case 03-E-0188- Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard which is referenced hereto and incorporated herein.

Emissions across the state are being reduced in the form of coal-fired power stations being shut down over the next several years. Several coal-fired power plants have been targeted for shutdown in order to comply with the new, more stringent NYS clean air standards issued in 2005 that targets the six most polluting plants. This Project, along with other WTG developments, are intended to provide electricity to the state in lieu of these coal-fired power stations. Based on New York’s current energy production mix, each megawatt-hour of electricity production results in 1.5 pounds of NOx emissions, 3 pounds of SO2 emissions, and 882 pounds of CO2 annually (NYS Energy Research and Development Authority). Wind power produces zero emissions that are harmful to the environment. The Ecogen project can annually reduce New York’s emissions by 300,000 pounds of NOx emissions, 600,000 pounds of SO2 emissions, and 176,400,000 pounds of CO2 based on the planned 200,000 MWh generated by Ecogen.

PROOF-READING/SITE TOUR/EDITING/MAP CORRECTIONS

19  Comments:
#087, June 15, 2005   Martha Parker
#103, June 15, 2005   Richard Marx
#009, May 2, 2005     Kestrel Haven

The comments are summarized as stating that there are proofreading issues in the document (i.e. page 3-83) and that the site sketches are not easy to read. In addition, was a site inspection conducted in order to check how many low hanging wires cross the Naples main street?

On the maps, road names were misidentified. Town Line Road is misidentified as Wetmore Road on the following maps:

Fig 1.0-1 Preliminary Site Plan
Fig 1.5-1 Wind Resources
Fig 3.1-1 Digital Orthophoto and Tax Parcel
Fig 3.1-2 Land Use Classification
Response:

Comments acknowledged. The FGEIS will be subjected to an internal technical review (ITR), prior to its publication. Such ITRs include extensive proofreading.

An inspection of how many low hanging wires cross Naples’ main street was not conducted. At this time transportation routes are being evaluated and the revised routes do not use Main Street in the Village of Naples (see comments to Transportation Impacts). However, prior to transporting the WTG components, Ecogen will survey the proposed route and work with local utility providers to ensure that there will be no disruption of local utilities.

Comment:
#082, June 15, 2005 Town of Italy

The High-Tor Wildlife Management Area currently serves as the northwest boundary of the project, but it should be pointed out that many species who inhabit the High-Tor area have home ranges that far exceed the suggested two miles. It is, in fact, somewhat troubling to think that infringing on an animal’s home range seems to be more of a concern than infringing on the home range of Italy’s citizens. This clearly states that the developer has no intention of erecting towers anywhere near the High-Tor WMA. If this is in fact true, scaling back the project scope will not affect the integrity of the project. In light of this statement, the Town again formally requests that the project site be revised and a new map surveyed to reflect the new scale. This would make the Emerson Rd. corridor the boundary line of a new Project Map and not Brink Hill Road, Shay Road and Sliter Hill. This new map should then be resubmitted for inclusion and review in a new DGEIS.

Response:

The northern part of the project area in the Town of Italy has been eliminated from the study area. All Figures have been revised to reflect this change. The large study area was used to determine the best places for the WTG based on wind speed while trying to minimize the impact to the local residents. Avoidance of the High-Tor Wildlife Management Area is one of the mitigations used in order to reduce the impact that the project will have on the local wildlife living in the area. Utilizing setbacks, advanced machinery and careful siting are all designed to protect the citizens of the Towns of Italy and Prattsburgh.
INTERNAL DOCUMENT CONFLICTS

21  Comment:  
#011, May 9, 2005       Alice Sokolov

The comments are summarized as stating that there is internal continuity error: one section of the Project Description (#6) says that the project is a single phase while another (#7) says that it is a multiphase project with one phase starting in March 2005 and the other ending in December 2006.

In addition, the future alternatives are not detailed. If the number of turbines exceeds 53, it would cross a threshold and trigger an Article X [of the NYS Public Service Law], which is not mentioned. Transmission lines could also trigger an Article VII, which is also not mentioned.

Response:

The project will be a “single phase” development of 53 WTG. The reference in the EAF to “multiphase” was originally referring to two steps of construction: one step was for infrastructure and the other was for WTG construction. To clarify, there is no mention within the DGEIS of multiphase construction work.

Article X of the NYS Public Service Law was allowed to elapse and has not been reinstated. That article regulated power generation facilities over 80 MW. However, the Ecogen project will generate 79.5 MW of power using 53 WTG and will not exceed that limit.

Article VII of the NYS Public Service Law regulates the siting of major utility transmission facilities. These include electric transmission lines of either a capacity of 125 kV extending for one mile or more or a line between 100-125 kV extending more than 10 miles. There will be no major electric transmission lines of the type regulated by Article VII, including the electrical collection system for the Project. An existing 115 kV line runs through the Project area and will carry the electricity generated by the Project to the general bulk grid.

Viable alternatives are discussed in Section 4.2 of the DGEIS.

REFERENCING

22  Comment:  
#101, June 17, 2005       Bond, Schoeneck, and King

Comment states that two paragraphs in Section 3.5 Visual Impacts were taken verbatim from the Flat Rock Wind Power Project (FRWPP) Visual Impact Assessment. Pages 1-9 and 1-10 were also taken from the FRWPP Buried Cable Installation section. Page 3-79, also from FWP, needs to be cited.
Response:

The text, while used as a guide will be referenced.

RECEIPT OF RESPONSE

23 Comment:
PH#02, May 23, 2005 Vincent Johnson

Commenter requested confirmation that his written materials were received and responded to.

Response:

Comments were received May 23, 2005, assigned the response to Comment #028 and the relevant comments were responded to throughout the Response Section.

NOTIFICATION

24 Comment:
PH#28, May 23, 2005 Phyllis Hickey

The comment concerns the lack of public notification of meetings about the Ecogen Project.

Response:

Meeting notices were published in the Environmental Notice Bulletin and the local papers one month prior to the scheduled meetings. Based on the heavy attendance of those meetings, the community was clearly aware of the meetings.

STATE SUBSIDIES

25 Comments:
PH#19, May 23, 2005 Ruthie Matilski
PH#40, May 23, 2005 Jim Tronson
PH#46, May 23, 2005 Krystyna Lefler
PH#48, May 23, 2005 David Ferry (Italy Zoning Commission)

The comments state that Ecogen is receiving State subsidies and that is the only reason that this project is feasible. In addition, Ecogen will benefit from tax breaks such as lowered property taxes, accelerated depreciation, lease-lease back, production tax credits and renewable energy credits.
Response:

While many electricity generation projects benefit from governmental assistance, the Ecogen, LLC project will be funded solely through private resources. The WindFarm Prattsburgh developed through UPC Wind Partners, LLC and Global Winds Harvest, Inc. is receiving financial assistance from NYSERDA. The only assistance that Ecogen is receiving is through the Steuben County IDA and its PILOT property tax assistance program. PILOT reduces tax payments, but does not eliminate them. At the end of the PILOT period, the project will be paying taxes based on the full-assessed value of the project. The economic assistance package under consideration is no different from what would be offered to any other business looking to invest in Steuben County. As expected, the project sponsor has organized the structure of its private capital sources of equity and debt in order to most efficiently utilize the accelerated depreciation and the federal production tax credit (PTC). The PTC was recently reauthorized by Congress with significant bipartisan support and signed by the President as part of the recently passed Energy Bill. The NYS PSC has mandated a Renewable Portfolio Standard, which includes wind power projects. Any wind farm that meets the requirements of these programs is eligible to participate in both the RPS and the PTC. The legislation supporting the PTC and RPS were full vetted through the appropriate public political process. The state and federal government has structured programs and tax incentives to promote renewable energy projects (including wind farms) based on sound social, economic and environmental policy.
C.4 PROJECT ALTERNATIVES

ALTERNATIVE PROTOCOLS

01 Comments:
#101, June 17, 2005 Bond, Schoeneck and King
#106, June 17, 2005 USFWS

Discussion is lacking on the alternative of having larger, more powerful but fewer WTGs as opposed to the smaller, more numerous WTG that have been looked at in the DGEIS.

Alternative sites cannot be identified yet as final siting has not taken place.

There is no discussion indicating whether the various alternatives are considered feasible.

Response:
Comment acknowledged. The viable alternatives to the project have already been presented in the DGEIS. Using fewer but larger WTGs for the project was initially considered, but then discarded for the following reasons:

• The commercial availability of the larger WTG is limited as of the date of the FGEIS. The larger WTG have yet to be sold to projects within the United States.
• As a result of requiring an interconnection study to maintain the Independent System Operator (ISO) class year for operations by the project, the proposed project is limited to the 1.5 MW generators

Alternative siting would be the other 46 unused potential sites that will be reviewed.

Project alternatives are discussed in Section 4 of the DGEIS. All proposed alternatives are considered technically feasible unless stated otherwise in the text, however they are not preferable as they may pose greater burdens on the Project than the preferred alternative.

02 Comment:
#079, June 15, 2005 Arthur Giacalone

Although both the Final Written Scope and the DGEIS fail to mention it, SEQR regulations require that, “The description and evaluation of each alternative should be at a level of detail sufficient to permit a comparative assessment of alternatives discussed.” 6 NYCRR 617.9(b)(5)(v). It is clear from a reading of the discussion of “Project Alternatives,” found at p. 4-1 through 4-6 of the DGEIS, that the DGEIS does not provide description and analysis at a level of detail sufficient to allow the requisite “comparative assessment.” Analyses and comparisons are, at best, conclusory.
Response:

The SEQR requirement for a comparative assessment of the impacts of alternatives does not mean that each alternative must have a duplicative section of the DGEIS commensurate with the preferred project. The bulk of the DGEIS provides extensive detail regarding the potential impacts of preferred project. Section 4 of the DGEIS on Alternatives provides sufficient discussion of the limited alternatives available to meet the project goals of an economically viable project. As demonstrated in the DGEIS, the potential adverse impacts of the project are minimal and the discussion in Section 4 must be read in conjunction with the discussion of the potential impacts in Section 3. This provides sufficient information for SCIDA and the involved agencies to make a reasoned determination on the range of available alternatives.

03 Comment:
#079, June 15, 2005  Arthur Giacalone

Ecogen should be required to provide a dollar-and-cents analyses of how reducing the number of WTG’s without increasing their size would “negatively affect the economic feasibility of the Project.” At a minimum, SCIDA and the public should be provided sufficient information to allow a determination of whether the applicant is truly concerned with the project’s “economic feasibility” or its own profit margin.

Response:

Reducing the size of the project without increasing the size of the WTG reduces the energy generation capacity and consequently the ability to generate revenue. Regardless of how many towers, the permitting process and associated “soft” costs for consulting and other services will remain roughly the same with less income to offset the costs.

However, there is no absolute rational basis for reducing the overall MW size of the project. The fossil fuels that are currently used to generate electricity are a finite source. The demand for electricity is growing, both domestically and globally. The cost of fossil fuels is accelerating dramatically. It is not a question of if, but when, all of our generation needs will come from renewable sources. Conservation is certainly a prudent measure but you cannot conserve a finite resource that at some point will be completely depleted. The only point of discussion should be can we develop renewable energy swiftly enough and in a magnitude sufficient to offset the depletion of fossil fuels.

04 Comment:
#079, June 15, 2005  Arthur Giacalone

It is essential that Ecogen address in detail how its proposed project would look if the Town of Italy were to prohibit wind farm development within the township, and/or prohibit construction and operation of the proposed substation.

Response:

The Project as described has always included the Town of Italy. While it is understood that the Town is proposing to adopt local land use regulations that would apply to WTG,
it is not understood that a total prohibition will be enacted. Ecogen will work within the local regulatory framework, assuming that they require a site plan, special use permit or variance application. It is premature and speculative for Ecogen to develop an alternative site configuration based upon an unadopted local law that is still being revised.

05 Comment:
#079, June 15, 2005 Arthur Giacalone

Ecogen is still talking in generalities when describing its “preferred alternatives.” Now is the time for Ecogen to specify the 53 sites where it wishes to place its wind turbines, eliminating locations that are inappropriate for environmental or other reasons, and to identify with specificity where its electrical transmission lines, service roads, etc. will be located. The DGEIS process will have been a sham if it does not allow the applicant and SCIDA to identify the “project” with precision.

Response:

The purpose of the DGEIS is to provide the siting criteria and thresholds that will govern the final selection of the 53 sites. Identifying the sites within the DGEIS is impossible because final siting cannot occur before the criteria are set. Final siting will occur after the Lead Agency issues its Findings Statement.
C.5 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

ASSESSING IMPACTS

01 Comment:
#101, June 17, 2005   Bond, Schoeneck and King

The comment is summarized as stating that if the DGEIS was truly a worst-case scenario, sensitive resources such as wetlands, streams, State-regulated 100-ft wetland buffers, cultural resources, shadow flicker and communication signals should all be included on the bulleted list.

Response:

The suggestions above are not unavoidable adverse impacts associated with the operation and maintenance of the Project. They are items that may be impacted, but the impact on them can be mitigated. Section 3.0 of the DGEIS goes into detail on how these impacted resources can have the impact mitigated.
C.6 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

DOCUMENT CONFLICTS

01 Comment:
#101, June 17, 2005 Bond, Schoeneck and King

Regarding the permanence of WTG, Page 6-1 seemingly conflicts with statements made on page 5-2.

Response:

On page 5-2 of the DGEIS, reference is made to the WTG being permanent structures. The word permanent was not intended to imply for all eternity but to state that the towers are not seasonal in use or will be present for a short time frame. It is anticipated that the towers will be used for at least 20 years. On Page 6-1, the statement is made that the land could be reclaimed for alternative uses. Implicit in this statement is the assumption that WTG will eventually become obsolete. For the present, it is intended that they will become a permanent fixture on the landscape.
C.7  CUMULATIVE IMPACTS

01 Comment:
#101, June 17, 2005  Bond, Schoeneck and King

Various comments about cumulative impacts that were not fully addressed in the DGEIS:

1. Page 7-1 suggests that the Ecogen and WindFarm Prattsburgh are not compatible.
2. The impact analysis in Section 3 is inadequate.
3. On page 7-2 simply doubling the approximated Ecogen impact (acreage of land impacted) for both projects is not adequate.
4. Impacts to wetlands/streams for both projects is speculative at best.
5. Potential cumulative impacts to wildlife is not addressed in a meaningful manner.
6. The visual impact survey does not fully evaluate the impacts from both wind farm projects.
7. Groundwater impacts to residential wells need to be discussed.
8. Nighttime photo simulations should be prepared in order to show the difference in lighting.
9. The conclusion on page 7-9 that the cumulative impact of the two projects on local roads is not expected to be significant is totally unsupported. Despite the proposed mitigation, even a single project will have a significant impact on local roads.
10. Since all impacts associated with both projects are unknown, the statement on page 7-7: “The direct and indirect effects of each project are not yet known and, therefore, the combined cultural resource impacts of the two projects are uncertain” should be applied to every other sensitive resource evaluated throughout the DGEIS.

Response:

1. Page 7-1 does not suggest that the Ecogen and Wind Farm Prattsburgh projects are incompatible. It does, however, note that there is no connection between the projects although there is some overlap of proposed sites and that, conceivably, construction of the two projects could occur concurrently.
2. Numerous comments and responses pertaining to the adequacy of Section 3.0 of the DGEIS are addressed in the FGEIS.
3. Wind Farm Prattsburgh has not released any project specifics to date; therefore, doubling the estimated acreage of Ecogen’s impact to account for WFP’s impact seemed appropriate. Although the exact acreage is not known, Ecogen was trying to make the point that only a small amount of land surface relative to the Project area would be disturbed by both projects.
4. Specific impacts to wetlands, streams, and other water resources is beyond the capacity of the DGEIS to detail because the final site selections for either project would occur after the Findings Statement that would be issued at the end of the SEQR process. Once again, limited project specifics have been made public by WFP.
5. Based on the wildlife studies conducted by Ecogen as per the Final Scope, we stand by our analysis of cumulative impacts to wildlife by the two projects. Our analysis of cumulative impacts of the two projects on wildlife is based on our understanding of wildlife issues determined for the project area.
6. The WFP project is nominally included in the visual impact through assessing all 99 potential sites. While these sites are not contiguous with proposed WFP siting, the impacts remain the same: whether or not any WTG are visible.

7. Short term and long term impacts to groundwater are addressed in Section 3.15.2.2 of the DGEIS.

8. A nighttime photograph of a red light against a black background would have no context. How could the potential for visual impact be assessed? Tower lighting is mandated by the FAA. The lighting scheme selected for the Project is designed to minimize attraction to night flying wildlife.

9. Road impacts during construction would be temporary and short-term. Ecogen will repair any damage caused to local roads as a result of transporting the subassemblies of the WTG. Similarly, WFP would be expected to protect and restore local roads during and after construction. Local traffic disruption would be expected to be minimal due to the existing low density of traffic. Convoys of equipment transporters should be able to pass directly through most areas with a minimum of disruption.

10. Comment acknowledged.

02 Comment:
#106, June 17, 2005 USFWS

Cumulative impacts are discussed in this section with a focus on project-specific impacts as well as the potential impacts from another wind energy facility proposed in the same area. A similar wind project is being developed in the same general area by WindFarm Prattsburgh (Global Harvest). The Global Harvest project, which would consist of 25 to 50 turbines, is also currently proceeding through the scoping process. The proposed locations of the Global Harvest turbines are found on Figure 7.1-1. Many turbine locations overlap in the same general area for both projects. This undoubtedly will cause turbulence problems if turbines are located too close together or too many turbines are located in one area. We question how this issue will be resolved. In the past, both Ecogen and Global discussed constructing their projects in two phases, essentially doubling the number of turbines from what has been discussed in this report. It should be made clear what Ecogen’s intentions are for the future with respect to the size of this project.

Response:

Ecogen intends to construct 53 WTG within the Towns of Italy and Prattsburgh. Ecogen will engage in only a single phase of construction with infrastructure and WTG constructed consecutively.

Ecogen has no control over or knowledge of Global’s project, including their construction schedule and the placement of WTG and associated infrastructure.

It is SCIDA’s understanding that as of October 27, 2005, NYSERDA and Global Winds have parted ways. NYSERDA is no longer the Lead Agency for the Global Project based on mutual consent and because the Global Project will not commence commercial operation prior to July 1, 2006, which is when the 5-year System Benefits Charge II Program expires.
03   Comment:
#106, June 17, 2005    USFWS

Unfortunately, the cumulative impact analysis for both projects is similar to the analysis for the Ecogen project provided in other sections of the DEIS. There is no quantification of potential cumulative impacts to natural resources. Instead, the document makes a blanket statement that the collective impacts are expected to be minimal. The document goes on to say that under a worst-case scenario, the impacts would be double for two projects. But as we pointed out earlier, impacts were not quantified for the Ecogen project so it is impossible to understand the magnitude of the projects, individually or collectively. We find this analysis to be unacceptable to determine potential cumulative impacts. At a minimum, existing information and mapping (i.e. wetland, soils, and stream mapping, aerial photographs, land use mapping) should have been overlain with all of the proposed turbines from both projects. It is obvious very little effort went into this analysis and we recommend that it be revised.

Response:

SCIDA believes that cumulative assessment as contained within the DGEIS is satisfactory under the generic approach. If circumstances develop that would change this opinion, Part 617.10(d) provides options, some of which include requiring additional SEQR review. We wish the USFWS had been more specific and pointed out where statements were made that weren’t reasoned through. The DEGIS does not say or imply “that under a worst-case scenario, the impacts would be double for two projects”. This statement was only made with regard to the amount of land that would be impacted by the two projects. Since the number of WTG proposed by the two projects is similar, it is not inappropriate to suggest that double the amount of land would be impacted. If we knew exactly how much land would be impacted by WFP, we could perhaps provide a better estimate.

04   Comment:
#106, June 17, 2005    USFWS

We would like to point out that other wind energy projects are proposed in the vicinity of the Ecogen and Global projects. The Cohocton and Bishop wind projects are each proposed to the west of the Ecogen site and other projects have also been proposed to the northwest in Ontario County. While we do not expect Ecogen to know all of the details of these projects or quantify impacts at this level, some information and discussion could be provided of the potential cumulative impacts to birds and bats on a regional basis. We recommend this discussion be included in the EIS.

Response:

The projects in Cohocton under Global UPC and Bishop, which it is our understanding that this project has been withdrawn from consideration, are proposals only and have not yet begun the SEQR process. Therefore public knowledge of these projects is extremely limited or non-existent.
In summary, we find that the DEIS does not contain adequate information regarding potential impacts of the project on wildlife and habitat. Notably lacking is basic information regarding potential impacts to natural resources such as intermittent and perennial streams, wetlands, wildlife, and various types of habitat found in the project area. In our view, additional data on avian and bat use of the project site are also required prior to drawing conclusions on the significance of potential project impacts. We recommend that additional data be gathered by radar, acoustic, and visual observation methods to verify results of existing studies conducted at this site.

Response:

For all the reasons outlined in the comments/responses for Sections 3.2 and 3.3, we respectfully disagree.

Given that a large amount of critical information is lacking in the DGEIS, we recommend additional information be gathered, as recommended above, and potential impacts to natural resources reanalyzed, including potential cumulative impacts. This information should be incorporated into a revised DEIS or supplemental EIS and submitted for review prior to the preparation of a Final EIS. We recommend the IDA not issue a Findings Statement until this additional information and analysis can be provided.

Response:

A detailed analysis regarding potential impacts has already been conducted and is presented in Sections 3.2 and 3.3 of the DGEIS. A GEIS is a more generalized approach than an EIS and should not be confused as an EIS. As the project moves to final site selection, SCIDA will have sufficient information to determine if further environmental impact review is required. When and if the Global Harvest project proceeds, as well as any other similar projects in the area, those projects will undergo a complete environmental review with the specific information related to those projects, once that information is made public.

Finally, the Service recommends that all wind power projects that proceed to construction be monitored for impacts to wildlife following construction and during turbine operation. Post-construction bat and bird mortality monitoring should occur for a minimum of three years. Monitoring methods should be coordinated with both the Service and the NYSDEC. Information gained from post-construction monitoring will continue to aid the Service and project sponsors as we learn more about potential impacts, or lack thereof, to wildlife in the project area. We recommend that project approval not be given until after
the details of the post-construction monitoring plan have been reviewed and approved by the Service and NYSDEC.

Response:

The NYSDEC and USFWS will be consulted during the design of a post-construction monitoring program. Post-construction monitoring information will be shared with the NYSDEC and USFWS in the form of reports. Ecogen appreciates the value of post-construction monitoring studies to the wind industry, to science and to protecting the environment.
C.8 GROWTH INDUCING ASPECTS OF ACTION

01 Comment:
#101, June 17, 2005 Bond, Schoeneck, and King

Earlier in the DGEIS it was stated that the project could limit residential subdivision and new home construction in the area. This should be discussed in this section as well.

Response:

Comment acknowledged. The setbacks for noise, ice-throw and the fall zone would also limit residential development in some areas.

Section 8.0 has been modified to include discussion of subdivision of agricultural lands. Section 3.1.2.2.2 states that the Project may discourage the subdivision of participating agricultural lands.
C.9 ENVIRONMENTAL JUSTICE

There were no public or agency comments on the Environmental Justice section of the DGEIS.
There were no public or agency comments on the Reference section of the DGEIS.
PART D  CONCLUSIONS AND FINDINGS

In accordance with the requirements of SEQR, this part summarizes the results of the impact analysis presented in Section 3 of the DGEIS. Table D-1 presents a summary of the potential Project impacts, proposed mitigation measures, and siting criteria.

Table D-1 replaces Table ES-1 in the DGEIS Executive Summary. Table D-1 reflects the additional information received through the public and agency comment period, as well as revisions to the DGEIS. For each adverse impact, the Table presents proposed mitigation measures and siting criteria/conditions, designed to avoid or minimize such impact. Where appropriate, specific criteria are included in Table D-1 to define quantifiable and measurable criteria to be used to evaluate specific WTG sites.

SCIDA will incorporate these mitigation measures and recommended siting criteria/conditions in a Findings Statement. The Findings Statement will outline the relevant environmental impacts; provide a rationale for its decision; and state how, among the reasonable alternatives available, the preferred alternative avoids or minimizes adverse impacts to the maximum extent practicable by incorporating mitigation measures as conditions of approval. The Findings Statement will be prepared by SCIDA not less than 10 calendar days but within 30 calendar days of filing this FGEIS. Each involved agency will adopt the Findings Statement (or prepare their own Findings Statement) prior to taking action to fund or grant an approval.

The Findings Statement will set forth specific conditions or thresholds under which the final Project will be undertaken, approved or funded, including requirements for any subsequent SEQR review. The nature of any such subsequent SEQRA review will be determined by the specific characteristics of the final Project as follows:

- No further SEQR review will be required if the final Project will be carried out in conformance with the conditions and thresholds established in the FGEIS/ Findings Statement. It is anticipated that, after siting has been completed, the final Project will meet the conditions and thresholds in the FGEIS/Findings Statement and therefore no further SEQR review will be required.

- A Negative Declaration will be issued if a substantive characteristic of the Final Project was not addressed or was not adequately addressed in the FGEIS/Findings Statement and
the final Project will not result in any significant environmental impacts. An example of circumstances that may warrant additional SEQR review and a Negative Declaration would be a small increase in tower height or a small increase in WTG pad size. Also, some conditions have been established requiring additional studies (examples: cultural resource assessment, water resource assessment, etc.) the purpose of which is to confirm the degree of environmental impact.

- A Supplemental EIS will be required if a substantive characteristic of the final Project was not addressed or was not adequately addressed in the FGEIS/Findings Statement and as a consequence the final Project may have one or more significant environmental impacts. An example of a circumstance that would warrant a Supplemental EIS would be an expansion of the project to greater than 80 megawatts capacity or the project is outside the “Project Boundary” as defined in this FGEIS.

After final WTG site selection, the Project Sponsor will submit detailed site plans and regulatory applications. The Findings Statement will also include a process in which an objective third-party compliance review could be conducted to advise the Lead Agency whether the proposed final Project meets the siting criteria and mitigation measures set forth in Table D-1. In an effort to simplify this review process, a checklist outlining items that constitute a complete site plan submittal and procedural steps for reviewing the site plan is presented in this part following Table D-1. The Findings Statement will also include this checklist.

The Project’s compliance review will be performed at the Project Sponsor’s expense. Documentation of this process will be maintained and filed by SCIDA. SCIDA will be responsible for assuring compliance with the specific conditions or thresholds set forth in the Findings Statement and records maintenance.
TABLE D-1
Summary of Potential Impacts, Mitigation, and Siting Criteria

<table>
<thead>
<tr>
<th>Potential Impacts</th>
<th>Mitigation Measures</th>
<th>Siting Criteria/Conditions</th>
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<tbody>
<tr>
<td><strong>Administrative Issues</strong></td>
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<tr>
<td>• No impacts.</td>
<td>• No mitigation.</td>
<td>• Following the Finding Statement and prior to construction Ecogen will be required to coordinate additional studies with various resource agencies and/or governmental bodies. Ecogen is required to copy SCIDA on all correspondence, notify SCIDA of all meetings at least 7 calendar days in advance and provide SCIDA with meeting minutes.</td>
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<td>• Proper application of setbacks will be confirmed by SCIDA after final site selection and prior to PILOT approval. Necessary documentation of the application of the setbacks will be required. Ecogen will be required to notify the owners (on record at the tax assessor’s office) of properties contiguous to parcels containing final WTG location(s). Notification will be by registered mail, return receipt requested and shall be at least 30 days prior to approval of the PILOT.</td>
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<td>• Communication with local officials, school transportation officials and emergency providers will be a requirement throughout the construction of the project. Prior to construction a plan will be submitted to SCIDA that identifies standard communication protocol to be employed during the project.</td>
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| **3.1: Land and Land Use** |                      |                           |
| • Approximately 72 acres of agricultural, vacant and forested land will be converted into developed land. | • Re-use topsoil on-site.   | • Site WTG a minimum of WTG height plus 100 feet (489 feet) from the base of the tower to the property line of a non-participating property or center line of public roadways. |
| • Where feasible, use existing farm or logging roads for service roads. | • Mandatory setbacks from property lines. | |

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<th>Mitigation Measures</th>
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| • Approximately 1.13 to 1.26 acres of land will be impacted for each WTG site.  
• Approximately 3.4 miles of service roads will be constructed.  
• Future use of small parcels may be negatively impacted by the presence of WTG. | • For adjacent, non participating properties without a permanent residence, setbacks from the base of the WTG will apply in accordance with A and B:  

**A: Variable Setback to Property Line:**  
-2.0 acres or less, setback 1,000 feet  
-Greater than 2.0 to 4.0 acres, setback 925 feet  
-Greater than 4.0 to 6.0 acres, setback 850 feet  
-Greater than 6.0 to 8.0 acres, setback 775 feet  
-Greater than 8.0 to 10.0 acres, setback 700 feet  
-Greater than 10.0 to 12.0 acres, setback 625 feet  
-Greater than 12.0 to 14.0 acres, setback 550 feet  
-Greater than 14.0 acres, setback 489 feet  

- Property sizes will be determined based on:  
  1. tax records as if November 22, 2005.  
  2. total acreage of contiguous parcel of common ownership  

- Excludes properties less than 5 acres that contain a communication tower. |
| B: Non-Permanent Residence, if present:  
A minimum setback of 850 provided that the dwelling was constructed on a frost proof foundation or floating concrete slab as of November 22, 2005.  
• It is acknowledged that a comprehensive plan was amended by the Town of Italy on July 25, 2005. This plan will be reviewed by SCIDA in the final design package. If zoning is adopted, Ecogen will be required to abide by those regulations.  
• Coordinate with New York State Department of Agriculture and Markets prior to construction to develop an “Agricultural Mitigation Plan” for the project.
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<tr>
<td></td>
<td>Comply with applicable Federal, State and Local laws.</td>
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<td>After final site selection a quantification of land acreage impacts by the project will be provided. It will include an estimate of impacted land according to different types of habitat. It will also identify the location of slopes greater than 15% grade. The plan will reviewed by SCIDA prior to approving the economic assistance package.</td>
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### 3.2: Water Resources

- Silt-laden runoff entering Project area streams and wetlands during construction.
- Impacts to Federal jurisdictional wetlands during construction of service roads, 10 acre staging area and the ECS.
- Potential impacts to streams from crossing of ECS

- ECS crossings will be perpendicular to stream banks wherever possible in order to minimize overhead clearing.
- The ECS will cross streams via overhead lines or directional boring.
- Restore impacted wetlands to pre-construction conditions where applicable.
- No trenching or use of heavy equipment will occur in streambeds and no ground disturbance will occur within 50 feet of NYS protected streams.
- Implement Stormwater Pollution Prevention Plan and Erosion and Sediment Control Plan to minimize impacts during construction.

- Prepare a “Water Resources Assessment” as defined in attached GEIS Compliance review Checklist.
- Minimum 100 ft. setback from State-regulated wetlands unless granted a NYSDEC permit.
- Restrict total federal wetland impacts to less than 0.5 acre unless granted a federal individual permit.
- Obtain appropriate permits from ACOE for wetland crossings.
- If necessary, obtain proper ACOE and NYSDEC wetland permits prior to construction.
- Obtain SPDES General Permit for Stormwater Discharges from Construction Activities, Permit No. GP-02-01.

### 3.3: Wildlife and Habitat Resources

**Endangered, Threatened and Special Concern Species**

- WTG collision mortality involving Federal or State listed migrating or foraging birds.

- FAA approved lighting utilized on approximately 50% of WTG to discourage avian attraction during migration while remainder will be unlit.

- Locate WTG away from Segar Gulley.
- Develop and conduct 3-year post-construction monitoring plan of bird and bat mortality under consultation with NYSDEC and USFW.
<table>
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### Plant Communities
- Permanent impact to approximately 17 acres of active agricultural land; 31.8 acres of abandoned agricultural land; and 12.6 acres of primarily successional second growth woodland.

### Mammals, Reptiles, Amphibians and Fish
- Temporary displacement of mammal species during construction and operation.
- Mortality of small mammals, reptiles and amphibians during construction.

### Birds
- WTG collision mortality involving migrating, resident and foraging birds.
- Temporary displacement of resident, breeding and over-wintering birds during project construction and operation.
- Paint WTG a color (off white) readily visible to migrating and foraging birds. However, the paint must be an approved color required by FAA regulations.
- Utilize existing farm roads and logging trails where practicable for service roads.
- Co-locate ECS along service roads where practicable.
- Stream crossing via overhead lines or directional boring.
- No crossing of streams with heavy equipment.
- Implement Stormwater Pollution Prevention Plan and Erosion and Sediment Control Plan to minimize impacts during construction.
- FAA approved lighting utilized on approximately 50% of WTG to discourage avian attraction during migration.
- Paint WTG a color readily visible (off-white) to migrating, foraging and resident birds. However, the paint must be an approved color required by FAA regulations.

### Siting Criteria/Conditions
- Minimize impacts to active agricultural land and woodland by co-locating ECS with service roads.
- Quantification of land acreage impacts per Section 3.1. Land Use.
- Obtain SPDES General Permit for Stormwater Discharges from Construction Activities, Permit No. GP-02-01.
- Develop and conduct 3-year post-construction monitoring plan of bird and bat mortality under consultation with NYSDEC and USFW.
- Conduct summer breeding bird surveys during and following construction and compare to baseline survey.
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| Bats                                                                            | • FAA approved lighting utilized on approximately 50% of WTG to discourage avian attraction during migration.  
  • Paint WTG a color readily visible to migrating, foraging and resident birds. However, the paint must be an approved color required by FAA regulations (off-white). | • Locate WTG away from Segar Gully.  
  • Minimize disturbance to mature forest.  
  • Locate WTG near edge of woodland where practicable. |

| High Tor Wildlife Management Area                                                | • WTG collision mortality involving resident or breeding birds from the High Tor WMA migrating or foraging over the Project area. |                                                                |

| 3.4: Agricultural Resources                                                     | • Approximately 17 acres of agricultural land will be impacted by clearing, excavation and filling activities.  
  • Construction could result in the spread of the golden nematode from infected areas in the Town of Prattsburgh. | • Prepare an “Agricultural Mitigation Plan” as defined in the attached GEIS compliance Review Checklist.  
  • Construct the Project in conformance with New York State Department of Agriculture and Market Guidelines for Agricultural Mitigation for Windpower Projects.  
  • A Final Notice of Intent and Agricultural Impact Statement must be filed in accordance with New York State Department of Agriculture and Markets prior to construction.  
  • Obtain SPDES General Permit for stormwater discharges from construction activities. |

|                                                                                | • Ecogen entered into a Compliance Agreement with the USDA regarding movement and possible treatment of construction equipment in golden nematode infected areas.  
  • Install ECS a minimum of 4 feet bgs within active agricultural lands; minimum 3 feet if co-located with service roads.  
  • Reuse topsoil onsite. Utilize an agricultural restoration contractor to restore agricultural land temporarily disturbed during construction. Mitigate soil erosion under requirements of NYSDEC Permit No. GP-02-01 and as defined under the Agricultural Mitigation Plan. |                                                                |
### 3.5: Visual Impacts

- High visual impacts may exist close to WTG.
- Further away, the impact diminishes but may still be evident.
- Other visual impacts include FAA lighting on WTG, and new views created from the operation and maintenance building, substation and service roads.

- WTG will be uniform in design and all buildings will have a neutral, low-reflectivity finish to minimize contrast. However, paint must be an approved color required by FAA regulations (off-white).
- Landscaping/fencing will be used to partially screen the Ecogen buildings and help transition into the surroundings.
- Mandated FAA lighting will be on approximately 50% of WTG and will be the lowest intensity required for pilot safety.
- Where possible construct ECS underground.
- Utilize existing farm or logging roads where possible for service roads.

- No applicable siting criteria.
- Additional Visual Impact Analysis will be necessary if required by SHPO as part of cultural resource review; or if the equipment is significantly different in shape size and color; or if the view of the project from Naples is more than 5 turbines on Knapp Hill, as is depicted in the photo simulation presented in Appendix R in the FGEIS, or if required by an adopted local law in the town.

### 3.6: Historic and Archaeological Resources:

- Construction activities could potentially impact archaeological resources in areas identified as archeologically sensitive.
- The Project could create indirect visual impacts on existing structures that are either listed on the NRHP or eligible for listing on the NRHP.

- Where possible construct ECS underground.
- Paint WTG a neutral, unobtrusive color (off-white). However, paint must be an approved color required by FAA regulations.
- Limit FAA-mandated lighting within WTG clusters.
- Ecogen will adhere to mitigation as determined by SHPO. A one time payment of $25,000 each for the Towns of Prattsburgh and Italy will be made for improvements to historic buildings or sites.

- No applicable siting criteria.
- Prepare a “Cultural Resource Assessment” and any other required SHPO studies after final site selection as defined in the attached GEIS Compliance review Checklist.
### 3.7: Noise Impacts

- Noise will be associated with construction activities.
- A study of operational noise impacts was conducted for the Project using guidelines in the NYSDEC policy “Assessing and Mitigating Noise Impacts.” The study found that impacts from noise would be within a generally acceptable level.

**Mitigation Measures**

- Contractors will minimize construction noise by implementing best management practices such as turning off engines when not in use, maintaining equipment and using adequate engine covers and mufflers.
- Setback criteria are based, in part, on the noise study in the GEIS and will result in no significant increase in noise levels to sensitive receptors.

**Siting Criteria/Conditions**

WTG siting to non-participating permanent residence will be in accordance with minimum setbacks from the base of the WTG as defined below:

- 1,200 ft. minimum setback to non-participating residences located in areas with average wind speed greater than 6.5 m/s as determined by AWS Truewind computer modeled surface wind speed (generally depicted on Figure 3.7-1 in the DGEIS).
- 1,375 ft. minimum setback to non-participating residences located in areas with average annual wind speed less than 6.5 m/s as determined by AWS Truewind computer modeled surface wind speed (generally depicted on Figure 3.7-1 in the DGEIS).

Note: A structure will be considered a permanent residence if the following criteria are met:
1. Structure is connected to public utility for electric service, and
2. Structure is connected to a potable water supply, and
3. Structure is connected to a municipal sewer or has a on-site septic system.
4. Must meet the definition of residence by April 1, 2006. For proposed construction, must also be able to demonstrate issued building permit by January 1, 2006. Residences will be determined by Tax records through 2004 and by Building permits issued through 2005.

- For adjacent, non-participating properties without a residence, the setbacks will be accordance with Section 3.1 Land Use.
### Potential Impacts Mitigation Measures Siting Criteria/Conditions

#### 3.8: Energy Impacts

- A variety of energy products (such as petroleum and electricity) will be consumed to construct and operate WTGs and related facilities.
- No mitigation is required.
- No applicable siting criteria.

#### 3.9: Temporary and Short Term Impacts

- Disturbance during construction activities.
- Potential for silt-laden runoff during construction.
- Impacts to wetlands during ECS construction. Disturbance to some wildlife species during construction activities.
- Agricultural soils will be impacted during construction activities.
- Visual impacts will result from cranes used during construction activities.
- Archaeological resources may be impacted during construction activities.
- Noise impacts will result from transportation and operation of construction equipment.
- Increased demand for energy resources as a result of the construction and installation of WTG components.
- Local roads may be impacted during construction due to mobilization of heavy equipment.
- Local traffic will be impacted from delivery of materials, equipment
- Disturbed areas will be graded and seeded.
- No stream crossings by heavy equipment.
- No ground disturbance will occur within 50 ft. of State-protected streams or 100 ft. of State wetlands
- Restore wetlands to pre-construction conditions as required by ACOE Nationwide Permitting of utility crossings.
- Utilize agricultural restoration contractor to restore agricultural land following construction.
- Conduct construction during daylight hours to mitigate noise impacts.
- Implement best management practices to mitigate noise including turning off engines when not in use, maintaining equipment and using adequate engine covers and mufflers.
- Repair local roads damaged from mobilization of heavy equipment.
- In order to mitigate the additional inspection costs that may be required for each town to oversee construction issues related to SEQR compliance, Ecogen will provide a fund of $30,000 to cover these costs. The $30,000 will be divided between the municipalities based on the number of turbines built for each town.
- Locate WTG as close to roads and edges of agricultural fields as possible given other siting criteria.
- Obtain ACOE Section 404 Nationwide Permit for utility crossings, prior to construction, if required.
- Obtain SPDES General Permit for stormwater discharges from construction activities and implement Stormwater Pollution Prevention Plan during construction of WTG and associated buildings, service roads and the ECS, which will include utilization of appropriate sediment and erosion control measures to minimize silt-laden run-off.
- Obtain applicable highway permits from local, county and State agencies prior to mobilization of heavy equipment and WTG components.
- If blasting is necessary, prepare a plan describing blasting operations in compliance with all applicable Federal, State, and local rules and regulations.
- Establish a decommissioning fund to ensure that in the event the Project is terminated construction areas would be restored to remove any temporary negative impacts.
- Construct the Project in conformance with New York State Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Windpower Projects.
- In accordance with the SHPO approved workplan, pre-construction Phase 1B studies will be conducted in archeological sensitive areas.
- File a Final Notice of Intent and Agricultural Impact
### Potential Impacts and Mitigation Measures

<table>
<thead>
<tr>
<th>Potential Impacts</th>
<th>Mitigation Measures</th>
<th>Siting Criteria/Conditions</th>
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</table>
| • The project will generate temporary employment and income during construction activities.  
• Temporary impacts may occur to unconfined, unconsolidated, shallow groundwater resources or natural springs (if encountered) due to limited groundwater pumping during construction activities.  
• A negative visual impact would result from premature project decommissioning.  
• The size and complexity of the project may strain local town resources when monitoring for permit compliance. | Statement with NYS Dept. of Ag & Markets to insure any adverse agricultural impacts are minimized or avoided.  
• Standard communication protocol will establish prior to construction. | |

#### 3.10: Health and Safety Impacts

<table>
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<tr>
<th>Health and Safety Impacts</th>
<th>Mitigation Measures</th>
<th>Siting Criteria/Conditions</th>
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</table>
| • Project construction may place workers at risk of accidents and fires.  
• During WTG operation, the potential exists for ice shedding from rotating blades, blade throw from damaged rotors and in extreme conditions collapse.  
• Some receptors may be exposed to shadow flicker, which would be limited to the immediate vicinity of the WTG and would not be significant based on other setbacks.  
• Potential impacts from electromagnetic fields were researched and it was determined that the project would not result in significant adverse health impacts. | • Project-specific health and safety standards will be implemented during construction. Construction personnel will be provided with all appropriate personal protective equipment.  
• Engineering design of the WTG shall conform to all Federal, State and local codes.  
• Four redundant safety systems are included in WTG design that will minimize risk of ice throw.  
• Icing detectors will be installed on meteorological tower to detect ice buildup.  
• WTG, service roads and related facilities will be sited with adequate setbacks on private property to reduce the potential for safety impacts to the general public.  
• Ecogen will mark the location of buried ECS at 300 foot intervals as well as register the location | • For adjacent non-participating properties, site WTG minimum of 489 (WTG height plus 100 feet) feet from base of tower to property line or center line of public roadways.  
• Site WTG minimum 489 feet from participating residence.  
• Project and contractor representatives will review available emergency preparedness plans prior to construction. |
<table>
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<tr>
<th>Potential Impacts</th>
<th>Mitigation Measures</th>
<th>Siting Criteria/Conditions</th>
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<tr>
<td>of the buried ECS with Underground Facilities Protection Organization.</td>
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<tr>
<td>3.11: Impacts on Local Roads:</td>
<td>• Potential impacts to local roads during construction could include road surface and</td>
<td>• No applicable siting criteria.</td>
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<td>shoulder damage, hazardous and non-hazardous substance spills, soil tracking and</td>
<td>• Prepare a Road Assessment as defined in the attached GEIS Compliance review Checklist.</td>
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<td>potential traffic congestion.</td>
<td>• Obtain applicable highway permits prior to mobilization of heavy equipment.</td>
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<td>• Best management practices will be implemented during project construction to</td>
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<td>minimize spills and soil tracking.</td>
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<td>• Repair local roads damaged from mobilization of heavy equipment and WTG components</td>
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<td>at Ecogen’s expense.</td>
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<td>• Provide annual stipend to host community of $3,000/WTG/year for 20 years for local</td>
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<td>road maintenance.</td>
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<td>• Complete road, culvert and intersection upgrades to facilitate construction work if</td>
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<td>required.</td>
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<td>3.12: Blasting and Seismic Issues</td>
<td>• Although not anticipated, impacts from blasting would occur in the event blasting</td>
<td>• No applicable siting criteria.</td>
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<td>was necessary for foundation construction.</td>
<td>• Prepare a “Blasting Plan” describing blasting operations and potential impacts to adjacent</td>
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<td>• If blasting is required, follow criteria for blasting as required in the blasting</td>
<td>above and below grade structures.</td>
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<td>plan.</td>
<td>• The “Blasting Plan” would adhere to all applicable regulations pertaining to blasting,</td>
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<td>including NYSDOL explosive handling regulations (12 NYCRR Part 39) and NYSDEC blasting/</td>
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<td>mining regulations.</td>
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<td>3.13: Socio-Economic Impacts</td>
<td>• Local school districts will be positively impacted due to increased tax revenue</td>
<td>• No applicable siting criteria.</td>
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<tr>
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<td>through a PILOT agreement.</td>
<td>• Project and contractor representatives will review any available local emergency</td>
</tr>
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<td>• The Project will generate employment and income during construction activities and</td>
<td>preparedness plans prior to construction and operation of the Project.</td>
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<td>• Follow procedures established in the pre-construction meeting.</td>
<td>• Project and contractor representatives will hold a pre-construction meeting with local</td>
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<td>• In order to promote local workforce involvement in the project the following will</td>
<td>emergency providers in order to familiarize them with out-of-the-ordinary</td>
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<td>be accomplished:</td>
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<td>- For short term construction jobs, a policy of “first among equals” will</td>
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<tr>
<td><strong>Potential Impacts</strong></td>
<td><strong>Mitigation Measures</strong></td>
<td><strong>Siting Criteria/Conditions</strong></td>
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<td>throughout operation. Approximately 75 to 100 full-time jobs will be created during the construction phase of the Project and that approximately 2 million dollars in wages will be generated. • It is estimated that approximately 6 to 8 full-time jobs will be created during the operational phase of the Project, generating approximately $250,000 to $300,000 in new annual wages. • It is estimated that approximately $150,000 in annual lease payments will be made to landowners that will result in additional positive impact on the local economy. • The PILOT payments will increase revenue to the host townships, school districts and special funding districts.</td>
<td>be implemented, and - For permanent jobs, Ecogen will coordinate the search for potential local job candidates with Chemung Schuyler Steuben Workforce New York.</td>
<td>construction equipment and methods, and the anticipated construction sequencing. • No impact to the park in the Town of Prattsburgh.</td>
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</tbody>
</table>

3.14: Property Values

- No adverse impacts are anticipated based on information contained in the GAR Associates analysis on property values.  
- No mitigation is necessary.  
- No applicable siting criteria.

3.15: Groundwater and Wells

- Limited construction related groundwater dewatering may be necessary. This would not adversely impact any groundwater wells in the area.  
- No mitigation is necessary.  
- No applicable siting criteria.
<table>
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<tr>
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</table>
| **3.16: Decommissioning** | • The potential impacts resulting from Project abandonment include aesthetic impacts, erosion and sedimentation impacts and public safety impacts  
• WTG components would be decommissioned and the disturbed property restored.  
• Decommissioning would include removal of WTG foundations to 3 ft below grade; construction materials and debris would be removed; and the leased parcel will be re-graded and seeded.  
• In the event the Project is terminated during construction, decommissioning activities would include removal of WTG foundations to 3 ft below grade, removal of construction materials/debris and re-grading/seedling of the leased parcel. | • No applicable siting criteria.  
• Prepare a “ Decommissioning and Restoration Plan” as defined in the attached GEIS Compliance Review Checklist.  
• A decommissioning bond in the amount of cost of tear down and restoration minus salvage value will be established prior to construction to decommission the Project, as determined by an independent engineer or salvage contractor to be held by SCIDA or its successor agency. |
| **3.17: Mandated FAA Lighting** | • Potential impacts related to required FAA lighting include impacts to air navigation, wildlife and aesthetic/visual resources.  
• Follow all requirements specified in the FAA’s acknowledgment letter(s), including lighting specifications in accordance with the FAA Advisory Circular AC 70/7460-1.  
• Install red strobe-like L-864 lights on selected WTG to minimize the attraction to birds. | • No applicable siting criteria.  
• Submit Notice of Proposed Construction or Alteration to the FAA for each WTG at least 30 days prior to construction (FAA Form 7460-1).  
• Determine the minimum number of towers to be lit in each WTG grouping to satisfy FAA requirements. |
| **3.18: Obstruction Of FCC Regulation** | • WTG have the potential to interfere with radio frequency signals by obstructing the line-of-sight microwave transmissions.  
• Potential interference with off-air broadcast signals.  
• Site WTG so as to avoid microwave interference by maintaining existing point-to-point transmission paths.  
• Rotor blades will be constructed of fiberglass/carbon material and asynchronous (brushless) generators will be used which will reduce the potential for electromagnetic interference.  
• If future complaints relative to degraded | • Adjust WTG locations to be clear of point to point microwave transmissions.  
• Prepare a Microwave Transmission Study after final site selection as defined in the GEIS Compliance Review Checklist. |
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<tr>
<td>television reception due to project operation arise, the project developer will investigate such complaints and address any such problem resulting from such operation. Mitigation actions could include adjusting existing receiving antennae’s, install community step up signal antenna and related equipment, providing cable (if available), satellite reception, or other measures to the affected households who were utilizing a household antenna for their broadcast television reception needs as of the date of the FGEIS.</td>
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### 3.19: Land Title

- WTG will only be constructed on lands with marketable title. Project sponsor will deal with covenants or restrictions on the property accordingly with landowner and original seller. Certain deed restrictions may be left in place and not impact the Project’s development. Title searches would be conducted to determine a property’s status.

- No mitigation required.

- No applicable siting criteria.
- Obtain title insurance as necessary for lending requirements.
### Potential Impacts Mitigation Measures Siting Criteria/Conditions

#### 3.20: Solid Waste Management

- During the construction phase, increased solid waste generation is expected.
- During the operation phase, it is anticipated that very little solid waste will be created.

- Refuse will be collected and transported off site to a licensed disposal facility by a local solid waste hauler.
- Vegetative material generated during clearing work will be recycled in the Project area.
- Following construction, regular site visits to WTGs will be conducted and any solid waste generated will be transported to the operations and maintenance building for proper disposal.

- No applicable siting criteria.
Communication Requirements:

- Following the Finding Statement and prior to construction Ecogen will be required to coordinate additional studies with various resource agencies and/or governmental bodies. Ecogen is required to copy SCIDA on all correspondence, notify SCIDA of all meetings at least 7 calendar days in advance and provide SCIDA with meeting minutes.

- Proper application of setbacks will be confirmed by SCIDA after final site selection and prior to PILOT approval. Necessary documentation of the application of the setbacks will be required. Ecogen will be required to notify the owners (on record at the tax assessor’s office) of properties contiguous to parcels containing final WTG location(s). Notification will be by registered mail, return receipt requested and shall be at least 30 days prior to approval of the PILOT.

- Communication with local officials, school transportation officials and emergency providers will be a requirement throughout the project. Prior to construction a plan will be submitted to SCIDA that identifies standard communication protocol to be employed during the project.

WTG Setbacks:

- Minimum setback from the base of the WTG to the centerline of public roads or the property line of non-participating land owner is 489 feet (WTG height plus 100 feet).

- For adjacent, non-participating properties without a permanent residence, setbacks from the base of the WTG will apply in accordance with A and B:

  A: Variable Setback to Property Line:
  - 2.0 acres or less, setback 1,000 feet
  - Greater than 2.0 to 4.0 acres, setback 925 feet
  - Greater than 4.0 to 6.0 acres, setback 850 feet
  - Greater than 6.0 to 8.0 acres, setback 775 feet
  - Greater than 8.0 to 10 acres, setback 700 feet
  - Greater than 10.0 to 12.0 acres, setback 625 feet
  - Greater than 12.0 to 14.0 acres, setback 550 feet
  - Greater than 14.0 acres, setback 489 feet

  Property sizes will be determined based on:
  1. tax records as if November 22, 2005.
  2. total acreage of contiguous parcel of common ownership

  Excludes properties less than 5 acres that contain a communication tower.
B: Non-Permanent Residence, if present:
Minimum setback of 850 feet provided that the dwelling was constructed on a frost proof foundation or floating concrete slab as of November 22, 2005.

- Setback from NYSDEC-regulated wetlands is 100 feet (any project related disturbance) unless granted a NYSDEC permit.

- Setback from a participating residence is a minimum 489 (Wtg height plus 100 feet) feet from the base of the WTG.

- Noise setback to non-participating permanent residences:
  
  - Setback to mitigate noise impacts is 1,200 feet from the permanent residence for non-participating landowners with an average wind speed of greater than 6.5 m/s average annualized wind speed as determined by AWS Truewind computer modeled surface wind speed (generally depicted on Figure 3.7-1 in the DGEIS).

  - Setback to mitigate noise impacts is 1,375 feet from the permanent residence for non-participating landowners with an average wind speed of less than 6.5 m/s average annualized wind speed as determined by AWS Truewind computer modeled surface wind speed (generally depicted on Figure 3.7-1 in the DGEIS).

Note: A structure will be considered a permanent residence if the following criteria are met:

1. Structure is connected to public utility for electric service, and
2. Structure is connected to a potable water supply, and
3. Structure is connected to a municipal sewer or has an on-site septic system.
4. Must meet the definition of residence by April 1, 2006. For proposed construction, must also be able to demonstrate issued building permit by January 1, 2006. Residences will be determined by Tax records through 2004 and by Building permits issued through 2005.

Discretionary Permits/Approvals and Plans:

- Prepare a “Micro Wave Transmission Study” after final site selection and prior to construction. The analysis will demonstrate to SCIDA that the WTG’s are situated so as not to interfere with point to point transmission of microwave signals. The Plan will be reviewed by SCIDA prior to approving the economic assistance package.

- After final site selection and prior to construction, conduct a “Water Resources Assessment” (regulated wetlands and streams). The Assessment will include: field reconnaissance to identify and locate resources; assessment of impacts; coordination with resource agencies (NYSDEC and USACOE); determination of appropriate permits; mitigation to be included in the project design so as to ensure “No Significant Impact”.

11/22/05
• Prepare an “Agriculture Mitigation Plan” (approved by the NYS Dept. of Agriculture and Markets) following final site selection and prior to construction. The Mitigation Plan will be in accordance with the guidance document entitled, “NYS Agriculture and Markets Guidelines for Agricultural Mitigation of Windpower Projects”. The plan will include: siting recommendations and goals; construction guidelines; restoration guidelines; and, 2 year monitoring and remediation (if required).

• Prepare a “Road Assessment” of the state county and local roads used for project access in the Towns of Prattsburgh and Italy following final site selection and prior to construction. Coordination with appropriate highway superintendents will be required. The assessment will document: all haul routes; exiting conditions of roads, bridges, culverts, etc. to identify structures that will require improvement; required permits; necessary improvements including “envelope” clearing requirements; requirements for maintaining roads during construction; impacts to private property (if any); a plan for post construction inspections and remedial action. The Plan will be reviewed by SCIDA prior to approving the economic assistance package.

• Prepare a “Decommissioning and Restoration Plan” after final site selection and prior to construction. The Plan will include: anticipated life of the project; estimated decommissioning cost in current dollars; method of and schedule for updating the costs of decommissioning and restoration; method of ensuring that funds will be available for decommissioning and restoration; and, anticipated manner in which the project will be decommissioned and the site restored. The plan will reviewed by SCIDA prior to approving the economic assistance package.

• Prepare a “Cultural Resource Assessment” after final site selection and prior to construction in accordance with SHPO approved Scope of Work entitled, “Phase IB Archeological Field Investigation; Specialized Archeological Study and Architectural History Survey.” Ecogen will provide the NYSDEC an opportunity to review and comment (30 day limit) on the cultural resources inventory when developed. SCIDA will require SHPO concurrence that cultural resource issues are satisfactorily addressed. Coordination with local historical societies is a requirement of the scope of work. A one time payment of $25,000 each for the Towns of Prattsburgh and Italy will be made for improvements to historic buildings or sites. Other mitigation regarding cultural resources may be required by the SHPO.

• A comprehensive plan was amended by the Town of Italy on July 25, 2005. This plan will be reviewed by SCIDA in the final design package. If zoning is adopted, Ecogen will be required to abide by those regulations.

• Following final site selection and prior to construction, a three year post construction avian and bat monitoring plan will be developed in consultation with the NYSDEC and USFW. The plan will provide access to NYSDEC and USFW staff for evaluation of post monitoring studies.

• Develop a plan describing the protocols to conduct summer breeding bird surveys during and following construction that will allow a comparison to base line surveys.
• SPDES General Permit No. GP-02-01, Storm Water Discharges from Construction Activities, is required. A Stormwater Pollution and Prevention Plan and an Erosion and Sediment Control Plan are required as part of the permit.

• Comply with the thresholds and conditions of USACOE Nationwide Permit No. 12 for Utility Line Crossings for wetland impacts less than 0.5-acres are disturbed. If filling within wetlands exceed 0.1 acres, a pre-construction notification, wetlands delineation and wetlands mitigation plan must be submitted to USACOE.

• A Final Notice of Intent and Agricultural Impact Statement must be filed with the NYS Department of Agriculture and Markets.

• Obtain applicable highway permits from Local, County and State agencies prior to mobilization of heavy equipment and WTG components.

• FAA Notice of Proposed Construction or Alteration, Form 7460-1 must be submitted to the FAA at least 30 days prior to construction.

• Prepare a blasting plan describing blasting operations and potential impacts to adjacent above and below grade structures. The blasting plan would adhere to all applicable regulations pertaining to blasting, including NYSDOL explosive handling regulations (12 NYCRR Part 39) and NYSDEC blasting/mining regulations.

General Criteria:

• Additional Visual Impact Analysis will be necessary if required by SHPO as part of cultural resource review; or if the equipment is significantly different in shape size and color; or if the view of the project from Naples is more than 5 turbines on Knapp Hill, as is depicted in the photo simulation presented in Appendix R in the FGEIS, or if required by an adopted local law in the Town.

• Ecogen will mark the location of buried ECS at 300 foot intervals as well as register the location of the buried ECS with Underground Facilities Protection Organization.

• After final site selection a quantification of land acreage impacts by the project will be provided. It will include an estimate of impacted land according to different types of habitat. It will also identify the location of slopes greater than 15% grade. The plan will reviewed by SCIDA prior to approving the economic assistance package.

• No impact to the park in the Town of Prattsburgh.

• Re-use topsoil on-site.

• In order to promote local workforce involvement in the project the following will be accomplished:
- For short term construction jobs, a policy of “first among equals” will be implemented, and
- For permanent jobs, Ecogen will coordinate the search for potential local job candidates with Chemung Schuyler Steuben Workforce New York.

- Ecogen will provide a fund of $30,000 to cover the additional cost of inspection that may be required for each town to oversee construction issues related to SEQR compliance. The $30,000 will be divided between the municipalities based on the number of turbines built for each town.

- Coordinate with NYS Department of Agriculture and Markets prior to construction.

- Where feasible, use existing farm or logging roads for service roads.

- Avoid wetlands. Where necessary, minimize impacts to federal jurisdictional wetlands to less than 0.5-acres. Restore wetlands temporarily impacted to pre-construction conditions, when applicable.

- Co-locate ECS along service roads and install underground where practicable. ECS stream crossings will be via overhead lines or directional boring and perpendicular to stream banks in order to minimize overhead clearing.

- FAA approved lighting will be utilized or approximately 50% of WTG to discourage avian attraction during migration. Follow all requirements specified in the FAA’s acknowledgment letter(s), including lighting specifications in accordance with the FAA Advisory Circular AC 70/7460-1. Install red strobe-like L-864 lights on selected WTG to minimize the attraction to birds.

- Paint WTG an FAA-approved color (off-white) readily visible to migrating and foraging birds.

- Locate WTG outside of Segar Gully.

- Minimize impacts to active agricultural land and woodland; locate WTG near edge of woodland where practicable.

- Construct the Project in conformance with “NYS Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Windpower Projects”.

- Install ECS a minimum of 4 feet bgs within active agricultural lands, 3 feet bgs elsewhere.

- WTG constructed on active agricultural land will be sited as to best avoid disrupting agricultural activities, such as along field edges when other setbacks allow.

- Landscaping and fencing will be used to partially screen Ecogen buildings.

- Minimize construction noise by implementing best management practices.
• Limit construction to during daytime hours to mitigate noise impacts.

• Disturbed areas will be graded and seeded.

• No trenching or use of heavy equipment will occur in streambeds and no ground disturbance will occur within 50 ft of State-protected streams.
• Utilize an agricultural restoration contractor to restore agricultural land temporarily disturbed during construction.

• Repair local roads damaged from mobilization of heavy equipment and WTG components at Ecogen’s expense.

• Engineering design of the WTG and related project equipment shall use conservative assumptions/safety factors and will meet all Federal, State and local codes.

• Icing detectors will be installed on meteorological tower to detect ice buildup and allow for shut down of turbines in the event of a problematic icing condition.

• Project and contractor representatives will review available emergency preparedness plans with local emergency management officials prior to construction.

• Best management practices will be implemented during project construction to minimize spills and soil tracking.

• Complete road, culvert and intersection upgrades and restoration work at Ecogen’s expense to facilitate construction work, if required.

• A decommissioning bond in the amount of cost of tear down and restoration minus salvage value will be established prior to construction to decommission the Project, as determined by an independent engineer or salvage contractor to be held by SCIDA or its successor agency.

• Rotor blades will be constructed of fiberglass/carbon material and asynchronous (brushless) generators will be used which will reduce the potential for electromagnetic interference.

• Refuse will be collected and transported off site to a licensed disposal facility by a local solid waste hauler.

• Vegetative material generated during clearing work will be recycled in the Project area.

• In the event the Project was terminated during construction, decommissioning/restoration activities would include removal of WTG foundations to 3 ft below grade, removal of construction materials/debris and re-grading/seeding of the leased parcel.
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