FINAL ENVIRONMENTAL IMPACT STATEMENT

FOR THE

COHOCTON WIND POWER PROJECT

Town of Cohocton, Steuben County, NY

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Date DEIS Accepted by Lead Agency:	April 20, 2006
DEIS Public Comment Period:	April 20, 2006 – June 9, 2006
Date SDEIS Accepted by Lead Agency:	December 20, 2006
SDEIS Public Comment Period:	December 20, 2006 – February 15, 2007
Date FEIS Accepted by Lead Agency:	June 27, 2007

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1.0 INTRODUCTION

This Final Environmental Impact Statement (FEIS) is prepared pursuant to the New York State Environmental Quality Review Act (SEQRA) and its implementing regulations, 6 NYCRR Part 617. This document was preceded by a Draft Environmental Impact Statement (DEIS) and a Supplement to the Draft Environmental Impact Statement (SDEIS). The SDEIS built upon the DEIS, providing additional information and addressing Project changes that occurred after the DEIS was accepted as complete and released for public comment. Similarly, the FEIS builds upon the two preceding documents and addresses Project changes that occurred, and new information that became available, after the SDEIS was released for public review and comment. The FEIS also provides an extensive response to substantive comments received on the DEIS and SDEIS. Information presented in the SDEIS in terms of the Project layout, existing conditions, and associated impacts supercedes that presented in the DEIS, and information presented in the FEIS supercedes both the DEIS and the SDEIS. However, the SDEIS and FEIS do not, in general, reiterate information that remains accurate and unchanged from the DEIS. These three documents together provide a comprehensive analysis of the environmental impacts anticipated to result from the proposed Cohocton Wind Power Project.

1.1 SUMMARY OF SEQR PROCESS

On December 19, 2005 a Full Environmental Assessment Form (EAF) addressing the proposed wind power project was submitted by Canandaigua Power Partners (CPP) to the Town of Cohocton Planning Board pursuant to SEQRA. The formal submittal of the EAF initiated the SEQRA process for the subject action. Also in January of 2006, a solicitation of Lead Agency status was forwarded to involved agencies by the Cohocton Planning Board, along with a copy of the EAF document. No agency objected to the Planning Board's assuming the role of Lead Agency. On March 2, 2006 the Cohocton Planning Board formally assumed the role of Lead Agency, and, in that role, issued a positive declaration, requiring the preparation of a DEIS (see DEIS Appendix B for a compilation of agency correspondence.)

On March 31, 2006, the DEIS was submitted to the Lead Agency. The DEIS was accepted as complete on April 20, 2006. Upon Lead Agency acceptance of the DEIS, copies of that document (along with a copy of the public notice) were distributed to all interested and involved agencies (see DEIS Table 1) and made available to the public at the Cohocton Town Clerk's Office, the Cohocton Public Library, and CPP's local office in the Village of Cohocton. Additional copies of the document were sent to the Cohocton Zoning Board of Appeals, the U.S. Army Corps of Engineers (USACE), the Town of Wayland, and Cohocton Wind Watch. The entire DEIS was posted to the Project website (www.cohoctonwind.com) to facilitate public review and comment on the document. The public comment period ran from April 20, 2006 to June 9, 2006 and a public hearing was held at the Wayland-Cohocton Central School on May 25, 2006.

In order to address changes made to the Project layout, present further support studies, and to provide additional detail to the public regarding the proposed Project, a Supplemental Draft Environmental Impact Statement (SDEIS) was prepared. The SDEIS was accepted by the Lead Agency on December 20, 2006 and a Notice of Completion and Notice of Public Comment Period were subsequently filed and published. The public comment period on the SDEIS was to run through February 1, 2007 but was subsequently extended until February 15, 2007. A public hearing on the SDEIS was held at Wayland-Cohocton Central School on January 19, 2007. A Responsiveness Summary was subsequently prepared as part of this Final Environmental Impact Statement (Section 3.0) to address all substantive comments received on the DEIS and the SDEIS.

The SEQRA process for the Cohocton Wind Power Project will conclude with the following actions and time frames:

- FEIS accepted by Lead Agency (Cohocton Planning Board).
- Final notice of completion of FEIS.
- Distribute FEIS and a copy of the public notice to the agencies listed in Table S2 of the SDEIS.
- 10-day public consideration period.
- Lead Agency issues Findings Statement, completing the SEQRA process.
- Involved agencies issue Findings Statements.

1.2 SUMMARY OF THE DEIS

At the time the DEIS was prepared, the Cohocton Wind Power Project was proposed to consist of 41 turbines, four meteorological towers, a system of gravel access roads, an electrical collection system, an operations and maintenance building, a collector station, a 115 kV overhead transmission line, and an electrical substation. The Project was proposed to be developed on 5,755 acres of leased private land, in the Town of Cohocton, with construction anticipated to commence in April 2007 and to finish in December 2007. The wind turbine proposed was the Gamesa Eolica G87 with a total height of 399 feet. The Project was anticipated to employ approximately six operations and maintenance personnel.

Various plans and support studies were prepared in support of the DEIS, which provide detailed information on discrete topical areas in furtherance of the SEQRA evaluation. These studies included the following:

- Agricultural Protection Measures
- Groundwater Resources Report
- Cultural Resource Management Report
- Shadow Impact Assessment
- Transportation Study
- Off-Air Television Reception Analysis
- Licensed Microwave Search & Worst Case Fresnel Zone Study
- Spring 2005 Radar Survey of Bird Migration
- Spring and Fall 2005 Acoustic Survey of Bats
- Avian Risk Assessment
- Visual Impact Assessment
- Environmental Sound Survey and Noise Impact Assessment

In addition to providing a project description and summary of the regulatory process to date, the DEIS presents the purpose, need and benefit of the proposed project, a summary of the potential environmental impacts and proposed mitigation measures, and closes with a discussion of project alternatives and project effects on the use and conservation of energy resources. These topics, as presented in the DEIS, can be summarized as follows.

Purpose, Need, and Benefit

The purpose of the proposed action is to create a wind-powered electrical-generating facility that will provide a significant source of renewable energy to the New York power grid. The Project would facilitate compliance with the Public Service Commission (PSC) "Order Approving Renewable Portfolio Standard Policy", issued on September 24, 2004. This Order calls for an increase in renewable energy used in the state to 25% (from the level of 19% at that time) by the year 2013. The Project responds to objectives identified in the 2002 New York State Energy Plan and Final Environmental Impact Statement (State Energy Plan) (New York State Energy Planning Board, 2002), and the Preliminary Investigation into Establishing a Renewable Portfolio Standard in New York (NYSERDA, 2003). These objectives include stimulating economic growth, increasing energy diversity, and promoting a cleaner and healthier environment. The benefits of the proposed action include positive impacts on socioeconomics (e.g., increased payment-in-lieu of tax [PILOT] revenues to local municipalities and lease revenues to participating landowners), air quality (through reduction of emissions from fossil-fuel-burning power plants), and climate (reduction of greenhouse gases that contribute to global warming).

Summary of Potential Impacts

In accordance with requirements of SEQRA, potential impacts arising from the proposed action were identified early in the application process and were evaluated in the DEIS with respect to an array of environmental and cultural resources. The identified potential impacts are summarized in Table 1.

Table 1. Summary of Potential Impacts Identified in the DEIS

Environmental Factor	Potential Impacts
Physiography, Geology, and Soils	Soil disturbance Soil erosion Soil compaction Loss of agricultural land
Water Resources	Temporary disturbance Siltation/sedimentation Stream crossings Wetland filling
Biological Resources	Vegetation clearing/disturbance Incidental wildlife injury and mortality Loss or alteration of habitat
Climate and Air Quality	Construction vehicle emissions Dust during construction Reduced air pollutants and greenhouse gases
Aesthetic/Visual Resources	Visual change to the landscape Visual impact on sensitive sites/viewers Shadow-flicker impact on adjacent residents
Cultural Resources	Visual impacts on architectural resources Disturbance of archaeological resources
Sound	Construction noise Operational impacts on adjacent residents
Transportation	Road wear/damage Traffic congestion/delays Road system improvements/upgrades
Socioeconomic	Host community payment/PILOT Revenue to participating landowners Expenditures on goods and services Tourism Short-term and long-term employment
Public Safety	Construction concerns related to large equipment, falling objects, open excavations,

Environmental Factor	Potential Impacts
	electrocution Possible ice shedding concerns Project components catching fire
Communication Facilities	Temporary interference to communication signals Degraded reception to off-air television signals
Community Facilities and Services	Demands on police and emergency services Relocated utility distribution lines and towers
Land Use and Zoning	Adverse and beneficial impacts on farming Changes in community character and land use trends

Construction of the Project as described in the DEIS would have resulted in disturbance of up to 245 acres of soil and 378 acres of vegetation, primarily within agricultural fields. In addition, approximately 67 acres of forest and 2.9 acres of wetland would have been disturbed by Project construction. However, most of this disturbance would have been temporary. A total of approximately 36 acres of agricultural land would have been converted to non-agricultural use/built facilities (e.g., roads, turbines, substation, etc.), and a total 42 acres of forest would have been converted to early successional (shrub and sapling-dominated) communities (primarily on the transmission line right-of-way). Permanent wetland impacts were estimated to be less than 0.1 acre (due to transmission line towers). Project construction was also predicted to result in some level of temporary disturbance and congestion on area roadways.

The potential for Project operation to result in some level of avian and bat collision mortality was discussed and was estimated in the range of 0-6 birds per turbine per year. Turbines were expected to be visible from many locations within the surrounding area, but to also be fully or partially screened from viewers in many locations (e.g., the Village of Cohocton). The turbines were expected to result in a perceived change in land use from some locations, but to help keep land in active agricultural use by supplementing farmer's income. Predicted noise and shadow flicker impacts were modest. Only one receptor had the potential to experience over 25 hours of shadow flicker annually, and turbine-related sound was only predicted to exceed 50 decibels at adjacent non-participating property lines in seven instances. In no instances was this sound level predicted to be experienced at a neighboring residence. The DEIS also stated that the Project was expected to generate approximately $434,600 per year ($8.7 million over 20 years) in PILOT revenues to local taxing jurisdictions, while requiring very little in terms of municipal services.

Summary of Mitigation Measures

Various measures described in the DEIS were intended to avoid, minimize and/or mitigate potential environmental impacts. General mitigation measures included adhering to requirements of various local, state, and federal ordinances and regulations. CPP will also employ environmental monitors to assure compliance with permit requirements and environmental protection commitments during construction. The proposed Project resulted in significant environmental and economic benefits to the area. These benefits also served to mitigate unavoidable adverse impacts associated with Project construction and operation.

Specific measures designed to mitigate or avoid adverse potential environmental impacts during Project construction or operation which were outlined in the DEIS included:

- Siting the Project away from population centers and areas of residential development.
- Siting turbines primarily in open field areas to minimize required clearing of mature forest land to the extent practicable.
- Siting turbines and access roads so as to avoid impacts to wetlands and streams.
- Keeping turbines a minimum of 1,500 feet from nonparticipating residences to minimize noise, shadow flicker, and public safety concerns.
- Using existing roads for turbine access whenever possible to minimize disturbance to agricultural land.
- Utilizing construction techniques that minimize disturbance to vegetation, streams, and wetlands.
- Routing the overhead transmission line along existing railroad right of way, and other disturbed areas, to minimize impacts on wetlands.
- Implementing agricultural protection measures to avoid, minimize, or mitigate impacts on agricultural land and farm operations.
- Limiting turbine lighting to the minimum allowed by the Federal Aviation Administration (FAA) to reduce nighttime visual impacts, and following lighting guidelines to reduce the potential for bird collisions.
- Developing and implementing various plans to minimize adverse impacts to air, soil, and water resources, including a dust control plan, sediment and erosion control plan, and Spill Prevention, Control, and Countermeasure (SPCC) plan.

- Entering into a PILOT agreement with the local taxing jurisdictions to provide a significant predictable level of funding for the town, county, and school districts over the first 20 years of the Project's operations.
- Development of an emergency response plan with local first responders.

Alternatives

Alternatives to the proposed Project that were considered and evaluated in the DEIS included no action, alternative project siting, alternative project area, alternative project design/layout, alternate project scale and magnitude, and alternative technologies. Analysis of these alternatives revealed that both the size of the Project and the configuration of the turbines as proposed in the DEIS were necessary to produce a commercially feasible project that minimizes adverse impacts to the extent practicable. A smaller project would not fully capture the available wind resource and would not generate enough power to be economically viable given the project development and construction costs, including the expense of connecting to the power grid. A larger facility might theoretically provide more economic return, but it would force location of towers into areas within the land available to CPP with more marginal wind power resources and greater proximity to residents, steep slopes, and/or forested areas. This would result in more numerous potential adverse environmental impacts than the preferred alternative addressed in the DEIS. A larger number of smaller turbines, while perhaps reducing visibility from some areas, would not change the overall visual impact of the Project and would increase impacts associated with the more extensive road and interconnect systems required. Alternative technologies (e.g., different sources of generation) eliminate many of the environmental advantages associated with the proposed Project. In summary, the alternatives analysis concluded that the Project as proposed in the DEIS offered the optimum use of resources with the fewest potential adverse impacts.

Effects on Use and Conservation of Energy Resources

The proposed Project would have significant, long-term beneficial effects on the use and conservation of energy resources. Energy will be expended during the construction phase of the Project, as well as for the operation and maintenance of the wind turbines and support facilities on-site. Each turbine requires approximately 50 megawatt hours (MWh) per year to operate, but is anticipated to produce over 6,500 MWh per year. The operating Project, as proposed in the DEIS, would produce up to 82 MW of wind-generated electricity. This greatly exceeds the energy required to construct and operate the Project, and the output is enough to power approximately 28,700 homes in New York State, (on an average annual basis). The Project would add to and diversify the state's sources of power generation, helping to stabilize power prices currently subject to spikes in fossil fuel prices. Over the long term, power produced by the Cohocton Project would help displace some of the state's older, less efficient, and dirtier sources of power, and at a minimum will help to stave off the need to build some new fossil fuel plants. The principal, overriding benefits of the Project are in complete accordance with the 2002 State Energy Plan (New York State Energy Planning Board, 2002), namely:

- "Stimulating sustainable economic growth"
- "Increasing energy diversity…including renewable-based energy"
- "Promoting and achieving a cleaner and healthier environment"

1.3 SUMMARY OF THE SDEIS

The SDEIS addressed the Project modifications that occurred between the time the DEIS was prepared and the time the SDEIS was prepared. It also presented the results of revised studies and supplemental data collection. The SDEIS was a supplement to the original DEIS, and in general did not reiterate information from the original DEIS that remained accurate and unchanged. In addition, the SDEIS addressed several issues raised in the public/agency comments received on the original DEIS, although it did not include a comprehensive responsiveness summary as is found in Section 3 of this FEIS.

As mentioned previously, the Project was originally proposed to include approximately 41 Gamesa G87 wind turbines, each with a generating capacity of 2.0 MW, and a maximum height of approximately 399 feet. Maximum generating capacity of the Project was up to 82 megawatts (MW). The wind turbine proposed in the SDEIS is the Clipper Liberty C96, with a generating capacity of 2.5 MW and a total height of 420 feet. The proposed Project layout was modified to accommodate the larger wind turbine and the revised Project was proposed to include a total of up to 36 wind turbines, with a total generating capacity of 90 MW. The revised Project thus increased generating capacity while reducing the number of required turbines. The size of the Project area was also reduced from approximately 5,755 acres to approximately 5,700 acres.

Studies conducted in support of the SDEIS included the following:

- Phase 1B Archaeological Survey and Architectural Reconnaissance
- Revised Shadow Impact Assessment
- Transportation Assessment Report

- Revised Licensed Microwave Search & Worst Case Fresnel Zone Study
- 2006 Breeding Bird Survey
- Interim results from Fall 2006 Radar and Anabat Surveys at Dutch Hill
- Supplemental Visual Impact Assessment
- Revised Environmental Sound Survey and Noise Impact Assessment
- Wetland Delineation Report
- Property Value Study
- Economic Impact Analysis

The SDEIS also presented updated potential Project impacts based on the revised Project design, an expanded discussion of proposed mitigation measures, and revised/expanded analyses of Project alternatives, cumulative impacts, and effects on the use and conservation of energy resources. These changes and additions, as presented in the SDEIS, can be summarized as follows.

Summary of Revisions to Potential Impacts

Due to changes in the proposed Project layout, the anticipated impacts also changed. Construction of the revised Project was estimated to result in disturbance of up to 216 acres of soil and 302 acres of vegetation, including approximately 55 acres of forest and 3.83 acres of wetland. As was the case in the DEIS, most of this disturbance was anticipated to be temporary. A total of approximately 25 acres of agricultural land, 2 acres of successional land, and 5 acres of forest land were to be converted to built facilities (e.g., roads, turbines, substation, etc.). An additional 36.5 acres of forest land were to be converted to successional communities for the duration of Project operation (primarily on the transmission line right-of-way). Permanent wetland impacts were anticipated to include approximately 0.032 acre of fill and the conversion of approximately 2.3 acres of forested wetland along the transmission line ROW to scrub-shrub wetland for the life of the Project.

Visual impacts associated with the proposed turbines were not significantly different from those described in the DEIS. Revised communication studies suggested that the Project would not adversely affect microwave communications, and revised sound and shadow flicker studies indicated that predicted noise and shadow flicker impacts would remain minimal. Only three receptors had the potential to experience over 20 hours of shadow flicker annually, and turbine-related sound was not predicted to exceed 50 decibels at any adjacent non-participating property lines with the installation of noise abatement measures. Sound levels above 45 dBA were not anticipated at any neighboring residences.

Summary of Revised Mitigation Measures

Specific measures designed to mitigate or avoid potential adverse environmental impacts that were introduced or expanded upon in the SDEIS includes the following:

- Additional detail was provided on pre- and post-construction surveys of wells located within 1,000 feet of a turbine site.
- Should post-construction monitoring indicate significant bat mortality, CPP will work with the New York State Department of Environmental Conservation (NYSDEC) and U.S. Fish and Wildlife Service (USFWS) to evaluate the feasibility of deterrents or other viable mitigation measures.
- CPP will explore the feasibility of light shields to help block ground-level views of FAA obstruction warning lights on the turbines.
- Additional investigation of three receptors that could receive more than 20 hours of shadow flicker annually will be undertaken.
- If required by the State Historic Preservation Office (SHPO), a Memorandum of Agreement (MOA) will be negotiated with that prescribes mitigation for adverse visual impacts on Register-eligible historic sites.
- CPP will work with state, county, and local highway departments to develop a final transportation routing plan.
- Design plans will be completed for all public road improvements, and will be made available to the affected local Towns (and other jurisdictions having responsibility for the affected roads) for review prior to the initiation of construction activities.
- Prior to construction, CPP will video document the existing roadways to verify pre-construction roadway conditions. Upon completion of the construction activities, CPP will, at a minimum, return all roadways to their pre-construction conditions (and video document) at no cost to the affected jurisdiction.
- Use of public roads by heavy equipment or oversized vehicles during Project operation and maintenance will be coordinated with state, county, and local Highway Department officials. Any damage to the roads will be repaired at the Project operator's expense.
- Additional detail regarding the proposed complaint resolution procedure is described in Section 4.2 of the SDEIS.

Alternatives

Alternatives to the proposed Project were discussed with additional detail on transmission line alternatives. Alternative transmission line routes that would reduce Project visibility or the extent of forest clearing were either not considered acceptable by the involved landowners or would result in significant wetland impacts. Placing the 115 kV transmission line partially or fully underground was determined to be infeasible due to the high cost. The cost of going overhead for the full 9 mile length of the line is approximately $4 million. The cost of going underground over this same distance would be approximately $16 million. Given the generating capacity of the Project, the cost of placing the entire line underground would make the Project uneconomical. In regard to turbine selection, an 80 meter tower with a 96 meter-diameter rotor, as currently proposed, is among the tallest turbines now commercially available. Because the wind is stronger and less turbulent at higher altitudes, these larger turbines are more efficient at capturing the available energy in the wind. The currently proposed turbine and turbine layout are thus the ones that maximize the generation potential of the site, while utilizing the fewest turbines.

Cumulative Impacts

Cumulative impacts associated with the proposed Cohocton Wind Power Project and other wind power projects proposed in Steuben County were discussed. Cumulative impacts were only evaluated for those projects where information on proposed turbine number and location was publicly available. These were limited to the WindFarm Prattsburgh Project in the Towns of Italy and Prattsburgh, and the Dutch Hill Wind Power Project in the Town of Cohocton. Potential cumulative avian, visual, transportation, and socioeconomic impacts are anticipated if either the WindFarm Prattsburgh or Dutch Hill Project is built along with the Cohocton Project. These impacts are largely unavoidable, and in the case of socioeconomics, are beneficial. Analysis included in the SDEIS indicates that cumulative transportation impacts can be adequately managed, and that cumulative avian and visual impacts are not likely to be significant. Other potential impacts associated with the construction or operation of multiple wind power projects are either additive (e.g., acres of disturbance to soils or agricultural land), or will not occur due to the separation of the proposed projects (e.g., noise and shadow flicker).

Effects on Use and Conservation of Energy Resources

The proposed Project's effect on the use and conservation of energy resources were essentially as described in the DEIS. The SDEIS provided data indicating that the Project will generate enough power to support approximately 39,500 homes in New York State and off-set up to 236,500 MWh of fossil fuel-generated power annually.

2.0 PROJECT CHANGES AND NEW INFORMATION

This section describes changes that were made to the Project, as well as supplemental information regarding potential environmental impacts that has become available, since the SDEIS was filed in December 2006. For Project components that have not been altered, and environmental resource areas for which complete information was provided in the DEIS and/or SDEIS, the corresponding section below indicates that no substantive changes have been made. In these cases, please refer to the corresponding section of the DEIS and SDEIS for details. Additionally, all appendices, figures, and tables included in the DEIS and SDEIS remain relevant to this FEIS. Updated appendices, figures, and tables are included herein to account for Project alterations that have occurred, or additional information that has become available, since the SDEIS was issued.

Since the release of the SDEIS, minor changes in the proposed Project layout and Project impact assumptions have occurred due primarily to identification of construction constraints, landowner preferences, efforts to reduce environmental impact and cost, and wind resource optimization. These changes are listed below and depicted in Figures 1 and 2.

- Elimination of one proposed wind turbine (Turbine 33 formerly located on Brown Hill), thus reducing Project size to a maximum of 35 wind turbines.
- Shifts in the location of 27 turbines; 10 of these turbines have shifted less than 100 feet, eight turbines have shifted between 100 and 250 feet, and nine have shifted by more than 250 feet. Three turbines (12, 30, and 31) have experienced the most significant moves, ranging from 750 to 1,915 feet from the locations proposed in the SDEIS.
- Realignment of access road and buried interconnect routes, with the current layout resulting in approximately 8.8 miles of access road and 15.4 miles of buried interconnect. This compares to 8.9 miles of road and 16.6 miles of interconnect described in the SDEIS.
- Realignment of the 115 kV transmission line in several locations (total length remains 9.0 miles). Significant realignment has occurred in the following three areas:
    - The transmission line now follows Cayward Road southwest of the Newcomb Hollow Road intersection instead of traversing the agricultural field on the north side of the road.
    - The descent from Cayward Road to the Cohocton River valley floor has been shifted west of it’s previous alignment. The transmission line now follows the west edge of the agricultural field south of Cayward Road and then turns sharply to the west traveling approximately half way down slope toward Ryan Hollow Road and then turning south/southwest toward the Flint Road/Jones Road intersection in the valley.

This realignment resulted in a change in the first Cohocton River crossing point, approximately 250 feet east of the previously proposed crossing.

  - Finally, the alignment in the Fairbrother Road area is now proposed to follow the road ROW for a short distance whereas it was previously proposed to traverse the wooded slope to the west of the road.

- Elimination of one of the three permanent meteorological towers proposed in the SDEIS for a total of two permanent meteorological towers, one located on Pine Hill off of Pine Hill Road, and the other located on Brown Hill off of Preston/Van Auker Road. The meteorological towers will be guyed, galvanized steel pole structures.
- Relocation of the Brown Hill substation approximately 300 feet to the east to minimize steep slope/area of disturbance impacts and comply with New York State Electric and Gas (NYSEG) specifications.
- Refinement of the Project boundary resulted in a decrease in the size of the Project area from approximately 5,700 acres to approximately 4,800 acres.
- Consultation with engineers and contractors has resulted in two changes to Project impact assumptions.
  - The width of vegetation clearing and soil disturbance for the installation of buried electrical interconnect was previously assumed to be 15 feet. This width has been increased to 35 feet to account for passage of support vehicles. Temporary impacts to this expanded area will be limited to clearing of vegetation and compaction of soils. Installation of buried interconnect will not result in any permanent impacts (although in forested areas regeneration will be a gradual process). All compacted, or otherwise disturbed soils along the buried cable route will be restored following construction in accordance with NYS Department of Agriculture and Markets (NYSA&M) Agricultural Protection Guidelines.
  - Temporary disturbance associated with the installation of transmission line towers was previously assumed to impact a 100 foot by 50 foot area at each tower site. As a result of information provided by electrical engineering contractors, this area of disturbance has been reduced to 100 feet by 40 feet.
  - Although temporary timber mats are being proposed as an alternative to gravel crane pads at the turbine sites, gravel pads are still included in the impact calculations to provide a conservative estimate of potential impacts, and in recognition of the fact that mats may not be feasible at certain sites.

- Changes to the proposed turbine component delivery routes due to the larger size of the components currently proposed (primarily the blades), existing restrictions at exits off of Route 390, and a desire to minimize impact to local roads, residents, and roadside resources (wetlands streams, etc.). The revised transportation routing plan will require temporary modification of 12 sections of public road. These modifications typically involve temporary gravel widening of intersections, as described in the SDEIS.

These Project changes result in relatively minor changes to the anticipated impacts described in the SDEIS. These changes are described in the following sections of the FEIS.

In addition to discussing the effect of Project changes that have occurred, the following sections also present new information that has become available since preparation of the SDEIS. This information includes the following:

- Fall 2006 Survey of Bird and Bat Migration
- Agency Correspondence
- Supplemental Visual Analysis
- Revised Shadow Flicker Modeling
- Updated Noise Modeling Results
- Engineering Reports Concerning Effects on FCC Licensed Transmitting Facilities
- Revised Transportation Routing Plan

This information is discussed below and included in the appendices to the FEIS. As mentioned previously, the following sections only address new or revised information and do not reiterate information that remains accurate and unchanged from the DEIS/SDEIS.

2.1 GEOLOGY, SOILS, AND TOPOGRAPHY

The changes in Project layout have resulted in minor changes to the anticipated impacts to on-site soils. The current Project layout is anticipated to result in the disturbance of approximately 236 acres of soil. Of the 236 acres of total disturbance, 31 acres will be converted to built facilities and the remaining 205 acres of disturbance will result from temporary construction-related activities. This compares to an estimated 219 acres of total soil disturbance described in the SDEIS, consisting of 32 acres of permanent disturbance and 187 acres of temporary disturbance. The increase in temporary impacts is largely due to the increase in the assumed width of disturbance associated with installation of the buried interconnect (i.e., from 15 feet to 35 feet). Less than 2 acres of temporary soil disturbance will result from necessary modification of public roads. The soil types being disturbed and the anticipated types and extent of disturbance are as described in the SDEIS/DEIS. As mentioned in Section 2.0, the proposed use of temporary timber mats rather than gravel crane pads at each tower site would reduce the area of permanent soil disturbance. If feasible at all tower sites, this reduction would be approximately 4.8 acres.

2.2 WATER RESOURCES

Since preparation of the SDEIS, one additional wetland has been delineated. This wetland (PH-A) is located at the intersection of Pine Hill Road and State Route 371. This area was delineated in May 2007 because it occurs in an area that is likely to require temporary modification of public roads to accommodate construction traffic (see discussion in Section 2.8 and maps/figures in Appendix G). Wetland PH-A is an intermittent drainage dominated by herbaceous wetland vegetation, including cattails, reed canary grass and late goldenrod. At the time of delineation wetland hydrology was indicated by saturated soils and shallow standing/flowing water.

As stated in the SDEIS, construction-related impacts to surface waters and wetlands are anticipated to be very minor. However, these anticipated impacts have changed slightly, due primarily to the re-alignment of the 115 kV transmission line in a few locations (see Figures 3-6 and revised wetland delineation figures in Appendix A). The discussion of wetland impacts presented in the DEIS/SDEIS is amended by the following revisions:

- Due to landowner insistence, the transmission line ROW no longer avoids the wetland complex along Fairbrother Road. CPP originally sited the transmission line on the western edge of this property to avoid the wetland, but this location proved unacceptable to the landowner. The only location acceptable to the landowner is along Fairbrother Road, where it is currently proposed. CPP could not route the line around this landowner because doing so would involve another landowner who did not want the transmission line on his land. Therefore, the only alternative CPP had was to site the transmission line through the wetland along Fairbrother Road. The Fairbrother Road wetland complex is a relatively large area of wet meadow and scrub-shrub wetland associated with an unnamed tributary to the Cohocton River. The characteristics, functions, and values of this wetland (Wetland TLU) are described in the Wetland Delineation Report included as Appendix B to the SDEIS. Seven transmission line towers (single wood poles) are proposed to be placed within or adjacent to this wetland. It is anticipated that five of these towers will fall outside the wetland boundary, but may have temporary wetland impacts associated with their construction. Placement of two towers within this wetland was unavoidable, and will result in a small permanent impact (see Appendix A, Sheet 23). The extent of impacts to this wetland will be finalized as project engineering advances and final acreages will be presented in the Joint Application for Permit. Based on project engineering conducted to date, temporary impacts are anticipated to include soil and vegetation disturbance within a 40-foot by-100 foot workspace for each transmission line tower and a 20 foot wide access route to one tower within the wetland interior (all but this one tower are located at the wetland edge). A 70 foot wide cleared ROW will be required along the entire length of the line, but clearing of vegetation is anticipated to be extremely limited due to the fact that few, if any tall-growing trees are present in this wetland. All of these impacts are temporary, and total up to 0.74 acre. Permanent wetland impacts will be limited to the basal area of the transmission line towers (approximately 4 square feet each). Because the wetland currently lacks tall-growing trees, long term ROW maintenance will not result in conversion of this wetland to a different cover type.

- Additional Project design/engineering completed to date indicates that direct construction-related impact to wetlands/streams is anticipated to total no more than 2.91 acres, as opposed to 3.83 acres in the SDEIS. This acreage includes clearing of approximately 1.51 acres of forested wetland within the transmission line ROW. The anticipated impacts to forested wetlands have decreased compared to the SDEIS conservative estimate of 2.3 acres primarily due to the results of a field survey of forested areas along the transmission line ROW, which revealed less forested wetland than assumed in the SDEIS/DEIS.
- Permanent wetland impacts are anticipated to be limited to seven transmission line towers totaling less than 28 s.f. of permanent wetland loss (4 square feet per tower). In addition, the estimated 1.51 acres of forested wetland within the transmission line ROW will be converted to a scrub-shrub community for the operational life of the line.
- Construction of the currently proposed overhead transmission line route will impact approximately 2.51 acres of State-regulated Wetland AV-1 (AV-1 includes wetlands delineated by EDR as TLC/TLD, TLE, TLF, TLG, TLH, TLI, TLJ, and TLQ) in the Cohocton River valley and approximately 0.38 acre of state regulated adjacent area (100 foot buffer). These impacts include selective tree clearing in the 70 foot wide ROW, installation of towers, and disturbance of a temporary 20 foot wide access route to tower locations that are otherwise inaccessible.
- Approximately 60% of the linear distance of transmission line route through Wetland AV-1 utilizes the existing railroad ROW, as opposed to 67% in the SDEIS. This change is a result of realignment of the transmission line ROW through the portion of AV-1 delineated as Wetland TLE.

- An anticipated access road crossing (permanent filling) of Wetland R-19-A is being avoided through the relocation of the proposed access road to Turbine 14.
- Anticipated temporary filling impacts to Wetlands VAB and WRA associated with public road improvements are being avoided with the new transportation routing plan proposed for construction traffic (see discussion in Section 28 and maps in Appendix G). Based on field reconnaissance (including wetland delineations) and engineering completed to date, no wetlands or streams are currently anticipated to be impacted by required public road improvements along the revised transportation route.

Currently anticipated impacts to individual wetlands are presented in Table 2. An additional four wetlands are intersected by project components but are not included in the table as no impacts are currently anticipated. Three of these wetlands (TLR, TLV, and TLW) are spanned by the transmission line but will not be disturbed. The fourth, Wetland LHA, will be avoided by utilizing directional boring methods. The Project will still require a Nationwide Permit from the U.S. Army Corps of Engineers, and an Article 24 and Article 15 permit from the NYSDEC, as discussed in the DEIS and SDEIS.

Table 2. Estimated Impacts to Wetlands and Surface Waters

EDR Wetland ID	Wetland Covertype[1]	Jurisdiction[2]	Impact	Area of Temporary Impact (s.f.)	Area of Permanent Impact (s.f.)
I15A	Stream	Federal	Buried Interconnect	1,112	---
I15B	Stream (dry) drainage	Federal	Buried Interconnect	721	---
TLC/TLD	FO/SS/WM/Stream	Federal and State	Tower Access Road and 2 Towers	15,823	8
TLE	SS/WM/EM	Federal and State	Tower Access Road and 1 Tower	9,591	4
TLF	SS/EM/WM	Federal and State	Forest Clearing	---	22,166
TLH	FO/SS/Stream	Federal and State	Tower Access Road, 1 Tower, and Forest Clearing	12,237	43,724
TLQ	FO/EM/SS/Stream	Federal and State	Tower Access Road and 1 Tower	5,778	4
TLU	Stream/WM/EM/SS	Federal	Tower Access Road and 2 Towers	32,142	8

[1] Wetland community types are represented by the following abbreviations: "EM" = Emergent, "FO" = Forested, "SS" = Scrub-shrub, "WM" = Wet meadow.
[2] Federal jurisdiction assumed based on existing mapping and visual observation of hydrologic connectivity in the field (final jurisdictional determination to be made by USACE). State jurisdiction assumed based on existing NYSDEC mapping of freshwater wetlands and/or protected streams.
[3] Based on preliminary assessment of impact extent. Precise impact acreages based on engineering drawings will be included in the Joint Application for Permit.

2.3 BIOLOGICAL, TERRESTRIAL, AND AQUATIC RESOURCES

Vegetation

As indicated in revised Figure 7, the smaller 4,800-acre Project area has essentially the same composition of ecological communities as was described in the SDEIS, with minor changes to acreages and percentages of communities present. It is composed of approximately 1,460 acres of forestland (30.4%), 150 acres of successional shrubland (3.1%), 25 acres of successional old field (0.5%), 3,098 acres of active agriculture (64.5%), 2 acres of open water (>0.1%), and 65 acres of disturbed or developed land (1.4%). Impacts to vegetation are slightly different than those presented in the SDEIS. The increased buried interconnect impact assumption (to a width of 35 feet), and shifts in turbines, access roads, and interconnect, have resulted in a decrease in impacts to forest and disturbed/developed areas, and an increase in impacts to agricultural land and successional old field and shrubland communities (Table 3). In terms of impacts to forestland, 4 acres will be converted to built facilities (turbines, crane pads, and access roads), 31.5 acres will be actively maintained as successional communities for the life of the Project (within turbine workspaces and within the transmission line ROW), and 15.5 acres will be left to regenerate naturally (along edges of access roads, at public road intersections and along buried interconnect routes). This compares to 5 acres of conversion to built facilities, and 50 acres of maintained successional and regenerating forestland (36 acres and 14 acres, respectively) presented in the SDEIS. This change results primarily from the relocation of the 115 kV transmission line out of forest land in the Fairbrother Road area. As mentioned in Section 2.1 use of temporary timber mats rather than gravel crane pads could reduce permanent vegetation impacts by approximately 4.8 acres.

Table 3. Impacts to Vegetative Communities

Community[1]	Total Disturbance (Acres)		Temporary Disturbance (Acres)		Conversion to Built Facilities (Acres)	
	SDEIS	FEIS	SDEIS	FEIS	SDEIS	FEIS
Agricultural Land	220	250	195	224	25	26
Successional Old Field	6	3	4	2	2	1
Successional Shrubland	10	13.5	10	13.5	0	0
Forest[2]	55	51	50	47	5	4
Disturbed/Developed	11	2.5	11	2.5	0	0
TOTAL	**302**	**320**	**270**	**289**	**32**	**31**

[1]Excludes wetland and open water communities
[2]The term "temporary disturbance" is inapplicable to forest communities. The FEIS "temporary disturbance" to forest more accurately consists of 31.5 acres of actively maintained successional communities and 15.5 acres of regenerating forest.

Migrating Songbirds

Information on migrating songbirds is as described in the DEIS and SDEIS. However, the final report for the Fall 2006 Dutch Hill radar study is now available, and included in Appendix B. As stated in this report, a total of 21 nights of radar data were collected between August 29 and October 2, 2006. Because the anti-rain function of the radar must be turned down to detect small songbirds and bats, surveys could not be conducted during periods of inclement weather. Therefore, surveys were targeted largely for nights without constant rain. However, nights with weather forecasts including occasional showers were sampled in order to characterize migration patterns during nights with suboptimal migration conditions. Table 1 in Appendix B provides a summary of the range of weather conditions encountered during the fall 2006 radar survey.

While this fall survey effort is less than the NYSDEC-recommended 60 nights, Woodlot recently conducted a re-evaluation of seven, 45-night spring radar data sets to assess the affect of sampling effort on the results of avian radar studies. That re-evaluation indicated that sampling with radar on as few as 15 to 20 nights yielded average migration characteristics (passage rate, flight height, and flight direction) that are not statistically different than the average calculated using the full 45 night data sets (assuming that the allocation of those fewer nights represents the range of weather conditions experienced over the full 45 night period). This re-evaluation has been presented at two recent industry and ecological conferences, including the Northeast Fish and Wildlife Conference held in Burlington, Vermont (Roy and Hengstenberg, 2006a) and the American Wind Energy Association (AWEA) Wind Power Project Siting Workshop (Roy and Hengstenberg 2006b). Consequently, the sampling effort at Dutch Hill is adequate to characterize bird migration patterns through the Project area.

Final analysis of the recorded radar data confirms the preliminary results included in the SDEIS. Specifically, nightly passage rates ranged from 88 targets per kilometer per hour (t/km/hr) to 1,158 t/km/hr, with a seasonal mean of 535 t/km/hr. The mean seasonal flight direction was to the southwest, which is typical of fall migration in the Northeast. The mean seasonal flight height of night-migrants was 358 meters (m) above the radar site, and ranged from 263 m to 494 m. The nightly percent of targets flying below the approximate maximum turbine height (125 m) ranged from less than 1% to nearly 27%, with an overall seasonal mean of 11%.

As stated in the SDEIS, the flight characteristics documented in the radar study are generally very similar to those observed during surveys conducted in 2004 and 2005 at the Cohocton Wind Power Project site, the WindFarm Prattsburgh site, and the Italy-Prattsburgh Wind Power Project site. The fall 2006 passage rate was higher than observed during the previous years of survey at the nearby sites, and at the high end of the range observed at other sites in New York State. This is largely due to the exceptional view that the radar had of the surrounding airspace, including airspace below the elevation of the radar unit. The location of the radar at the top of the plateau allowed for detection of targets flying down into the adjacent Cohocton River Valley. The vast majority of radar studies have not had similarly clear views down to or below horizontal. This radar 'view' thus exceeds that available at other sites. Hence, the radar at the Project was able to 'see' and plot the tracks of birds in a larger volume of airspace. This factor, which varies from site to site, is the most important limitation in radar data set comparisons. Consequently, direct comparisons between sites to determine if more birds fly over one site than another, should be made with extreme caution.

Perhaps the most important result of the radar survey was the observation that night-migrants do not appear to be concentrating in any one location within the Project area. Any concentration would be of concern if a turbine were located near the concentration area.

The emerging body of studies characterizing nighttime bird movements shows a relatively consistent trend in regard to the altitude at which night migrants fly (see Table 2-1 in Appendix B). In general, nighttime migration typically occurs approximately 1,000 to 2,000 feet above the ground. The percentage of targets documented at heights below that of typical modern wind turbines is generally in the range of 10 to 20 percent. The mean flight height of 358 m (1,176 feet) documented in the radar study is generally similar to heights documented by other studies in the region. In fact, the fall 2006 flight height is only 7 m (23 feet) less than what was observed in the Prattsburgh/Italy study (Mabee et al., 2005) conducted in the area during the fall of 2004 and 160 m (525 feet) less than what was observed in the WindFarm Prattsburgh study (Woodlot, 2005) during that same year.

Evidence suggesting topographic effects on the altitude of night-migrating birds, has typically been limited to areas of highly varied topography, such as the most rugged areas of the northern Appalachians and the Alps. The landscape around the Project site consists of agricultural plateaus and valleys with elevation differentials ranging from 600 to 700 feet. This differential is considerably less than in those other areas where potential topographic effects on flight height and direction have been observed. Consequently, it is unlikely that the topography in the vicinity of the Cohocton Project affects the movements of night migrants. However, consultation with the NYSDEC identified Dutch Hill as being of concern with respect to fall migrants passing from the Canandaiqua Lake and Cohocton River valleys, to the north of the Project areas, over the Dutch Hill and Cohocton Project area at low altitudes within the height of the proposed turbines.

The mean flight altitude of targets documented during this study supports the conclusion that topographic features are not affecting migration patterns. The mean flight altitude being high above the radar (which was located near the top of a plateau) indicates that most birds are flying so high that their flight is unimpeded by topographic features such as the hilltops of the Project area. Additionally, the radar unit was oriented so that in the vertical mode it could detect targets flying northeast to southwest in the valley below the radar's elevation to determine if birds were using the Cohocton River valley as a flyway at low altitudes. This was done specifically to address the concerns of NYSDEC regarding so-called "channeling" of migrants. No evidence of channeling was observed, and the data demonstrates that fall migrants approaching the Project area from the north are generally at altitudes well above the height of the proposed turbines.

Overall, results of the fall 2006 radar survey indicate that bird migration patterns are generally similar to patterns observed at other sites in the region, including those studies conducted in close proximity to the Project. The mean passage rate is also within the range of passage rates observed in studies at similar Northeastern sites. The percent of targets flying below turbine height was also well within the range observed at other sites, despite the large area of sky being sampled by the radar as it projected down into the nearby Cohocton River valley to the northeast. Consequently, conclusions presented in the DEIS/SDEIS regarding the potential avian risk posed by the Cohocton Project remain unchanged based on the results of this study.

Mammals

As mentioned in the SDEIS, Woodlot also conducted acoustic bat surveys on Dutch Hill using Anabat II detectors during the summer and fall of 2006 to supplement information on bat activity within the Project area. The final report documenting the results of this study is now complete and included as Appendix B. As was discussed in the SDEIS, a total of 103 bat call sequences were recorded during the 61 night survey period (August 12-October 12, 2006). The number of call sequences recorded per night ranged from 0 to 15 with a mean detention rate of 1.14 calls/detector night. Appendix B includes more specific information on the nightly timing, number, and species composition of recorded bat call sequences.

Nights with peak activity occurred on September 7 and September 28, with 15 and 9 total calls, respectively. Call files were classified to four distinct species guilds: Big Brown Bat Guild (including big brown bat, hoary bat, and silver-haired bat); Red Bat-Pipistrelle Guild; Myotid; and Unknown. The majority of the recorded call sequences (52%) were labeled as unknown due to very short call sequences (less than five to seven pulses) or poor call signature formation (probably due to a bat flying at the edge of the detection zone or flying away from the microphone). Of the calls that were identified to species or guild, those of the Big Brown Bat Guild were the most common (39% of all call sequences), followed by the species within the Myotid Guild (6% of all call sequences). Only 3% of the total call sequences were identified as either red bat or eastern pipistrelle (i.e., Red Bat-Pipistrelle Guild).

Of the 40 sequences in the Big Brown Bat Guild, approximately 40% appeared to be distinctly that of the silver-haired bat, 13% that of the hoary bat, and 8% that of the big brown bat. The remaining sequences were determined to be either that of the big brown bat or silver-haired bat, but not of the hoary bat. Of the six call sequences in the Myotid Guild, all were identified simply to the genus *Myotis* and not to any species. No calls were identified as Indiana bat, although these calls can be very difficult to distinguish from those of other myotids. Finally, within the Red Bat-Pipistrelle Guild, the three recorded calls were identified as mostly likely being from red bats.

Overall, the detection rates and species composition documented during the 2006 survey were similar to those documented at Cohocton and Prattsburgh in 2004 and 2005, and reported in the

DEIS/SDEIS. Those surveys, documented detection rates ranging from 0.28 to 2.2 recorded call sequences per detector-night. Results from 2006 were within the range of those survey results. This is not surprising, considering the similarity in location, predominant habitats, and land uses between the Dutch Hill site and the other local sites. Of the calls that were identifiable to species or guild, calls of the big brown guild were the most abundant. The observed pattern in guild abundance is generally consistent with that observed in studies at other Northeastern sites, as indicated in Table 4.

Table 4. Summary of Available Bat Detector Survey Results

Location[1]	Landscape	Season	Calls Per Detector Night
Cohocton, NY	Agricultural plateau	Fall 2004	2.0
Franklin, WV	Forested ridge	Fall 2004	9.2
Prattsburgh, NY	Agricultural plateau	Fall 2004	2.2
Sheffield, VT	Forested ridge	Fall 2004	1.8
Sheffield, VT	Forested ridge	Spring 2005	0.17
Deerfield, VT	Forested ridge	Spring 2005	0.07
Marble River, NY	Ag. plateau/ADK foothills	Spring 2005	0.26
Jordanville, NY	Agricultural plateau	Spring 2005	0.5
Cohocton, NY	Agricultural plateau	Spring 2005	0.72
Prattsburgh, NY	Agricultural plateau	Spring 2005	0.28
Liberty Gap, WV	Forested ridge	Spring 2005	0.5
Churubusco, NY	Ag. plateau/ADK foothills	Fall 2005	5.6
Cohocton, NY	Agricultural plateau	Fall 2005	1.6
Fairfield, NY	Ag. plateau/ADK foothills	Fall 2005	1.7
Jordanville, NY	Agricultural plateau	Fall 2005	4.8
Mars Hill, ME	Forested ridge	Fall 2005	0.8
Redington, ME	Forested ridge	Fall 2005	4.2
Sheffield, VT	Forested ridge	Fall 2005	1.2
Sheldon, NY	Ag. plateau	Fall 2005	34.9
Sheffield, VT	Forested ridge	Spring 2006	7.9
Sheffield, VT	Forested ridge	Fall 2006	1.1

[1] See Literature Cited section of Appendix B for specific study references.

Results of acoustic surveys must be interpreted with caution, as considerable room for error exists in identification of bats based upon acoustic recordings alone. Also, detection rates are not necessarily correlated with the actual numbers of bats in an area, because it is not possible to differentiate between individual bats in such studies. However, the surveys conducted during the fall of 2006, did document the species that would be expected in the area based on species' range and abundance as well as the habitat types characteristic of the Project area. The study also documented overall low passage rate/detection rate (which is a general index of bat activity) during the fall migration period. This is consistent with data presented in the DEIS and SDEIS.

Accurately predicting risk to bats is also difficult, due to limited study results from operating wind power projects. However, as noted below, some general trends between bat activity and mortality have been observed. According to Woodlot Alternatives, there are five publicly available studies for which bat activity surveys were conducted concurrently with fatality studies. Data from these studies has been summarized in Table 5, below. While this sample size is relatively small, and methods may have varied, the reported bat mortality rates correlated with the call detection rates, which serve as indices of bat activity. Sites with the lowest bat activity have shown relatively low bat mortality while those with the highest activity levels have shown much higher rates of mortality.

Table 5. Mortality and Bat Activity Indices for Five Wind Projects

Site	Total detector nights	Survey Periods	Bat Mortality (#/turbine/survey period)	Bat activity (#/detector/night)
Mountaineer, WV	33	Fall (1)	38	38.2
Buffalo Mtn., TN	149	Spring-fall (2)	20.8	23.7
Top of Iowa, IA	42	Spring-fall (2)	10.2	34.9
Buffalo Ridge, MN	216	Summer-fall (2)	2.2	2.1
Foote Creek Rim, WY	39	Summer-fall (2)	1.3	2.2

The overall bat activity index, which is the combined average number of bat calls per detector-night for all seasons, at the Cohocton Wind Project area, was 1.14 calls per detector night. This is at the lower end of the rates observed at the five sites in Table 5. Assuming this activity index is an indicator of expected mortality, bat mortality at the Cohocton Wind Project is anticipated to be relatively low.

In addition to bat activity rates serving as predictors of potential indices for bat mortality, predicting the timing of mortalities is also possible. There are several post-construction mortality surveys, conducted over extended periods of time, which have documented that the majority of bat fatalities actually occur over a relatively short period of time. Erickson et al. (2002) identified five wind energy facilities that were searched for fatalities from May 1 to November 15 (in the case of four of the five facilities) or from July 1 to November 15. Of the bat fatalities observed at those facilities, 89.4% occurred between July 16 and September 15. The report also provides a discussion of why it is believed that the fatalities were migrant bats rather than resident bats. Kerns and Kerlinger (2004) provided similar evidence that bat fatalities are concentrated during the late summer and fall migration period. During that seven month study (April 4 to November 11) 92.5% of all bat fatalities occurred between August 18 and September 30.

The timing of fatalities from these long-term studies has been recognized by a variety of agencies, organizations, and professionals concerned with bat mortality at wind energy developments. In fact, recent post-construction investigations by the Bat Wind Energy Cooperative (a cooperative formed by the American Wind Energy Association, Bat Conservation International, the National Renewable Energy Laboratory, and the United States Fish and Wildlife Service) were timed to span this recognized period when bats appear more susceptible to collisions with wind turbines (Arnett et al. 2005).

Based on the information obtained from the various acoustic surveys conducted in the vicinity of the Cohocton Project Area, and other similar studies, the Project is not likely to have any undue adverse effect on bat habitat or bat migration within the area. Data on bat mortality observed at five existing facilities and corresponding bat activity measures (see Table 5) demonstrate that overall bat mortality may, to some degree, be predicted by bat activity indices from preconstruction acoustic surveys of bat vocalizations. Based on the low detection rates found at the Cohocton Wind Project, mortality rates at this site are also expected to be relatively low.

<u>Threatened and Endangered Species</u>

Updated correspondence from the NYSDEC does not indicate the presence of any listed threatened and endangered species beyond those described in the DEIS/SDEIS (see Appendix C).

2.4 CLIMATE AND AIR QUALITY

The information regarding climate and air quality provided in Section 3.4 of the DEIS/SDEIS has not been affected by Project changes that have occurred or new data that have become available.

2.5 AESTHETIC/VISUAL RESOURCES

Visual Impact Assessment

Due to the minor adjustments in proposed turbine location, rerouting of sections of the 115 kV transmission line, and relocation of the Brown Hill substation, which have occurred since preparation of the SDEIS, EDR reevaluated the visual impact of the proposed Cohocton Wind Power Project. This reevaluation is presented in a letter report included as Appendix D.

The Supplemental Visual Impact Assessment (SVIA) previously prepared for this Project (EDR, 2006a) included viewshed maps that indicated areas of potential Project visibility within a 10-mile radius of the proposed turbines. To determine if the revised layout changed the overall Project viewshed, the 10-mile radius topographic blade tip viewshed of the currently proposed Project was overlaid on the same viewshed prepared for the previous layout addressed in the SVIA. This overlay exercise revealed almost complete similarity between the two viewsheds (46.6% of the study area potentially visible with the revised layout, as opposed to 46.7% with the layout addressed in the SVIA). Only very minor areas of altered visibility were indicated in the northern and western portions of the study area (see Figure 2 in Appendix D). Based on these results, it was concluded that the viewshed results reported in the SVIA remain accurate, and no additional analysis of the turbine viewshed is required.

However, because the Brown Hill substation is now proposed in a hilltop location, additional visibility of this Project component is now possible. To evaluate the extent of this potential visibility, topographic and vegetation viewshed analyses were conducted. These analyses utilized the same methodology described in the SVIA, but were based on the revised location of the substation, a maximum structure height of 80.5 feet (as indicated by the Project electrical engineers), and a study area of 3 miles (a distance generally considered to be the appropriate limit of visual study for transmission facilities in New York State). Topographic viewshed analysis indicates that areas of potential substation visibility are limited to 16.1% of the 3-mile radius study area. Potentially visible areas (discounting the effect of tree screening) are concentrated on higher elevation hilltops and slopes in the southwestern portion of the study area. Factoring the screening effect of forest vegetation into the analysis (utilizing the same data sources and height assumptions described in the SVIA) resulted in a significant decrease in areas of potential visibility. The vegetation viewshed analysis indicated potential visibility in only 3.5% of the study area, primarily in high elevation open fields in the southwestern area. Potential views from public roads were indicated along small portions of Canfield Road, Jones Road, Akins Road, Brown Hill Road, and Rex Road (see Figure 3 in Appendix D).

Because the revised Project is comparable to the project evaluated in the SVIA in terms of scale, components, and general location, results of the field evaluation (ballooning) and the viewpoints used for photo simulations are still considered accurate/appropriate. However, due to the revised location of the Brown Hill substation, supplemental fieldwork was conducted on May 31, 2007 to document views from areas where viewshed analysis indicated the potential for substation visibility. Photos were obtained from 14 viewpoints. Photos from these viewpoints indicate that views of the substation will generally be distant and/or screened by vegetation (see Figure 4 in Appendix D). However, a potential open view within 1.0 mile of the substation was documented from Viewpoint 3 on Akins Road, and therefore this viewpoint was selected for development of a new photo simulation of the Brown Hill substation.

Because some relocated turbines and sections of transmission line are now proposed, there is the potential for the project to have a slightly different appearance/visual impact from certain viewpoints. To reevaluate the Project's visual impact, revised photo simulations were prepared for those viewpoints utilized in the SVIA that included significantly relocated or deleted project components. To determine which simulations needed to be revised, EDR modeled the new turbine and transmission line lay-out and applied a bright color to these components (turbines and transmission line). This new model was then overlaid on the existing site model and previously-proposed Project model in each simulation (using the same camera alignment, scale and perspective as the original simulation). Any simulation where the old Project components were not completely overlaid by the new (i.e., a difference in turbine/transmission line location could actually be perceived on a 23 inch Cinema Display computer monitor) was revised to show the new Project layout. This exercise resulted in the revision of 20 of the 23 simulations that were included in the SVIA (SDEIS Appendix F). This included five of the six simulations from areas with concentrations of historic structures (i.e., Viewpoints 194, 205, 207, 209, and 210). In addition, the proposed Dutch Hill Wind Power Project turbines were also added to one cumulative simulation (Viewpoint 133) that had previously only shown turbines from the Cohocton and WindFarm Prattsburgh projects.

The revised Cohocton layout was modeled using the same turbines (i.e., Clipper C96 with an 80-meter [262-foot] tower and a 96 meter [315 foot] diameter rotor), transmission line components, and clearing assumptions previously proposed. The revised simulations were prepared as described in the methodology discussion in the VIA (EDR, 2006b) and SVIA reports. For the purposes of this supplemental investigation, the simulations of the modified Project from each viewpoint were presented in comparison to the previously prepared simulation from the same viewpoint (see Figures 5-24 in Appendix D).

A new simulation of the proposed Brown Hill substation from supplemental Viewpoint 3 was also prepared utilizing the same techniques described in the SVIA, except the three-dimensional model of the proposed facility was developed by the Project electrical engineers (MSE). The simulation of the substation was presented in comparison to the existing view from supplemental Viewpoint 3 (see Figure 25 in Appendix D).

The simulations for each viewpoint were then presented to the EDR rating panel that had previously evaluated the visual impact of the proposed Project. For the previously-evaluated simulations, the panel members were asked whether the revised layout changed the original evaluation of visual impact from each viewpoint, and if so, how. Based on their review of the original and revised simulations, the panel felt that the revised layout had little effect on the original visual impact results in 17 out of the 20 revised simulations. From Viewpoints 11, 57, 68, 71A, 94, 114, 130, 154, 160, 178, 194, 195, 205, 207, 209, 210, and 228 the overall appearance, scale, and visual impact of the Cohocton Project remained relatively unchanged, when comparing the original and revised project layout. However, in three of the simulations, one or more of the rating panel members judged the impact to be different.

The visual impact from Viewpoint 74 (Figure 9 of Appendix D) was reduced due to the new alignment of the 115 kV transmission line coming off of Lent Hill. With the new alignment, the cleared right-of-way (ROW) traverses the side of the hill, and is more concealed by topography and trees than was the previous alignment. Although the new ROW draws the viewer's eye to a cluster of turbines on the ridgetop, it is much less of an alteration to the wooded hillside, and overall visual impact is reduced. The composite impact score for this viewpoint was reduced from 3.0 (moderate contrast) to 2.04 (low to moderate contrast).

Visual impact of the project was increased in Viewpoint 110 (Figure 11 of Appendix D) with the addition of a foreground turbine to the view. The foreground turbine (approximately 0.25 mile from the viewer) presents significant scale contrast and becomes a dominant feature in the view. The composite visual impact rating from this viewpoint increased from 2.50 to 3.54. This is consistent with findings of the VIA and SVIA, that viewpoints which include turbines at foreground distances (i.e., under 0.5 mile) are likely to have the greatest visual impact.

The cumulative simulation from Viewpoint 133 (Figure 14 of Appendix D) was revised, not only to show the updated Cohocton turbine layout, but also to include turbines from the Dutch Hill Wind Power Project (along with those from the Cohocton and WindFarm Prattsburgh projects previously shown). With the addition of the Dutch Hill turbines on the background ridge, one rating panel member indicated that visual clutter is somewhat increased, and the turbines are more visually distracting. However, because only one panel member indicated a change, composite visual impact scores for this viewpoint only increased from 2.46 to 2.63.

In evaluating the new simulation of the Brown Hill substation, the panel indicated that the substation (and a proposed turbine) generally presented low to moderate contrast with the existing landscape. Moderate form, texture, scale and color contrast were noted for the substation. However, much of the overall impact in this simulation was attributed to the proposed turbine rather than the substation. Overall visual impact was mitigated by the presence of existing transmission line structures, as well as vegetative screening and the effects of distance. Visual impact ratings for this viewpoint ranged from 2.13 to 2.5 with a cumulative average of 2.34.

Comparing the new visual impact scores to the averages for the turbine simulations presented in the SVIA results in an essentially unchanged overall visual impact score (1.87 vs. 1.88). This score still indicates that the Project has a generally low visual impact. In addition, evaluation of the revised simulations confirmed that visual impact typically increases in viewpoints that include foreground turbines and/or where numerous turbines extending across the full field of view. The score of 2.34 received by the Brown Hill substation simulation is within the range of scores received by the other transmission and substation simulations included in the SVIA. Factoring this score into the average for transmission line and substation simulations presented in the SVIA increases the average contrast rating from 1.80 to 1.89, still indicating a generally low visual impact. This level of impact appears to relate to the relatively modest scale of the transmission facilities, their limited contrast with existing landscape features, and/or the distance from which they will be viewed.

Consequently, it is EDR's conclusion that the revised layout for the Cohocton Wind Power Project does not significantly alter the findings of our previous visual impact evaluations for this project. However, should the Project layout change in the future (post SEQR), supplemental visual impact analysis may be required. The need for this analysis will be determined by performing the simulation overlay exercise described previously.

<u>Shadow Flicker</u>

To address the revised turbine locations currently proposed, and the occurrence of one additional receptor identified since completion of the SDEIS, revised shadow flicker analyses were conducted. These analyses, included as Appendix E, also included a detailed evaluation of those receptors originally predicted to receive in excess of 20 hours of shadow flicker annually. This follow-up analysis is in accordance with the mitigation commitment made by CPP in Section 3.5.3 of the DEIS and SDEIS.

The revised shadow flicker analyses utilized the currently proposed turbine coordinates, but otherwise was conducted in full accordance with the methodology and assumptions described in the DEIS and SDEIS. Results of this analysis indicate that of the 166 modeled receptors (i.e., 166 residences located within approximately 1,100 meters of a wind turbine), no receptor potentially receives shadow flicker in excess of 25 hours per year (except receptor #840, which is a trailer that is owned by a participating landowner, and therefore not addressed in the analysis). Receptor #659 potentially receives 24 hours and 55 minutes of shadow-flicker per year. All other modeled receptors potentially receive relatively little or no shadow flicker. None of the 54 receptors in the vicinity of the relocated Brown Hill turbines are expected to receive more than 9 hours of shadow flicker per year. A summary of predicted shadow flicker hours is presented in Table 6, below. Detailed information on each modeled receptor is included in Appendix E.

Table 6. Predicted Annual Hours of Shadow Flicker

Cumulative shadow-flicker time	Number of receptors
Total	166
0 hours	46
>0 hours	120
>10 hours	32
>15 hours	7
>20 hours	1
>25 hours	0

Consistent with the findings of the DEIS and SDEIS, the number of shadow-flicker hours calculated and reported above is significantly lower than at other wind power project installed in New York and around the U.S.

Due to turbine shifts that occurred with the revised layout, two receptors that were previously predicted to receive in excess of 20 hours of shadow flicker annually (#714 and #658), will now receive under 20 hours (18:44 hours and 17:32 hours, respectively).

Detailed analysis of the remaining receptor that could potentially receive greater than 20 hours of shadow flicker annually (receptor #659) indicates the following:

1. Due to the distance between the turbine and the receptor, shadow intensity will be of relatively low intensity, and at times barely noticeable.

2. Deciduous trees that largely surround the affected residence will significantly screen turbine shadows and completely block them during the growing season.

These conditions will significantly reduce duration (below 20 hours) and intensity of any shadow flicker impacts at this receptor site. Therefore, no additional impact avoidance or mitigation measures are proposed.

2.6 HISTORIC, CULTURAL, AND ARCHAEOLOGICAL RESOURCES

The information regarding historic, cultural, and archaeological resources provided in Section 3.6 of the DEIS/SDEIS has not been affected by Project changes that have occurred or new data that have become available.

However, the Office of Parks, Recreation and Historic Preservation (OPRHP) issued a letter on March 2, 2007 stating that they had reviewed the Phase 1B Archaeological/Architectural Reconnaissance Report (presented in Appendix G of the SDEIS) and concurred with the conclusions and recommendations made in the report. The OPRHP recommends that ground disturbance at the locations of the four isolated finds of prehistoric artifacts be avoided, and that the two identified historic period sites should be avoided or further investigated. As stated in the SDEIS, all of these sites will be avoided during Project construction. In addition, specific avoidance plans will be developed by CPP and will be submitted to the OPRHP for review and approval prior to construction. Two additional items currently pending with the OPRHP include review of the architectural study (included as part of the 1B Report in the SDEIS) and response to a request to initiate formal consultation regarding potential effects of the project on historic and prehistoric resources, sent by the Department of Public Service on March 23, 2007. Correspondence with the OPRHP is included in Appendix C. CPP is coordinating with ORPHP on both of these matters. Any future (post SEQR) Project changes that are substantial enough to require supplemental visual analysis (see discussion in Section 2.5) will also trigger re-evaluation of visual impact on historic architectural resources.

2.7 SOUND

To address the revised turbine layout currently proposed, and to incorporate new sound data now available for the Clipper C96 turbine, Hessler Associates, Inc. (Hessler) modeled predicted operational sound from the revised Project to evaluate potential impacts on adjacent residential receptors (Appendix F). The study's methodology was consistent with that of the DEIS and SDEIS, and followed guidelines included in the Cohocton Local Windmill Law and the NYSDEC program policy regarding noise (NYSDEC, 2001).

The sound outputs in Hessler's SDEIS and FEIS assessments were based upon a Clipper 96 wind turbine, which is the model proposed for use on the Cohocton Project. The sound power level of the production version of the Clipper C96 wind turbine was not definitively known at the time the SDEIS was prepared because the model was still in development. As indicated in the SDEIS, a prototype turbine, with a slightly smaller rotor diameter of 93 m, was built for testing and design refinement purposes, and sound power level measurements were taken from this unit. These measurements were used in the analysis included in the SDEIS. Since the time that the SDEIS was prepared, noise abatement modifications have been made to the prototype and revised noise emission tests have been conducted. These tests indicate that overall sound levels have been reduced by approximately 2 dBA.

Using the revised sound power level spectrum for the C96 wind turbine, a maximum sound level contour plot for the site was calculated using the "Cadna/A", ver. 3.5 sound modeling program developed by DataKustik, GmbH (Munich). This software enables the Project and its surroundings, including terrain features, to be realistically modeled in three-dimensions. The hill and valley topography of this site was digitized into the sound model from USGS maps. Each turbine is represented as a point sound source at a height of 80 m above the local ground surface (design hub height). As in the previous analyses, the model uses conservative assumptions regarding ground absorption of sound and wind speed, and predicts downwind sound levels from all directions simultaneously.

According to NYSDEC program policy, a cumulative increase in the total ambient sound level of 6 dBA or less is unlikely to constitute an adverse community impact. For the Cohocton Project area, a Project operation sound level of 42 dBA is equal to an increase of 6 dBA above the measured ambient sound level. The results of the revised sound assessment performed by Hessler indicates that far fewer residences lie on or outside the region bounded by the 42 dBA contour than anticipated in the SDEIS. As opposed to the approximately 30 receptors predicted to be within this boundary in the SDEIS assessment, a total of 10 residences now occur within the 42 dBA contour. Three of these are non-participating residences, and may potentially experience sound levels in the 42 to 43 dBA range under the assumptions outlined above. The remaining seven homes belong to

Project participants. Six of them are predicted to experience sound levels in the range of 42 to 43 dBA and one of them is predicted to experience a sound level of 44 dBA.

The Town of Cohocton Local Windmill Law sets three conditions regarding Project-related noise. The first of these limits Project operation sound levels to 50 dBA at the property line of non-participating landowners. The results of Hessler's analysis show that Project sound levels of 50 dBA will be confined to participating properties. The study also notes that these sound levels would only occur intermittently during windy conditions and that there would be no detectable noise from Project operation during calm or low wind conditions. Regardless, CPP has obtained setback/noise releases from landowners with property lines close to the 50 dBA contour. The second condition limits Project sound levels to 45 dBA outside any non-participating residences. Sound modeling indicates that the currently proposed Project fully complies with this condition, as the maximum predicted sound level at any non-participating residence is just under 43 dBA. The Project also complies with the third condition of the Town of Cohocton Local Windmill Law, which limits tonal noise to a set of specific 1/3 octave band exceedances applicable in different regions of the frequency spectrum, as shown in Table 7.

Table 7. Prominent Bands in the Clipper C96 Sound Power Level Spectrum (After Installation of Noise Abatement Measures) Relative to Ordinance Tonal Limitations

Nominal Tone Frequency, Hz	1/3 Octave Band Sound Power Level of Tone and Two Adjacent Bands, dB re 1 pW	Exceedance of Tone above Average of Adjacent Bands, dB	Applicable Cohocton Ordinance Limit, dB (as Observed at a Prop. Line or Residence)
400	98.6	2.5	8
	99.6		
	95.6		
1000	92.2	2.9	5
	93.7		
	89.4		

Under most circumstances sound levels from the project are not expected to exceed the levels shown in the sound contour maps and may be somewhat lower due to the conservative nature of the calculations. There may be times, however, when certain atmospheric and wind conditions will increase audibility of operational noise such that the experienced sound levels equal or exceed the nominal predictions. The atmospheric conditions under which such increased audibility is most likely to occur are during periods of stable atmosphere, with low thermal turbulence, in which winds at ground level are low but are much higher aloft at the level of the turbine blades. Audibility is enhanced due to the low wind (and relatively quiet) conditions at ground level. A greater degree of modulation of sound intensity may accompany this condition, as the turbine blades experience differential wind speeds at the top and bottom of their rotation. Under these particular and limited conditions, the sound model's predictive ability may be constrained. The frequency with which these conditions will develop at each particular locale is unknown and is, for all intents and purposes, unpredictable on a site-by-site basis.

Because of this variability in sound propagation conditions and a number of other factors and uncertainties, including individual attitudes toward the Project and the actual character of the sound produced by the Clipper C96 turbines, the possibility of adverse reactions to Project noise cannot be ruled out and could well occur at residences outside the nominal threshold of 6 dBA increase over background. The conservative assumptions in the modeling help to mitigate this uncertainty.

To address limitations in the predictive modeling and the resulting possibility of adverse noise impacts at residences, a noise impact analysis and mitigation protocol will be implemented through the SEQRA Findings and as a condition of any special use permit. Noise complaints will be evaluated and, if warranted, addressed under that process. The 45 dBA predictive standard at residences contained in the Windmill Local Law will be used as one of the initial threshold criteria for evaluating the potential existence of adverse noise conditions that may merit further monitoring and analysis, or mitigation. In addition, the Town will apply and enforce the requirements of section 1130 (2)(d)(vi) of its Zoning Law.

2.8 TRANSPORTATION

Since the submittal of the DEIS, CPP has retained the services of a transportation company, Transgroup Worldwide Logistics (Transgroup), to arrange for the transportation and delivery of the turbine components to the Project site. Some modifications to the delivery routes described in the in the SDEIS and Appendix J of the SDIES are required due primarily to the dimensions of turbine components for the Clipper C96 turbine. A revised routing map is included as Map 1 in Appendix G. Under the current plan, turbine components will be coming to the area on Interstate Route 390 (I390) from the south. Exit 1 is not accessible to north-bound traffic due to an insufficient inside curb radius and highway guardrail at the off ramp. Therefore, Exit 2 provides the best routing to the Lent Hill area of the Project. After exiting I390, delivery vehicles will travel on Loon Lake Road to NYS Route 415, then to Davis Hollow Road and on to Black Creek Hollow Road[1]. Supplemental Figures SU-C16, SU-C17 and SU-C8 in Appendix G show the intersection improvements required along this section of the route. The other modification to the previously-proposed delivery route to Lent Hill is

[1] With the exception of Black Creek Hollow Road, this is the same route used to deliver turbine components to the Dutch Hill Wind Power Project.

the addition of a section of NYS Route 371 from the intersection of McKay Street to Kirkwood Road (refer to Figures SU-C4 and SU-C7 in Appendix G). At this point, the revised route would proceed up Kirkwood Road and join the transportation route proposed in the SDEIS at Wheaton Road/Lent Hill Road. Supplemental Figures SU-C1, SU-C2, SU-C3, SU-C6, SU-C9 and SU-C10 in Appendix G, show the road improvements required along this section of the route. As these figures illustrate, a total of 10 locations along this route will require some type of modification to accommodate the oversized vehicles that will be delivering turbine components. Most of these will involve temporary gravel widening of intersections to accommodate turning movements. However, proposed improvements range from re-setting signs to construction of short segments of new road.

The final transportation routing change is a new route to the proposed turbines on Brown Hill. The original route on Van Aucker road cannot be used due to tight turns and bends along the road that cannot accommodate the oversized vehicles required to transport turbine components, particularly blades. Alternate route C-4 described in the original Transportation Assessment Report is also not feasible due to intersection modifications that would require permission from an abutting property owner. Discussions with this property owner indicate that it is unlikely such permission could be obtained. The currently proposed route for these turbines is to utilize Route I-86/17 to Exit 34 in North Hornell. Delivery vehicles would then travel on NYS Route 36 south to NYS Route 21 north, and then onto County Route 6 (Neils Creek Road) and Pawling Road. Modification to the Route 21/Neils Creek Road and Neils Creek Road/Pawling Road intersections will be required to accommodate turns as shown on Supplemental Figures SU-C11 an SU-C12 in Appendix G. These intersection improvements will require temporary gravel widening and sign resetting, respectively. Approximately 1.7 acres will be disturbed by all proposed public road modifications. Most of this disturbance (0.8 acre) will occur on agricultural land, and no wetlands, streams or sensitive natural communities will be impacted. It is anticipated that all disturbed areas will be restored to their preconstruction condition following the completion of construction. The transportation plan, as modified, continues to avoid the business district and residential neighborhoods of the Village of Cohocton and from an environmental impact standpoint, is not a significant change from the route presented in the DEIS/SDEIS.

CPP has also considered whether a practicable alternative could be identified to deliver project components into Cohocton by rail. If such an alternative were to be feasible, it might be possible to reduce the over-the-road traffic necessary for such deliveries. To date, CPP has not been able to identify a practicable rail delivery alternative. As CPP works with its logistics suppliers, it will continue to investigate whether a practicable rail delivery alternative can be identified. If it succeeds in so doing, it will advise the Town, and work with the Town to decide whether such an alternative should be pursued.

2.9 SOCIOECONOMICS

Except as set forth in section 2.9.1, the information regarding socioeconomics provided in Section 3.9 of the DEIS/SDEIS has not been substantially affected by Project changes that have occurred or new data that have become available. The Economic Impact Analysis in the SDEIS was based on the conservative assumption that the Project could be as small as 33 turbines (82.5 MW). The 35 turbine project currently proposed still exceeds this minimum, and thus does not change the results in the previous analysis.

2.9.1 Municipal Budgets and Taxes

Because operation of the proposed Project will not create a significant demand for municipal, or school district services and facilities, it will have no adverse impact on municipal or school budgets. CPP proposes to enter into a PILOT agreement with the Steuben County Industrial Development Agency, and in to a host community agreement with the Town. Although the specific terms of the PILOT and host agreements have not been negotiated, it is anticipated that the annual PILOT payment will fall in a range of approximately $5300 to $8000 per installed MW and that the PILOT and other agreements will have a term of at least 20 years. At that range, and subject to other variables which may affect the total payments per megawatt during the 20 year term, the PILOT and host payments would average approximately $477,000 to $720,000 per year. Further, over an assumed 20 year duration of the PILOT and agreements, the local jurisdictions would receive total payments in a range between nearly $9.54 and $14.4 million. The annual PILOT and host payments would be distributed between the Town of Cohocton, the County of Steuben, and the local school districts. The percentage sharing of the payments has not yet, however, been negotiated. After the PILOT expires, the facility will be taxed at its assessed value.

The PILOT payments will increase the revenues of the local taxing jurisdictions, and will represent a significant portion of their total tax levy. Further, the PILOT payments will more than off-set any minor increases in community service costs that may be associated with long-term operation and maintenance of the Project (e.g., small number of additional school children, slightly increased road maintenance costs.)

Because the wind farm facility will generate a predictable source of additional revenue for all of the affected municipalities and school districts over the next 20+ years, the Project will positively impact municipal and school district revenues. This will enhance the type and level of services these jurisdictions provide to local residents for the duration of the Project's operational life.

2.10 PUBLIC SAFETY

The information regarding public safety provided in Section 3.10 of the DEIS/SDEIS has not been affected by Project changes that have occurred or new data that have become available.

2.11 COMMUNITY FACILITIES AND SERVICES

The information regarding community facilities and services provided in Section 3.11 of the DEIS/SDEIS has not been affected by Project changes that have occurred or new data that have become available.

2.12 COMMUNICATION FACILITIES

Evans Associates conducted a study to determine if the currently proposed turbine layout would adversely impact Federal Communications Commission (FCC)-licensed microwave links and/or other radio frequency facilities (Appendix H). Their analysis evaluated all turbine sites with additional detail provided on turbines located near known microwave links (Turbines 4, 9, 7, 8, 11, 14, 16, and 28). According to their analysis, the current Project layout meets the required clearances and is not anticipated to result in any adverse impacts to microwave communications.

2.13 LAND USE AND ZONING

Land use and zoning are essentially as described in Section 3.13 of the DEIS/SDEIS with the following acreage revisions:

- Approximately 4,150 acres (86.5%) of the revised Project area are included in Steuben County Agricultural District 5 (see Figure 8).
- Approximately 3,098 acres of the 4,800 acre Project area (64.5%) are under active agricultural land use (row crop, field crop, or pastureland).
- Construction-related disturbance to agricultural land is currently estimated to total approximately 250 acres as compared to 216 acres in the SDEIS (this increase is due primarily to the impact assumption for buried interconnect changing from 15 feet wide in the SDIES to 35 feet wide in the FEIS).
- Construction will result in the clearing of approximately 51 acres of forestland as compared to 55 acres in the SDEIS.
- The 35 possible turbine sites, substations, and other ancillary facilities together represent a maximum conversion of approximately 31 acres of agricultural land, meadow/brushland, or forestland to developed land use, as compared to 32 acres estimated in the SDEIS).
- Setback releases have been or will be obtained by CPP, as needed, from non-participating landowners who's property is less than 520 feet from a proposed turbine.

2.14 ALTERNATIVES

The Project layout as currently proposed does not represent an alternate project design. It is a minor modification of the previously-proposed location of turbines, access roads, substation and buried electrical interconnect lines, based primarily on construction constraints, landowner preferences, and efforts to reduce environmental impact and costs. The only significant change is the reduction of proposed number of turbines (from 36 to 35), which was described as a possibility in the SDEIS. As indicated by the analyses included in this FEIS, the removal of this turbine, along with the minor relocation of other Project components, results in either no significant additional impact, or a minor reduction in impact. Consequently, the discussion and evaluation of Project design alternatives is consistent with that presented in the DEIS and SDEIS.

Some additional evaluation of transmission line crossing alternatives for Route 390 have been undertaken since completion of the SDEIS. The Project electrical engineers (MSE) evaluated both an underground crossing, and an overhead crossing utilizing steel monopoles. An underground crossing would require a boring approximately 850 feet long. This, along with engineering, materials, installation, and testing, would cost approximately $700,000. An overhead crossing utilizing two 125-foot tall steel monopoles with concrete foundations would cost approximately $370,000, including engineering, materials, and installation. Consequently, based on the cost differential, CPP continues to propose an overhead crossing of Route 390 utilizing guyed, wood H-frame structures, as described and evaluated in the SDEIS.

2.15 CUMULATIVE IMPACTS

Information and analysis regarding cumulative impacts have generally not been affected by the minor Project changes that have occurred since preparation of the SDEIS. The only additional evaluation of cumulative impact from the proposed Dutch Hill project is the cumulative visual simulation from Viewpoint 133 (Figure 11 in Appendix D). This simulation was revised, not only to show the updated Cohocton turbine layout, but also to include turbines from the Dutch Hill Wind Power Project (along with those from the Cohocton and WindFarm Prattsburgh projects previously shown). As previously discussed in Section 2.5, with the addition of the Dutch Hill turbines on the background ridge, one rating panel member indicated that visual clutter is somewhat increased, and the turbines are more visually distracting. However, only one panel member indicated a change, and composite visual impact scores for this viewpoint increased only marginally, from 2.46 to 2.63.

Since completion of the SDEIS, information is now publicly available cornering two additional wind power projects in Steuben County. The Everpower Renewables Howard Wind Power Project released a DEIS on February 27, 2007. In addition, an EAF (dated March 23, 2006) was submitted to SCIDA for the Airtricity Hartsville Project, which included a preliminary project layout.

As stated in the SDEIS, it is important to note that the assumption that one or more of the proposed Steuben County projects would complete the NYISO review; complete SEQRA review; complete state, federal, and local permitting; receive funding; and be constructed is speculative. Any, or all of the proposed projects in Steuben County may not be approved and/or constructed, and therefore would not contribute to cumulative impacts associated with the construction and operation of the Cohocton Wind Power Project. Nonetheless, for purposes of this FEIS, CPP assumes that all of the proposed projects will be approved and constructed, and provides the following analysis of potential cumulative impacts to the extent ascertainable.

The Howard Wind Power Project is proposed to be constructed in the Town of Howard, approximately 7 miles south/southwest (as measured to the nearest turbine), of the Cohocton Project. The Howard project is proposed to include 25 turbines, each with a generating capacity of 2.5 MW. The Hartsville Wind Farm is proposed to be constructed south of the City of Hornell and west of the Village of Canisteo, in the Towns of Hartsville and Hornellsville. According to the preliminary information provided to SCIDA, this project is proposed to include approximately 22 wind turbines. At its closest point (as measured to the nearest turbine), the Hartsville Wind Farm is located approximately 13.8 miles southwest of the Cohocton Wind Power Project.

The cumulative impact analysis included in the Howard DEIS (EDR, 2007) was reviewed and considered in this analysis. Consistent with the findings of the Howard analysis, the physical separation of the Howard and Hartsville projects from the Cohocton Project assures that cumulative construction impacts (traffic, noise, dust, etc.) will not occur. With respect to operational impacts, the Howard and Hartsville projects will also not create cumulative noise and shadow flicker impacts due to its distance from the Cohocton Project.

Cumulative impacts arising from simultaneous operation of both projects are anticipated to be limited to visual and avian impacts. Cumulative avian impacts may occur, regardless of the distance between proposed facilities. As indicated in the SDEIS, worst case avian turbine mortality is estimated at 6 birds per turbine per year. Given the current proposal for 35 turbines, this would equate to an estimate of 210 avian fatalities per year at the Cohocton Project. Applying the same assumption to the 47 proposed turbines at Howard and Hartsville increases this number by 282 to a total of approximately 492. Adding this to the 660 birds that could be killed by the WindFarm Prattsburgh, Ecogen, and Dutch Hill projects (based on the same worst case mortality assumptions) brings the overall total to 1,152. Although this number may sound large, it is a tiny fraction of the population that migrates through or resides in this area, and would not be biologically significant (see radar data in Appendix B).

Cumulative visual impacts are not anticipated to be significant, due to the distance between the Cohocton Wind Power Project and the Howard and Hartsville projects. A cumulative viewshed analysis prepared for the Howard project. To accomplish this, the 10-mile radius Howard Wind Power Project topographic and vegetation analyses (based on maximum blade tip height) were overlaid on the same viewshed analyses prepared for the Cohocton and the Dutch Hill projects. The viewsheds for the three projects were then plotted on a base map and areas of viewshed overlap identified.

Based on the screening effect of topography alone, it appears that areas with potential simultaneous views of these three projects are limited to higher elevation ridgetops and slopes. Valley areas, where the majority of sensitive receptors are located (including all of the villages, hamlets, and major roads) generally will not have the potential for simultaneous views of the three projects. Factoring vegetation into this cumulative viewshed analysis essentially eliminates wooded sites from the area of potential cumulative project visibility. Areas indicated as having views of all three projects on the cumulative vegetation viewshed map are limited to open fields on some slopes and hilltops, which in total amount to approximately 1.2% of the overlapping 10 mile-radius study areas (EDR, 2007). Areas of actual visibility are anticipated to be much more limited than indicated by the viewshed analysis, due to the slender profile of the turbines (especially the blade, which make up the top 150 feet of the turbine), the effects of distance, and screening from hedgerows, street trees and structures, which are not considered in the viewshed analysis. If either the Howard or Hartsville project is visible from the same vantage points as the Cohocton Project, visual impact should be minimal. These projects would only appear as a background feature in any foreground or midground view that includes the Cohocton turbines. This finding is consistent with the conclusion of the cumulative visual impact analysis included in the Howard DEIS, and the findings of other studies indicating that visual impact diminishes significantly at distances over 3.5 miles (Eyre, 1995).

2.16 REMAINING DEIS/SDEIS SECTIONS

The remaining DEIS/SDEIS sections that have not been discussed thus far in light of Project changes and new information include Unavoidable Adverse Impacts, Irreversible and Irretrievable Commitment of Resources, Growth Inducing Impacts, and Effects on Use and Conservation of Energy Resources. The information provided in these Sections (4.0, 6.0 7.0, and 9.0) of the DEIS/SDEIS has not been affected by Project changes that have occurred or new data that have become available.

3.0 RESPONSE TO SUBSTANTIVE COMMENTS RECEIVED

3.1 RESPONSE TO COMMENTS ON THE DEIS

3.1.1 Public Hearing Comments

This Response Summary is the formal response to the oral comments received at the public hearing for the Cohocton Wind Power DEIS, held by the Town of Cohocton Planning Board at the Cohocton-Wayland Central School on May 25, 2007. The original hearing transcript, with numbered comments identified, is included as Appendix H. This section contains separate alphabetical comment indexes (Tables 8 and 9, arranged by commenter) for general comments for which no response is necessary, and for comments that have corresponding responses, which are also provided in this section.

Table 8. Cohocton DEIS Public Hearing Substantive Comment List

SOURCE	COMMENT #	SUBJECT
Bolton, R. (5/25/06)	221E	Project Description Cumulative Impact
Bolton, R. (5/25/06)	221K	Aesthetic/Visual Resources
Bolton, R. (5/25/06)	221M	Project Construction
Bolton, R. (5/25/06)	221G	Project Purpose, Need and Benefit
Bolton, R. (5/25/06)	221H	Project Purpose, Need and Benefit
Bolton, R. (5/25/06)	221I	Project Purpose, Need and Benefit
Bolton, R. (5/25/06)	221B	Public and Agency Involvement
Bolton, R. (5/25/06)	221N	Public Safety (Lightning Strikes)
Bolton, R. (5/25/06)	221O	Socioeconomics
Bolton, R. (5/25/06)	221L	Sound
Dionisio, A. (5/25/06)	234B	Aesthetic/Visual Resources
Dionisio, A. (5/25/06)	234A	Socioeconomics
Fitzpatrick, A. (5/25/06)	214A	Socioeconomics
Fitzpatrick, A. (5/25/06)	214B	Socioeconomics
Gettys, P. (5/25/06)	215D	Socioeconomics
Gettys, P. (5/25/06)	215F	Sound
Goldthwait, J. (5/25/06)	233A	Other
Goldthwait, J. (5/25/06)	233B	Other
Jacobs, K. (5/25/06)	229A	Project Construction
Jacobs, K. (5/25/06)	229B	Public Safety
Kendrickson, B. (5/25/06)	218D	Alternatives
Kendrickson, B. (5/25/06)	218D	Alternatives
Kendrickson, B. (5/25/06)	218B	Project Description
Kendrickson, B. (5/25/06)	218B	Project Description
Kota, C. (5/25/06)	222B	Description of Proposed Action
Kota, C. (5/25/06)	222A	Project Purpose, Need and Benefit
Lince, J. (5/25/06)	228A	Socioeconomics
Lince, J. (5/25/06)	228B	Sound
Miller, D. (5/25/06)	210E	Description of Proposed Action
Miller, D. (5/25/06)	210C	Description of Proposed Action

Table 8. Cohocton DEIS Public Hearing Substantive Comment List		
SOURCE	**COMMENT #**	**SUBJECT**
Miller, D. (5/25/06)	210D	Description of Proposed Action
Moody, R. (5/25/06)	232A	Socioeconomics
Morehouse, B. (5/25/06)	227C	Aesthetic/Visual Resources
Morehouse, B. (5/25/06)	227D	Sound
Palmiter, B. (5/25/06)	219D	Communication Facilities
Palmiter, B. (5/25/06)	219D	Communication Facilities
Palmiter, B. (5/25/06)	219C	Land Use and Zoning
Palmiter, B. (5/25/06)	219C	Land Use and Zoning
Radell, R. (5/25/06)	223E	Communication Facilities
Radell, R. (5/25/06)	223D	Socioeconomics
Radell, R. (5/25/06)	223C	Sound
Strasburg, R. (5/25/06)	216C	Socioeconomic
Strasburg, R. (5/25/06)	216B	Public Safety
Strasburg, R. (5/25/06)	216A	Other
Trude, S. (5/25/06)	209A	Description of Proposed Action
Trude, S. (5/25/06)	209B	Description of Proposed Action
Trude, S. (5/25/06)	209C	Land Use and Zoning

Table 9. Cohocton DEIS General Comments From Public Hearing – No Response Necessary	
Source	**Comment Number**
Aldridge, B. (5/25/06)	231A
Bolton, R. (5/25/06)	221C
Bolton, R. (5/25/06)	221A
Bolton, R. (5/25/06)	221D
Bolton, R. (5/25/06)	221J
Decker, A. (5/25/06)	226A
Gettys, P. (5/25/06)	215E
Gettys, P. (5/25/06)	215A
Gettys, P. (5/25/06)	215B
Gettys, P. (5/25/06)	215C
Gettys, P. (5/25/06)	215G
Goldthwait, J. (5/25/06)	233E
Goldthwait, J. (5/25/06)	233C
Goldthwait, J. (5/25/06)	233F
Greenfield, B. (5/25/06)	230A
Greenfield, B. (5/25/06)	230B
Hall, J. (5/25/06)	59A
Hall, J. (5/25/06)	208A
Hursh, D. (5/25/06)	224A
Jacobs, K. (5/25/06)	229C
Jacobs, R. (5/25/06)	213A
Jacobs, R. (5/25/06)	213B
Kendrickson, B. (5/25/06)	218C
Kendrickson, B. (5/25/06)	218A
Lessar, M. (5/25/06)	225A
Miller, D. (5/25/06)	210F
Miller, D. (5/25/06)	210G

Table 9. Cohocton DEIS General Comments From Public Hearing – No Response Necessary	
Source	**Comment Number**
Miller, D. (5/25/06)	210H
Miller, D. (5/25/06)	210A
Miller, D. (5/25/06)	210B
Moody, R. (5/25/06)	232B
Moore, G. (5/25/06)	212A
Morehouse, B. (5/25/06)	227E
Morehouse, B. (5/25/06)	227A
Morehouse, B. (5/25/06)	227B
Oehlbeck, M. (5/23/06)	40S
Palmiter, B. (5/25/06)	219E
Palmiter, B. (5/25/06)	219A
Palmiter, B. (5/25/06)	219B
Palmiter, K. (5/25/06)	220A
Radell, R. (5/25/06)	223A
Radell, R. (5/25/06)	223B
Swartley, C. (5/25/06)	204E
Swartley, C. (5/25/06)	204A
Swartley, C. (5/25/06)	204B
Swartley, C. (5/25/06)	204C
Swartley, C. (5/25/06)	204D
Swartley, C. (5/25/06)	204F
Swartley, C. (5/25/06)	204G
Swartley, C. (5/25/06)	204H
Swartley, C. (5/25/06)	204I
Swartley, C. (5/25/06)	204J
Towner, J. (5/25/06)	211A
Towner, J. (5/25/06)	211B
Wolfe, A. (5/25/06)	207A

This Response Summary is presented according to topic representing the issues raised in the various comments. Most individuals provided multiple comments that addressed multiple topics; therefore, each comment is listed under its appropriate topic.

Aesthetic/Visual Resources

Response 221K: Shadow flicker impact is discussed in Section 3.5.2.2.6 and Appendix G of the DEIS. This impact is also described in Section 3.5.2.2.6 and Appendix H of the SDEIS and Section 2.5 and Appendix E of the FEIS. Proposed mitigation measures are described in each of these documents. Shadow flicker studies were done for the original layout addressed in the DEIS, the revised layout addressed in the SDEIS and the final layout proposed in the FEIS. In each case, the studies concluded that shadow flicker impacts were minor and significantly lower than that calculated for other wind power projects in New York State and throughout the U.S.

Response 227C: See response to Comment 183A regarding visual impacts.

Response 234B: See response to Comment 9C and 147D1 regarding the overall benefits of the Project, both locally and on a larger scale. As stated in a recent issue of the on-line publication Orion:

> "the science on global warming is terrifyingly clear: to have even a shot at fending off climate catastrophe, the world must reduce carbon dioxide emissions from fuel burning by at least 50 percent within the next few decades. If poor countries are to have any room to develop, the United State, the biggest emitter by far, needs to cut back by 75 percent.
>
> Although automobiles, with their appetite for petroleum, may seem like the main culprit, the number one climate change agent in the U.S. is actually electricity. The most recent inventory of U.S. greenhouse gases found that power generation was responsible for a whopping 38 percent of carbon dioxide emissions. Yet the electricity sector may also be the least complicated to make carbon free. Approximately three-fourths of U.S. electricity is generated by burning coal, oil, or natural gas. Accordingly, switching the same portion of U.S. electricity generation to nonpolluting sources such as wind turbines, while simultaneously ensuring that our ever-expanding arrays of lights, computers, and appliances are increasingly energy efficient would eliminate 38 percent of the country's CO_2 emissions and bring us halfway to the goal of cutting emissions by 75 percent."

Alternatives

Response 218D: See response to comment 25H.

Communication Facilities

Response 219D: Although the DEIS does not reference 60 days, the Cohocton Windmill Local Law does. Upon receipt of such a complaint it will be investigated by CPP immediately and resolved to the resident's satisfaction as quickly as possible. Additional discussion regarding the proposed complaint resolution procedure is included in Section 4.2 of the SDEIS.

Response 223E: See response to Comments 40J and 219D regarding television interference and CPP's commitment to promptly address such problems.

Description of Proposed Action

Response 209A: The currently proposed turbine and turbine layout are the ones that maximize the generation potential of the site, while utilizing the fewest turbines. In general, because the wind is stronger and less turbulent at higher altitudes, larger turbines are more efficient at capturing the available energy in the wind. This concept was explained in a simple manner by Charles Komanoff in a recent article in the on-line publication Orion:

> "What dictates the supersizing of windmills are two basic laws of wind physics: a wind turbine's energy potential is proportional to the square of the length of the blades, and to the cube of the speed at which the blades spin. I'll spare you the math, but the difference in blade lengths, the greater wind speeds higher off the ground, and the sophisticated controls available on industrial-scale turbines all add up to a market-clinching five-hundred-fold advantage in electricity output for a giant General Electric or Vestas wind machine."

Since no substantial adverse impacts were identified in the original Sound Study included in the DEIS (Appendix I), there was no specific need to investigate low noise turbine upgrade options. The Clipper C96 turbine is currently being proposed for the Project and available information indicates that this turbine will have a lower sound level than the Gamesa G87. Testing is currently in progress. Also see the response to Comment 40K in the Project Description section of the Written Comments text for further information.

Response 209B: See response to 209A. The turbines produce enough power to make it possible to sell the power into the New York power markets at a competitive price. As described in the DEIS and SDEIS in Section 9.0, the anticipated annual capacity factor of the wind turbines will be approximately 30%. This is based upon the available wind resource for the site and will therefore not be affected by the number of turbines that are installed.

Response 210C: CPP first began making presentations regarding the Cohocton Project in 2002, and thereafter appeared before the Planning Board to discuss its proposed Project. While no "formal" application was submitted, CPP prepared an Environmental Assessment Form for the Cohocton Project and submitted it to the Planning Board in February 2006 for consideration of the potential impacts from its proposed Project. By that time, the Town had adopted its local law requiring wind projects to obtain a special use permit and site plan approval from the Planning Board. The DEIS reviewed the proposed Project for which CPP intended to submit a formal application for a special use permit to the Planning Board. The Planning Board actions caused a DEIS to be prepared prior to the submission of a formal application, but after CPP announced the proposed Project and stated its intent to apply for the special use permit and site plan approval. These actions of the Planning Board are fully consistent with SEQR, in that SEQR encourages agencies to "incorporate the consideration of environmental factors into the existing planning, review and decision-making processes of state, regional and local government agencies at the earliest possible time." 6 NYCRR § 617.1(c).

Response 210D: See response to 210C.

Response 210E: See response to 210C.

Response 218B: See Section 5.3 of the SDEIS. Wind turbines installed on shorter towers will not produce the same amount of electricity because of the effect of wind shear at the site. Winds at higher elevation above the site will be stronger and less turbulent and result in more efficient operation of the wind turbines and better electric output. Put another way, with shorter towers, more wind turbines would be required to produce the same amount of electricity. Review of the towers by the FAA will assure that the towers do not pose a hazard to air traffic.

Response 222B: The economic benefits of the Project are discussed in Section 3.9 of the DEIS and SDEIS and in the Cohocton Wind Farm - Economic Impact Analysis found in Appendix K of the SDEIS. See also the response to written comments 5A and 74C.

Land Use and Zoning

Response 209C: As described in the DEIS, SDEIS, and FEIS the proposed Project complies with setbacks and noise thresholds defined in the Town of Cohocton Windmill Local Law. See response to Comment 13E regarding the adequacy of the 1,500 foot setback as a means of minimizing/mitigating potential impacts.

Response 219C: Noise modeling included in the FEIS, using updated sound information from the turbine supplier, indicates that Project noise is likely to be barely audible above the natural background level at 1500 ft. from any turbine. In most cases and on most days the sound of the turbines (at the 1500 ft. set back distance) is likely to blend in with and be largely indistinguishable from the sound of the wind blowing through nearby trees or grass. Even at the base of the towers, let alone at 1500 ft., low frequency noise from the turbines will be inconsequential and will have no adverse health affects of any kind on adults or children. See also response to Comment 13E regarding the adequacy of the 1,500 foot setback as a means of minimizing/mitigating other potential impacts.

Other

Response 216A: Information from the Town of Lincoln (Wisconsin) Wind Turbine Study Committee report is often presented by wind power opponents. However, this presentation is often selective and out of context. In response to a document titled *Excerpts from the Final Report of the Township of Lincoln Wind Turbine Moratorium Committee,* the chairman of that committee prepared a written response that is posted on the AWEA web site. In that response, the chairman states:

> "This document is quite disturbing because someone has paraphrased the Committee's findings to bolster their own, obviously political, agenda. In addition, the document is considerably embellished, intentionally misleading the reader to think that the document reflects the situation in the Town of Lincoln. Sprinkling a few facts or findings from our Committee into a document meant to influence public or official opinion but does not reflect the true tenor of those facts or findings is just plain dishonest."

It should also be noted that the vast majority of utility-scale wind power projects that have been constructed in the U.S. have experienced very few if any problems with landowner or community acceptance. In New York State the public reaction to the Madison, Fenner, and Maple Ridge Projects has been overwhelmingly positive (see also response to Comment 183A).

Response 233A: Mr. Ruzow represents the Planning Board of the Town of Cohocton. His fees are paid by the Town. CPP has created an escrow account for use by the Town in paying Mr. Ruzow's fees.

Response 233B: Mr. Ruzow's independence is assured by legal ethics rules which require him to provide undivided loyalty to the Planning Board.

Project Construction

Response 221E: Please see response to comment 25F.

Response 221M: A Transportation Assessment Report was completed for the Project and is included as Appendix J to the SDEIS. Revised transporation plans were prepared as part of the FEIS (see Section 2.8 and Appendix G). The impacts associated with proposed improvements to public roads (primarily intersection widening) are fully addressed in the SDEIS and FEIS.

Response 229A: There was an error on the County tax map that was discovered and corrected by the county. CPP then revised its mapping to reflect the change.

Project Purpose, Need and Benefit

Response 221G: The Project will be a significant source of energy generated from a renewable resource. Given the predicted capacity factor of approximately 30%, the Cohocton Project will generate enough electricity to power 39,500 typical homes in New York State. The following discussion regarding the Madison and Fenner Wind Power Projects was included in a recent issue of the on-line publication Orion, and helps puts this benefit in context:

> "The Madison County turbines have an average capacity factor, or annual output rate, of 34 percent, meaning that over the course of a year they generate about a third of the electricity they would produce if they always ran at full capacity. But that still means an average three thousand hours a year of full output for each turbine. Multiply those hours by the twenty-seven turbines at Fenner and Madison, and a good 200,000 barrels of oil or

50,000 tons of coal were being kept underground by the two wind farms each year".

Response 221H: As stated in Section 3.4.2.2 of the SDEIS the Project is anticipated to produce approximately 236,500 MWHr per year.

Response 221I: See response 147D1 regarding how wind-generated power is allocated on the grid.

Response 222A: See response to 222B below.

Public and Agency Involvement

Response 221B: Comment noted. The Cohocton DEIS and SDEIS provide a comprehensive evaluation of the potential environmental issues associated with the proposed wind project.

Public Safety

Response 216B: Potential shadow flicker impacts associated with the original and revised Project have been thoroughly discussed in the DEIS, SDEIS, and FEIS (see Appendices G, H, and E respectively). See also response to Comment 216A.

Response 221N: Lightning is addressed in Section 3.10 of the DEIS and SDEIS. The wind turbines are fully protected (grounded) against lightning strikes. It is also worth noting, that to the extent turbines attract lightning, because they are the tallest structures in the area, they will reduce the potential of strikes on nearby structures and trees.

Response 229B: Public safety concerns were fully addressed in the DEIS and SDEIS. As concluded in these documents, compliance with required setback distances from roads, property lines, and residences, along with other proposed mitigation measures, will minimize potential safety concerns.

Socioeconomic

Response 214A: See response to Comment 5A and the results of the Cushman & Wakefield study included in the SDEIS.

Response 214B: See response to Comment 5A and the results of the Cushman & Wakefield study included in the SDEIS regarding potential Project impact on property values. The Project's visual impact on adjacent residences was evaluated in the VIA and SVIA prepared for the Project (Appendix F in each document), and the effect of turbine visibility on property value was specifically examined in the Hoen (2006) study, which is discussed in Section 3.9.2.2.1 of the SDEIS. It should also be noted that lease agreements with landowners provide for an increase in payments over time to account for inflation, and that the local wind ordinance specifically requires establishment of decommissioning security to remove the turbines at the end of their operational life.

Response 215D: See response to Comment 5A and the results of the Cushman & Wakefield study included in the SDEIS.

Response 216C: See response to Comment 5A, the results of the Cushman & Wakefield study included as Appendix L to the SDEIS, and response to Comment 216A.

Response 221O: The potential impact of the Project on tourism is addressed in the DEIS (page 128-129). As stated in response to Comment 11E, based on the experience elsewhere, there is no reason to expect a significant adverse affect. Also, see response to Comment 56B.

Response 223D: See response to Comment 5A and the results of the Cushman & Wakefield study included in the SDEIS (Appendix L).

Response 228A: See response to Comment 5A and the results of the Cushman & Wakefield study included in the SDEIS (Appendix L). In regard to quality of life issues, see response to Comment 9C.

Response 232A: As stated in the DEIS, and as indicated in the Economic Impact Analysis included in the SDEIS (Appendix K), construction and operation of the proposed Project should have a significant positive effect on local businesses through the purchase of goods and services. Construction of the Project is estimated to result in approximately $2.5 million in local earnings. Operation of the Project is expected to result in approximately $874,000 in local earnings annually.

Response 234A: See response to Comment 5A and the results of the Cushman & Wakefield study included in the SDEIS as Appendix L.

Sound

Response 215F: The 50 dBA sound contours shown in the sound level maps already take into account the fact that the wind is blowing. The turbine sound level upon which the noise model is based was measured directly downwind of a representative turbine with an 8 m/s wind blowing. In the model, this downwind sound level is conservatively assumed to exist in every direction from every turbine at the same time - although the reality is that quieter sound levels will exist upwind and to the side of each unit. In short, the modeling already considers the wind in predicting Project sound levels.

Response 221L: The assertion that sound will travel further across a placid lake or on a calm night is correct; however, the turbines will be inactive and silent under calm conditions. In fact, near dead calm winds are required for the thermal gradient conditions to develop that promote the propagation of sound over unusually long distances. At the wind speeds necessary for the turbines to operate, temperature inversions, or "stable" atmospheric conditions are much less likely.

Response 223C: Although the type of turbine planned for this Project will likely generate sound levels of about 55 dBA at the base of the tower, the sound studies prepared for both the DEIS and SDEIS predict that, at the nearest receptor locations hundreds of feet away, turbine-related sound should be at or, in most cases, below 45 dBA. A Project sound level of 45 dBA or less is slightly higher but still comparable to normal background levels (measured during the field survey) that occur when the wind is blowing – meaning that the sound produced by the turbines will be difficult to distinguish from the sound of trees or tall grass rustling at the nearest homes. Project sound levels of 70 dBA at 1500 m are impossible with the type of turbine planned for the Project.

Response 227D: See response to Comment 223C and others regarding potential noise impacts.

Response 228B: The noise level prediction software is simply an automated version of an internationally accepted standard, ISO 9613-2 Acoustics – Attenuation of Sound during Propagation Outdoors, that provides a way of calculating in detail how sound levels will diminish with distance from a source. While some of the individual processes just follow the laws of physics, others, such as ground absorption, have been determined empirically from actual field measurements. The primary input to the model is the sound power level of the turbine that will be used in the Project. This value is determined from field measurements of an actual unit carried out in accordance with a detailed test plan contained in IEC Standard 61400-11 Wind Turbine Generator Systems – Acoustic Noise Measurement Techniques. The sound level used for the C96 wind turbine proposed for the project is based on a prototype and the final production version will incorporate noise mitigation measures not present on the prototype. Therefore, the actual sound level of the production model is expected to be less than the value used in the modeling.

Consequently, the entire modeling prediction methodology is fundamentally based on being "out measuring the noise", as the commentator suggests. Just because a computer program "in an office somewhere" is used to calculate the future sound levels associated with the Project doesn't mean that the predictions are flawed in any way or removed from reality.

Over many years, field tests of completed projects have shown that the calculations performed by the modeling software are valid and, in many cases, conservative – i.e. the predictions overestimate what the actual sound level is.

3.1.2 Written Comments

This Response Summary is the formal response to the written comments received for the Cohocton Wind Power Project DEIS, by the Town of Cohocton during the public comment period. Copies of the original written comment letters, with individual comments numbered, are included in Appendix I. This section also contains separate alphabetical comment indexes (Tables 10 and 11, arranged by commenter) for general comments for which no response is necessary, and for substantive comments that have corresponding responses provided in this section.

Table 10. Cohocton DEIS Written Substantive Comment List

SOURCE	COMMENT NUMBER	PRIMARY SUBJECT
Aldridge, B. (5/24/06)	57E	Aesthetic/ Visual Resources
Aldridge, B. (5/24/06)	57D	Public Safety
Aldridge, B. (5/24/06)	57C	Socioeconomics
Aldridge, B. (5/24/06)	57B	Socioeconomics
Anonymous	12A	Socioeconomics
Anonymous	12B	Socioeconomics
Anonymous	12C	Socioeconomics
Anonymous	12D	Socioeconomics
Azzi, S. (6/20/06)	74E	Biological Resources
Azzi, S. (6/20/06)	74D	Socioeconomics
Azzi, S. (6/20/06)	74C	Socioeconomics
Azzi, S. (6/20/06)	74A	Socioeconomics
Bose, J. (undated)	34B	Aesthetic/ Visual Resources
Bose, J. (undated)	34C	Communication Facilities
Bose, J. (undated)	34E	Public Safety
Bose, J. (undated)	34A	Sound
Brickler, K. (5/31/06)	16A	Aesthetic/ Visual Resources
Brickler, K. (5/31/06)	16C	Project Description
Brickler, K. (5/31/06)	16B	Sound (i) Operations and Maintenance (ii) Land Use/Zoning (iii)
Brickler, T. & K. (5/19/06)	38A	Aesthetic/ Visual Resources
Brickler, T. & K. (5/19/06)	38C	Aesthetic/ Visual Resources
Brickler, T. & K. (5/19/06)	39B	Aesthetic/ Visual Resources
Brickler, T. & K. (5/19/06)	39A	Communication Facilities
Brickler, T. & K. (5/19/06)	39D	Communication Facilities
Brickler, T. & K. (5/21/06)	36E	Biological Resources
Brickler, T. & K. (5/21/06)	36B	Biological Resources
Brickler, T. & K. (5/21/06)	36C	Biological Resources
Brickler, T. & K. (5/21/06)	36D	Biological Resources
Brickler, T. & K. (5/21/06)	37A	Project Description
Brickler, T. & K. (5/21/06)	37B	Project Description
Brickler, T. & K. (5/21/06)	37C	Project Description
Brickler, T. & K. (6/19/06)	89A	Communication Facilities
Brickler, T. & K. (6/23/06)	104E	Public Safety
Brickler, T. & K. (6/23/06)	104C	Public Safety
Brickler, T. & K. (6/23/06)	104D	Public Safety
Brickler, T. & K. (6/23/06)	104B	Socioeconomics
Brickler, T. & K. (6/9/06)	110A	Public Safety
Brickler, T. & K. (6/9/06)	110B	Public Safety
Brickler, T. & K. (6/9/06)	110C	Public Safety
Cole, C. (10/12/04-6/22/06)	82A	Sound
Conrad, R. (6/21/06)	73F	Biological Resources
Conrad, R. (6/21/06)	73C	Decommissioning
Conrad, R. (6/21/06)	73G	Other
Conrad, R. (6/21/06)	73D	Public Safety
Conrad, R. (6/21/06)	73E	Socioeconomics
Dionisio, H. (6/11/06)	90B	Socioeconomics
Evans, B. (6/23/06)	95E	Biological Resources

Table 10. Cohocton DEIS Written Substantive Comment List

SOURCE	COMMENT NUMBER	PRIMARY SUBJECT
Evans, B. (6/23/06)	95A	Biological Resources
Evans, B. (6/23/06)	95D	Biological Resources
Evans, B. (6/23/06)	95F	Biological Resources
Evans, B. (6/23/06)	95H	Biological Resources
Evans, B. (6/23/06)	95C	Biological Resources
Evans, B. (6/23/06)	95G	Biological Resources
Evans, B. (6/23/06)	95B	Biological Resources
Evans, W. (5/31/06)	96A	Biological Resources
Fitzpatrick, A. (5/26/06)	126	Socioeconomics
Forrest Slayton Farms (6/22/06)	170	Project Description (iii), Socioeconomics (v)
Forrest Slayton Farms (6/5/06)	62	Project Description (iii), Socioeconomics (v)
Gettys, P. (5/23/06)	58C	Aesthetic/ Visual Resources
Gettys, P. (5/23/06)	58E	Socioeconomics
Gettys, P. (5/23/06)	58A	Socioeconomics
Gettys, P. (5/23/06)	215D	Socioeconomics
Gettys, P. (5/23/06)	58F	Sound
Gray, D.	56I	Biological Resources
Gray, D.	56E	Geology, Soils, and Topography
Gray, D.	56F	Geology, Soils, and Topography
Gray, D.	56C	Project Description
Gray, D.	56G	Public Safety
Gray, D.	56J	Public Safety
Gray, D.	56B	Socioeconomics
Gray, D.	56D	Socioeconomics
Gray, D.	56H	Sound
Gueniot, C. (3/20/06)	184	Sound
Hall, J. (6/5/06)	25H	Alternatives
Hall, J. (6/5/06)	25F	Cumulative Impacts
Hall, J. (6/5/06)	25G	Land Use and Zoning
Hall, J./Cohocton Wind Watch	285E	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	287E	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	279	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	280	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	281	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	283A	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	283B	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	284B	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	284C	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	284A	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	285C	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	285A	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	285B	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	285D	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	286A	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	287A	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	287B	Aesthetic/Visual Resources

Table 10. Cohocton DEIS Written Substantive Comment List

SOURCE	COMMENT NUMBER	PRIMARY SUBJECT
Hall, J./Cohocton Wind Watch	287C	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	287F	Aesthetic/Visual Resources
Hall, J./Cohocton Wind Watch	329E	Alternatives
Hall, J./Cohocton Wind Watch	326	Alternatives
Hall, J./Cohocton Wind Watch	327	Alternatives
Hall, J./Cohocton Wind Watch	328A	Alternatives
Hall, J./Cohocton Wind Watch	328C	Alternatives
Hall, J./Cohocton Wind Watch	329F	Alternatives
Hall, J./Cohocton Wind Watch	329A	Alternatives
Hall, J./Cohocton Wind Watch	329B	Alternatives
Hall, J./Cohocton Wind Watch	329C	Alternatives
Hall, J./Cohocton Wind Watch	329D	Alternatives
Hall, J./Cohocton Wind Watch	330	Alternatives
Hall, J./Cohocton Wind Watch	331	Alternatives
Hall, J./Cohocton Wind Watch	273G	Biological Resources
Hall, J./Cohocton Wind Watch	273C	Biological Resources
Hall, J./Cohocton Wind Watch	273D	Biological Resources
Hall, J./Cohocton Wind Watch	273F	Biological Resources
Hall, J./Cohocton Wind Watch	274C	Biological Resources
Hall, J./Cohocton Wind Watch	274A	Biological Resources
Hall, J./Cohocton Wind Watch	274B	Biological Resources
Hall, J./Cohocton Wind Watch	276B	Biological Resources
Hall, J./Cohocton Wind Watch	276A	Biological Resources
Hall, J./Cohocton Wind Watch	277	Climate and Air Quality
Hall, J./Cohocton Wind Watch	322A	Communication Facilities
Hall, J./Cohocton Wind Watch	322B	Communication Facilities
Hall, J./Cohocton Wind Watch	323	Communication Facilities
Hall, J./Cohocton Wind Watch	324A	Communication Facilities
Hall, J./Cohocton Wind Watch	321E	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321J	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321D	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321C	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321F	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321G	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321H	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321I	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321K	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321L	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321M	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321A	Community Facilities and Services
Hall, J./Cohocton Wind Watch	321B	Community Facilities and Services
Hall, J./Cohocton Wind Watch	334C	Cumulative Impacts
Hall, J./Cohocton Wind Watch	334B	Cumulative Impacts
Hall, J./Cohocton Wind Watch	259A	Decommissioning
Hall, J./Cohocton Wind Watch	259B	Decommissioning
Hall, J./Cohocton Wind Watch	335E	Effects on Use and Conservation of Energy Resources

Table 10. Cohocton DEIS Written Substantive Comment List

SOURCE	COMMENT NUMBER	PRIMARY SUBJECT
Hall, J./Cohocton Wind Watch	335A	Effects on Use and Conservation of Energy Resources
Hall, J./Cohocton Wind Watch	335B	Effects on Use and Conservation of Energy Resources
Hall, J./Cohocton Wind Watch	335C	Effects on Use and Conservation of Energy Resources
Hall, J./Cohocton Wind Watch	335D	Effects on Use and Conservation of Energy Resources
Hall, J./Cohocton Wind Watch	238E	Executive Summary
Hall, J./Cohocton Wind Watch	238J	Executive Summary
Hall, J./Cohocton Wind Watch	238I	Executive Summary
Hall, J./Cohocton Wind Watch	238F	Executive Summary
Hall, J./Cohocton Wind Watch	238K	Executive Summary
Hall, J./Cohocton Wind Watch	238T	Executive Summary
Hall, J./Cohocton Wind Watch	264A	Geology, Soils, and Topography
Hall, J./Cohocton Wind Watch	265A	Geology, Soils, and Topography
Hall, J./Cohocton Wind Watch	265B	Geology, Soils, and Topography
Hall, J./Cohocton Wind Watch	266	Geology, Soils, and Topography
Hall, J./Cohocton Wind Watch	333B	Growth Inducing Impacts
Hall, J./Cohocton Wind Watch	333A	Growth Inducing Impacts
Hall, J./Cohocton Wind Watch	333C	Growth Inducing Impacts
Hall, J./Cohocton Wind Watch	288	Historic and Archaeological Resources
Hall, J./Cohocton Wind Watch	289	Historic and Archaeological Resources
Hall, J./Cohocton Wind Watch	290	Historic and Archaeological Resources
Hall, J./Cohocton Wind Watch	291	Historic and Archaeological Resources
Hall, J./Cohocton Wind Watch	292	Historic and Archaeological Resources
Hall, J./Cohocton Wind Watch	293	Historic and Archaeological Resources
Hall, J./Cohocton Wind Watch	294	Historic and Archaeological Resources
Hall, J./Cohocton Wind Watch	295	Historic and Archaeological Resources
Hall, J./Cohocton Wind Watch	296	Historic and Archaeological Resources
Hall, J./Cohocton Wind Watch	332E	Irreversible and Irretrievable Commitment of Resources
Hall, J./Cohocton Wind Watch	332B	Irreversible and Irretrievable Commitment of Resources
Hall, J./Cohocton Wind Watch	332D	Irreversible and Irretrievable Commitment of Resources
Hall, J./Cohocton Wind Watch	332A	Irreversible and Irretrievable Commitment of Resources
Hall, J./Cohocton Wind Watch	332F	Irreversible and Irretrievable Commitment of Resources
Hall, J./Cohocton Wind Watch	332C	Irreversible and Irretrievable Commitment of Resources
Hall, J./Cohocton Wind Watch	325A	Land Use and Zoning
Hall, J./Cohocton Wind Watch	325B	Land Use and Zoning
Hall, J./Cohocton Wind Watch	325C	Land Use and Zoning
Hall, J./Cohocton Wind Watch	258B	Operations and Maintenance
Hall, J./Cohocton Wind Watch	258C	Operations and Maintenance
Hall, J./Cohocton Wind Watch	261B	Permits and Approvals Required

Table 10. Cohocton DEIS Written Substantive Comment List

SOURCE	COMMENT NUMBER	PRIMARY SUBJECT
Hall, J./Cohocton Wind Watch	248A	Project Construction
Hall, J./Cohocton Wind Watch	248B	Project Construction
Hall, J./Cohocton Wind Watch	249	Project Construction
Hall, J./Cohocton Wind Watch	250	Project Construction
Hall, J./Cohocton Wind Watch	251	Project Construction
Hall, J./Cohocton Wind Watch	252	Project Construction
Hall, J./Cohocton Wind Watch	253	Project Construction
Hall, J./Cohocton Wind Watch	254	Project Construction
Hall, J./Cohocton Wind Watch	255	Project Construction
Hall, J./Cohocton Wind Watch	256B	Project Construction
Hall, J./Cohocton Wind Watch	256A	Project Construction
Hall, J./Cohocton Wind Watch	256C	Project Construction
Hall, J./Cohocton Wind Watch	260B	Project Cost and Funding
Hall, J./Cohocton Wind Watch	260A	Project Cost and Funding
Hall, J./Cohocton Wind Watch	240E	Project Description
Hall, J./Cohocton Wind Watch	237G	Project Description
Hall, J./Cohocton Wind Watch	237D	Project Description
Hall, J./Cohocton Wind Watch	238A	Project Description
Hall, J./Cohocton Wind Watch	238B	Project Description
Hall, J./Cohocton Wind Watch	238C	Project Description
Hall, J./Cohocton Wind Watch	238D	Project Description
Hall, J./Cohocton Wind Watch	239B	Project Description
Hall, J./Cohocton Wind Watch	239C	Project Description
Hall, J./Cohocton Wind Watch	240A	Project Description
Hall, J./Cohocton Wind Watch	240C	Project Description
Hall, J./Cohocton Wind Watch	240F	Project Description
Hall, J./Cohocton Wind Watch	240B	Project Description
Hall, J./Cohocton Wind Watch	240G	Project Description
Hall, J./Cohocton Wind Watch	240J	Project Description
Hall, J./Cohocton Wind Watch	241A	Project Description
Hall, J./Cohocton Wind Watch	243	Project Description
Hall, J./Cohocton Wind Watch	244A	Project Description
Hall, J./Cohocton Wind Watch	244B	Project Description
Hall, J./Cohocton Wind Watch	245	Project Description
Hall, J./Cohocton Wind Watch	246B	Project Description
Hall, J./Cohocton Wind Watch	246A	Project Description
Hall, J./Cohocton Wind Watch	247A	Project Purpose, Need and Benefit
Hall, J./Cohocton Wind Watch	247C	Project Purpose, Need and Benefit
Hall, J./Cohocton Wind Watch	262A	Public and Agency Involvement
Hall, J./Cohocton Wind Watch	262B	Public and Agency Involvement
Hall, J./Cohocton Wind Watch	309A	Public Safety
Hall, J./Cohocton Wind Watch	309B	Public Safety
Hall, J./Cohocton Wind Watch	310	Public Safety
Hall, J./Cohocton Wind Watch	311	Public Safety
Hall, J./Cohocton Wind Watch	312	Public Safety
Hall, J./Cohocton Wind Watch	313B	Public Safety
Hall, J./Cohocton Wind Watch	313A	Public Safety
Hall, J./Cohocton Wind Watch	314	Public Safety

Table 10. Cohocton DEIS Written Substantive Comment List

SOURCE	COMMENT NUMBER	PRIMARY SUBJECT
Hall, J./Cohocton Wind Watch	315	Public Safety
Hall, J./Cohocton Wind Watch	317	Public Safety
Hall, J./Cohocton Wind Watch	318A	Public Safety
Hall, J./Cohocton Wind Watch	318C	Public Safety
Hall, J./Cohocton Wind Watch	319	Public Safety
Hall, J./Cohocton Wind Watch	320A	Public Safety
Hall, J./Cohocton Wind Watch	320B	Public Safety
Hall, J./Cohocton Wind Watch	247B	Socioeconomics
Hall, J./Cohocton Wind Watch	301	Socioeconomics
Hall, J./Cohocton Wind Watch	303	Socioeconomics
Hall, J./Cohocton Wind Watch	305	Socioeconomics
Hall, J./Cohocton Wind Watch	306	Socioeconomics
Hall, J./Cohocton Wind Watch	307A	Socioeconomics
Hall, J./Cohocton Wind Watch	307B	Socioeconomics
Hall, J./Cohocton Wind Watch	308	Socioeconomics
Hall, J./Cohocton Wind Watch	297E	Sound
Hall, J./Cohocton Wind Watch	238G	Sound
Hall, J./Cohocton Wind Watch	297A	Sound
Hall, J./Cohocton Wind Watch	297F	Sound
Hall, J./Cohocton Wind Watch	297G	Sound
Hall, J./Cohocton Wind Watch	297H	Sound
Hall, J./Cohocton Wind Watch	297I	Sound
Hall, J./Cohocton Wind Watch	297J	Sound
Hall, J./Cohocton Wind Watch	297P	Sound
Hall, J./Cohocton Wind Watch	297O	Sound
Hall, J./Cohocton Wind Watch	297T	Sound
Hall, J./Cohocton Wind Watch	297U	Sound
Hall, J./Cohocton Wind Watch	297W	Sound
Hall, J./Cohocton Wind Watch	297Y	Sound
Hall, J./Cohocton Wind Watch	297Z	Sound
Hall, J./Cohocton Wind Watch	297R	Sound
Hall, J./Cohocton Wind Watch	297N	Sound
Hall, J./Cohocton Wind Watch	299	Sound
Hall, J./Cohocton Wind Watch	300A	Transportation
Hall, J./Cohocton Wind Watch	300D	Transportation
Hall, J./Cohocton Wind Watch	300B	Transportation
Hall, J./Cohocton Wind Watch	300C	Transportation
Hall, J./Cohocton Wind Watch	268	Water Resources
Hall, J./Cohocton Wind Watch	269	Water Resources
Hersh Family (5/25/06)	13G	Aesthetic/ Visual Resources
Hersh Family (5/25/06)	13K	Aesthetic/ Visual Resources
Hersh Family (5/25/06)	13E	Land Use and Zoning
Hersh Family (5/25/06)	13F	Land Use and Zoning
Hersh Family (5/25/06)	13J	Project
Hersh Family (5/25/06)	13A	Project Description
Hersh Family (5/25/06)	13D	Public Safety
Hersh Family (5/25/06)	13I	Socioeconomics
Hersh Family (5/25/06)	13B	Sound

Table 10. Cohocton DEIS Written Substantive Comment List

SOURCE	COMMENT NUMBER	PRIMARY SUBJECT
Hersh Family (5/25/06)	13C	Water Resources
Keenan, M. (6/1/06)	145	Socioeconomics
Konieczny, D. & B. (6/7/06)	85H	Aesthetic/Visual Resources
Konieczny, D. & B. (6/7/06)	85B	Aesthetic/Visual Resources
Konieczny, D. & B. (6/7/06)	85C	Biological Resources
Konieczny, D. & B. (6/7/06)	85D	Biological Resources
Konieczny, D. & B. (6/7/06)	85F	Project Description
Konieczny, D. & B. (6/7/06)	85E	Public Safety
Konieczny, D. & B. (6/7/06)	85G	Socioeconomics
Konieczny, D. & B. (6/7/06)	85A	Sound
Kota, C. & B. (5/22/06)	11C	Aesthetic/ Visual Resources
Kota, C. & B. (5/22/06)	11D	Biological Resources
Kota, C. & B. (5/22/06)	11F	Project Description
Kota, C. & B. (5/22/06)	11E	Socioeconomics
Kota, C. & B. (5/22/06)	11A	Socioeconomics
Kota, C. & B. (5/22/06)	11B	Socioeconomics
Kota, C. & B. (6/22/06)	103B	Project Description
Levee, J. and S. (5/25/06)	14C	Land Use and Zoning
Levee, J. and S. (5/25/06)	14E	Permits and Approvals Required
Levee, J. and S. (5/25/06)	14F	Public Safety
Levee, J. and S. (5/25/06)	14D	Socioeconomics
Levee, J. and S. (5/25/06)	14B	Socioeconomics
Levee, J. and S. (5/25/06)	14A	Sound
Lince, J. & S. (5/23/06)	101A	Sound
Lince, J. (5/18/06)	54D	Sound
Lowry, H. (5/26/06)	15A	Community Character
Matilsky, T. (6/23/06)	102A	Public Safety Noise
McDowell, D. (6/20/06)	183A	Aesthetic/Visual Resources
McDowell, D. (6/20/06)	183B	Socioeconomics
McKinney, R. (6/22/06)	105E	Avian
McKinney, R. (6/22/06)	105B	Avian
McKinney, R. (6/22/06)	105C	Avian
McKinney, R. (6/22/06)	105D	Avian
McKinney, R. (6/22/06)	105F	Avian
McKinney, R. (6/22/06)	105G	Avian
McKinney, R. (6/22/06)	105H	Avian
McKinney, R. (6/22/06)	105I	Avian
Morehouse, B. and S. (6/5/06)	182E	Aesthetic/Visual Resources
Morehouse, B. and S. (6/5/06)	182G	Socioeconomics
Morehouse, B. and S. (6/5/06)	182F	Sound
N. Pierpont, M.D., PH.D. (3/9/06)	185	Public Safety
NYSDAM (6/13/06)	2A	Land Use and Zoning
NYSDAM (6/13/06)	2B	Land Use and Zoning
NYSDAM (6/13/06)	2C	Land Use and Zoning
NYSDEC (11/3/05)	199B	Biological Resources
NYSDEC (6/21/06)	1C	Aesthetic/ Visual Resources
NYSDEC (6/21/06)	1B	Biological Resources
NYSDEC (6/21/06)	1F	Cumulative Impacts

Table 10. Cohocton DEIS Written Substantive Comment List

SOURCE	COMMENT NUMBER	PRIMARY SUBJECT
NYSDEC (6/21/06)	1D	Historic and Archeological Resources
NYSDEC (6/21/06)	1A	Water Resources
NYSDPS (6/8/06)	3C	Aesthetic/ Visual Resources
NYSDPS (6/8/06)	3A	Aesthetic/ Visual Resources
NYSDPS (6/8/06)	3B	Aesthetic/ Visual Resources
NYSDPS (6/8/06)	189	Aesthetic/ Visual Resources
NYSDPS (6/8/06)	3E	Project Description
NYSDPS (6/8/06)	3D	Water Resources (iii) Alternatives
Oehlbeck, M. (5/23/06)	40A	Project Description
Oehlbeck, M. (5/23/06)	40J	Communication Facilities
Oehlbeck, M. (5/23/06)	40N	Communication Facilities
Oehlbeck, M. (5/23/06)	40O	Project Description
Oehlbeck, M. (5/23/06)	40B	Project Description
Oehlbeck, M. (5/23/06)	40K	Project Description
Oehlbeck, M. (5/23/06)	40L	Project Description
Oehlbeck, M. (5/23/06)	40H	Socioeconomics
Oehlbeck, M. (5/23/06)	40I	Socioeconomics
Oehlbeck, M. (5/23/06)	40G	Socioeconomics
Oehlbeck, M. (5/23/06)	40E	Sound
Oehlbeck, M. (5/23/06)	40M	Sound
Oehlbeck, M. (5/23/06)	40F	Sound
Oehlbeck, M. (5/23/06)	40C	Sound
Oehlbeck, M. (5/23/06)	40D	Sound
Oehlbeck, M. (5/23/06)	40Q	Sound
Oehlbeck, M. (5/23/06)	40R	Sound
Oehlbeck, M. (6/23/06)	100B	Alternatives
Oehlbeck, M. (6/5/06)	19A	Sound
Oehlbeck, M. (6/5/06)	109	Sound
Oehlbeck, M. (6/5/06)	19B	Visual and Aesthetic Resources
Palmiter, B. (5/17/06)	51B	Agriculture
Palmiter, B. (5/17/06)	51D	Geology, Soils, and Topography
Palmiter, B. (5/17/06)	51C	Other
Palmiter, B. (5/17/06)	51E	Permits and Approval Required
Palmiter, B. (5/17/06)	51G	Project Description
Palmiter, B. (5/17/06)	51I	Public Safety
Palmiter, B. (5/17/06)	51J	Public Safety
Palmiter, B. (5/17/06)	51H	Socioeconomics
Parkinson, J. (5/17/06)	49A	Aesthetic/ Visual Resources
Sanford, D. (6/3/06)	61C	Aesthetic/ Visual Resources
Sanford, D. (6/3/06)	60C	Biological Resources
Sanford, D. (6/3/06)	61A	Other
Sanford, D. (6/3/06)	60B	Socioeconomics
Sanford, D. (6/3/06)	61D	Socioeconomics
Sanford, D. (6/3/06)	61B	Sound
Sherwood, W. – Mayor Village of Naples (4/28/06)	26C	Aesthetic/ Visual Resources
Sherwood, W. – Mayor Village of Naples (4/28/06)	26A	Aesthetic/ Visual Resources

Table 10. Cohocton DEIS Written Substantive Comment List

SOURCE	COMMENT NUMBER	PRIMARY SUBJECT
Sherwood, W. – Mayor Village of Naples (4/28/06)	26E	Transportation
Sherwood, W. – Mayor Village of Naples (4/28/06)	26D	Transportation
Silco, C. (5/25/06)	12E	Community Character
Silco, C. (5/25/06)	12A	Socioeconomics
Simonds, J. & C. (6/5/06)	63C	Aesthetic/ Visual Resources
Simonds, J. & C. (6/5/06)	63B	Land Use and Zoning
Simonds, J. & C. (6/5/06)	63E	Public and Agency Involvement
Simonds, J. & C. (6/5/06)	63D	Socioeconomics
Smith, S. and I. (6/5/06)	88C	Biological Resources
Smith, S. and I. (6/5/06)	88D	Biological Resources
Smith, S. and I. (6/5/06)	88B	Socioeconomics
Smith, S. and I. (6/5/06)	88F	Sound
Sokolow, A. (6/13/06)	113B	Project Description
Sokolow, A. (6/22/06)	107A	Sound
Sokolow, A. (6/22/06)	119	Sound
Sokolow, A. (6/23/06)	78 A	Public Safety
Sokolow, A. (6/23/06)	78B	Public Safety
Sokolow, S. and S. Trude (5/4/06)	33A	Socioeconomics
Sokolow, S. and S. Trude, J. Hall (4/26/06)	30C	Mitigation
Sokolow, S. and S. Trude, J. Hall (4/26/06)	30B	Socioeconomics
Speziale, M. (5/25/06)	9A	Aesthetic/ Visual Resources
Speziale, M. (5/25/06)	9B	Biological Resources
Speziale, M. (5/25/06)	9C	Community Character
Speziale, M. (5/25/06)	9E	Project Description
Speziale, M. (5/25/06)	9D	Project Description
Speziale, M. (5/25/06)	9G	Socioeconomics
Speziale, M. (5/25/06)	9F	Socioeconomics
Stoner Clark, F. (6/8/06)	84D	Biological Resources
Stoner Clark, F. (6/8/06)	84B	Socioeconomics
Stoner Clark, F. (6/8/06)	84C	Sound
Strasburg, R. (6/19/06)	83K	Aesthetic/Visual Resources
Strasburg, R. (6/4/06)	24D	Socioeconomics
Strasburg, R. (6/4/06)	24M	Transportation
Struck, G. & P. (6/15/06)	91E	Communication Facilities
Struck, G. & P. (6/15/06)	91C	Public Safety
Struck, G. & P. (6/15/06)	91F	Public Safety
Struck, G. & P. (6/15/06)	91D	Sound
Tobias, J. (6/11/06)	20B	Biological Resources
Tobias, J. (6/11/06)	94B	Biological Resources
Tobias, J. (6/11/06)	20A	Project Description
Tobias, J. (6/11/06)	94A	Project Description
USF&WS (6/24/06)	147D1	Air Impacts
USF&WS (6/24/06)	147D3	Air Impacts

Table 10. Cohocton DEIS Written Substantive Comment List

SOURCE	COMMENT NUMBER	PRIMARY SUBJECT
USF&WS (6/24/06)	147H1	Alternatives
USF&WS (6/24/06)	147H3	Alternatives
USF&WS (6/24/06)	147H2	Avian
USF&WS (6/24/06)	147E1	Biological Resources
USF&WS (6/24/06)	147J2	Biological Resources
USF&WS (6/24/06)	147F16	Biological Resources
USF&WS (6/24/06)	147F17	Biological Resources
USF&WS (6/24/06)	147J3	Biological Resources
USF&WS (6/24/06)	147F10	Biological Resources
USF&WS (6/24/06)	147F11	Biological Resources
USF&WS (6/24/06)	147F12	Biological Resources
USF&WS (6/24/06)	147F13	Biological Resources
USF&WS (6/24/06)	147F14	Biological Resources
USF&WS (6/24/06)	147F5	Biological Resources
USF&WS (6/24/06)	147F6	Biological Resources
USF&WS (6/24/06)	147F7	Biological Resources
USF&WS (6/24/06)	147F8	Biological Resources
USF&WS (6/24/06)	147F9	Biological Resources
USF&WS (6/24/06)	147J4	Biological Resources
USF&WS (6/24/06)	147F15	Biological Resources
USF&WS (6/24/06)	147F4	Biological Resources
USF&WS (6/24/06)	147D2	Cumulative impacts
USF&WS (6/24/06)	147E3	Description of Proposed Project
USF&WS (6/24/06)	147E5	Description of Proposed Project
USF&WS (6/24/06)	147E6	Description of Proposed Project
USF&WS (6/24/06)	147E2	Description of Proposed Project
USF&WS (6/24/06)	147E7	Description of Proposed Project
USF&WS (6/24/06)	147E4	Description of Proposed Project
USF&WS (6/24/06)	147I2	Summary of Cumulative Impacts
USF&WS (6/24/06)	147I4	Summary of Cumulative Impacts
USF&WS (6/24/06)	147I1	Summary of Cumulative Impacts
USF&WS (6/24/06)	147I3	Summary of Cumulative Impacts
USF&WS (6/24/06)	147K3	Unavoidable Adverse Impacts
USF&WS (6/24/06)	147G1	Unavoidable Adverse Impacts
USF&WS (6/24/06)	147G4	Unavoidable Adverse Impacts
USF&WS (6/24/06)	147G5	Unavoidable Adverse Impacts
USF&WS (6/24/06)	147G6	Unavoidable Adverse Impacts
USF&WS (6/24/06)	147K1	Unavoidable Adverse Impacts
USF&WS (6/24/06)	147K2	Unavoidable Adverse Impacts
USF&WS (6/24/06)	147G2	Unavoidable Adverse Impacts
USF&WS (6/24/06)	147G3	Unavoidable Adverse Impacts
USF&WS (6/24/06)	147F2	Water Resources
USF&WS (6/24/06)	147J1	Water Resources
USF&WS (6/24/06)	147F1	Water Resources
USF&WS (6/24/06)	147F3	Water Resources
VanWormer, J. & S. (6/7/06)	86A	Geology, Soils, and Topography
VanWormer, J. & S. (6/7/06)	86B	Project Description
VanWormer, J. & S. (6/7/06)	86C	Socioeconomics

Table 10. Cohocton DEIS Written Substantive Comment List

SOURCE	COMMENT NUMBER	PRIMARY SUBJECT
Wahlstrom, N. & C. (6/23/06)	99C	Project Purpose, Need and Benefit
Wahlstrom, N. & C. (6/23/06)	99A	Socioeconomics
Wayland – Town Supervisor (5/24/06)	5C	Aesthetic/ Visual Resources
Wayland – Town Supervisor (5/24/06)	5A	Socioeconomics
Wayland – Town Supervisor (5/24/06)	5B	Sound
Wolfe, A. (5/23/06)	8D	Land Use and Zoning
Wolfe, A. (5/23/06)	8A	Land Use and Zoning
Wolfe, A. (5/23/06)	8B	Land Use and Zoning
Wolfe, A. (5/23/06)	8C	Sound
Wolfe, A. (5/23/06)	8E	Water Resources
Woodard, S. (5/22/06)	6C	Aesthetic/ Visual Resources
Woodard, S. (5/22/06)	6F	Socioeconomics
Woodard, S. (5/22/06)	6A	Socioeconomics
Woodard, S. (5/22/06)	6E	Sound
Woodard, S. (5/22/06)	6B	Sound
Woodard, S. (5/22/06)	6D	Transportation

Table 11. Cohocton DEIS General Written Comments - No Response Necessary

Source	Comment Number
Aldridge, B. (5/24/06)	57A
Aldridge, B. (5/24/06)	231A
Anonymous (12/4/03) (2004)	122
Anonymous (5/12/06)	52A
Anonymous (5/31/?)	137
Anonymous (5/4/06)	68
Anonymous (6/13/06)	193
Anonymous (6/22/06)	114
Anonymous (6/22/06)	190
Anonymous (Undated)	124
Anonymous (Undated)	129
Anonymous (Undated)	131
Anonymous (Undated)	139
Anonymous (Undated)	172
Anonymous (Undated)	188
Anonymous (Undated)	192
Anonymous (Undated)	195
Anonymous (Undated)	197
Anonymous (Undated)	202
Azzi, S. (6/20/06)	74B
Azzi, S. (6/20/06)	74F
Binkowski, H. (Not dated)	43A
Bittner-Mackin, E. (undated)	140
Bolton, R. (6/23/06)	97A
Bolton, R. (6/ 23/06)	106

Table 11. Cohocton DEIS General Written Comments - No Response Necessary

Source	Comment Number
Bolton, R. (5/25/06)	221A
Bolton, R. (5/25/06)	221C
Bolton, R. (5/25/06)	221D
Bolton, R. (5/25/06)	221J
Bose, J. (undated)	34D
Brickler, K. (5/18/06)	35A
Brickler, K. (5/18/06)	35B
Brickler, K. (5/18/06)	35C
Brickler, K. (5/18/06)	35D
Brickler, T. & K. (5/17/06)	21A
Brickler, T. & K. (4/6/06)	22A
Brickler, T. & K. (4/8/06)	22C
Brickler, T. & K. (5/18/06)	31B
Brickler, T. & K. (5/19/06)	38B
Brickler, T. & K. (5/19/06)	39C
Brickler, T. & K. (5/21/06)	31A
Brickler, T. & K. (5/21/06)	31D
Brickler, T. & K. (5/21/06)	36F
Brickler, T. & K. (6/16/06)	111
Brickler, T. & K. (6/23/06)	104A
Brickler, T. (5/18/06) (5/19/06)	31E
Brickler, T. (5/18/06) (5/19/06)	31C
Brickler, T. (5/21/06)	41A
Buss, E. and G. (6/11/06)	166
Buss, E. and G. (6/12/06)	151A
Buss, E. and G. (6/12/06)	151B
Buss, E. and G. (6/12/06)	167
Cochrane, K. (5/7/06)	Cochrane, K. (5/7/06)
Cochrane, K. (5/7/06)	44A
Cohocton Wind Watch (4/17/06)	7
Cole, R. (4/29/06)	48E
Cole, R. (4/29/06)	48A
Cole, R. (4/29/06)	48B
Cole, R. (4/29/06)	48C
Cole, R. (4/29/06)	48D
Conrad, R. (6/21/06)	73A
Conrad, R. (6/21/06)	73B
Conrad, R. (6/21/06)	73H
COPEMAC1125 (5/9/06 - email)	65
Cosgrove, M. (6/8/06)	161
Daly, G. (6/11/06)	127A
Darling, R. (no date)	69
Decker, A. (5/25/06)	226A
Dionisio, H. (6/11/06)	90A
Dionisio, H. (6/11/06)	90C
Drum, P. (6/14/06)	168
Drum, P. (6/16/06)	72A
Drum, P. (6/16/06)	72B

Table 11. Cohocton DEIS General Written Comments - No Response Necessary

Source	Comment Number
Eagar, H. (Undated)	127B
Finger Lakes Visitors Connection (undated)	143.5
Foringer, P. (undated)	143
Forrest Slayton Farms (6/22/06)	76A
Gettys, P. (5/23/06)	58B
Gettys, P. (5/23/06)	58D
Gettys, P. (5/23/06)	58G
Gettys, P. (5/25/06)	215E
Gettys, P. (5/25/06)	215A
Gettys, P. (5/25/06)	215B
Gettys, P. (5/25/06)	215C
Gettys, P. (5/25/06)	215F
Gettys, P. (5/25/06)	215G
Goldthwait, F. J. (6/20/06)	174
Goldthwait, J. (5/25/06)	233E
Goldthwait, J. (5/25/06)	233C
Goldthwait, J. (5/25/06)	233D
Goldthwait, J. (5/25/06)	233F
Graham, H. (Undated)	155
Gray, D. (5/16/06)	50A
Gray, D. (5/16/06)	56A
Greenfield, B. (5/25/06)	230A
Greenfield, B. (5/25/06)	230B
Hall, J.	59A
Hall, J. (5/25/06)	208A
Hall, J. (6/15/06)	173
Hall, J. (6/20/06)	77A
Hall, J. (6/20/06)	77B
Hall, J. (6/20/06)	77C
Hall, J. (6/20/06)	77D
Hall, J. (6/22/06)	178
Hall, J. (6/23/06)	98A
Hall, J. (6/5/06)	25E
Hall, J. (6/5/06)	25A
Hall, J. (6/5/06)	25B
Hall, J. (6/5/06)	25D
Hall, J. (6/5/06)	25I
Hall, J. (6/5/06)	25J
Hall, J. (6/5/06)	32A
Hall, J. (6/5/06)	32B
Hall, J. (6/5/06)	87A
Hall, J. /Cohocton Wind Watch	241B
Hall, J./Cohocton Wind Watch	237E
Hall, J./Cohocton Wind Watch	262E
Hall, J./Cohocton Wind Watch	273E
Hall, J./Cohocton Wind Watch	300E
Hall, J./Cohocton Wind Watch	325E
Hall, J./Cohocton Wind Watch	237A

Table 11. Cohocton DEIS General Written Comments - No Response Necessary

Source	Comment Number
Hall, J./Cohocton Wind Watch	237B
Hall, J./Cohocton Wind Watch	237C
Hall, J./Cohocton Wind Watch	237F
Hall, J./Cohocton Wind Watch	237H
Hall, J./Cohocton Wind Watch	237I
Hall, J./Cohocton Wind Watch	237J
Hall, J./Cohocton Wind Watch	237K
Hall, J./Cohocton Wind Watch	237L
Hall, J./Cohocton Wind Watch	238H
Hall, J./Cohocton Wind Watch	238L
Hall, J./Cohocton Wind Watch	238M
Hall, J./Cohocton Wind Watch	238N
Hall, J./Cohocton Wind Watch	238O
Hall, J./Cohocton Wind Watch	238P
Hall, J./Cohocton Wind Watch	238Q
Hall, J./Cohocton Wind Watch	238R
Hall, J./Cohocton Wind Watch	238S
Hall, J./Cohocton Wind Watch	238U
Hall, J./Cohocton Wind Watch	239A
Hall, J./Cohocton Wind Watch	240D
Hall, J./Cohocton Wind Watch	240H
Hall, J./Cohocton Wind Watch	240I
Hall, J./Cohocton Wind Watch	241C
Hall, J./Cohocton Wind Watch	242
Hall, J./Cohocton Wind Watch	247B
Hall, J./Cohocton Wind Watch	247D
Hall, J./Cohocton Wind Watch	248C
Hall, J./Cohocton Wind Watch	248D
Hall, J./Cohocton Wind Watch	256D
Hall, J./Cohocton Wind Watch	257A
Hall, J./Cohocton Wind Watch	257B
Hall, J./Cohocton Wind Watch	258A
Hall, J./Cohocton Wind Watch	258D
Hall, J./Cohocton Wind Watch	259A
Hall, J./Cohocton Wind Watch	261A
Hall, J./Cohocton Wind Watch	262C
Hall, J./Cohocton Wind Watch	262D
Hall, J./Cohocton Wind Watch	263A
Hall, J./Cohocton Wind Watch	263B
Hall, J./Cohocton Wind Watch	263C
Hall, J./Cohocton Wind Watch	263D
Hall, J./Cohocton Wind Watch	267
Hall, J./Cohocton Wind Watch	270
Hall, J./Cohocton Wind Watch	271
Hall, J./Cohocton Wind Watch	272
Hall, J./Cohocton Wind Watch	273A
Hall, J./Cohocton Wind Watch	273B
Hall, J./Cohocton Wind Watch	273H
Hall, J./Cohocton Wind Watch	274D

Table 11. Cohocton DEIS General Written Comments - No Response Necessary

Source	Comment Number
Hall, J./Cohocton Wind Watch	275A
Hall, J./Cohocton Wind Watch	275B
Hall, J./Cohocton Wind Watch	278
Hall, J./Cohocton Wind Watch	282
Hall, J./Cohocton Wind Watch	284B
Hall, J./Cohocton Wind Watch	287D
Hall, J./Cohocton Wind Watch	297B
Hall, J./Cohocton Wind Watch	297C
Hall, J./Cohocton Wind Watch	297D
Hall, J./Cohocton Wind Watch	297J
Hall, J./Cohocton Wind Watch	297K
Hall, J./Cohocton Wind Watch	297L
Hall, J./Cohocton Wind Watch	297M
Hall, J./Cohocton Wind Watch	297Q
Hall, J./Cohocton Wind Watch	297S
Hall, J./Cohocton Wind Watch	297V
Hall, J./Cohocton Wind Watch	297X
Hall, J./Cohocton Wind Watch	298
Hall, J./Cohocton Wind Watch	302
Hall, J./Cohocton Wind Watch	304A
Hall, J./Cohocton Wind Watch	304B
Hall, J./Cohocton Wind Watch	309C
Hall, J./Cohocton Wind Watch	316
Hall, J./Cohocton Wind Watch	318B
Hall, J./Cohocton Wind Watch	318D
Hall, J./Cohocton Wind Watch	320C
Hall, J./Cohocton Wind Watch	324B
Hall, J./Cohocton Wind Watch	324C
Hall, J./Cohocton Wind Watch	325
Hall, J./Cohocton Wind Watch	325D
Hall, J./Cohocton Wind Watch	328B
Hall, J./Cohocton Wind Watch	334A
Hall, J./Cohocton Wind Watch	334D
Hall, J./Cohocton Wind Watch	336
Hall, J./Cohocton Wind Watch	337
Hersh Family (5/25/06)	13H
Hersh Family (5/25/06)	13L
Holbrook, K., M. Walker, and M. Fisher – The office of the Fire Chief (6/22/06)	181
Hull, F. (Undated)	186
Hunt, W. (Undated)	158
Hursh, D. (5/25/06)	224A
Jacobs, K. (5/25/06)	229B
Jacobs, K. (5/25/06)	229C
Jacobs, R. (5/25/06)	213A
Jacobs, R. (5/25/06)	213B
jmirving (5/8/06 - email)	66
Johnston, M. (5/5/06)	201
Kalena, C. (5/8/06)	67

Table 11. Cohocton DEIS General Written Comments - No Response Necessary

Source	Comment Number
Kendrickson, B. (5/25/06)	218A
Kendrickson, B. (5/25/06)	218C
Kithil, R. (6/11/06)	136
Knauf, A.J. (Undated)	196
Knoblauch, V. – President Finger Lakes Visitors Connection (5/25/06)	28A
Koch, F. et al. (Undated)	130
Konieczny, D. & B. (6/7/06)	85I
Kota, C. & B. (6/22/06)	103A
Kota, C. & B. (6/22/06)	103C
Lafler, T. (not dated)	42A
Lafler, T. (not dated)	42B
Lafler, T. (not dated)	42C
LeBlanc, M.P. (2/9/05)	134
Lessar, M. (5/25/06)	225A
Lessar, M. and M. Sammons (5/24/06)	10
Levee, J. and S. (5/25/06)	14G
Lince, J. (5/18/06)	54E
Lince, J. (5/18/06)	54A
Lince, J. (5/18/06)	54B
Lince, J. (5/18/06)	54C
Lince, J. (5/19/06)	29A
Lince, J. (5/29/06)	17A
Lince, J. (5/29/06)	18A
Lince, J. (5/29/06)	18C
Lince, J. (5/29/06)	18D
Lince, J. (6/10/06)	179
Lince, J. (6/16/06)	176
Lince, J. (6/16/06)	177
Lince, J. (6/23/06)	81A
Lince, J. (6/23/06)	81B
Lindsey, R. (5/22/06)	23A
Lindsey, R. (5/22/06)	23B
Matilsky, T. (6/22/06)	120
Matilsky, T. (6/22/06)	135
Matilsky, T. (6/22/06)	191
Matilsky, T. (6/23/06)	102B
McKinney, R. (6/22/06)	105A
McKinney, R. (6/22/06)	105J
Miles, J. (6/9/06)	123
Miller, D. (5/25/06)	210A
Miller, D. (5/25/06)	210B
Miller, D. (5/25/06)	210F
Miller, D. (5/25/06)	210G
Miller, D. (5/25/06)	210H
Moody, R. (5/25/06)	232B
Moore, G. (5/25/06)	55A
Moore, G. (5/25/06)	212A
Moran, H. (6/7/06)	162
Morehouse, B. (5/25/06)	227E

Table 11. Cohocton DEIS General Written Comments - No Response Necessary

Source	Comment Number
Morehouse, B. (5/25/06)	227A
Morehouse, B. (5/25/06)	227B
Morehouse, B. and S. (6/5/06)	182 B
Morehouse, B. and S. (6/5/06)	182A
Morehouse, B. and S. (6/5/06)	182C
Morehouse, B. and S. (6/5/06)	182D
Morgan, C. et al. (3/31-4/2/98)	133
Motz, E. (6/9/06)	75A
Motz, E. (6/9/06)	75B
Motz, E. (6/9/06)	75C
Murray, R. (5/7/06)	194
NYSDA&M	148
NYSDEC (6/21/06)	149
NYSDEC (11/3/05)	199A
NYSDEC (2/12/04)	200
NYSDEC (6/21/06)	1E
NYSDPS (6/8/06)	150
NYSDOT (5/25/06)	4
Oehlbeck, M. (5/23/06)	40 S
Oehlbeck, M. (5/23/06)	40M
Oehlbeck, M. (5/23/06)	40P
Oehlbeck, M. (6/23/06)	100A
Oehlbeck, M. (6/23/06)	100C
Oehlbeck, M. (6/23/06)	100D
Otsego County Planning Commission (1/19/04)	132
Otsego County Planning Commission (1/19/04)	138
Palmiter, B. (5/25/06)	219E
Palmiter, B. (5/25/06)	51A
Palmiter, B. (5/25/06)	51F
Palmiter, B. (5/25/06)	219A
Palmiter, B. (5/25/06)	219B
Palmiter, K. (5/25/06)	220A
Palmiter, K. (6/22/06)	141
Parkinson, J. (5/17/06)	49A
Perham, M. (undated)	144
Peterson, C. (5/10/06)	64
Pierpont, N. (6/7/06)	121
Quadri, C. (6/13/06)	198
Radell, R. (5/25/06)	223A
Radell, R. (5/25/06)	223B
Ruith, M. et al. (Undated)	128
Sanford, D. (6/3/06)	60E
Sanford, D. (6/3/06)	60A
Sanford, D. (6/3/06)	60D
Schleede, G. (9/1/02)	125
Seifert, G. (12/05)	146
Sherwood, W. – Mayor Village of Naples (4/28/06)	26B
Simolo, D. (6/6/06)	163
Simonds, J. and C. (6/5/06)	63A

Table 11. Cohocton DEIS General Written Comments - No Response Necessary

Source	Comment Number
Slayton, K. (6/21/06)	171
Smith, B. (5/25/06)	217
Smith, S. and I. (6/5/06)	88E
Smith, S. and I. (6/5/06)	88A
Smith, S. and I. (6/5/06)	88G
Sokolow, A. (6/13/06)	107B
Sokolow, A. (6/13/06)	112
Sokolow, A. (6/13/06)	113A
Stanton Graham, H. (6/5/06)	71
Stanton Graham, H. (Undated copy - #71 above is dated 6/5/06)	157
Stoner Clark, F. (6/8/06)	84A
Strasburg, R. (5/6/06)	46A
Strasburg, R. (5/6/06)	46B
Strasburg, R. (6/19/06)	83E
Strasburg, R. (6/19/06)	83A
Strasburg, R. (6/19/06)	83B
Strasburg, R. (6/19/06)	83C
Strasburg, R. (6/19/06)	83D
Strasburg, R. (6/19/06)	83F
Strasburg, R. (6/19/06)	83G
Strasburg, R. (6/19/06)	83H
Strasburg, R. (6/19/06)	83I
Strasburg, R. (6/19/06)	83J
Strasburg, R. (6/19/06)	83L
Strasburg, R. (6/4/06)	24E
Strasburg, R. (6/4/06)	24A
Strasburg, R. (6/4/06)	24B
Strasburg, R. (6/4/06)	24C
Strasburg, R. (6/4/06)	24F
Strasburg, R. (6/4/06)	24G
Strasburg, R. (6/4/06)	24H
Strasburg, R. (6/4/06)	24I
Strasburg, R. (6/4/06)	24J
Strasburg, R. (6/4/06)	24K
Strasburg, R. (6/4/06)	24L
Strasburg, R. (6/4/06)	24N
Strasburg, R. (6/4/06)	24O
Strasburg, R. (6/4/06)	24P
Strasburg, R. (6/4/06)	24Q
Strasburg, R. (6/4/06)	24S
Struck, G. & P. (6/15/06)	91A
Struck, G. & P. (6/15/06)	91G
Struck, G. (4/17/06)	27
Struck, G. (5/20/06)	53A
Swartley, C. (5/25/06)	204E
Swartley, C. (5/25/06)	204A
Swartley, C. (5/25/06)	204B
Swartley, C. (5/25/06)	204C
Swartley, C. (5/25/06)	204D

Table 11. Cohocton DEIS General Written Comments - No Response Necessary

Source	Comment Number
Swartley, C. (5/25/06)	204F
Swartley, C. (5/25/06)	204G
Swartley, C. (5/25/06)	204H
Swartley, C. (5/25/06)	204I
Swartley, C. (5/25/06)	204J
Talk of the Towns Excerpts (Jan/Feb 05), (Mar/Apr 05)	122.5
Town Of Cohocton (5/17/06 - email)	70
Town of Cohocton (7/31/89)	115
Towner, J. (5/25/06)	211A
Towner, J. (5/25/06)	211B
Towner, R. and J. (6/9/06)	159
Towner, R. and J. (6/9/06)	160
Towner, R. and J. (Undated)	154
Towner, R. et al. (6/23/06)	152
Trude, H. (5/27/06)	118
Trude, H. (6/1/06)	116
Trude, H. (6/1/06)	117
Trude, H. (6/14/06)	92
Trude, H. (6/14/06)	93
Trude, H. (6/7/06)	169
Trude, S. et al. (6/8/06)	180
USF&WS (6/24/06)	147A
USF&WS (6/24/06)	147B
USF&WS (6/24/06)	147C
USF&WS (6/24/06)	147D4
USF&WS (6/24/06)	147K1
Vahue, J. and M. Duemmel (5/5/06)	45A
Vahue, J. and M. Duemmel (5/5/06)	45B
van den Berg, G. P. (Undated)	187
Van Wormer, J. & S. (6/7/06)	86D
Vang, J. and L. (6/3/06)	142
Wahlstrom, N. & C. (6/23/06)	99E
Wahlstrom, N. & C. (6/23/06)	99B
Wahlstrom, N. & C. (6/23/06)	99C
Wahlstrom, N. & C. (6/23/06)	99D
Walsh, J. (5/5/06)	47A
Walsh, J. (5/5/06)	175
Wolcott, P. (Undated)	156
Wolfe, A. (5/25/06)	207A
Yes! Wind Power for Cohocton (Undated)	153
Zeh, D. (6/13/06)	164
Zeh, D. (6/13/06)	165

Many of the written comments addressed similar questions or concerns. This Response Summary is presented according to topic representing the issues raised in the various comments. Most individuals provided multiple comments that addressed multiple topics; therefore, each comment is listed under its appropriate topic.

Aesthetic and Visual Resources

Response 1C: The site layout was thoroughly reevaluated and the numbers of turbines significantly reduced in the SDEIS. Further modifications were made in the development of the final layout addressed in the FEIS. Various siting constraints, including participating landowners, noise thresholds, property line setbacks, road setbacks, and turbine separation, as well as environmental factors such as wetlands and agricultural lands, significantly limit the developer's ability to further modify the Project layout, the number of turbines, or turbine size. A figure illustrating the siting constraints is included as Figure S23 in the SDEIS. As this figure shows, only very small areas within the Project site (and the Town as a whole) are available to site turbines. A Supplemental Visual Impact Assessment (SVIA) is included as an appendix to the SDEIS. The SVIA includes additional analysis and discussion of visibility and mitigation options for visual resources of statewide significance. An addendum to the SVIA is addressed in the FEIS (Section 2.5) and included as an Appendix to this document (Appendix D).

Response 3A: See response to Comment 1D in the Historic and Archaeological Resources section. Views from all landscape zones where the Project would be visible are included in the Visual Impact Assessment, Supplemental Visual Impact Assessment, and SVIA addendum, found in Appendix F of the DEIS and SDEIS, and Appendix D of the FEIS. Impacts to structures or sites potentially eligible for listing on the National Register of Historic Places are discussed in the SVIA and the SDEIS.

Response 3B: See responses to Comment 1D in the Historic and Archaeological Resources section and 3A in the Aesthetic and Visual Resources section.

Response 3C: The Supplemental VIA (included as Appendix F to the SDEIS) includes an analysis of visual impacts associated with the major above-ground components of the proposed Project that will be visible from multiple vantage points within the study area. These include the turbines, collection station and 115 kV transmission line. Also included in the SVIA are additional foreground simulations (see Figures 24 and 25), a simulation from the forest landscape similarity zone (see Figure 22), a simulation from the Village of Naples using a better quality photograph (see Figure

30), and landscape similarity zone mapping (see Figure 4, Sheet 1 of 5) as requested by NYSDPS staff. As shown in the height comparison figure presented as Appendix L, the height of other man-made features in the simulation photographs were determined using 3D Studio Max® software. These features were found not to exceed 80 feet; the height of a typical farm silo (See Appendix L to the FEIS). An addendum to the SVIA addressing the current Project layout is included as Appendix D to the FEIS.

Response 5C: Correspondence with WEI, the consultants who prepared the original Shadow Flicker Study in the DEIS (Appendix G), and the revised analyses included in the SDEIS (Appendix H) and FEIS (Appendix E), indicates that shadow flicker from the proposed turbines will not be perceptible from sites in the Town of Wayland due to the distance of the turbines from potential receptors (at least 6 miles). Shadow flicker studies generally limit their evaluation to structures within 1,000 meters (3,280 feet) of the turbines) and state that impacts are generally only perceivable within 1,500 feet.

Response 6C: See response to 5C in the Aesthetic and Visual Resources section.

Response 9A: The visibility and visual impact of the proposed wind turbines was fully evaluated in the VIA included in the DEIS (Appendix F), the SVIA included in the SDEIS and the SVIA addendum included in the FEIS (Appendix D). These VIA's included viewshed analysis, line-of-site cross section analysis, and visual simulations. Evaluation by a panel of landscape architects indicated that the Project would generally not have an undue adverse impact on aesthetic resources and community character within a 5-mile radius of the turbines. See also, response to Comments 34B and 183A.

Response 11C: See responses to Comments 6A (Socioeconomic Section), 9A, & 9B (Biological Resources Section), respectively.

Response 13G: See response to Comment 5C (Aesthetic and Visual Resources section).

Response 13K: See Response to 9A, earlier in this Section.

Response 16A: The complete shadow flicker report for the Project was included as Appendix G to the DEIS. This report calculated the total hours of shadow flicker generated by Project turbines at each receptor site. As indicated in that report, a given receptor could experience shadow flicker from no turbines, a single turbine, or multiple turbines. In no case, however, did more than three turbines contribute to total shadow flicker hours at a given receptor adjacent to the Cohocton Wind Power Project. As indicated in the DEIS, only one receptor (#673 on Pine Hill Road) was predicted to receive over 25 hours of shadow flicker per year. This calculation does not take into account possible screening provided by intervening vegetation and structures. Twenty-five hours is generally considered to be the threshold that requires additional on-site investigation and possible mitigation. See also, response to Comments 5C and 13G (Aesthetics and Visual Resources Section).

Revised shadow flicker reports which address the new turbine dimensions and revised layout are included as Appendix H to the SDEIS and Appendix E to the FEIS. These reports indicate that no receptors will receive over 25 hours of shadow flicker per year, and that only three receptors could experience over 20 hours per year. Supplemental investigation was undertaken at these three sites to determine the likelihood of shadow flicker and whether mitigation measures are necessary. Results of the supplemental investigation are presented in Section 2.5 and Appendix E of the FEIS.

Response 19B: The revised Project layout indicates a total of up to 36, 420-foot tall turbines (Clipper C96), as opposed to the 48 399-foot tall turbines (Gamesa G87) evaluated in the DEIS. The currently proposed turbine is not available with a shorter tower, and its slightly taller height takes advantage of an improved wind resource, thus allowing fewer turbines overall. As noted in the original VIA (Appendix F of the DEIS) and the SVIA, fewer larger structures are generally considered to have less of an adverse visual impact than a larger number of slightly smaller turbines. The feasibility of an alternate arrangement of turbines or a larger number of shorter turbines is also limited by set-back requirements from roads, residences, and property lines (see response to Comment 1C). The larger machines proposed for the Cohocton Wind Power Project also have greater efficiency in low wind conditions.

As indicated in the response to Comment 40K in the Project Description Section, the currently proposed turbine and turbine layout are the ones that maximize the generation potential of the site, while utilizing the fewest turbines. In general, because the wind is stronger and less turbulent at higher altitudes, larger turbines are more efficient at capturing the available energy in the wind. Because a wind turbine's energy potential is proportional to the square of the length of the blades, and to the cube of the speed at which the blades spin, the greater wind speeds higher off the ground result in a significant advantage in electrical output for larger machines. In addition, by using the larger Clipper machine, CPP is able to decrease the number of turbines by 20% while maintaining approximately the same output, thereby reducing visual and other impacts.

Response 26A: Project visibility from the Village of Naples was evaluated in the original VIA (Appendix F to the DEIS). This evaluation included viewshed mapping, field review, and preparation of a simulation from Main Street (Figure 16 in the VIA). As part of the Supplemental VIA prepared for the SDEIS, an additional simulation from the Village was prepared using a photo with better exposure and the revised turbine/layout currently proposed (see Figure S16 in SDEIS). Panel evaluation of this simulation indicates that visual impact was essentially the same as reported in the original VIA (DEIS Appendix F). As stated in that document, the three visible turbines appear out of place in a traditional village setting, and compete with foreground features for viewer attention. However, at a distance of about 3.0 miles, the turbines' scale contrast is modest and their line and form are not inconsistent with the overhead utility lines that already break the skyline. The SVIA addendum, included as FEIS Appendix D, indicated that these conclusions do not change as a result of final Project layout revisions. To some viewers the turbines will represent a visual intrusion, while others may view them as an interesting addition to the background landscape. As mentioned in the DEIS, existing wind power projects have not been demonstrated to have an adverse impact on tourism, even in areas with a tourism-based economy. In fact, the Madison, NY Supervisor said in the Wednesday, March 1, 2006 *Catskill Mountain News* that the Madison Wind Project has become a tourist destination. Please also see Response to Comment 11D (Biological Resources Section) and SDEIS Comment 53.29 (Socioeconomics Section).

Response 26C: Please see responses to comments 9C (Community Character section), 11A (Socioeconomic section) and 26A regarding visual impact on the Village of Naples and impacts on tourism and community character.

Response 34B: The original VIA included in the DEIS, the SVIA included in the SDEIS, and the SVIA addendum included in the FEIS present an objective assessment of Project visibility and visual impact. As indicated in these documents, the type and extent of visual impact will depend on a variety of factors including distance from the turbines, the number of turbines visible, their compatibility/contrast with existing landscape features, and viewer sensitivity/attitude toward wind power. The VIAs conclude that the visual impact of the proposed Project will be greatest from viewpoints where turbines are viewed at foreground distances (under 0.5 mile) or where they appear out of context/character with existing land use or viewer activity. This information is provided to allow an informed decision by the Town of Cohocton Planning Board as lead agency under SEQR. As such, the Planning Board will ultimately decide if the Project's visual impacts are acceptable.

Response 38A: Very few homes or other sensitive receptors are located within 0.5 mile of a proposed turbine. However, as indicated in response to Comment 3C, additional simulations of foreground views of the proposed turbines have been included in the SVIA (SDEIS Appendix F) and SVIA addendum (FEIS Appendix D).

Response 38C: All of the requested information is included in the original VIA (Appendix F of the DEIS) the supplemental VIA (Appendix F of the SDEIS), and the SVIA addendum (Appendix D of the FEIS).

Response 39B: The balloon test performed for the Dutch Hill Project was associated with the proposed Cohocton Wind Power Project only in that it allowed for accurate depiction and analysis of cumulative visual impacts. Two balloons were raised to the approximate maximum height of the Dutch Hill turbine blade tips (one at the south end and one at the north end of Dutch Hill). The balloons were tethered to the ground (not to existing communication towers), and raised to a height of 400 feet above existing grade.

Response 49A: As described in the DEIS and SDEIS, the Cohocton Wind Power Project will result in real environmental and economic benefits, with limited adverse impacts to natural and cultural resources within and adjacent to the Project site. Also see the response to Comment 12A (Socioeconomic Section).

Response 57E: See response to Comment 9C (Community Character Section) regarding potential quality of life impacts.

Response 58C: See response to Comment 9C (Community Character Section) regarding potential impacts on community character and quality of life. The VIA, SVIA, and SVIA addendum prepared for the Project, as well as the original and revised sound studies, indicate that visual and noise impacts will be minimal. See Comment 5A (Socioeconomic Section) regarding potential impact on property values.

Response 61C: Please see response to Comment 25G (Land Use and Zoning Section) regarding "wind turbine syndrome".

Response 63C: See the response to comment 9A.

Response 83K: Visual impact associated with required FAA obstruction lighting is discussed in the VIA and DEIS, as well as the Supplemental VIA and SDEIS. As stated in those documents, night lighting will be kept to the minimum allowed by the FAA. In addition, CPP is evaluating the feasibility of a shielding device designed to minimize lighting impacts on adjacent residences (see additional information in Appendix F of the SVIA). As discussed in the DEIS and SDEIS, lighting at the substation, collection station, and O&M facility will be kept to the minimum necessary to provide for facility safety and security. Switches, timers, and/or motion detectors will be used to minimize the time during which these facilities are lit during night time hours.

Response 85B: Shadow flicker studies were prepared for the original Project (DEIS Appendix G), the revised Project addressed in the SDEIS (SDEIS Appendix H) and the final Project layout addressed in the FEIS (Appendix D). These studies indicate very low levels of potential shadow flicker on adjacent receptors (homes). To our knowledge, shadow flicker impacts on livestock, including decreased milk production, have not been documented in association with operating wind power projects.

Response 85H: See response to Comment 83K.

Response 182E: As described in the VIA included as Appendix F to the DEIS, visual simulations of the completed Project are based on actual Project layout and turbine dimensions, and are accurate in terms of their alignment, color, scale, perspective, and shading. A comparison of simulations prepared by EDR on other projects, with photos of the same projects following construction (Figure 6 in the SVIA) indicates the accuracy of these simulations. Additional visual simulations are included in the SVIAs that are attached as appendices to the SDEIS and FEIS. These simulations include views with human structures to provide a sense of scale, and nighttime simulations from two viewpoints. An animated digital simulation is also included on the disc attached as Appendix D to the Supplemental VIA. As was the case with the DEIS, the SDEIS has been posted to the Project web site to allow public viewing of the simulations. The VIA and the Supplemental VIA were both prepared by a licensed landscape architect, and are consistent with the policies, procedures and guidelines contained in established visual impact assessment methodologies, including the New York State Department of Environmental Conservation's Policy on Assessing Visual Impacts, DEP-00-2.

Response 183A: See response to Comment 34B. Results of the original VIA included in the DEIS and the Supplemental VIA included in the SDEIS conclude that 1) the Project is generally well screened (i.e., blocked from view) by buildings, topography and vegetation and/or distant from villages and other areas of concentrated human settlement, 2) the Project is generally compatible with a working agricultural landscape, 3) contrast with existing landscape was rated as low to moderate from most viewpoints, and 4) adverse visual impacts will generally be restricted to viewpoints with foreground views of the turbines (i.e., less than 0.5 mile), and/or where the turbines appear out of place in a particular landscape setting (e.g., views from a residential area).

Existing wind power projects in New York State have generally received a positive public reaction following their construction. Typical are the following published observations:

> "Given the broad sweep of the Fenner landscape…the completed turbines look anything but out of place. Their colossal dimensions

> notwithstanding…from a distance, they take on a spindly, almost delicate look." *Syracuse New Times,* August 21, 2002.

> "The nonlinear arrangement of the Fenner turbines situated them comfortably among the traditional farmhouses, paths, and roads, while at Madison, a grassy hillside site, the windmills were more prominent but still not aggressive. Unlike a ski run, say, or a power line cutting through the countryside, the windmills didn't seem like a violation of the landscape. The turning vanes called to mind a natural force – the wind – in a way that a cell phone or microwave tower, for example, most certainly does not." *Orion* September-October 2006.

These observations are consistent with the results of a recent study of public perception of wind power in Scotland and Ireland (Warren et al. 2005). The conclusion of this study states the following:

> "A remarkably consistent picture is emerging from surveys of public attitudes to wind power, and the case studies provide further evidence that this picture is a representative one. Large majorities of people are strongly in favor of their local windfarm, their personal experience having engendered positive attitudes. Moreover, although some of those living near proposed windfarm sites are less convinced of their merits, large majorities nevertheless favor their construction. This stands in marked contrast with the impression conveyed in much media coverage, which typically portrays massive grassroots opposition to windfarms."

Response 189: See response to Comments 3A to 3E (Project Description section).

Response 279: Possible impacts on tourism are addressed in Section 3.9.2.2.2 of the DEIS and response to Comment 11E (Socioeconomic Section).

Response 280: Visual impacts associated with the proposed Project are fully evaluated in the VIA included as Appendix F to the DEIS, the SVIA included as Appendix F to the SDEIS, and the SVIA addendum included as Appendix D to the FEIS. Simulations presented and evaluated in these reports include views toward the proposed Project from all representative distances and directions.

Response 281: See response to Comment 279.

Response 283A: See response to Comments 34B, 183A and 280.

Response 283B: See response to Comment 283A, regarding visual impact. See response to Comment 5A (Socioeconomic Section) and the Cushman & Wakefield Study included in the SDEIS as Appendix L regarding potential impact on property values.

Response 284A: See response to Comment 238D (Project Description Section). The SVIAs included in the SDEIS and FEIS as Appendix F and Appendix D, respectively, address the visibility and visual impact of the currently proposed Clipper C96 turbine.

Response 284B: The original and Supplemental VIAs include simulations that are representative of various landscape similarity zones, viewer groups, distances, and directions from the turbines. Taken together they represent the full range of the anticipated visual impact within the 5-mile radius visual study area. Preparing a simulation from every residence within the Project viewshed is not practical or necessary to evaluate visual impact.

Response 284C: CPP has provided, and will continue to provide information regarding the Project for review by the citizens of Cohocton, Town Officials, and the Town's independent consultants as part of the SEQR and Town Special Use permit processes. These processes are comprehensive, and will provide an opportunity to review all impacts. Possible visual mitigation measures were reviewed in both the original VIA and the SVIAs. If additional specific visual mitigation measures are requested, CPP will consider them. In addition, CPP plans to discuss with the SHPO whether visual mitigation measures or offsets are necessary to mitigate visual impacts on historic structures.

Response 285A: The vast majority of residents within the visual study area will view the Project from mid-ground and background distances (i.e., over 0.5 mile). Thus, the majority of simulations evaluated in the VIA (Appendix F to the DEIS) are from these distances. However, foreground simulations are included in the VIAs, and additional foreground simulations have been added to the SVIA included as Appendix F to the SDEIS and Appendix D to the FEIS. As stated in these studies, the greatest visual impacts will generally occur when the Project is viewed from foreground viewer distances.

Response 285B: See Section 3.9.2.2.1 of the SDEIS, especially the discussion of the Hoen (2006) Study that looks specifically at this question. See also response to Comment 5A (Socioeconomic section) and the results of the Cushman & Wakefield study included as Appendix L to the SDEIS.

Response 285C: EDR's experience with constructed wind power projects in New York State (Madison, Fenner, and Maple Ridge) is that the vast majority of local residents react positively to the projects. Media coverage reflects this, in that almost all reports in Syracuse newspapers and television stations have highlighted the positive aspects of these projects. While this attitude is certainly not universal, it has been consistent, regardless of the size or location of the existing projects in Central New York. Also see response to comment 183A.

Response 285D: The fact that no property sales evaluated in the Hoen (2006) study were recorded for residences closer than 0.76 mile from a turbine, does not change the fact that this study found turbine visibility to have no discernable effect on property value. The lack of such sales could reflect the fact that the total number of homes in proximity to the turbines is small, or that homes in a rural area such as Fenner typically do not change ownership with great frequency, rather than reflecting a depressing effect on nearby home sales due to the presence of the wind power project. Although foreground views typically have the greatest visual impact, it is worth noting that a study of nearby homeowners in Scotland and Ireland found that those living closest to a wind farm (0-5 km) were generally more likely to describe the turbines favorably and to approve of a second facility, than those living further away (5-20 km) (Warren et al. 2005, see Appendix M).

Response 285E: See response to Comment 285A.

Response 286A: See the discussion in the DEIS (Section 3.5.2.2.6) and the SDEIS (3.10.2.2.7) regarding lack of documented health affects associated with shadow flicker.

Response 287A: See response to Comment 285A. Mitigation measures described in Section 3.5 of the DEIS (for both daytime and night time impacts) are not presented in the context of viewer distance from the Project.

Response 287B: Possible night time visual impact is acknowledged in the DEIS and the VIA. Nighttime visual simulations are included in the Supplemental VIA included in the SDEIS as Appendix F.

Response 287C: See response to Comment 287B.

Response 287E: The DEIS and VIA both acknowledge that measures to mitigate the visual impacts of wind power projects are limited due to the height and siting requirements of the turbines. However, both documents review various activities that have or will be undertaken to reduce visual impact to the maximum extent practicable.

Response 287F: Public understanding and knowledge of the Project and wind power in general can help prevent misconception and enhance public access to and appreciation of the Project. As stated in the VIA (Appendix F to the DEIS), Stanton (1996) believes such action can positively affect how the public feels about such projects (reduce the perception that the Project's visibility is an adverse affect). As mentioned in the response to Comment 11E (Socioeconomic Section), the Town of Fenner, New York is expanding this concept into a proposed renewable energy education center that will provide education and tourism benefits to the host community.

Agriculture

Response 51B: STE03 is a description of the agricultural district. STE stands for Steuben County, and 03 designates the third district.

Air Impacts

Response 147D1: The proposed Project will reduce air emissions. As stated as in the response to Comment 99C (Project Purpose, Need, and Benefit Section), every kilowatt hour of power generated by the wind will eliminate the need for a comparable amount of -generated power from New York's existing fossil fuel supply mix. Additional discussion of this matter is included in Sections 3.4.2.2 and 9.0 of the SDEIS. The effect of wind generation on the New York electric system was evaluated in *The Effects of Integrating Wind Power on Transmission System Planning, Reliability and Operations Report on Phase 2: System Performance Evaluation*, one of the most comprehensive reports on the subject. The report was prepared by GE Energy Consulting for The New York State Energy Research and Development Authority and dated March 4, 2005. The report evaluated the effect of adding up to 3,300 MW of wind power to the NY grid, which represents 10% of the projected 2008 peak load. The study used the NYISO 2008 system model and actual wind profiles from historical weather records to conduct the analysis. The report includes a discussion of the effect of wind power on the spinning reserve requirement, emission reductions, effective capacity and cost reduction in addition to a number of other transmission system planning, reliability and operational concerns.

Operating reserve is one of the requirements under the reliability rules established by the New York State Reliability council (NYSRC) and enforced by the New York Independent System Operator (NYISO). The operating reserve is based on the largest single system contingency loss and is presently set at 1,200 MW. One component of the 10 minute operating reserve consists of units that are operating and synchronized such that they can pick up load within 10 minutes upon loss of a generating element or generating capacity that can be made available such as canceling an energy sale to other systems (sometime referred to as spinning reserve). It also consists of non-synchronized load that can be made available within 10 minutes. The report concludes that even with the addition of 3,300 MW of wind generation, no change in the spinning reserve criteria are required. Because of the geographical diversity of wind across the system, the simultaneous loss of wind through out the system is not a credible contingency. Even though there may be periods of no wind, they are likely to be preceded by periods of very little wind according to the report, and therefore, there is no need to change the existing 1,200 MW value as the largest single system contingency.

The study also evaluated the displacement of existing electric generation units and the resultant emission reductions utilizing the Multi-area Production Simulation model (MAPS) using 2001 and 2002 actual load shape data and wind data and NYISO 2008 projections. Several cases were examined and each showed that the presence of wind generation would displace existing fossil fuel units and result in a decrease in air emissions. The report indicated that 65% of the displaced energy would come from gas fired unit, 15% from coal and 10%

from oil with another 10% from imports. Unit commitment practices will affect the relative proportions of energy displaced but the general trend is the same. This displacement of fossil fired units results in a reduction of all associated air emissions. The report analyzed the magnitude of these reductions for the 2001 and 2002 data by assigning values to the two pollutants that are presently traded, NO_x and SO_2 and found potential reduction of 12,000 tons and 6,500 tons respectively for the 3,300 MW of wind generation.

The study also found that the wind generation had the potential to dramatically reduce the cost of system operation while reducing emissions and dependence on fossil fuel. The study reported decreases in the zonal prices that ranged from a few percent to as much as 10%.

Therefore it is reasonable to assume conclude, based upon an authoritative study of the entire NYISO market area, that the electrical energy produced by the wind project will result in a decrease in air emissions through the offset of fossil fired units while providing cost savings and decreased dependence on fossil fuel. The study also establishes that additional spinning reserves beyond those already maintained will not be necessary to maintain system reliability even with the addition of up to 3,300 MW of wind generation.

Response 147D3: See response to Comment 147D1 and 147D2. While more electric power is generally consumed during the summer in Upstate New York than during the winter, winter demand is still significant, and electric power generated by the proposed Project will help meet this demand using a pollution-free renewable energy resource.

Response 277: Please see the response to comment 248 B (Project Construction Section).

Alternatives

Response 25H: Project design and turbine size have been addressed in Section 5 of the DEIS in accordance with the SEQR requirement to examine reasonable alternative to the proposed action that are feasible, considering the objectives and capabilities of the project sponsor. Furthermore, community wind projects face a number of serious constraints. According to the Alliance for Clean Energy New York (ACENY)[2], Community Wind Power Development faces the following obstacles:

- The development stage of these projects can require an investment of millions of dollars for feasibility studies, environmental impact assessment, legal expenses, permitting, land acquisition and public information programs.
- Deregulation of the electric power industry in New York has increased the financial risk associated with development of new projects, especially with regard to power producers. The investors and owners of community wind projects would be responsible for any financial losses associated with a failed project.
- Because of the large capital investment needed and the risk involved in a wind energy project, financing may be hard to obtain under municipal or community ownership.

Independent power producers—companies who are experienced in the business of owning and operating power projects—have the expertise to manage this process, and to understand and hedge the risks (e.g., by developing a diversified portfolio of projects), and are well positioned to absorb the development, operating and most of the financing risks, and do so at a competitive cost.

Also, please see response to Comment 9G (Socioeconomic Section).

Response 100B: The state of windmill turbine technology is such that the three blade, upwind design is best suited for use in areas such as upstate New York. This design has been shown to be suitable for utility use. No other design is currently feasible or practicable.

Response 147H1: See response to Comment 1C (Aesthetic and Visual Resources Section) regarding the limited availability of alternate turbine sites. The revised layout addressed in the SDEIS and FEIS essentially locates turbines in the only areas where local setback requirements allow them to occur. The currently proposed

[2] *The Alliance for Clean Energy New York's (www.aceny.org) mission is to promote the use of clean, renewable electricity technologies and energy efficiency in New York State, in order to increase energy diversity and security, boost economic development, improve public health, and reduce air pollution.*

Project site represents the only area in the Town of Cohocton, other than Dutch Hill (where a separate project is proposed) and Potter Hill (which is not owned by UPC), where there is adequate wind for a commercial wind power project.

Response 147H3: The proposed transmission line and substation have not been designed to accommodate or facilitate additional wind power projects in the area. They will provide capacity sufficient only to support the Cohocton and Dutch Hill Projects.

Response 326: All energy projects are subsidized in one way or another, whether it is taxpayer paid insurance for nuclear plants or tax breaks for oil companies, or more indirect subsidies such as the cost of securing oil and gas from unstable areas of the world. Wind receives about 1% of the subsidies in the US. The majority of the subsidies go to nuclear and fossil fuel generation.

UPC has erected almost 700 MW of wind powered electric generation in Italy and 100 MW of wind powered electric generation in North America including Maui, Hawaii's first wind farm, Maine's first wind farm, and most recently the Steel Winds Project in Lackawanna, New York.

Response 327: The discussion of the No Action alternative in the DEIS acknowledges that this alternative would avoid all Project-related environmental impacts, including visual impacts and impacts on community character unless or until a separate project is proposed and reviewed. However it would also preclude the numerous environmental and economic benefits associated with the Project. As stated in Section 3.13.2.2 of the DEIS, the Project is consistent with town land use goals. The Town of Cohocton Comprehensive Plan, in its introduction of goals and objectives, includes the following statement:

> "It is the desired goal of the Plan to maintain the predominantly rural character of Cohocton and to encourage the preservation of valuable agricultural lands while at the same time to provide for forecasted growth. It is not the intent or purpose of the Plan to encourage a great amount of growth, but more to channel it into meaningful patterns of community development so that major portions of the community can be preserved in their present state."

Specific goals that follow include maintaining the Town and Village as a desirable place to live, preserving the overall rural character, and broadening the community's tax base so as to stabilize and keep residential property taxes at a reasonable level without curtailing community services. Specific land use objectives have a strong emphasis on maintaining rural character and large areas of active agricultural land.

The proposed Cohocton Wind Power Project, by supporting local farmers, will help to keep large areas of the Town in active agricultural use and maintain its rural character. At the same time, the financial benefits of the Project (to participating landowners, local businesses, and the local taxing jurisdictions) will provide an economic boost to the community and provide much-needed funds for community and school district facilities and services. In fact, a commercial wind power project is in many ways an ideal fit for a rural community such as the Town of Cohocton. It simultaneously addresses the often-conflicting goals of economic development and preservation of open space/rural character. Consequently, the applicant believes that the proposed Project is entirely consistent with the goals and objectives of the Town of Cohocton Comprehensive Plan. The Project also is consistent with the Town's Windmill Local Law, which was enacted much more recently than the Comprehensive Plan.

Response 328A**:** The referenced statement is true as a matter of law. CPP is a legally separate entity from its affiliates and parent.

Response 328C: CPP is developing this wind project and will be selling the power it produces in the very competitive New York marketplace. Making the wind data public would put UPC at a large competitive disadvantage. The wind data has been presented to the Town, and reviewed with the Town's outside consultants.

Response 329A: Limitations on alternate project layouts are explained in Section 5.3 of the DEIS and SDEIS. See also response to Comment 1C (Aesthetic and Visual Resources Section). As stated in Section 2.14 of the FEIS, modifications to the final Project layout do not represent an alternative design. These are minor modifications of the previously-proposed location of turbines, access roads, substation, and buried electrical interconnect lines. These modifications result in only minor changes to Project impacts, and do not alter conclusions regarding alternatives presented in the DEIS or SDEIS.

Response 329B: In Section 2.1 (page 8) of the DEIS it is stated that final turbine sites (i.e., 41 out of the 48 evaluated) would be selected “utilizing a number of factors including wind resource optimization, availability of land rights and access routes, landowner preferences, and avoidance and minimization of environmental impacts”. This same approach is described in the SDEIS. Section 5.3 of the DEIS and SDEIS elaborate on this process.

Response 329C: Criteria for turbine site selection are listed on page 169 (Section 5.2) of the DEIS. These are essentially the same as those described above (for the selection of alternative sites), but also include avoidance of sensitive environmental resources such as steep slopes, active agricultural land, wetlands, and areas of concentrated human settlement. As stated in response to Comment 1C (Aesthetic and Visual Resources Section), this along with compliance with required road, property line, and residential setbacks (as described in Section 2.1 of the DEIS) defines a very limited area where turbines can potentially be sited.

Response 329D: The pros and cons of the overhead versus underground alternative for the proposed transmission line are discussed briefly in Section 5.3 of the DEIS. This discussion is expanded in the same section of the SDEIS.

Response 329E: The reference to eminent domain in leases addresses the circumstances in which a condemning authority seeks to exercise its rights of eminent domain over the land subject to lease, not the exercise of eminent domain power by the lessee. CPP is not seeking to obtain or exercise eminent domain authority.

Response 329F: The fact that the Project proposes to use “the highest towers now commercially available” does not change any of the data or analysis included in the DEIS. All impact analyses were based on the height and model of turbine proposed at that time. No change to the discussion of public safety or other topic is required, and the applicant has prepared a SDEIS to address the impacts from the new, higher turbines proposed to be used.

Response 330: Information provided in the DEIS and SDEIS provides the information necessary for the public and interested agencies to evaluate the impacts of the Project.

Response 331: See Section 5.3 of the DEIS. The Cohocton Wind Project is a commercial electric generating project. As described in Section 5.3, if smaller wind turbines are used, the number of turbines would need to be increased to meet the electric capacity requirement of the Project necessary for economic viability, and would increase environmental impacts associated with the Project. In terms of setback requirements, the Town of Cohocton Windmill Local law specifies these distances, and the project as proposed is in compliance with that law.

Avian

Response 105B: As noted in the DEIS and the Avian and Bat Summary and Risk Assessment attached as Appendix E, some studies undertaken at the Cohocton site were abbreviated due to the fact that more extensive avian and bat studies were being undertaken at the WindFarm Prattsburgh and Prattsburgh/Italy Wind Farm sites less than five miles from the proposed Cohocton Project site. The Cohocton studies were essentially undertaken to verify that conditions at Cohocton were similar to those at Prattsburgh where the larger body of data was being collected. As noted in the DEIS and SDEIS, results from the Cohocton data collection efforts showed a high degree of consistency with the data collected at Prattsburgh and at other sites throughout New York State.

With respect to the on-site raptor surveys, these were not intended to count the total number of raptors passing through the Project area (i.e. a census) and should not be interpreted that way. Raptors do migrate over a long period of time, with different species moving at different times throughout the season, as indicated by Mr. McKinney. The surveys that were conducted targeted days with generally good migration conditions for raptors (conditions that are predictable) in order to make observations of the most birds during the survey effort allocated to this task. Because it was not a census of the migrant raptor population, the survey results were reported as both the total number of raptors observed and the rate at which they were observed per unit time. The latter reporting measure allows for more direct comparison with other raptor watch sites because it corrects for differing levels of observation effort made at each different raptor watch site.

Response 105C: See initial paragraph of response to Comment 105B. Additionally, the DEIS draws upon available information on actual kills at existing wind facilities. While no two sites will experience identical rates of collision mortality, a trend of consistently low rates of bird collision with wind turbines is emerging. In light of this, the DEIS in no way underestimates the potential impact of the Project. In addition, a fall radar survey was conducted at the nearby Dutch Hill site in 2006. The results of this study are consistent with those of other studies in New York, and do not suggest a higher than normal risk of avian collision. The results of this study and other recent studies are summarized in the SDEIS.

Response 105D: See response to Comments 85D (Biological Resources Section) and 105B. Additionally, it is worth noting that the collection of three seasons (fall 2004, spring 2005, and fall 2005) of bat detector data is more than what is typically requested by the NYSDEC as part of pre-construction wind power development surveys.

Response 105E: As noted previously (See response to Comment 95G in the Biological Resources Section) and as discussed in the DEIS and SDEIS, wind power projects have generally not resulted in significant impacts to birds. There is nothing about the Cohocton site that would indicate an elevated level of avian risk at this site.

Response 105F: As stated previously, the Project DEIS/SDEIS and Avian and Bat Summary review what is known about collision mortality at other operating wind power projects. While these projects may utilize turbines that are somewhat smaller in height than those proposed at the Cohocton Project, this height difference is relatively minor (i.e., less than 100 feet). In addition, mortality rates from more recent projects (utilizing larger turbines) are consistent with the results of earlier studies, and radar data from numerous studies indicate that most birds fly well above the proposed height of even the tallest turbines. All of these results suggest that mortality rates predicted in the DEIS (0 to 6 birds per turbine per year) remain valid. Additionally, consistent trends in the average flight height of night migrants from several radar surveys in proximity to the Project area indicate that the vast majority of migration occurs well above the height of these newer, slightly taller wind turbines.

Response 105G: While it has been documented that inclement weather can result in lower flight altitude among migrating songbirds, it has also been documented that relatively few birds fly under such conditions. The greatest passage rates are typically seen on nights with clear skies and strong winds blowing in the direction migrating birds are traveling.

Response 105H: See response to Comment 95F (Biological Resources Section). As discussed in that response, channeling of bird movements, when it may occur, would not result in the direct funneling of birds through the Project area. There is no reason to believe that birds flying low in the valleys during any channeling events in Prattsburgh would rise up out of those valleys and fly through the Cohocton site, which occurs just a few miles away and within the same landscape context.

Response 105I: See responses to Comments 95G (Biological Resources Section) and 105E and 105F.

Response 147H2: Adequate data has been collected, to describe the existing avian and bat community in the Project area, and to predict the type and magnitude of likely Project related impacts. See previous responses to Comment 105B in the Avian Section, and Comments 147F4, 147F8, 147F9 and 147F10 in the Biological Resources Section.

Biological Resources

Response 1B: The radar studies prepared for the WindFarm Prattsburgh Project are included in Appendix E to the SDEIS. Data from similar sites and radar study results have also been provided to the NYSDEC and a meeting has been requested to discuss the results of these migration studies. As requested by the NYSDEC, a fall radar study of the Dutch Hill site has been completed by UPC, and a post-construction monitoring plan will be developed in consultation with the NYSDEC and the U.S. Fish and Wildlife Service (USFWS). Agreement on that plan protocol will be required by these agencies prior to issuance of state and federal wetland permits for the Project.

Response 9B: The Project's potential impact on wildlife is fully addressed in the DEIS. Data sources and studies cited or included in the DEIS included the following:

- NYS Breeding Bird Atlas (BBS).
- USGS Breeding Bird Survey (BBS).
- On-site raptor migration surveys conducted by Woodlot during 2004 and 2005 (DEIS Appendix E).

- A brief radar survey conducted by Woodlot during the spring of 2005 (DEIS Appendix E).
- Bat detector surveys conducted in the fall of 2004, spring of 2005, and fall of 2005.
- Radar data from migration studies conducted in the Town of Prattsburgh during 2004 (Mabee et al. 2005).
- Woodland Bat Study conducted by Bat Conservation and Management (BCM) in the Town of Prattsburgh during 2004 (BCM 2004).
- Raptor migration and radar survey data from studies conducted by Woodlot in Prattsburgh during 2004 and 2005 (Woodlot 2005a and b).
- On-site observations by EDR ecologists during the fall of 2005.

The results of these studies, and a site-specific Avian and Bat Summary and Risk Assessment (DEIS Appendix E), conclude that, while the Project will result in various direct and indirect impacts (including collision mortality, habitat loss, and species displacement), it is unlikely to have a significant adverse affect on any resident or migratory wildlife populations.

Subsequent to the DEIS, an on-site breeding bird survey (Woodlot 2006) and a fall radar study on Dutch Hill were conducted by Woodlot Alternatives. Results of these studies are discussed/included in the SDEIS (Appendix E).

Response 11D: See responses to Comments 6A (Socioeconomic Section), 9A (Aesthetic and Visual Resources Section), & 9B, respectively.

Response 20B: Anticipated impacts to wildlife resulting from Project construction and operation are fully described in Section 3.3.2 of the DEIS. As reported on page 69 of the DEIS, the primary landowner at the Madison Wind Power Project (with five turbines on his property) has not observed any significant change in the use of his property by game species (deer and turkey). Please also refer to Response to Comment 9B (Biological Resources section).

Response 36B: Ecological field surveys were conducted at specific locations in the Project area based on a variety of factors, such as habitat distribution, meteorological tower locations, and visibility for daytime surveys. The results of those survey efforts, however, are applicable to the entire study area. More specifically, the habitats on and around Brown Hill are generally similar to those on Lent and Pine Hills. Consequently, the same wildlife assemblages would be expected in these areas and potential impacts would be similar across these sites and the Project area as a whole.

Response 36C: The Avian and Bat Information Summary and Risk Assessment included in Appendix E of the DEIS, summarized the results of three seasons of raptor migration field surveys conducted by Woodlot. As noted in that summary, direct observations of raptors migrating through the Project area documented flights both above and below the height of the proposed turbines. Raptors do fly at all heights and individual raptors and species commonly change their altitude based on atmospheric conditions, activity, and land forms.

The presence of raptors below the maximum height of the proposed turbines does provide the opportunity for raptors to encounter the wind turbines. However, as indicated in the risk assessment, the fatality rate of raptors at modern wind facilities is extremely low. In fact, in over a dozen post-construction monitoring studies conducted at modern facilities in the last five to six years, fewer then 20 raptor fatalities have been reported. The daytime habits of raptors, their keen eyesight, and the slow moving blades (i.e. the blades remain visible during operation, even in strong winds) of modern turbines combine to dramatically reduce collisions of raptors with wind turbines.

Response 36D: As noted in Response 36B, it is anticipated that the wildlife assemblages on Brown Hill are expected to be similar to those that occur in the other parts of the Project area. This is based on the similarity of habitats and landscape uses between these areas. If Brown Hill contained locally or regionally unique natural characteristics, this would not be the case. However, because the areas are similar, general bat activity and species composition documented in other parts of the Project area are expected to be applicable to the Brown Hill area. Additionally, it is important to note again that bat detector surveys provide an index of activity. Because detectors cannot distinguish between individual bats, they cannot be used to estimate the total number of bats in an area.

Response 36E: The nearest large water body to the proposed Project site is Canandaigua Lake, located over 6 miles north of the proposed Project site. Waterfowl using this lake as a wintering area or migratory stop-over will generally concentrate low altitude flight in near proximity to the lake. In addition, it is worth noting that waterfowl are generally not susceptible to significant displacement or collision mortality from turbines. This conclusion was confirmed by a recent study conducted by the Iowa Cooperative Fish and Wildlife Research Unit at the Top of Iowa Wind Farm located in Worth County, Iowa. Due to its proximity to three state-owned Wildlife Management Area's (WMA), the Top of Iowa Wind Farm experiences very high use by waterfowl (over 1.5 million duck and goose use days per year). Observations at that site revealed that the wind turbines did not affect the use of the fields by Canada geese or other species of waterfowl. In addition, over the two year course of the study, no turbine-related waterfowl or shorebird mortality was documented (Koford et al. 2005).

Response 56I: The Project's potential impact on wildlife is fully described in Section 3.3.2 of the DEIS and SDEIS. See also responses to Comments 9B and 20B regarding possible effects on game and other animal and bird species.

Response 60C: Construction-related impacts are discussed for all topic areas addressed in Section 3.0 of the DEIS. Specific construction-related impacts to wildlife are addressed in Section 3.3.2.1 of the DEIS and the SDEIS.

Response 73F: The DEIS Avian and Bat Information Summary and Risk Assessment (DEIS Appendix E) discusses the type and magnitude of impacts to birds that could occur from Project construction and operation. Relatively small direct loss of habitat, and emerging evidence that relatively few birds fly into modern wind turbines, indicate that no significant impacts to local or regional bird populations are anticipated. Because critical habitats are not being impacted, and the Project will not have an impact on local bird populations, birding opportunities in the area will be maintained.

Response 74E: See response to Comments 9B and 20B.

Response 84D: See response to Comments 9B, 36D & E, and 73F.

Response 85C: See responses to Comments 9B and 56I.

Response 85D: Potential Project impacts on bats are described in Section 3.3.2 of the DEIS and in the Avian and Bat Information Summary and Risk Assessment included in DEIS Appendix E. At the current time, there is no agency accepted/scientifically valid means of quantitatively predicting the extent of bat mortality that will occur at a proposed wind power site before a wind energy project is constructed. On-going monitoring at the Maple Ridge Project and other operating wind power projects will help shed light on this issue, particularly with respect to how bat mortality in largely agricultural settings compares with that observed at forested, mid-Appalachian ridgelines. Potential mitigation measures, such as bat deterrents, are also being evaluated at other wind power sites. CPP has committed to a post-construction monitoring study developed in consultation with the NYSDEC and USFWS (see response to Comment 1B). Should significant bat mortality be documented at the Cohocton site, CPP will explore all practicable means of mitigating these impacts.

Response 88C: See response to Comments 9B, 20B, 36E and 85B (Aesthetic and Visual section).

Response 88D: Anecdotal evidence seems to suggest that dogs are sensitive to very high frequency or even ultrasonic noise. Wind turbines do not generate any significant or unusual amount of high frequency sound. In any event, high frequency sound rapidly diminishes with distance from any source; consequently, all of the high frequency energy that might be produced by the turbines would essentially drop out before reaching even the closest residence.

Response 94B: See response to Comments 9B, 20B, 36E and 85B (Aesthetic and Visual section).

Response 95A: As indicated in the response to Comment 1B, the spring and fall radar studies prepared for the WindFarm Prattsburgh Project are included in Appendix E to the SDEIS.

Response 95B: CPP chose Woodlot because of its overall credentials and because of its extensive experience in avian studies for wind projects in New York. The implication that Robert Roy, the lead radar biologist at Woodlot Alternatives, does not have experience with the use of marine surveillance radar is incorrect. Mr. Roy has used this type of radar technology at wind power sites since 1994. For the past three years, Mr. Roy and his team have used radar at nearly a dozen sites in New York, Maryland, West Virginia, and Maine. Woodlot Alternatives biologists have submitted testimony or reports based on radar results in several states and have been qualified as experts in those states (e.g., Vermont – PSC hearings – 2004-5). In addition, an examination of the Woodlot Alternatives reports reveals that its results are very similar to those of ABR, the company Mr. Evans refers to as being highly experienced.

The radar data collected by Woodlot Alternatives is reliable and Mr. Roy and others at Woodlot Alternatives are competent radar technicians and field biologists. Questions regarding the expertise of Woodlot Alternatives are unfounded.

Response 95C: At the time that the Avian Risk Assessment was prepared, the authors of that report (Woodlot Alternatives) did have a copy of the study at the Ecogen project referenced by Mr. Evans. That study report has subsequently been reviewed. Although it is acknowledged that the low flying migrants can possibly be affected by topographic features, on-site radar surveys and surveys from several other proposed wind energy developments within 10-15 miles of the Cohocton Project (including the radar survey conducted in coordination with some of Mr. Evans' acoustic work) have documented that the vast majority of migration over the agricultural plateaus in this region of New York takes place above the height of the proposed turbines. Not only is the mean flight height documented at these sites sometimes several times the height of wind turbines, but the vast majority of migrants (anywhere from 80-97 percent of targets) are flying above the turbine height.

While localized channeling of low-flying migrants can occur at certain times, it may be important to note where this occurs relative to the proposed wind turbines. The channeling mentioned by Mr. Evans appears to indicate that low cloud ceilings on some nights might cause some migrants to remain in the surrounding valleys and not climb to altitudes that take them over the higher plateaus in the area. On nights when this occurs, these migrants would not be flying in proximity to the proposed wind turbines on the hilltops, which limit the potential for collision-related fatalities.

Results from the radar study conducted for the Ecogen, LLC Prattsburgh/Italy Wind Farm by ABR (Mabee, et. al. 2005) were discussed in the Cohocton Wind Power

Project DEIS. As stated in the response to Comment 95B, the Ecogen DEIS indicated that the acoustic study prepared for that Project may have indicated some localized channeling of migrants. However, the DEIS emphasized that the results of the radar study lead to a conclusion that birds in the area were migrating over a broad front. The Ecogen Project is far enough away that there will be no cumulative impacts propagated by the turbines.

Response 95D: See response to Comment 95A. As noted in Section 3.3.2.2.2 of the SDEIS, several studies cited in the DEIS, and other uncited studies (beyond the WindFarm Prattsburgh studies) have now been made available to the public. These include studies conducted by Woodlot Alternatives for the Marble River, Top Notch, and Jordanville wind power Projects (Woodlot 2005c, d, e, f, g, and h), studies conducted by WEST at the Dairy Hills Wind Power Project (WEST, 2005) and studies conducted by ABR at the Noble Altona, Clinton, and Ellenburg Project (Mabee et al. 2006). The results of these studies show a high degree of consistency and support the conclusion that the majority of night-migrating songbirds fly at high altitude, and are not significantly or consistently influenced by local physiographic features.

Response 95E: See response to Comments 95A and 95D. Recent increases in the proposed development of wind energy facilities in New York has resulted in a growing body of information on which to base biological opinions of the potential effects of these projects on wildlife. Many studies conducted in 2005 had not been made publicly available until recently, after the completion of the initial risk assessment for the Project. Woodlot has now reviewed the study results that have been released (both before and since completion of the risk assessment and DEIS). These studies corroborate the results of earlier studies with respect to the height at which night migrants fly during most of the migration season. See also the response to Comment 147J2.

Response 95F: See response to Comment 95D. Although the concept of night migrating songbirds “channeling” their flight to avoid physiographic features (hills, waterbodies, etc.) has been raised on several wind power projects, radar studies on these projects have not documented this occurrence. The only situations where such behavior has been definitively documented are along ocean shorelines and steep mountain ranges such as the White Mountains of New Hampshire and the Alps (P. Kerlinger, personal communication). Small scale channeling may occur in certain areas, during certain weather events, as indicated by Mr. Evans' comments. However, these events appear to limit the exposure of night-migrants to wind turbines by restricting the movement of migrants to areas away from proposed turbine locations (i.e., in the valleys rather than on the hilltops).

Additionally, it is unknown why Cohocton in particular is being identified as an area of concern for channeling, in comparison to other nearby project sites. The Cohocton Project site is located on top of a plateau with elevations similar to several nearby projects. The plateau sides are steep and slope down to relatively broad stream valleys, particularly the Cohocton River, which flows southward, west of the Project area. Any channeling effects, such as those observed in Italy Valley (less than six miles away) would be confined to similar valley areas within the Cohocton Project site. Additionally, if channeling were to occur there would be no reason to anticipate birds would suddenly leave the confines of the valleys and choose to gain altitude and fly over the elevated ridge lines of the Project site where the turbines are proposed.

Response 95G: No evidence has been provided to suggest that there could be a significant bird kill problem at the Cohocton Wind Power Project. Outside of the Altamount Pass area of California, there has never been a documented "significant" bird kill at a wind power project in the United Stated. In fact, the largest single mortality event reported in the literature for night-migrating songbirds is 14 birds at two turbines at the Buffalo Ridge project in Minnesota (Johnson et al. 2000). This topic is thoroughly discussed in the DEIS and the Avian and Bat Information Summary and Risk Assessment included in Appendix E of the DEIS. As these documents state, there is nothing about the Cohocton Project site that would indicate elevated risk of bird collision with the proposed turbines.

Mr. Evans asserts that the least bittern, a New York State listed threatened species is likely to fly over the Cohocton project site. There is little doubt that least bittern and other New York State listed species will fly over the Cohocton site at some time. The fact is these and other listed species will fly over all of New York State at some time. This species nests from Minnesota to Maine (and into southern Canada) and southward to Texas and Florida. This means migrants fly over a broad front between Minnesota and the Atlantic Ocean. They and most other listed species can generally be found anywhere within this broad geographic range while migrating and there is no reason to believe that large numbers aggregate or concentrate over the Cohocton site. In addition, least bittern has not been demonstrated to be at significant risk of colliding with wind turbines. In other states (within the migration range of least bitterns) where fatality studies have been conducted at wind power facilities, not a single least bittern has been found dead. These states include Iowa (2 year study at 89 turbines), Minnesota (4 year study at 300+ turbines), Wisconsin (2 year study at 31 turbines), Tennessee (3 year study at 3 turbines), and West Virginia (1 year study at 44 turbines).

These facts establish that Mr. Evans' suggestion that least bitterns may be at significant risk at the Cohocton site is based on conjecture, and not on scientific studies or validly supported expert opinion.

Response 95H: See response to Comment 95G. See also response to Comment 1B indicating that CPP has performed a fall 2006 radar study on Dutch Hill, west of the Cohocton Project site. The results of this study were summarized in the SDEIS, and a copy of the final report will be included in the FEIS.

Regardless of the results of this study, sufficient on-site data collection and available information has been reviewed to understand the potential risk to birds from the proposed Project. As referenced above, there is no single method that will allow the quantification of collisions prior to the construction of a wind power project. However, available radar data from the Project area and several nearby projects (within 5 to 25 miles of the Cohocton Project) indicate that the vast majority of nighttime bird migration occurs well above the height of the proposed turbines, which suggests a relatively low overall risk of significant impacts on migratory bird populations.

Response 96A: See responses to Comments 95A and 95D.

Response 147E1: As stated in the DEIS, the Project will install the minimum lighting allowable by the FAA, and will utilize flashing lights with the longest permissible off cycle. While lighting of communication towers and buildings has certainly been implicated in avian collision mortality, it is worth noting that studies of lighted vs. unlighted wind turbines have shown no significant difference in avian mortality

(Kerlinger, et. al., In Prep.). The source of information referenced in the comment does not appear to be reliable or to have been peer reviewed.

Response 147F4: An on-site breeding bird survey was conducted during June 2006 by Woodlot Alternatives. The results of this survey are described in the SDEIS and the survey report is included as Appendix E to the SDEIS.

Response 147F5: As described in the DEIS, although several listed bird species were observed within or adjacent to the Project site, significant impacts to these species, in terms of habitat loss or collision mortality, are not anticipated. Factors contributing to this conclusion include the migratory status of most of those species, which limits the overall exposure of these birds to the wind turbines, and the overall low collision rates documented at other wind energy developments outside of California.

Response 147F6: For the purposes of the risk assessment and DEIS, it was assumed that any bird species whose range extends north of the Project area could potentially pass through or over the site during migration. This includes species from eastern Canada to the northern boreal forests of central Canada. Bird banding data from the Spring Hill Wildlife Sanctuary certainly would provide documentation of species that occur in the region during the migration season. This information, however, would not necessarily rule out the potential presence of other species that occur in the broad geographic range described above (but have not stopped over in the vicinity of the Sanctuary). It is important to note that the potential occurrence of so many species passing through the Project area, and the documented low collision fatality rates documented at other modern wind facilities, would likely result in the distribution of collision fatality across a large number of species, with no single species experiencing significant impact.

Response 147F7: Use of the Project site by wildlife during the winter months is limited due to severe winter weather and lack of cover in the agricultural fields in which a majority of the Project components are proposed to be located. However, for informational purposes, additional discussion of wildlife use of the Project site during the winter months is included in Section 3.3.1.2.1 of the SDEIS.

Those species that can be expected to consistently occur within the Project area (i.e. occur during most winters), such as snow buntings, are generally common and abundant both on a regional (in winter) and continental (year-round) scale. Irruptive species, such as short-eared or snowy owls, generally have smaller populations but their presence in the area is inconsistent and often brief. This limits the overall exposure of such species to the wind turbines, thereby reducing the potential for collisions. Additionally, the typical activity periods for most of these species is during the day, which allows visibility of the turbines, which further reduces overall collision risks.

With respect to wintering waterfowl, large populations of wintering ducks and geese do occur in the Finger Lakes region of New York. However, as described in the response to Comment 36E, waterfowl are not appear to be susceptible to high collision rates with wind turbines. To CPP's knowledge, most avian risk assessments for wind energy projects have addressed winter birds, but have not done on-site field work.

Response 147F8: Additional information on the extent and adequacy of Project-specific raptor migration surveys is included in Section 3.3.1.2.1 of the SDEIS. This is in excess of what is typically requested by the NYSDEC as part of pre-construction assessment studies at proposed wind energy developments. Additionally, the survey effort that was used on-site was not limited to a consecutive seven to 10 day period. Rather, the survey effort targeted days with generally suitable raptor migration conditions over longer periods of time. The eight survey days during the fall 2004 survey occurred from late-September to late-October, the 10 survey days during the spring 2005 survey occurred from mid-March to early May, and the seven survey days during the fall 2005 survey occurred from early September to mid-October. This distribution of effort brackets the bulk of the raptor migration periods through this region of New York. As discussed in the response to Comment 105B, the data from these surveys were not intended to be a census of all individuals that pass through the Project area, but rather are an index of abundance and documentation of flight characteristics through the area. Comparison of the rate at which raptors were observed in the Project area with rates of occurrence at other sites with available hawk watch data indicates that this part of New York receives relatively low use by migrating raptors relative to other parts of the State.

Consequently, the raptor surveys conducted on the Cohocton Wind Power Project site, along with surveys conducted at the two nearby Prattsburgh sites, adequately describe the raptor species and migration characteristics of the area. There are no raptor concentration sites (i.e., hawk watches) documented in the area, and observed species and migratory behavior are typical of what would be expected throughout the broader region. The proximity of the Hi Tor Wildlife Management Area to the proposed Cohocton Wind Power Project should not pose any additional risk of collision by raptors and waterfowl (species that would be most abundant in this habitat) during the migration season. Because of their daytime habits and the slow moving blades of modern wind turbines, raptors and waterfowl are aware of the spinning blades and avoid them. Several post construction surveys conducted over the past five years have documented this (i.e. extremely low collision rates) and these results were included in the Risk Assessment for the project. Additionally, a more recent post construction study at the Maple Ridge Wind Project, which was conducted from June 17, 2006 to November 15, 2006 and included searches under 50 turbines, documented only one raptor fatality - an American kestrel. These survey results provide corroborating evidence that raptors using Hi-Tor Wildlife Management Area would not be at any significant risk of collisions with wind turbines at the Cohocton Wind Power Project.

Response 147F9: See response to Comment 105B (Avian Section). Additional information regarding the extent and adequacy of songbird migration studies is included in Section 3.3.1.2.1 of the SDEIS. The radar studies conducted at the Cohocton site, in addition to those conducted at the two Prattsburgh sites, provide an abundance of radar data over a relatively small area that encompasses four proposed wind power developments (some other proposed developments in the state actually cover more area than these projects, combined). This is more than has been conducted at other proposed wind power sites in New York State. In addition, as stated in the response to Comment 1B, an additional fall radar survey has been completed. The results of that study were summarized in the SDEIS, and the final report of the study. The consistency in results between all of the nearby radar surveys provides convincing evidence that nighttime bird migration in the area is broad-front in nature. The radar surveys provided no evidence of concentrated bird movements over the higher plateau areas proposed for wind power development, despite some limited evidence indicating that channeling of night migrants in valleys may occur under certain circumstances.

Response 147F10: Additional information regarding the extent and adequacy of on-site bat studies is included in Section 3.3.1.2.1 of the SDEIS. Multiple methods for bat surveys were not requested during agency consultation conducted during the development of study plans for the Cohocton Project. The use of multiple methods, such as mist-netting and acoustic survey data, does often result in a greater number of species being confirmed as present in an area. It also allows for definitive identification of some species that are difficult to identify with acoustic data alone (e.g., the myotid bats). The acoustic data collected in the Project area should not be construed as documentation of all bat species that occur in the area. Some species not documented during the acoustic surveys likely do occur in the Project area and were simply not documented. An important result of the acoustic surveys was the indication that bat activity in the open fields, where most turbines are being proposed, appears to be very low. Mist-netting surveys were not considered because the presence of the Indiana bat (a myotid species that cannot be differentiated from other myotids using Anabat detectors, thereby necessitating mist-netting) is not anticipated to occur in the area, based on the known range of this species in the State and consultation with NYSDEC.

Response 147F11: As indicated in response to several comments above, and as described in the SDEIS, adequate pre-construction avian and bat data has been collected. Because there is no agency accepted standard or protocol for utilizing pre-construction data to predict post-construction risk, the only valid approach is to look for any anomalies in the data, and if none exist, use post-construction monitoring data from constructed projects to predict the range of possible impacts. Prediction of post-construction risk to these species is discussed in detail in Section 3.3.2.2.2 of the SDEIS. In terms of birds, the range of 0 to 6 bird fatalities per turbine per year is low and relatively consistent from project to project. For bats, the range of observed mortality is broader, and as described in the DEIS Risk Assessment could range from 0.07 to 2.32 fatalities/turbine/year (based on open and mixed landscapes in the west and Midwest) to 46.2 fatalities/turbine/year located on forested ridgelines in the east. The reasons for such higher mortality are not fully understood at this time. Also see the response to Comment 273G.

The number of potential fatalities predicted in the risk assessment included in the DEIS uses the best available data and does not represent the exact number of fatalities that will occur. The use of multiple years of pre-construction data would not provide a more quantitative or definitive estimate of mortality because a method to use pre-construction data to precisely predict post-construction mortality does not exist. The relative consistency in radar survey data from across New York State over the last several years provides evidence that migration activity is not that variable. Finally, the one site that has been studied with both post-construction radar and mortality monitoring efforts (the Stateline project in Washington and Oregon) documented very low mortality rates relative to the number of migrants passing over and through the project area.

Response 147F12: The fatality rates of bats documented at some mid-Appalachian wind power facilities do provide credible cause of concern regarding the potential impact of wind power developments on bat populations in certain areas. However, as discussed in Section 3.3.2.2.2 of the SDEIS, considerable variability in documented fatality rates for bats has been observed across the country and across the landscapes on which wind energy developments have been constructed. As described in the risk assessment, the Cohocton Project area does not contain landscape features or habitats similar to those that occur in areas where documented bat fatalities could result in local population-level effects. However, it is also not identical to those facilities where documented bat fatality rates are extremely low. Also see the response to Comment 273G.

Response 147F13: See response to Comments 147F9 and 147F10.

Response 147F14: Modern 115 kV overhead transmission lines are not known to be a significant source of avian and bat mortality. Estimates of annual bird mortality from power lines were provided in the risk assessment for the Project. Cursory investigations indicate that over 500,000 miles of high voltage transmission lines, and many times more miles of distribution lines, occur in the United States. The overhead transmission line required for this Project does not represent a significant increase in transmission line mileage or potential impact. The proposed wood pole structures offer limited perching opportunities, the conductors are easily visible, and their low height puts them well below the altitude of most night migrating song birds. The DEIS commitment to construct the line in accordance with Avian Power Line Interaction Committee (APLIC) guidelines for insulation and spacing (see page 78 of the DEIS) should further reduce any risk posed by the overhead line.

Response 147F15: The original Project, as proposed in the DEIS, would have resulted in the physical disturbance of only one perennial headwater stream (I15A, along an interconnect line between turbines 10 and 12). The revised Project layout still only effects this one stream (still between proposed turbines 10 and 12). This stream is approximately 4-6 feet wide and has a maximum depth of 2-3 inches (see Photo 1 in the Wetland Delineation Report attached as Appendix B to the SDEIS). As described in the DEIS, crossing of this stream is proposed to occur in the dry. Streams to be crossed by the overhead line include the Cohocton River and several of its tributaries. As noted in the DEIS and SDEIS, these streams support a cold water fishery, including trout. However, installation and maintenance of the overhead line will not result in disturbance of the bed or banks of these streams. No equipment or herbicide use will be allowed within 100 feet of the stream, streamside vegetation will be preserved, and a comprehensive sediment and erosion control plan will be followed to further reduce Project-related impacts. The revised transmission line route described in the SDEIS crosses some of these streams in different locations, but the crossing techniques and mitigation measures remain the same as originally proposed. For informational purposes, additional data on fish species known to occur in the Cohocton River and its tributaries have been included in Section 3.3.1.2.4 and Appendix D of the SDEIS. However, impacts to fish will be minimal, and all work will be in accordance with required conditions of any state (Article 15) or federal (Section 404) permitting. The extremely limited work proposed to be done in or near streams does not warrant extensive review of fisheries data.

Response 147F16: Areas where continuous blocks of forest vegetation are being impacted occur primarily along the proposed transmission line route. Forested turbine sites generally occur in small woodlots and/or near the forest edge. In accordance with landowner wishes, the revised transmission line route described in the SDEIS utilizes existing forest roads and previously disturbed areas to minimize the need for new forest clearing. In areas where impacts to forest land could not be avoided (due to landowner preferences, wetlands or other environmental or logistical constraints), the affected woodlots are typically young and/or relatively small. The currently proposed route also completely avoids some larger areas of forest that would have been impacted by the original route described in the DEIS (although it still impacts others). Because the transmission line route is largely dictated by landowner preference, means of further reducing forest impacts are limited. Thus potential forest fragmentation impacts have been reduced to the maximum extent practicable.

Response 147F17: See response to Comment 147F16. Buried cables within the Project site are located in open fields or along field edges in the vast majority of locations. Where crossing sizable areas of forest (e.g., between turbines 10 and 12), existing forest roads and already disturbed areas (previously logged or cleared for turbine access roads) are generally being used. Turbine 9 is also located in a field and the cables between turbines 10 and 11 and 15 and 17 are located in fields. CPP will continue to look for opportunities to relocate turbines from forested areas within applicable constraints such as wind resource optimization and land owners wishes.

Response 147J2: See responses to Comment 105B in the Avian Section, and Comments 147F4 and 147F7-147F10 regarding the need for additional radar, acoustic, and observational studies of wildlife. The results of the Cohocton surveys can be verified with the use of results found at other nearby sites of similar size and site characteristics without additional data collection. Because this region of New York has strong wind resources a number of other projects in the vicinity have been proposed. These projects also conducted wildlife surveys, particularly for birds and bats. The results of these studies are now publicly available and can be used as references.

We are aware of five studies that have been conducted in this region of New York for which study results are publicly available. These include: Dutch Hill, Prattsburgh/Italy, Wind Farm Prattsburgh, Wethersfield, and Sheldon. Three of these, Dutch Hill, Prattsburgh/Italy, and Wind Farm Prattsburgh are within approximately 7-10 miles from the Cohocton Project. Wethersfield and Sheldon are approximately 50-60 miles away. Both spring and fall bird and bat migration studies were conducted at most of these sites.

Table 12. Summary of Available Radar Survey Results From Sites Near the Cohocton Wind Power Project

Project Site	Landscape	Season	Average Passage Rate (t/km/hr)	Range in Nightly Passage Rates	Average Flight Direction	Average Flight Height (m)	Pecent Targets Below Turbine Height	Source
1998								
Wethersfield, NY	Agric. plateau	Fall	168	N/A	179	N/A	N/A	abr
1999								
Wethersfield, NY	Agric. plateau	Spring	41	N/A	21	N/A	N/A	abr
2004								
Prattsburgh, NY	Agric. plateau	Fall	193	12-474	188	516	(125 m) 3%	woodlot
Prattsburgh/Italy, NY	Agric. plateau	Fall	200	18-863	177	365	(125 m) 9.2%	abr
2005								
High Sheldon, NY	Agric. plateau	Spring	112	6-558	25	418	(120 m) 6%	woodlot
Cohocton, NY	Agric. plateau	Spring	371	133-773	28	609	(125 m) 12%	woodlot
Prattsburgh, NY	Agric. plateau	Spring	277	70-621	22	370	(125 m) 16%	woodlot
Prattsburgh/Italy, NY	Agric. plateau	Spring	170	3-844	18	319	(125 m) 18%	abr
High Sheldon, NY	Agric. plateau	Fall	197	43-529	213	422	(120 m) 3%	woodlot
2006								
Dutch Hill	Agric. plateau	Fall	535	88-1158	215	358	(125 m) 11%	woodlot

As shown in Table 12, the results of the radar survey at the Cohocton Wind Power Project were similar to those observed at the nearby sites. The overall passage rate for the three night survey at Cohocton was slightly higher than several of the other, much longer-duration surveys. This is also true for each of the three nights of surveys that were conducted at both the Cohocton and WindFarm Prattsburgh sites (Table 13). However, the mean flight height was much greater at Cohocton than the other sites. Consequently, while the passage rate was slightly greater at Cohocton than the other sites, the percent of targets flying below turbine height was smaller.

Table 13. Comparison of Results From Radar Surveys Conducted in Cohocton and Prattsburgh Spring 2005

Night of	Passage Rate (t/km/hr)		Flight Height (m)		Flight Direction	
	Prattsburgh	Cohocton	Prattsburgh	Cohocton	Prattsburgh	Cohocton
May 10	621	773	461	745	19	31
May 11	184	206	225	518	112	200
May 12	70	133	278	563	296	334
Mean	292	371	321	609	18	28

A final important point to reiterate is that three single- or multi-season radar surveys have taken place on either side of the Project. Radar surveys in Prattsburgh (two surveys in fall 2004 and two surveys in spring 2005) were conducted 7-10 miles east-northeast of the Project. Radar surveys at Dutch Hill, also in Cohocton, were conducted only four miles to the northwest in fall 2006. The results of the radar surveys at Cohocton were not inconsistent with these five other seasonal surveys. The proximity of those surveys to the Cohocton Project area (the Dutch Hill radar survey location was actually closer to the Cohocton radar survey location than some of the proposed Cohocton wind turbines are) make those seasons of survey data applicable to the Project. Consequently, in light of the abundance of radar survey data from the immediate vicinity of the Project, additional survey data is not necessary in order to understand the characteristics of nighttime bird activity over the Cohocton Project area.

Regarding diurnal bird migration, efforts for raptor surveys at Cohocton and Prattsburgh were similar between seasons, and had similar results (See Table 14). The same trends were observed for species composition, flight heights, and passage rates (birds/hour) among sites. Passage rates were the most consistent trends observed between sites and seasons.

Table 14. Summary of Raptor Migration Survey Data in the Vicinity of the Cohocton Wind Power Project

Summary Information	**Site and Season**				
	Cohocton			**Prattsburgh**	
	Fall 2004	***Spring 2005***	***Fall 2005***	***Fall 2004***	***Spring 2005***
Number of Survey Days	8	10	7	13	10
Number of Species Observed	8	11	10	10	15
Number of Individuals	128	164	131	220	314
Number Birds/Hour	3.1	2.73	3.27	3.01	5.23
% flying <125 m above ground	80%	77%	63%	62%	83%

The results of the bat surveys were also comparable, in that bat activity was relatively low compared to other sites. Response to comment 273G below explains in detail the results of the bat surveys at the Cohocton Project as well as other available bat survey data that can be used to verify these results.

Response 147J3: As stated in previous responses, a SDEIS has been prepared that addresses proposed Project changes, as well as the results of supplemental studies and issues that have been raised during the public comment period. In regard to ecological issues, the SDEIS includes additional information on wetlands (including an on-site delineation report), breeding birds (including an on-site breeding bird survey) and cumulative impacts. Preliminary results of a fall 2006 radar study on Dutch Hill are also presented in the SDEIS, and the final report for this study will be included in the Project FEIS.

Response 147J4: A Findings Statement by the lead agency will only be issued following review and comment on the SDEIS, and acceptance and consideration of the FEIS for the Project.

Response 199B: This language is the standard response to a request for Natural Heritage Program data. It is not a comment on the DEIS (DEC concerns with the DEIS are expressed in Comment 1B). As indicated in the DEIS and SDEIS, numerous site-specific studies have been conducted to determine the presence of listed endangered, threatened, and special concern species. As indicated in these documents, several such species have been documented as residents or migrants in the Project area, and potential impacts on these species have been fully evaluated. A similar inquiry letter has been sent to the NYSDEC, as per their recommendation, to ensure that the Project utilizes the most current information.

Response 273C: The bird and bat studies included in the DEIS are comprehensive and professionally done. See response to Comments 95B, 147F8, and 147F9, among others.

Response 273D: The DEIS indicates that predicted bat fatalities are likely to be somewhere between the low levels documented at agricultural Midwestern wind power sites and the high levels reported at projects on forested Appalachian ridge tops. Additional discussion of this topic is included in Section 3.3.2.2.2 of the SDEIS and in the responses to Comments 147F11 and 147F12.

Response 273F: See Section 3.3.2.2.2 of the SDEIS and the response to Comment 147F11 regarding the use of pre-construction data to predict risk to birds and bats.

Response 273G: See response to Comment 273F. As indicated in the DEIS and in response to

Comment 147F11, data from existing wind power projects suggest that the level of potential impact to birds is fairly low and predictable. Accurately predicting risk to bats is more difficult, due to limited study results. However, some general trends as noted below between bat activity and mortality have been observed. The pre-construction acoustic surveys were designed to calculate bat call detection rates in the vicinity of some of the proposed wind turbines for the Cohocton Wind Power Project. Fall 2004 sampling revealed low levels of bat activity. The spring and fall 2005 sampling included a greater survey effort but still documented a similar low level of recorded call sequences. According to Woodlot Alternatives, there are five publicly available studies for which bat activity surveys were conducted concurrently with fatality studies. Data from these studies has been summarized in Table 5 presented in Section 2.3. While this sample size is relatively small, and methods may have varied, the reported bat mortality rates correlated with the call detection rates, which serve as indices of bat activity. Sites with the lowest bat activity have shown relatively low bat mortality while those with the highest activity levels have shown much higher rates of mortality.

The overall bat activity index, which is the combined average number of bat calls per detector-night for all seasons, at the Cohocton Wind Project area, was 1.14 calls per detector night. This is at the lower end of the rates observed at the five sites in Table 4. If this activity index is any indicator of mortality, bat mortality at the Cohocton Wind Project is expected to be relatively low.

Additionally, the seasonal results of the acoustic bat surveys at the Cohocton Project area are within the range of the results found at other sites in New York and the Northeast during similar studies using the same methods (Table 4). Overall, seasonal detection rates found at the Cohocton Project are at the low end of the range of other studies and there is no indication of any irregular patterns in bat activity in the Project area.

In addition to bat activity rates serving as indices for bat mortality, predicting the timing of mortalities also is possible. There are several post-construction mortality surveys, conducted over extended periods of time, which have documented that the majority of bat fatalities actually occur over a relatively short period of time. Erickson et al. (2002) identified five wind energy facilities that were searched for fatalities from May 1 to November 15 (4 of the 5 facilities) or from July 1 to November 15 of various years. Of the bat fatalities observed at those facilities, 89.4% occurred period between July 16 and September 15. The report also provides a discussion of why it is believed that the fatalities were migrant bats rather than resident bats. Kerns and Kerlinger (2004) provided similar evidence that bat fatalities are concentrated during the late summer and fall migration period. During that seven month study (April 4 to November 11) 92.5% of all bat fatalities occurred between August 18 and September 30.

The timing of fatalities from these long-term studies has been recognized by a variety of agencies, organizations, and recognized professionals concerned with bat mortality at wind energy developments. In fact, recent post-construction investigations by the Bat Wind Energy Cooperative (a cooperative formed by the American Wind Energy Association, Bat Conservation International, the National Renewable Energy Laboratory, and the United States Fish and Wildlife Service) were timed to span this recognized period when bats appear more susceptible to collisions with wind turbines (Arnett et al. 2005).

Based on the information obtained from the Cohocton Project Area and other similar studies, the Project is not likely to have any undue adverse effect on bat habitat or bat migration within the Project area, especially compared to other nearby sites. Data on bat mortality observed at five existing facilities and corresponding bat activity measures (Table 5) suggest a positive correlation that overall bat mortality may, in part, be predicted by bat activity indices from preconstruction acoustic surveys of bat vocalizations. Based on the low detection rates found at the Cohocton Wind Project, we would expect the mortality rates at this site to also be relatively low.

Response 274A: The DEIS and SDEIS discuss potential disturbance/displacement impacts to wildlife in Section 3.3.2.2.

Response 274B: Possible disturbance affects on game species are addressed in Section 3.3.2.2 of the DEIS. See response to Comment 88D regarding the possible affect of low frequency noise on pets.

Response 274C: An on-site breeding bird survey conducted during 2006 did not document the presence of nesting bald eagles. According to correspondence from the New York State Natural Heritage Program (included in the DEIS) the nearest nesting bald eagles occur in the Towns of Middlesex, South Bristol, Italy, Springwater, and Conesus (along Keuka and Canandaigua Lakes), well removed from the Project site. The generally low susceptibility of raptors to collision with turbines is discussed in the DEIS, SDEIS, and several previous responses to comments.

Response 276A: See response to Comment 274C.

Response 276B: The Avian Risk Assessment does not indicate Bald Eagles are at risk. The Project does not conflict with any federal laws. Federal resource agencies have been consulted with respect to the Project, and have had the opportunity to comment on the DEIS and SDEIS. Also see the response to comment 274C.

Communication Facilities

Response 34C: As described in Section 3.12.2.2 of the SDEIS, the Project will not interfere with reception of satellite TV signals because the antennas for the satellite receivers are positioned to provide a clear, unobstructed view of the satellites providing the programming. In addition, electromagnetic "noise" produced by the turbines is undetectable by satellite television receivers. Additional detail is provided in Appendix N of the SDEIS.

Response 39A: See response to Comment 34C.

Response 39D: Wind turbines have not been found to have an adverse affect on cellular phone reception. Please see the response to Comment 40J.

Response 40J: As stated in the DEIS, the wind energy facility will have minimal effect on cellular and other mobile telephone systems. See the discussion in the Response to Comment 324A. Off-Air TV coverage in the area is presently very sparse with only three full service channels available. The vast majority of residents get their programming from cable or DBS. These modes of programming will not be affected by the wind energy facility. Also, as indicated in a Technical Memorandum from Comsearch included in Appendix G to this FEIS, impacts on satellite television reception should be unaffected. Over-the-air television reception problems are more difficult to predict, but have occurred at several operating wind power projects. The complaint resolution process described in the DEIS, and expanded upon in the SDEIS (Section 4.2), outlines a procedure for reporting and resolving such problems. CPP stands by the commitment made in the DEIS to work with local residents to correct any television reception problems that result from development of the Cohocton Wind Power Project. As described in Section 3.12.3.2.2 of the SDEIS, corrective measures could range from simple antenna adjustments to installation of HDTV boxes, cable, or satellite systems for affected residents. It is worth noting that development of the Maple Ridge Project resulted in several instances of over-the-air TV reception interference. To date, of the almost 150 reported instances of TV interference on that project, 98% have been resolved to the satisfaction of the affected residents (W. Moore, personal communication).

Response 40N: Potential impacts to cellular telephone and television reception are described/predicted to the extent that they can be in the DEIS and SDEIS. See response to Comment 40J regarding CPP's commitment to resolve any television reception problems that occur as a result of project construction and operation.

Response 89A: Various communication studies were done for the Project as originally proposed and as revised. The results of these studies and the studies themselves are included in the DEIS (Appendices K and L), the SDEIS (Appendix N), and the FEIS (Appendix H). As these studies indicate, the proposed wind turbines have been sited to avoid microwave paths (Fresnel zones), and should not affect other forms of wireless transmission, other than perhaps television signals (See response to Comment 40J). Concerns regarding potential impacts on the police communication tower on Potter Hill are addressed in a Comsearch Technical Memorandum included in Appendix G to the FEIS. This memorandum indicates that the VHF frequencies used by this antenna will not be affected by the presence of wind turbines. In addition, any unanticipated impacts could be easily corrected or mitigated.

Response 91E: Potential impacts on communication facilities are described in Section 3.12.2 of the DEIS and SDEIS, and Section 2.12 of the FEIS. Upon receipt of any communication interruption complaints, CPP will investigate immediately and work to resolve the problem as quickly as possible. Additional discussion regarding the proposed complaint resolution procedure is included in Section 4.2 of the SDEIS. See also response to Comments 40N, and 89A.

Response 322A Comsearch performed a Geo PlannerTM Study of the area of the Cohocton Wind Energy Project. The study defined and described all of the licensed microwave paths in the area. The paths, along with their Worst Case Fresnel Zone (WCFZ), were plotted on maps which also showed the location of the turbines with scaled drawings of their turbine blades. All obstructed paths were identified in the study and UPC was able to relocate or remove the obstructing turbines using the Geo PlannerTM Study maps. This was done before the positioning of the turbines for the Cohocton Wind Energy Facility was finalized. Therefore, all line-of-sight conditions for microwave paths passing through the Cohocton Wind Energy Facility for the designed turbine configuration are unobstructed no matter which property the turbines happen to be located on in the Steuben County area.

Response 322B: There is one turbine location on the Moore property and it does not interfere with microwave communications. Also see the response to Comment 322A.

Response 323: Comsearch performed an Off-Air television study to determine what Off-Air TV channels were available to the local communities of the Cohocton area. The study found that there were only three full service Off-Air TV channels available. Two are analog and one is digital. Based on this limited coverage, most likely the residents of the area get their TV programming via cable system, where it is available, or via Direct Broadcast Satellite (DBS). Off-Air TV broadcasters from Rochester, NY are over 40 miles distant from the Cohocton area, so these TV stations can not be considered local stations for the Cohocton area. Television news broadcasts from Rochester, Syracuse, and Buffalo should be available on cable or DBS. Also see the response to Comment 40J.

Response 324A: Response: CPP has taken every reasonable safeguard to insure that the Cohocton Wind Energy Facility will have little or no degrading affect on the established communication systems in the area. CPP has performed studies to minimize the possibility that point-to-point microwave paths will be interfered with or obstructed including a Geo-Planner TM Study. Studies also were conducted that examined cellular, PCS and Land Mobile Radio (LMR) communication systems. Cellular operates in the 850 MHz Band and PCS operates in the 1900 MHz Band. Both

Cellular and PCS operate with a network of Omni-directional base stations made up of either sector antennas or a single Omni antenna. The networks are designed to provide optimum coverage in populated areas and the owner/operators of the network are permitted by the FCC to lay out their network any way they wish and to keep the location of their base stations under wraps as proprietary information. This is true in urban as well as rural areas. In either type of area, when structures are built near the base stations, the coverage of the base stations may be altered. If they are, the owner/operator may at his discretion add a base station or a sector antenna to re-establish the coverage that may have been altered by the structure. This happens quite often in urban areas where large buildings or other structures are often built near cellular and PCS base stations. In rural areas like the Cohocton area it is not expected the cellular or PCS coverage will be altered much by the wind turbines because of the large separation distance between turbine towers and because the antennas used in these communication systems are not directive. However, if there is an alteration in coverage, CPP would be willing to work with the owner/operator of the cellular or PCS so that the coverage can be re-established. The same issues apply to LMR communication systems. These systems normally operate in the VHF (150 MHz) and UHF (450 MHz) Bands with non directive antennas. The wavelengths at these frequencies will bend around the turbine towers and blades so the signals will undergo very little attenuation. Repeater stations are normally used for LMR networks to increase the range of the mobile systems either in vehicles or man-carried. Although unlikely, if the coverage of a LMR network seems to be decreased after the wind turbines are installed, Repeater stations can be installed within the wind facility on met, turbine and/or utility towers. CPP will work with the cellular, PCS and LMR owner/operators to insure that their coverage and operation was optimized and not degraded by the installed wind energy facility.

Community Character

Response 9C: As stated in the SDEIS, the Project VIA and SVIA concluded that the Project would not have a significant adverse impact on community character. The Project will be significantly, or completely, or almost completely, screened from most areas with concentrated residential development (Village of Cohocton, Village of Naples, etc.), and, in the opinion of the VIA rating panel, generally appears compatible with a working agricultural landscape. In addition, noise, transportation, public safety, communications, land use and community services impacts also have been thoroughly reviewed and found to be small. It is also worth nothing that, because to the extent that the Project supports local farmers and helps keep land in active agricultural use, it will help preserve open space and maintain the area's rural character. Furthermore, by creating jobs, local expenditures, and municipal revenue, the Project will enhance the economic health and well being of the community. These financial benefits will be provided without the need for municipal and school district services and facilities required by most other forms of economic development. A viable economy and strengthened tax base are crucial to maintaining quality of life within a community.

Response 12E: See response to Comment 9C.

Response 15A: See response to Comment 12E.

Community Facilities and Services

Response 321A: See response to Comments 25G (Land Use and Zoning Section) regarding possible health affects and alleged Wind Turbine Syndrome.

Response 321B: See previous responses regarding the adequacy of required setbacks and public health and safety risks.

Response 321C: As stated in the DEIS, SDEIS, and FEIS (DEIS and SDEIS Section 3.5.2.2.6 and FEIS Section 2.5, and Appendices G, H, and E, respectively), the shadow flicker model is based on a "near worst case" scenario. This scenario assumes that all building walls receiving shadow flicker have a window and are unscreened by adjacent trees or structures. Therefore, the occupants of such structures (i.e., receptors) are assumed to perceive the total hours of shadow flicker predicted by the model. The reality is that this is an extremely conservative analysis, and received/perceived shadow flicker at receptor locations will almost always be less frequent than predicted by the model.

Response 321D: See response to comment 297Y in the Sound Section.

Responses 321E: The receptor in the model is a one meter by one meter area and is independent of land use. The results will apply to the surrounding property for several hundred feet and therefore apply to the residence and surrounding property. The model uses worst case assumptions, and indicates that only three receptors will experience shadow flicker more that 20 hours per year and none will receive shadow flicker for more than 25 hours per year. Twenty-five (25) hours over the entire year equates to approximately four (4) minutes per day. The Shadow Flicker report in Appendix E of the FEIS presents results graphically showing hours per year of shadow flicker contour lines of the Project area.

Response 321F: See response to comment 321E.

Response 321G: See response to comment 321E.

Response 321H: See response to comment 321E.

Response 321I: See response to comment 321E.

Response 321J: See response to comment 321E.

Response 321K: See response to comment 321E.

Response 321L: It is not known from the comment what general assumptions are being referred to. The model used for the analysis (Windpro) is a standard model used for this shadow flicker analysis.

Response 321M: See response to comment 321E.

Cumulative Impacts

Response 1F: Additional discussion of cumulative impacts is included in the SDEIS and FEIS. Projects under consideration in this analysis include the Ecogen, LLC Prattsburgh/Italy Wind Farm Project, the WindFarm Prattsburgh Project, the Howard Wind Project, and the UPC Dutch Hill Project. The focus of the revised cumulative impact analysis is on potential cumulative visual, noise, shadow flicker, transportation and economic impacts.

Response 25F: UPC has made its intentions public, and is proposing two projects within the Town of Cohocton, the Cohocton Wind Project and the Dutch Hill Wind Project. These projects will be subject to separate decisions of the board to approve, approve with conditions or disapprove the applicant's special use permit and site plan applications. It is the planning board's understanding that the future development of one project does not depend upon the other. To prevent the duplication of transmission infrastructure, however, a streamlined interconnection will be utilized which ties both projects to a common substation in the event that both projects are permitted and built. Due to the contemporaneous review of these projects, the cumulative impacts of the Cohocton Wind Project and the Dutch Hill Wind Project, together with other known wind projects, have been evaluated in the Supplemental Draft Environmental Impact Statement for the Cohocton Wind Project, and the Draft Environmental Impact Statement for the Dutch Hill Wind Project. Any future proposals, whether by UPC or another project developer, would be subject to their own, rigorous, environmental review. In the absence of any concrete proposal beyond the speculation provided by the commenter, there is no reason to prohibit any further wind project development.

Response 147D2: Other fuel/energy consuming activities associated with the manufacturing and delivery of project components, or with project construction, are almost never included in a DEIS, and are a given for any building project. The commenter appears to imply that such energy consumption changes the assertion that the proposed Project will actually reduce or offset use of fossil fuels or fossil fuel-generated electricity. As stated in Sections 3.4.2.2 and 9.0 the SDEIS, the Cohocton Wind Power Project will generate approximately 236,500 MW hours of a emission-free electricity annually. This is enough energy to support approximately 39,500 homes in New York State, and more than offsets any energy used in the manufacturing, delivery, and construction of project components.

Response 147I1: An expanded discussion of cumulative impacts, including potential cumulative impacts on birds and bats, is included in Section 8.0 of the SDEIS. This section includes a description of the other projects proposed in Steuben County, to the extent that such information is publicly available.

Response 147I2: To the extent that turbine numbers on other projects are known or can be reasonably estimated, this information is included in the SDEIS discussion of cumulative impacts on wildlife.

Response 147I3: Conclusions regarding cumulative impacts are described in greater detail in Section 8.0 of the SDEIS and Section 2.15 of the FEIS. The SDEIS and FEIS also addresses other possible projects in Steuben (and Yates) County. The only projects with specific information available to evaluate cumulative impacts are the Ecogen Prattsburgh/Italy Valley Wind Farm, the WindFarm Prattsburgh Project, and Canandaigua II (Dutch Hill) project, which is also being proposed by an affiliate of CPP. The Ecogen Prattsburgh/Italy Wind Farm and the WindFarm Prattsburgh Project are proposed to be constructed in close proximity to each other in the Towns of Italy (Yates County) and Prattsburgh (Steuben County). As measured to the nearest turbine, these projects are located approximately 1.75 miles northeast of the Cohocton Wind Power Project. Based upon the information presented in the WindFarm Prattsburgh DEIS, if as many as 6 birds per turbine per year are killed (i.e., the high end of what has been observed at other projects), total annual collision mortality could be up to 264 birds (EDR, 2006). The avian analysis conducted for the Cohocton Project also predicted a potential worst-case scenario of 6 fatalities per turbine per year (see Section 3.3 and Appendix E of the DEIS). As currently proposed, the Cohocton Project includes up to 36 turbines, which equates to a maximum of approximately 216 avian fatalities per turbine per year. Therefore, cumulative avian mortality for both the WindFarm Prattsburgh and Cohocton projects may be up to 480 birds per year. Assuming the same maximum per turbine mortality rate, and approximately 50 turbines at the Ecogen project, would increase this number to 780. While this number may sound large, it is a tiny fraction of the population that migrates through or resides in this area, and would not be biologically significant for any of the affected species.

The Dutch Hill and Cohocton projects together could include up to 52 turbines, which would result in up to 312 bird collision fatalities annually (using the assumptions presented previously regarding potential worst case per turbine avian mortality). Adding potential mortality from the two Prattsburgh projects would increase this total number to 876. However, given the results of avian studies from all of these projects, this cumulative impact is still a small fraction of the bird population that resides in or migrates through the area.

Cumulative bat mortality impacts could also be anticipated, but based on the results of studies at other wind power projects and correspondence with the

NYSDEC (A. Hicks, Personal Communication) it does not yet appear possible to accurately predict post construction bat mortality based on preconstruction data.

The fatality rates of bats documented at some mid-Appalachian wind power facilities do provide credible cause of concern regarding the potential cumulative impact of wind power developments on bat populations. However, considerable variability in documented fatality rates for bats has been observed across the country and across the landscapes on which wind energy developments have been constructed. Also refer to the response to Comments 147F11 and 147F12 (Biological Resources Section), regarding prediction of bat mortality.

Response 147I4: See response to Comment 147I1.

Response 334B: Conclusions regarding cumulative impacts in the DEIS were tentative because information on other proposed projects in the area was either not publicly available (WindFarm Prattsburgh), generic (Prattsburgh/Italy Wind Farm), or had not yet been determined (Dutch Hill Wind Farm). Because some of this information is now available, additional analysis and discussion has been added to the cumulative impact section of the SDEIS and FEIS.

Response 334C: Please see the response to comment 25F.

Decommissioning

Response 11E: The costs of project decommissioning are the sole responsibility of CPP, and will not represent a cost to landowners participating in the Project. Decommissioning of the project is addressed in the Project's DEIS and is regulated under the Town's Zoning Law. Refer to Section 2.6 of the DEIS and Response 73C below.

Response 73C: The Town's Zoning Law clearly describes the requirements for project decommissioning. Conditions that would trigger decommissioning, means of funding the decommissioning, as well as facility removal requirements are specified. As described in the ordinance (Section II (4)), "(a) the owner of a windmill, after such application has been approved and before a building permit is issued, shall submit a letter of credit or other acceptable surety sufficient to ensure the removal if the use of the windmill is discontinued." An Engineer selected by the Town and the Town Attorney shall judge this letter of credit or other surety adequate and satisfactory before a building permit is issued." c.) Any windmill which has been out of active and continuous service for a period of one (1) year shall be removed from the premises to a place of safe and legal disposal. Any and all structures, guy cables, guy anchors and/or enclosures accessory to such windmill shall also be removed. The site shall be restored to as natural a condition as possible. Such removal shall be completed within (18) eighteen months of the cessation of active and continuous use of such windmill. Facilities associated with the wind turbines as described above will be removed to a depth of three feet below grade. Should any facilities be installed below this depth, removal will be matter of discussion with the property owner regarding their preference to remove or leave such structures in place.

Response 259A: Please see the response to comments 11E and 73C.

Response 259B: This comment is incorrect. Section 1130 (2)(f) of the Town Zoning Law requires that appropriate decommissioning sureties be provided.

Effects on Use and Conservation of Resources

Response 335A: A study performed by GE Power Systems for the New York State Energy Research and Development Authority shows that wind can increase to 10% of the New York power supply without extra costs or instabilities (GE Energy Consulting, 2005).

Response 335B: Energy sold in the New York market has associated fees such as for scheduling and balancing the power that is supplied to the grid.

Response 335C: The Cohocton Power Project is compliant with Executive Order 111 insofar as it qualifies under that order. However, CPP does not currently plan to sell power directly to state agencies. The RPS has to do with how the green attributes are sold and neither increases nor decreases the real benefits of the wind farm. As described in the DEIS, the Project would facilitate compliance with the Public Service Commission (PSC) "Order Approving Renewable Portfolio Standard Policy", issued on September 24, 2004. This Order calls for an increase in renewable energy used in the state to increase to 25% (from the then level of 19%) by the year 2013. The Project responds to objectives identified in the 2002 New York State Energy Plan and Final Environmental Impact Statement (State Energy

Plan) (New York State Energy Planning Board, 2002), and the Preliminary Investigation into Establishing a Renewable Portfolio Standard in New York (NYSERDA, 2003). These objectives include stimulating economic growth, increasing energy diversity, and promoting a cleaner and healthier environment. The benefits of the proposed action include positive impacts on socioeconomics (e.g., increased payment-in-lieu of tax [PILOT] revenues to local municipalities and lease revenues to participating landowners), air quality (through reduction of emissions from fossil-fuel-burning power plants), and climate (reduction of greenhouse gases that contribute to global warming). Also, it will provide a source of renewable energy that can be considered by state facilities purchasing electric energy as directed under Executive Order 111.

Response 335D: See Section 3.4.2.2 in the SDEIS for a description of the generation and emissions displaced by the Project.

Response 335E: Wind data is proprietary. However, if much less than a 30% capacity factor were projected, the Project would not be economical. Further, it is not the lead agency's responsibility to "guarantee" that the project is profitable. CPP has done a thorough evaluation of the economic feasibility of the Project, and has shared information about its wind data with the Town and its consultants.

Executive Summary

Response 238E: The Project was selected by NYSERDA for RPS funding in April 2007. Thus, it will directly facilitate achievement of the RPS goals. However, the purposes of the RPS and the Executive Order, that is to encourage the development of renewable energy projects that can supply energy within New York, and decrease the State's reliance upon fossil fuels for the generation of electricity, would have been served whether or not the Project received payments under the RPS or the Executive Order. The State recognizes that, because only limited funds will be available under the State sponsored programs, projects which do not receive State funding support will, nonetheless, contribute to achievement of the State's renewable energy goals.

Response 238F: See response to comment 222B (Description of Proposed Action section in Public Hearing Comments) and 238E.

Response 238I: The PILOT agreement has not yet been determined by SCIDA and therefore it is not possible at this point in time to compare it to any other taxing scenario.

Response 238J: The Project has been sited in the areas in Cohocton where the optimal wind resources are found.

Response 238K: The turbines do not fall under the International Building and Fire Code because they are not habitable structures. The CCP will be constructed in compliance with Town of Cohocton Local Law #2. In addition, the Town of Cohocton will ensure engineering oversight throughout Project permitting and construction.

Response 238T: This comment is a comment on the executive summary. Section 5.0 of the DEIS fully evaluates Project alternatives in accordance with the requirements of SEQR. Additional discussion of alternatives considered for the proposed 115 kV transmission line is included in the SDEIS.

Geology, Soils and Topography

Response 51D: As mentioned in Sections 3.1.3 and 3.2.3 of the DEIS, a comprehensive sediment and erosion control plan will be developed and implemented as part of the Storm Water Pollution Prevention Plan (SWPPP) for the Project. This plan is required as part of the SPDES general permit that will be issued by the NYSDEC. Drainage and erosion impacts also will be reviewed in the site plan approval and Special Use Permit processes. In addition, impacts to agricultural soils will be avoided, minimized and mitigated through compliance with New York State Department of Agriculture and Markets Guidelines (including in DEIS Appendix D).

Response 56E: As mentioned in the DEIS and SDEIS, proposed Project components have been sited to avoid forest impacts to the extent practicable. However, forest clearing/tree removal will be required, as described in the DEIS and SDEIS (Section 3.3.2 in both documents). The impact of this activity and proposed mitigation measures, in terms of soil disturbance, are fully described in Sections 3.1.2 and 3.1.3 of the DEIS.

Response 56F: Please see response to Comments 51D and 56E.

Response 86A: See response to Comment 13C (Water Resources Section) regarding the potential for blasting. Potential impacts on residential wells and proposed mitigation is described in Section 3.2 of the DEIS. As discussed in greater detail in Section 3.2.3 the SDEIS CPP will undertake pre-construction and post-construction surveys of all residential wells within 1,000 feet of a proposed turbine site.

Response 264A: The DEIS addressed groundwater impacts in Section 3.2 and both the DEIS and SDEIS included Groundwater Resource Reports (Appendix C). The Groundwater Resource Reports described the aquifers present in the Project area and the potential impacts to the groundwater/aquifer resources in Sections 4.0 and 5.0 respectively. The discussion includes the valley fill aquifer, and Table 4 of the reports summarize the findings of “no impact” to the water table in the vicinity of the Project. The bulk of the construction will be in the areas of higher elevations, well away from the valley aquifer, and no significant impacts from this construction are anticipated, either in the groundwater in the uplands or in the valley fill aquifer.

Response 265A: See response to Comment 238B in the Executive Summary Section.

Response 265B: See response to Comment 238B in the Executive Summary Section.

Response 266: In the absence of specific details of the alleged foundation failures for wind towers in Illinois, a response to this comment cannot be made.

Growth Inducing Impacts

Response 333A: Clipper Liberty C96 Wind Turbines are currently proposed for the Project (See SDEIS Section 2.2.1). The turbines are produced in Cedar Rapids, Iowa.

Response 333B: The SDEIS contains a thorough discussion of cumulative impacts. Please see the response to comment 25F in the Cumulative Impacts Section.

Response 333C: The comment is not clear, however, the referenced topics are thoroughly addressed in Section 7.0 of the DEIS and SDEIS. The Project is compliant with the Comprehensive Plan.

Historic and Archaeological Resources

Response 1D: Results of a Stage 1B archaeological survey and architectural reconnaissance for the Project are reported in the Cultural Resource Management Report included as

Appendix G to the SDEIS. This report identified structures/sites that are listed or eligible for listing on the National Register of Historic Places. The SVIA included as Appendix F to the SDEIS evaluates visual impact on areas where these structures are concentrated. The Cultural Resource Report has been sent to the New York State Historic Preservation Office (SHPO) for its concurrence as to which sites and structures within the Project viewshed are eligible for listing on the National Register of Historic Places. Upon receipt of the SHPO determination, additional visual impact analysis will be undertaken if necessary, and the Project cultural resource consultants, in consultation with the SHPO, will make a determination of visual impact on Register-listed and eligible structures and sites.

Response 288: As stated in Section 3.13.2.2 of the DEIS, and in response to Comment 9C (Community Character Section), the proposed Project will preserve the rural character of the area by helping to keep land within the Project area in active agricultural use. The SHPO has yet to render an effect determination regarding visual impact on architectural resources. However, CPP has initiated consultation with the SHPO to develop an appropriate mitigation plan. Additional information is provided in Section 2.6 of the FEIS.

Response 289: Cultural resource studies undertaken for the Project have resulted in the discovery of only two potentially significant archeological sites. Both of these are historic (as opposed to prehistoric) sites, although one did include a single prehistoric artifact. Neither of these sites are considered to represent areas of occupation by Native Americans. As described in the SDEIS (Section 3.6.2.1) Project components (roads, turbines, buried interconnect) have been or will be relocated as necessary to avoid impacting these sites.

Response 290: The SDEIS and SVIA (Appendix F to the SDEIS) address visual impacts on historic structures in the area. As indicated in the SDEIS and response to Comment 1D, this assessment of potential affects and proposed mitigation measures will be reviewed and ultimately approved by the SHPO.

Response 291: See response to Comment 290.

Response 292: The Cultural Resource Management Report included as Appendix G to the SDEIS inventories all structures within 5 miles of the proposed Project that are listed or considered eligible for listing on the National Register of Historic Places.

Response 293: As indicated in several previous responses to comments, there is no evidence that real estate values will be adversely affected by the proposed Project. In addition, increased local employment and expenditures resulting from the project are likely to have a beneficial economic effect on the area. If anything, such effect would likely improve maintenance and repair of local structures, rather than encouraging their falling into disrepair. The economic benefits of the project are discussed in Section 3.9 of the DEIS and SDEIS and in the report *Cohocton Wind Farm - Economic Impact Analysis* found in Appendix K of the SDEIS. See also response to comment 5A, the results of the Cushman & Wakefield study included as Appendix L to the SDEIS, and Section 3.9.2.2.1 of the SDEIS regarding potential effect on property values.

Response 294: All Project interconnection lines that connect the wind turbine generators to the collection station are proposed to be installed underground. See the discussion of Alternatives in the SDEIS and response to Comment 3D (Water Resources Section) regarding the pros and cons of burying the proposed 115 kV transmission line.

Response 295: The results of a Phase IA Archeological Investigation are reported in the DEIS, and the study itself is attached as Appendix H. A Cultural Resource Management Report, including a Phase IB Archeological survey and architectural reconnaissance is included as Appendix G to the SDEIS.

Response 296: All potential historic structures within 5-miles of the Project site are identified, mapped and inventoried in the Cultural Resource Management Report included in the SDEIS as Appendix G.

Irreversible and Irretrievable Commitment of Resources

Response 332A: The New York State Energy Research and Development Authority has granted the Cohocton Project $200,000 for environmental and interconnection studies. The Project also was selected by NYSERDA in April 2007 to receive RPS payments for its environmental attributes. The Project has received no other state or local grants or funding.

Response 332B: Please see the response to comment 244B in the Project Description Section.

Response 332C: Please see the response to comment 329E in the Alternatives Section.

Response 332D: To our knowledge, there are no local, state, or federal laws that support the concept of retention of "wind rights" by landowners. Since landowners do not have "wind rights," any perceived impact from the operation of the turbine units, due to wake effect, on property downwind does not constitute a taking or seizure of such wind rights without compensation. Accordingly, the Lead Agency has not required that CPP negotiate compensation for the wind rights of nonparticipating landowners or require that the proposed turbines be sited at greater distance from the property lines of nonparticipating landowners.

Response 332E: The duration of the PILOT agreement is still under negotiation. The Steuben County Industrial Development Agency's Uniform Tax Exemption Policy states that PILOTS may be for up to 20 years.

Response 332F: The irreversible and irretrievable commitment of resources is addressed in Section 6.0 of the DEIS and SDEIS.

Land Use and Zoning

Response 2A: All 34.5 kV collection lines for the Project will be buried underground, in accordance with NYSA&M guidelines, and therefore will not interfere with agricultural operations.

Response 2B: The proposed 115 kV line will generally run along field edges, through woods and along railroad rights-of-way (ROW). Therefore impacts to agricultural land and agricultural activities should be minimal. Taller poles that would allow wider spans are generally not being considered due to their increased visibility and visual impact, except in areas where sensitive environments or physical features (I-390) need to be spanned to minimize impacts.

Response 2C: As indicated in the SDEIS, the Project will comply with all NYSA&M agricultural guidelines including the placement of buried lines 48" deep in cropland, hayland, or improved pasture. Upon decommissioning, the removal of any facilities installed below a depth of three feet, will be matter of discussion with the property owner regarding their preference to remove or leave such structures in place.

Response 8A: The final transmission line route is illustrated in the FEIS (Figure 2). As this figure indicates, setbacks from adjacent property lines will be variable along the transmission line route. No minimum setbacks are required by either state or local law. However, the 70 foot wide right-of-way (ROW) assures that the line itself will never be closer than 35 feet from the property of a non-participating landowner.

Response 8B: There is no required setback of Project access roads from adjacent properties. These roads will occur within a 100-foot ROW on participating landowner properties. The roads themselves can be built anywhere within this 100-foot ROW.

Response 8D: Impacts from the Project on land use are based upon the identified uses, as well as the current zoning. Therefore, if there is a residence on a lot, the impacts on the residence are considered. In addition, the Town of Cohocton Windmill Local Law requires each tower to be set back 1,500 feet from existing dwellings, and structures, and areas commonly used by the public. The Town's Windmill Local Law took into account safety considerations in determining the required setbacks.

Response 13E: A 3,000-foot setback from residences is not necessary to mitigate potential adverse impacts on adjacent residents. The 1,500-foot setback being utilized for this Project complies with the Town of Cohocton Wind Ordinance and recommendations/examples provided in the NYSERDA "tool kit" for municipalities. This setback is equivalent to, or exceeds, required setbacks in other municipal ordinances in New York. Recently enacted ordinances in the Towns of Clinton, Ellenburg, Altona, and Eagle, New York all mandate residential setbacks of either 1,000 and 1,200 feet. In addition, as described in the DEIS, at 1,500 feet, potential adverse impacts associated with noise, shadow flicker, private wells, and public safety, are expected to be minimal.

Response 13F: The commenter's concern about the proximity of turbines to people is noted. See response to Comment 13E.

Response 14C: Seeking relief from setback requirements through an agreement with an adjacent landowner is permissible under the Town of Cohocton Wind Ordinance. Section II.B.(1) states that "the property line setback requirement may be reduced by the

Planning Board as an incident of special permit review when the Planning Board finds the following: (I) both properties on each side of the property line in question will have electric generation or transmission facilities constructed on them as part of the Project review, or (ii) ***the owner of the property for which the reduced setback is sought executes and presents for recording a development easement satisfactory to the Town in which the reduced setback is consented to, and construction within, and use of the easement area is appropriately restricted."*** (emphasis added) All such easements will be in full compliance with the requirements of the local ordinance and other laws and regulations of the Town and New York State.

Response 25G: Potential health effects associated with wind turbines are addressed in Section 3.10.2.2.7 of the SDEIS. Concerns regarding health effects associated with the so-called "Wind Turbine Syndrome" (i.e., symptoms allegedly associated with exposure to audible noise, low frequency noise, and shadow flicker) are not supported by the results of peer-reviewed medical studies. These concerns are based primarily on surveys of turbine-related annoyance and anecdotal reports, rather than clinical studies. The possible occurrence of Wind Turbine Syndrome is based on indirect evidence of health effects associated with other sources of noise and flashing lights. This evidence is limited and generally not applicable to the sound and flicker characteristics of wind turbines.

Response 63B: As described in the DEIS, SDEIS, and FEIS, the proposed Project complies with setbacks and noise thresholds defined in the Town of Cohocton Windmill Local Law. See response to Comment 13E regarding the adequacy of the 1,500 foot setback as a means of minimizing/mitigating potential impacts.

Response 325A: See response to previous comments such as 13E regarding adequacy of the required setbacks and public health and safety issues. In response to the French Academy of Medicine recommendations regarding a 1,500 meter residential setback, it is worth noting that the French Academy of Medicine report acknowledges that studies documenting actual health risks are lacking. The proposed 1.5 km setback is based on a 1.0 km distance at which noise is predicated to exceed some reference level, plus an extra 0.5 km to be conservative. This proposed setback is not based on any health-related data.

Response 325B: See response to Comment 25G regarding "Wind Turbine Syndrome".

Response 325C: See response to Comment 13E regarding adequacy of setbacks to protect public health and safety.

Mitigation

Response 30C: The fact that Canandaigua Power Partners is an LLC should not affect whether the Town requires a bond for the items listed. The question of whether a bond should be required relates to impacts, and whether there is an absence of a mechanism under the local law to require mitigation for those impacts. For instance, as set forth in the SDEIS (pp. 94-95), the Cohocton Project will not result in any significant impacts to community services such as emergency planning and response. CPP's operating practice is to develop a close coordination relationship with local responders responsible for emergency and other services in the project area. This includes provisions for close coordination in the event of injury on site during construction or operation of the project. UPC will work with local emergency services to identify gaps in equipment and training necessary to respond to potential emergencies at the site. CPP will train and equip the town volunteer file department for high angle rescue.

On the other hand, construction-related road damage is anticipated, therefore, CPP has committed to restoring all roads to pre-construction conditions at no cost to the municipality (SDEIS pp. 81-82). Furthermore, Local Law #2 of 2006 requires CPP to submit quarterly reports to the Town Highway Superintendent regarding road conditions, and restore roads to pre-construction conditions (Section 1030(f)(iv) of the Town of Cohocton Zoning Law). Therefore, there is no need to provide a bond for these costs. Finally, a requirement for bonding for decommissioning is addressed in Section 1030(f)(i) of the Town of Cohocton Zoning Law, which requires CPP to submit a letter of credit or other acceptable surety for decommissioning. See also response to comment 9E in the Project Description Section.

Operations and Maintenance

Response 258B: See response to Comment 255 in the Project Construction Section.

Response 258C:Project operations personnel are anticipated to live locally (i.e., within a reasonable commuting distance of the Project site). As indicated in response to Comment 85F (Project Description Section), turbine access roads will be plowed as needed by CPP operations personnel and/or independent contractor.

Other

Response 51C: The Town is not planning to use or acquire this property for the Project.

Response 60A: The Town Planning Board, as lead agency under SEQR, has retained independent consultants to review the DEIS and supporting studies prepared by the Applicant's consultants. In addition, this material has been subject to public and agency review and comment. The FEIS will include responses to all substantive comments received during the SEQR process.

Response 61A: Please see response to Comment 9C (Community Character Section) regarding potential quality of life impacts.

Response 73G: Comment noted. The Planning Board has not yet issued any approvals of the Project and will consider all available information, including all public comments, before making its decisions.

Response 83H: See response to Comment 73G.

Permits and Approvals Required

Response 14E: Various state and federal agencies will oversee project activities that affect resources under their jurisdiction. The Town Zoning Law contains specific enforcement authorities of the Town. See Zoning Law Sections 765, 770, 1160, 1170. The Town will oversee the project through its Zoning Officer, as well as environmental monitors and engineers which will be hired by the Town to assist the Zoning Officer. In addition, the NYSDEC and U.S. Army Corps of Engineers (USACOE) will oversee compliance with the conditions of state and federal wetland/stream permits. The NYSDEC will also oversee compliance with the Project's SPDES general permit and stormwater management plan. The NYSA&M will oversee compliance with guidelines for the protection and restoration of agricultural land. The NYSDPS will directly oversee compliance with any conditions contained in the Certificate of Public Convenience and Necessity to be issued pursuant to Section 68 of the NY Public Service Law. On other wind power projects, agency representatives have visited the Project site during construction on a regular basis to assure regulatory compliance. As described in the DEIS, on-site environmental monitors will be employed by the Project developer to make sure contractors are aware of various permit requirements and to assure environmental compliance during construction. The environmental monitors will correspond regularly with the agencies, and typically set up a protocol for reporting and responding to environmental compliance issues.

Response 51E(a): The Planning Board has not issued any special use permits for the wind power Project. The Planning Board has issued several special use permits to UPC for the installation of stand-alone, temporary meteorological test towers.

Response 51E(b): The limitation of one windmill per lot applies to residential and/or commercial windmills pursuant to Zoning Law § 1130(1)(a)(ii), but does not apply to industrial windmills, as defined by the Cohocton Zoning Law.

Response 261B: The Project is fully compliant with the Town of Cohocton Windmill Local Law and the Town of Cohocton Comprehensive Plan.

Project Construction

Response 248A: Please see the responses to comments 25F (Cumulative Impacts Section) and 237D (Project Description Section).

Response 248B: The DEIS and SDEIS present an appropriate level of detail with respect to the Project, its impacts, and all key mitigation measures. It is typical for detailed implementation plans to be processed as post-permit (and post-FEIS) submissions.

Response 249: The revised Transportation Routing Plan included as Appendix G to the FEIS identifies and describes all public road intersection improvements that are anticipated. The various impacts associated with these improvements are quantified and described in the SDEIS and FEIS.

Response 250: The majority of the turbine components will arrive right before installation. These will be delivered to the actual site for short term staging and/or direct erection.

In the event any components arrive beforehand, they will be placed in designated staging areas, near the sites, in areas away from general view. These areas will be secure, but are not intended to be fenced. Equipment and gear will be stored in an orderly fashion at specific construction centers, such as existing yards/shops. Construction will be carried out in stages, where completion of one stage will culminate in orderly clean sites before the next stage begins.

Response 251: The Groundwater Study included with the DEIS indicates that activities associated with the construction of the proposed Project, including possible blasting, are routine and unlikely to result in adverse affects to the groundwater/aquifer.

Response 252: Diagrams of required equipment turning radii are included in the revised Transportation Routing Plan included as Appendix G to the FEIS.

Response 253: As stated in the Groundwater Report in the DEIS (Appendix C) and SDEIS (Appendix C) impacts to groundwater associated with either a spread footer or caisson foundation are not anticipated to be significant. Table 4 of the reports summarize the findings of “no impact” to the water table in the vicinity of the Project based on the proposed construction elements and considers both a spread foot and caisson type foundation. The Project will use conventional construction methods, generally at shallow depths. A discussion of potential deeper foundation construction is also included in the report, in Sections 5.2, which describes the foundation types, and 5.3, which addresses potential impacts. The assessments conclude that the construction does not appear to have potential for significant impact to groundwater and impacts from wind power projects on groundwater resources are inconsequential.

Response 254: As indicated in the response to Comment 2C in the Land Use and Zoning Section, CPP will comply with NYSA&M Guidelines requiring a 48-inch depth of burial in active cropland in improved pasture (which theoretically could be converted to cropland).

Response 255: UPC is presently operating wind farms in Hawaii, Maine, and Lackawanna, New York.

Response 256A: The SDEIS fully reviews the impacts of the proposed electric transmission line.

Response 256B: The 0.1-acre (4,000 square feet) of permanent disturbance for the proposed transmission line, as described in the DEIS, was a worst case estimate of the impact associated with the installation of approximately 120 wood pole structures. Temporary disturbance along the ROW during construction, and the permanent conversion of forestland to successional shrubland along the ROW during Project operation, are acknowledged in the DEIS. Additional detail on transmission line construction is included in response to Comment 3D (Water Resources Section) and in Section 2.4 of the SDEIS. All currently anticipated impacts associated with construction and maintenance of the 115 kV transmission line (including ROW clearing, temporary soil disturbance, and ROW maintenance) are described in Section 3.2.2 of the SDEIS and Sections 2.2 and 2.3 of the FEIS.

Response 256C: Most distance and area measurements included in the DEIS and SDEIS, including the length of the proposed transmission line, were determined using ArcGIS software.

Project Cost and Funding

Response 260A: Anticipated Project development costs are described in 2.7 of the DEIS.

Response 260B: Section 1130 (2)(d)(iv) of the Town Zoning Law requires that all of the requirements of any special use permit issued for the Project be assumed by any new owner.

Project Description

Response 3E: An on-site concrete batch plant has not been proposed for the project.

Response 9D: In the unlikely event UPC is not able to continue construction or operation of the project, protections will be in place to protect the residents of Cohocton. The Town of Cohocton's Zoning Law requires such contingency measures be put into place. Section 1130(2)(f) of the Zoning Law requires that, prior to issuance of a building permit, the developer provide a letter of credit or other acceptable surety to ensure the removal of the windmills if their use is discontinued. The Town's Engineer and Attorney are empowered to determine whether the surety provided by the developer is adequate and satisfactory. In addition, prior to issuance of a building permit, the developer must provide liability insurance at a level determined by the Town Board, to cover damage or injury which may result from the failure of any part of the wind energy facility and transmission line. Section 1130(2)(f) also requires that the developer provide a performance bond, letter of credit, or other surety to ensure that any environmental contamination by oil will be addressed.

Response 9E: There are a number of measurers that will ensure that the turbines run for their entire life and then are removed. Generally, alternative energy production cost is frontloaded as the capital cost of the improvements, (here, installation of the wind turbines and other associated facilities). Therefore, in order to recover the cost of the Project, there is a powerful incentive for UPC to operate the turbines for their full life. Nonetheless, The Town of Cohocton Windmill Local Law has extensive protections to ensure that, if towers are abandoned, they will not "litter the environment". For instance, under Section 1130(2)(d)(i) of the Windmill Local Law, any windmill which has been out of active and continuous service for a period of one year is required to be removed, together with all structures, guy cables, guy anchors and/or enclosures accessory to the windmill, and the site restored to as natural condition as possible, within eighteen months of the cessation of active and continuous use of the windmill. In addition, under Section 1130(2)(f)(i), the owner of a windmill is required to submit a letter of credit or other acceptable surety, prior to the issuance of a building permit, that is sufficient to ensure the removal if the use of the windmill is discontinued. Through the use of this financial mechanism, in the event the owner does not remove the windmill, the Town will be able to utilize the letter of credit or performance bond to ensure the work is done.

Response 11F: See response to Comment 9E.

Response 13A: The turbines proposed for the Project (both the originally proposed Gamesa G87 and the currently proposed Clipper C96), are larger than most installed turbines in the U.S. in terms of their generating capacity. These turbines are rated at 2 MW and 2.5 MW, respectively, while most turbines installed to date are 1.65 MW or smaller (in New York, the Madison and Maple Ridge Projects utilize 1.65 MW turbines, while the Fenner Project has 1.5 MW machines, and the Weathesfield [Wyoming County] Project utilizes 660 KW turbines). However, the basic technology of the higher megawatt machines is the same as that of turbines that have been installed and operational for years. The newer, larger turbines are designed and built based on knowledge gained through thousands of hours of operational experience. The proposed Clipper turbines have been tested and certified, and have now been installed Medicine Bow, Wyoming and at the UPC project in Lackawanna, New York. The Project would be unable to obtain financing if there was any significant concern regarding turbine reliability.

In terms of turbine dimensions, the proposed turbines are only marginally larger than those being installed elsewhere in the U.S. The proposed tower height of 80 meters is the same as that used for the Maple Ridge turbines, and the rotor diameter of 96 meters is 14 meters (46 feet) larger than those utilized at Maple Ridge. Maximum turbine height of 420 feet compares to a maximum height of approximately 400 feet at Maple Ridge. The currently proposed turbines are described in detail in the SDEIS. The noise concern addressed in this comment is responded to in the Response to Comment 6B in the Sound Section.

Response 13J: See responses to Comments 9D and 9E (Project Description Section).

Response 16C: Meteorological towers constructed to measure pre-construction wind levels are generally removed at the time of Project construction. In the case of the Cohocton project, these towers will be replaced by permanent meteorological towers that will be used for on-going wind data collection and turbine performance testing. The anticipated location of the permanent meteorological towers is indicated in Figure S3 of the SDEIS. All pre-construction meteorological towers will come down.

Response 20A: Turbine locations, as originally proposed, are shown in Figure 3 in the DEIS. This document was available for public review at the Town Clerk’s office, the Cohocton Town Library, UPC’s Cohocton office and on a public world wide web site. Larger scale maps of this layout, along with proposed property lines and landowner names were provided to the Lead Agency as a follow-up to the submission of the DEIS. The revised turbine layout was shown in Figure S3 of the SDEIS and the currently proposed layout is indicated in Figure 2 of the FEIS. Additional detail with respect to the turbine locations is available in the site plans filed by CPP with the Town. Those site plans have been the subject of numerous public meetings.

Response 37A: The DEIS evaluated impacts at 48 possible turbines sites. The Project as proposed at that time would have involved construction of 41 2 MW turbines (82 MW total). The revised Project currently proposes to construct up to 36 2.5 MW turbines (90 MW total). While the nameplate generating capacity of the Project has increased, the actual number of turbines has been reduced by at least five. The Dutch Hill Project is proposed to consist of 16 turbines. That Project is comprehensively reviewed in the Draft Environmental Impact Statement, accepted for that Project, and the cumulative impacts between the Dutch Hill and Cohocton projects are reviewed in that DEIS and in the SDEIS prepared with respect to the Cohocton project.

Response 37B: The DEIS indicated that the Project operations and maintenance (O&M) facility would include a 25,000± square foot building and an associated 0.5 acre storage yard. The building would resemble an agricultural building, and would be located within the Project site on Lent Hill or Pine Hill. Additional information regarding the location, size, and appearance of the proposed O&M Building, is included in the Project Description section of the SDEIS.

Response 37C: The proposed Brown Hill Substation will be sized to accommodate 125 MW of wind-generated power. It will thus be able to accommodate the proposed Cohocton Wind Power Project as well as the Dutch Hill Wind Power Project.

Response 40A: As described in Section 2.0 of the DEIS, the DEIS evaluated the potential impacts of developing 48 individual turbine sites. The Project as proposed at that time would have involved development of 41 of the 48 potential sites. With the revised turbine layout, the development of up to 36 turbines is currently proposed. The environmental impact of the currently proposed Project is evaluated in the SDEIS and FEIS.

Response 40B: As stated previously, CPP currently proposes to use the Clipper C96 turbine. A SDEIS has been prepared to evaluate the environmental impacts of the alternate turbine and revised Project layout. Should a different turbine ultimately be selected, additional SEQR review and permit modification will be undertaken as necessary.

Response 40K & 40L: Since no substantial adverse impacts were identified in the original Sound Study included in the DEIS (Appendix I), there was no specific need to investigate low noise turbine upgrade options. The Clipper C96 turbine is currently being proposed for the Project and testing indicates that that this turbine has a lower sound profile than the Gamesa G87. Updated sound analysis is included in Section 3.7.2 and Appendix I of the SDEIS, and Section 2.7 and Appendix F of the FEIS.

The commenter is correct that different wind turbines have different sound characteristics/specifications. However, their variability in this regard is relatively minor. While sound specifications are certainly a factor in turbine selection decisions, this decision is based on numerous other factors as well, including cost, availability, power generating capacity, and suitability for the existing wind resource. The turbine ultimately selected is generally the one that presents the best combination of these factors at a given time, for a given site. It would be inappropriate, and unworkable, to mandate that one criterion be used in the turbine selection process to the exclusion of others. It is worth noting that the currently proposed Clipper 96 turbine is best suited to the Cohocton wind resource, and thus can generate the desired output using the fewest turbines. Field noise testing performed to date by the manufacturer also indicates that the C96 will have a total sound pressure level that is below average for units in this size class and at least 2 dBA quieter than the previously proposed Gamesa unit.

Response 40O: Comment noted. The requirements of the Town's Zoning Law, and the authority available to the Planning Board under that Law and SEQR to place conditions on any approval of the Project, provide the Town with the authority needed to assure that all impacts arising from the height of the wind turbines are mitigated to the maximum extent practicable. Further, windmills in excess of 400 feet in height have been proposed or constructed by Project sponsors in other municipalities.

Response 51G: All lines connecting the turbines to the collection station will be installed underground. UPC plans to acquire rights to utilize land for the transmission lines through negotiated landowner agreements, which have not yet been finalized.

Response 56C: Nighttime visual impacts of the proposed turbines are addressed in both the DEIS and SDEIS (Section 3.5.2 and Appendix F in both documents). Animated nighttime simulations (showing the flashing turbine lights) are also included in Appendix D of the SVIA (see CD included with Appendix F of the SDEIS). A preliminary FAA lighting plan and information on a turbine light shield are included in Appendix F of the SVIA. Sound impacts of the turbines are also fully addressed in the DEIS and SDEIS (Section 3.7.2 and Appendix I of both documents).

Response 62: In regard to potential impacts on property values, please see response to Comment 5A in the Socioeconomic Section. Lease agreements are still being negotiated with the landowners.

Response 85F: Ninety percent of the turbines are sited along existing farm roads. The landowners welcome the fact that these roads will be improved and maintained at UPC's expense. The underground cables will be trenched in, the top soil will be restored and there will be no more work needed for the cables under normal operating conditions. Transportation impacts associated with Project construction and operation are discussed in Sections 3.8.2 of the DEIS and the SDEIS and Section 2.8 of the FEIS. As indicated in those documents, Project construction could result in damage to local roads and temporary traffic delays. Blockage of private driveways or farm lanes by construction vehicles would be short-term. Any prolonged blockage could only occur with the landowner’s approval. A revised Transportation Routing Plan, included as Appendix G to the FEIS, defines likely delivery routes to the site and identifies intersections that would require improvement. Any damage or improvement to public roads that occur as a result of Project related activities will be paid for by CPP. Because construction activity will not occur during the winter, there will be no effect on the plowing of local roads. Clearing of snow from Project access roads will be done on an as needed basis by CPP, or a contractor employed by CPP.

Response 86B: Each turbine contains approximately 100 gallons of gear box oil plus about 17 gallons of hydraulic fluid (in the yaw and pitch drives, as well as the hydraulic station).

Response 94A: See response to Comment 20A.

Response 103B: The Project DEIS and associated support studies fully address the environmental impacts of the Project as originally proposed. The SDEIS and FEIS address the revised Project and some concerns/information that were brought to light during the public comment periods.

Response 113B: See response to Comment 16C. The data from the existing temporary meteorological towers has been presented to the Town and reviewed at a meeting. The data was not left in the Town's possession because it is trade secret material.

Response 147E2: It is understood that sodium vapor lights have been implicated in avian collision mortality at substations. Consequently, such lighting will not be used at the collection station or substation for the Cohocton Wind Power Project. As stated on page 98 of the DEIS, substation lighting will be kept to a minimum and turned on only as needed by switch or motion detector.

Response 147E3: Lattice wind turbine towers are believed to pose a greater hazard of avian collision, because they allow birds to perch in close proximity to spinning rotors. No such towers are proposed for the current Project(s). However, we are not aware of any studies that suggest that lattice meteorological (met) towers pose any greater hazard than monopole towers. In order to function properly, met towers are typically located several hundred feet from wind turbines, and thus do not provide any more of a perching opportunity than locally occurring trees, utility poles, and other structures.

Response 147E4: A Wetland Delineation Report has been prepared and submitted to the U.S. Army Corps of Engineers for their jurisdictional determination. Information from the delineation report has been incorporated into the SDEIS, and the actual report is included as Appendix B to the SDEIS.

Response 147E5: As stated in Section 2.4.6 of the DEIS, the anticipated means of installing buried cable will be through direct burial measures, such as a cable plow or trencher/rock saw. Open trenching with a back hoe would be used only when direct burial methods are not practical. Any trenching through streams will be conducted in the dry. Although not anticipated, any trenching through wetlands will include soil segregation and reestablishment of pre-construction contours, as well as implementation of sediment and erosion control measures.

Response 147E6: As described in the DEIS, soil and vegetation disturbance associated with the construction of all Project components will be kept to the minimum necessary. Disturbance associated with access road construction is being minimized through the use and upgrade of existing farm lanes throughout the site. Temporarily disturbed areas will be reclaimed and in non-agricultural areas will be allowed to revert to natural communities.

Response 147E7: The limited duration of the construction season in Upstate New York will not allow work stoppage during the wildlife breeding/nesting season (May 1-July 15). Observed nests will be avoided, and sediment and erosion control measures will be utilized to minimize impacts on aquatic organisms. It should also be noted that most construction will take place in active agricultural land that provides habitat for only a limited number of wildlife species. All of the wind energy projects constructed in New York to date have been constructed during the spring-summer nesting season and significant impacts on nesting birds have not been reported in connection with their construction.

Response 170: See response to comment 62.

Response 237D: Section 8 of the SDEIS considers the cumulative impacts of the Cohocton Project and other known wind energy projects in the area. Please also see the response to comment 25F in the Cumulative Impacts Section. No segmentation has occurred through use of corporate names or any other means. The cumulative impact analyses in the DEIS and SDEIS (as well as in the DEIS for the Dutch Hill Project) fully satisfy all cumulative impact analyses obligations under SEQR, and assure that the SEQR processes for both the Cohocton and Dutch Hill projects are no less protective of the environment than if the two projects had been addressed in a single review process.

Response 237G: The commenter is incorrect. The Project description and all analyses of impact included in the DEIS were based on the 2.0 MW Gamesa G87 turbine.

Response 238A: As stated in the DEIS, the four meteorological towers mentioned in the Project description are permanent towers that would be built as part of the proposed Project and are not the same as the temporary towers presently standing. Subsequent to the DEIS the number of meteorological towers was changed to three. The locations of the three permanent meteorological towers currently proposed are indicated in Figure S3 of the SDEIS. The data from the present, temporary meteorological towers is confidential and therefore not provided in the DEIS or the SDEIS. However, the data from the existing temporary meteorological towers has been presented to the Town and reviewed at a meeting.

Response 238B: See response 238A. Data from the temporary meteorological towers currently on site indicate that wind conditions are favorable for development of the proposed Project. The revised Project layout addressed in the Section 2.0 of the SDEIS has eliminated turbines from sites with marginal wind conditions. The permanent towers discussed in the DEIS are to be erected during construction of the Project and will not be collecting data during the SEQR process.

Response 238C: The developer agrees, and has addressed the revised Project in the SDEIS.

Response 238D: The reference to a G90 machine is a typographical error. The analysis was based on the dimensions of the Gamesa G87, as described in the DEIS. See also Response to Comment 238C.

Response 239B: CPP prepared a SDEIS which addressed changes in the proposed turbine model and layout. As with the DEIS, this document evaluated the potential impact associated with the largest Project that could be constructed (i.e., 36 turbines). Any future reduction in turbine number (as described in the FEIS) would result in less impact than reported in the SDEIS.

Response 239C: All components of the Project described in the DEIS were located completely within the boundaries of the Town of Cohocton. The transmission line as currently routed and described in the SDEIS, does cross into the Town of Avoca in the vicinity of Van Aucker Road.

Response 240A: WindPro2.5 was the software package used for layout of the wind turbines. The meteorological analysis conducted for turbine placement is confidential and proprietary.

Response 240B: Subsequent to the publishing of the DEIS, a different wind turbine (Clipper Liberty C96) has been proposed, as well as a revised layout. The SDEIS and FEIS describe these revisions.

Response 240C: Comment noted. This is a comment on the Town's Zoning Law, not on the DEIS.

Response 240E: Maximum height of the 2.0 MW turbines described in the DEIS was approximately 399 feet. Maximum height of the 2.5 MW turbines currently proposed is approximately 420 feet. Even at this taller height, turbine height plus 10% (i.e., 462 feet) is less restrictive than the setback for roads required in the Town of Cohocton Ordinance (tower height plus one hundred feet). The setback between turbines and non-participating residences is 1,500 feet and as described in Section 3.10 of the DEIS this setback distance is adequate to avoid/minimize any potential public safety concerns. Additional information on public health and safety risks, particularly ice shed, is included in Section 3.10.2 and Appendix M of the SDEIS. Please see also the response to Comment 13D.

Response 240F: The Town's Zoning Law authorizes uses for wind energy facilities in the Agricultural Residential District so long as a special use permit is obtained.

Response 240G: Potential impact to residences is acknowledged in various sections of the DEIS. These residences/receptors were the specific subject of many of the support studies included in the DEIS, SDEIS, and FEIS.

Response 240J: See response to Comment 5A (Socioeconomic Section) and the Cushman & Wakefield property value study included in the SDEIS as Appendix L.

Response 241A: Air turbulence or wake affect generally extends up to 7-8 rotor diameters down wind of an operating turbine. To the Applicant's acknowledge wake affects have not been implicated in any environmental impact studies or observations from operating wind power projects. See also response to Comment 6D in the Transportation Section and discussion of potential climatic impacts included in Section 3.4.2.2 in the DEIS.

Response 243: Access road dimensions/characteristics are described in Section 2.2.3 of the DEIS and SDEIS. A typical road cross section is included in Appendix A of the SDEIS. The decision to gate and lock access roads is up to the individual landowners.

Response 244A: The SEQR process for the Project includes review of the permanent meteorological towers proposed to be installed as part of the Project. The temporary meteorological towers previously installed by CPP were separately permitted and will be removed prior to project construction.

Response 244B: This comment does not relate to the DEIS. All of the currently existing temporary meteorological towers are properly permitted. The data from the present temporary meteorological towers is confidential and therefore not provided in the DEIS or the SDEIS. However, the data from the existing temporary meteorological towers has been presented to the Town and reviewed at a meeting.

Response 245: See response to Comment 26E in the Transportation Section regarding traffic management experience on the Maple Ridge Wind Power Project. Phase I of that project was over three times as large as the proposed Cohocton Project and resulted in very few traffic congestion problems. A construction manager and contractors with extensive experience in wind power project construction were utilized on that project. Individual/companies with similar experience are anticipated to work on the Cohocton Project.

Response 246A: To the extent details are known, the Operations and Maintenance building is described, and its impacts are reviewed, in the SDEIS. Specific details of the Operations and Maintenance building will be developed as part of the Town's permitting process.

Response 246B: The proposed turbines will be subject to a comprehensive maintenance program as described in the Project Description section of the DEIS. The currently proposed Clipper turbines are equipped with an on-board hoist that reduces the need for cranes during turbine maintenance and repair. A crane on site full time is not needed due to the fact that most service is done with the turbine winch and the turbine elevator. Turbine specifications included in Appendix A of the SDEIS indicate that routine maintenance on the Clipper turbine occurs once at 500 hours and then again at 6 month intervals.

Project Purpose, Need and Benefit

Response 99C: See response to Comments 9C (Community Character Section) and 12A (Socioeconomic Section). In regard to the environmental benefits, it should also be noted that, although the Project may not force the closure of fossil fuel generating facilities, every kilowatt hour of power generated by the Project will eliminate the need for a comparable amount of fossil fuel-generated power. See also response to Comments 147D1 (Air Impacts Section), 221H (Project Purpose, Need and Benefit of the Public Hearing Comment Responses), and 234B (Aesthetic and Visual Resources Section of the Public Hearing Comment Responses).

The status of windmill turbine technology is such that the three blade, upwind design is most appropriate in areas with a wind resource such as upstate New York. This turbine has been shown to be suitable for utility use. No other design is currently feasible or practicable

Response 247A: Please see the response to comment 238E in the Executive Summary Section.

Response 247C: In order to maintain the reliability of the power grid, reserve and back-up sources of power of various types are always required, regardless of the sources of electric power generation that are in operation at any particular time. Such back-up is needed because all sources of power generation are subject to unanticipated outages and power demand may experience sudden spikes. See response to Comment 147D1 (Air Impacts Section) regarding how wind generated power is utilized on the grid.

Public and Agency Involvement

Response 63E: Publication of the notice of public hearing was in compliance with state and local law and exceeded those requirements. Notice of the May 25, 2006 public hearing was published in the May 3 edition of the NYSDEC Environmental Notice Bulletin and in the April 27 and May 1 editions of the Hornell Evening Tribune.

Response 262A: Comment noted. All municipalities and agencies believed to have approval or consultative jurisdiction are listed in the DEIS and SDEIS.

Response 262B: Comment noted. The United States Department of Agriculture and the Golden Nematode Act are not implicated by this Project.

Public Safety

Response 13D: All of the potential public safety concerns expressed by the commenter are addressed in the DEIS and SDEIS. Setbacks from roads, property lines, and residences minimize the risk to the public from ice throw, lighting, or brake failure. In addition, as indicated in Section 3.10.2.2 and Appendix M of the SDEIS, these occurrences are not “common” as indicated by the commenter.

Response 14F: Additional discussion regarding potential health effects associated with shadow flicker/strobe affect and low frequency noise from operating wind turbines has been included in Section 3.10.2.2.7 of the SDEIS.

Response 34E: The potential for ice to be thrown some distance from the turbines is described in Section 3.10 of the DEIS (Pages 132-133 and 136-137). Additional information regarding ice shedding is included in Section 3.10.2.2.1 and Appendix M of the SDEIS. See also Responses to Comment 13D above and Comment 13E in the Land Use and Zoning Section.

Response 51I: Each wind turbine will receive scheduled preventive maintenance inspections during the first year of operation and twice a year in subsequent years. However, Operations and maintenance staff will be on duty during core operating hours (eight hours a day, five days per week) with weekend shifts and extended hours as required. In the event of turbine or facility outages, the supervisory control and data acquisition system (SCADA) system will send alarm messages to on-call technicians via pager or cell phone to notify them of the outage. The Project will have an on-call local technician who can respond quickly in the event of an emergency. Please refer to the Operations and Maintenance section of the DEIS (Section 2.5) for further details.

Response 51J: As stated in the DEIS, construction of the proposed wind turbines will comply with all applicable state and federal codes. Proper grounding of the turbines is essential to comply with electrical codes and prevent/minimize turbine damage in the event of a lightning strike. The Town will also inspect the construction of the Project to ensure it complies with its approval and standard engineering practices. It is in CPP’s interest to comply with all code requirements and protect its investment by properly grounding the turbines. CPP will not be able to obtain insurance for the project if the project is not properly grounded.

Response 56G: Please see response to Comment 14F.

Response 56J: Potential ice shed/ice throw impacts are discussed in Section 3.10 of the DEIS, and elaborated on in Section 3.10.2.2.1 and Appendix M of the SDEIS.

Response 57D: Potential health affects are discussed in Section 3.10.2.2.7 of the SDEIS. Please see also response to Comment 25G (Land Use and Zoning Section).

Response 73D: As described in the DEIS, modern wind turbines are grounded and include lighting protection systems to prevent damage from lighting strikes. If lightning strikes result in damage at all, it is typically surface damage to the blade tips, rather than a fire in the nacelle. Additional information regarding lighting damage and the response to a turbine fire is provided in Section 3.10.2.2 of the SDEIS.

Response 78A and 78B: The comment appears to be making the argument that no agency has the authority to regulate wind energy generation facilities in New York from the standpoint of public health and safety. That argument is erroneous. Wind energy generation facilities are extensively regulated from the standpoint of public health and safety. For this Project, that regulation begins with the Town's Zoning Law, which establishes important requirements relating to noise; setbacks; ice and blade throw; marking of guy wires and cables; lighting; broadcast interference; ice buildup sensors; undergrounding of connecting cables; blade to ground distance; fencing; blade braking; building and grounds maintenance; inspections; compliance with national design and operational standards; lighting protection; wind-load bearing; performance bonds; insurance; fire protection; drainage; and a host of other, more general health and safety considerations. The New York State Public Service Commission will provide additional significant health and safety oversight through its oversight of electric corporations and electric plants as required under Section 68 of the Public Service Law, and through compliance requirements that will be set forth in a Certificate of Public Convenience and Necessity (CPCN). CPCNs issued for wind energy projects typically include requirements addressing numerous health and safety issues, including DPS rights to inspect all electric plant; requirements with respect to vegetation clearing along transmission right-of-ways; facility safety and security requirements, facility maintenance standards; emergency response plans; and adherence to design, construction and operational standards established by the New York Independent System Operator, and all of the relevant electrical reliability organizations.

Response 85E: Potential public safety impacts associated with ice shed/throw and proposed mitigation measures are described in Section 3.10 of the DEIS and Section 3.10.2.2.1 of the SDEIS. See also, response to Comments 13D and 34E.

Response 91C: Potential impacts on public safety are described in Section 3.10 of the DEIS and SDEIS.

Response 91D: Operational sound and ice shed/ice throw impacts are fully described in Sections 3.7 and 3.10 of the DEIS and SDEIS. Appendix M of the SDEIS includes detailed information on ice throw.

Response 91F: Potential impacts on groundwater are discussed in Section 3.2.2 and Appendix C of both the DEIS and the SDEIS. Pre-construction and post-construction survey of residential wells within 1000 feet of a proposed turbine site are committed to in the DEIS and described in Section 3.2.3 of the SDEIS.

Response 102A: The DEIS and SDEIS address the public safety and noise impacts of 2.0 and 2.5 MW turbines, respectively. All of the analyses included in these documents are based on the specific characteristics, dimensions, and specifications of the turbines proposed.

Response 104C: Fire protection and potential response are described in Section 3.10.2.2 of the DEIS and Section 3.10.2.2.4 of the SDEIS. See also Section 3.10.2.2 of the SDEIS. UPC will also be coordinating with the Fire Departments.

Response 104D: Fire protection and potential response to a fire in a turbine nacelle is described in Section 3.10.2.2 of the DEIS and Section 3.10.2.2.4 of the SDEIS. See also Section 3.10.2.2 of the SDEIS.

Response 104E: To UPC's knowledge, the local volunteer fire department has not made any test runs to determine how long it will take to get to the turbine site. UPC will coordinate with the local fire departments.

Response 110A: The terminology used in the discussion of stray voltage in Section 3.10.1.3 of the DEIS (geometry, shielding, rock/soil resistively, proximity, etc.) is provided to indicate that various factors related to site conditions, the source of electric current, and its proximity to people or livestock, influence the potential for stray voltage (defined on page 133 of the DEIS). As noted in the DEIS, stray voltage is not created by a properly installed and maintained wind energy Project.

Response 110B: Because stray voltage is not anticipated to result from Project construction and operation, there will be no effect on individuals with pace makers.

Response 110C: See response to Comment 110B. Livestock are particularly sensitive/susceptible to stray voltage because their moist noses and mouths often come in contact with metal surfaces that can carry an electric current (water troughs, barn stanchions, etc.). However, because stray voltage is not anticipated to result from Project construction and operation, there will be no impact to livestock, children or pets.

Response 185: See response to Comments 25G and 184 in the Sound Section.

Response 309A: See response to Comment 307A (Socioeconomic Section) regarding the adequacy of road setbacks. The risks associated with ice throw at various distances are discussed in Section 3.10 of the DEIS and Section 3.10.2.2.1 and Appendix M of the SDEIS.

Response 309B: See Section 3.10.2.2.7 of the SDEIS regarding low frequency noise and associated health affects.

Response 310: See response to Comment 309A.

Response 311: See response to Comment 307A in the Socioeconomic Section. The setback between turbines and non-participating residences is 1,500 feet (greater than 457 meters). As described in Section 3.10 of the DEIS and SDEIS, this setback distance is adequate to avoid/minimize any potential public safety concerns, including tower fall, blade failure, ice throw, fire, etc.

Response 312: See Section 3.10 of the DEIS and SDEIS for a discussion of safety matters during construction and operation. Setbacks have been established in the Town Zoning Law to provide a safe buffer around adjacent structures.

Response 313A: The causes of stray voltage and risk posed by the phenomenon are fully described in Section 3.10 of the DEIS. The proposed Project will be properly designed and constructed, and therefore this impact is not anticipated to occur.

Response 313B: Risk of electrocution is low, as the public will not have access to any high voltage lines or equipment. Buried electrical lines will be deep enough so as not to come in contact with farm equipment and will be listed by the Dig Safely New York organization (www.digsafelynewyork.com, 800-962-7962). The 115 kV line will have adequate ROW width and ground clearance to ensure that electrocution will not occur, and the electrical equipment within the proposed collector station and substation will be enclosed by chain link fence to prevent public access.

Response 314: Fire hazard/response is addressed in Section 3.10 of the DEIS and SDEIS.

Response 315: The advantage of taller towers is discussed in response to Comment 209A in the Description of Proposed Action Section of the public hearing comment responses.

Response 317: The pitch system, that controls the blade orientation based on wind conditions, and the advanced electronic control system, regulate the speed of the turbine and the power output. See also the information on the Clipper C96 in Appendix A of the SDEIS.

Response 318A: See response to Comment 307A in the Socioeconomic Section.

Response 318C: See response to Comment 307A in the Socioeconomic Section.

Response 319: See SDEIS Section 3.10.2.2 regarding response to fire. The DEIS (Section 3.10.3.2.4) commits to the development of a Fire Protection and Emergency Response Plan in consultation with local fire departments, and outlines the anticipated components of this plan. A Spill Prevention Control and Countermeasure (SPCC) Plan will also be developed as described in Section 3.2.3

of the DEIS.

Response 320A: The risk of lightning strikes and means of protecting the turbines from fire or damage associated with such strikes is fully described in Section 3.10 of the DEIS and the SDEIS. As mentioned in the SDEIS, the currently proposed Clipper turbines include lightning receptors at the tip of each blade, which connect through brushes on the blade bearing and main shaft to carry lightning strike current down the tower to the ground. For service crew and machine safety, a steel mesh Faraday cage in the nacelle provides an added protective measure. It is worth noting that, because of their height, to the extent that turbines attract lightning, they will reduce potential for strikes on nearby structures, trees, and vehicles.

Response 320B: The turbines are fully grounded and will be the highest structures on the site. Therefore residences and trees will be less likely to be hit by lightning. The complaint resolution process described in the DEIS, and expanded upon in the SDEIS (Section 4.2), outlines a procedure for reporting and resolving any problems.

Socioeconomics

Response 5A: Section 3.9.2.2 of the DEIS describes the results of a quantitative study that was conducted by the Renewable Energy Policy Project (REPP) in 2003, titled *Effect of Wind Development on Local Property Values*. REPP assembled a database of real estate transactions adjacent to every wind power project in the United States (10 MW or greater) that became operational between 1998 and 2001 (a total of 10 projects, including the Madison and Fenner Projects in Madison County, New York). The results of this study showed no negative affect on property value from existing wind farms. More specifically, the REPP study concluded that there is no evidence that the presence of the Madison and Fenner wind farms had a significant negative effect on residential property values in Madison County, New York (Sterzinger et al. 2003).

The REPP study has been criticized by some because it assumes that all properties within the study area have a view of the respective wind farm, does not account for property distance to the wind farm, uses a questionable statistical analysis, and includes inappropriate transactions (e.g., estate sales, sales between family members, sales due to divorce, etc.). To present a clearer understanding of the actual effects of existing wind farms on property values, a Master of Science thesis project was undertaken by Benjamin Hoen of Bard College. A summary of this report is set forth in Section 3.9.2.2.1 of the SDEIS.

The Hoen study's analysis of 280 home sales within 5 miles of the Fenner Wind Farm did not reveal a statistically significant relationship between either proximity to, or visibility of, the wind farm and the sale price of homes. Additionally, the analysis failed to uncover a relationship even when concentrating on homes within one mile of the wind farm that sold immediately following the announcement and construction of the Project. This study therefore concluded that in Fenner, a view of the wind farm did not produce either a universal or localized effect on home values. To the degree that other communities resemble the Fenner rural farming community, similar conclusions are anticipated (Hoen, 2006).

A site specific analysis of this concern was undertaken for the proposed Cohocton Wind Power Project by Cushman & Wakefield (see Appendix L of the SDEIS).

This study concluded that the proposed Project should have no impact on the values for undeveloped properties or existing farms. It also found that local property values will be much more susceptible to the local economy than to changes in the viewshed created by the proposed Project. Consequently, Cushman & Wakefield concluded that the project should have no significant impact upon future sales or values of developed properties given the prevailing conditions.

Given the results of the REPP, Hoen, and Cushman & Wakefield studies described above, and the similarity of the Madison County sites to the Cohocton Project area, it is reasonable to conclude that the proposed Cohocton Wind Power Project will not have an adverse impact on local property values.

In regard to views from Loon Lake, cross section analysis in the original VIA suggests that views of the Brown Hill turbines will be well screened by existing vegetation and topography (see VIA Figure 7, Sheet 2). Ballooning conducted on November 11, 2005, also indicated that views of the Brown Hill turbines from Loon Lake will be limited, at best. This is demonstrated by photos from Viewpoints 36, 37, and 38, included in Appendix B of the original VIA (DEIS Appendix F).

Response 6A: See response to Comment 5A and results of Cushman & Wakefield study included in the SDEIS. The SDEIS provides further analysis of the potential impact of the Project on property values. Additional information included in the SDEIS includes a review of a Study by Ben Hoen of the impact of the Fenner Wind Farm on property values within 5 miles of that project, and a memorandum prepared by Cushman & Wakefield addressing potential impacts of the Cohocton Project. The Hoen Study concluded that views of the Fenner Project did not produce either universal or localized effects on home values. The Hoen Study also concluded that, to the degree that other communities resemble the Fenner rural community, similar results would be anticipated. Cushman & Wakefield concluded that the Cohocton Project should have a negligible impact on property values in the area. Please see Section 3.9.2.2 of the SDEIS.

Response 6F: Although the Payment in Lieu of Taxes (PILOT) agreement has yet to be finalized, based on other wind power projects in New York, it is anticipated that the Cohocton Wind Power Project will generate approximately $700,000 annually (over the life of the project) for the affected taxing jurisdictions. This money can be used to reduce or stabilize local taxes, or finance desired municipal facilities and services. In addition, Project construction and operation will result in significant expenditures for local goods and services, including some increase in local employment. Additional information on the economic benefits of the Project is included in the Economic Impact Analysis included as Appendix K to the SDEIS.

Response 9F: See response to Comment 5A (Socioeconomic Section) regarding the Project's possible effect on property values.

Response 9G: The financial benefits of the Project to the Town of Cohocton are described in the DEIS and in response to Comment 6F. The PILOT agreement is still being negotiated with the Stueben County Industrial Development Agency. Additional information on the risks and opportunities associated with development of a community wind power project is included in the response to Comment 25H in the Alternatives Section.

Response 11A: See previous response to Comment 9G. Benefits to the town (financial and others) are described in the DEIS and SDEIS. In addition, it should be noted that CPP will be investing millions of dollars to develop this Project, and many times more to construct it. Many aspects of the wind power industry are very competitive, from turbine pricing to energy sales.

Response 11B and 11C: See responses to Comments 6A, 9A (Aesthetic and Visual Resources Section), & 9B (Biological Resources Section), respectively.

Response 11D: The DEIS discusses potential impacts on tourism based on the experience of other communities with wind power projects. These communities, including those that relay heavily on tourism, such as Palm Springs, California, have generally not experienced an adverse effect in this regard. No specific information is provided by the commenter that contradicts or cast doubt upon the conclusions presented in the DEIS. It is worth noting that the Town of Fenner, New York is using its local wind power project to enhance tourism. It was recently announced that the Fenner Renewable Energy Education (FREE) Center will be developed. The proposed facility will include bus parking, an interpretive center, walking, trails, and a picnic pavilion. More information is available at http://www.fennerwind.com. The only potential adverse impacts to the winery industry relate to visual and community character issues. Please see response to comments 9A (Aesthetics and Visual section) and 9C (Communication Facilities section).

Response 12A-D: Contrary to the belief expressed in this comment, the proposed Project will provide significant benefits to both the community and the environment. As stated previously, PILOT payments will provide approximately $700,000 annually to local taxing jurisdictions. As described in Section 3.9 and Appendix K of the SDEIS, local employment and expenditures, as well as annual lease payments to participating landowners will inject significant additional revenue into the local economy. As described in the SDEIS, the Project will generate approximately 236,500 MWh of power annually from a renewable energy source. Power production by the Project will displace an equivalent amount of fossil fuel-generated power with no emissions to the air or water. The Project will thus not contribute to acidic participation, mercury contamination, global warming, asthma or other respiratory ailments. As also described in the DEIS, these environmental benefits will be achieved with very few impacts to the natural and cultural resources within the Cohocton area. See also, responses to Comments 147D1 (Air Resources Section), 221H (Project Purpose, Need and Benefit Section), and 234B (Aesthetic and Visual Resources Section of the Public Hearing Comment Responses).

Response 13I: See response to Comments 5A and 6A.

Response 14B: See response to Comment 5A.

Response 14D: See response to Comment 6F regarding the anticipated PILOT agreement. PILOT payments are not considered in the calculations of state aid to school districts, and therefore will have no affect on the level of financial aid the Wayland-Cohocton School District receives from New York State. The vast majority of state aid to school districts is based upon a formula which uses the assessed value of property within the district, and the income of residents within the districts. As a general rule, the poorer the district in terms of assessed value of property and income, the more state aid the school district receives. See State Aid to Schools: A Primer, dated December 2005, available on the New York State Education Department's web site at http://www.oms.nysed.gov/faru/Primer/Primer05-06A_files/primer05-06.htm. CPP will be conveying its interests in the project to the Steuben County Industrial Development Agency, and leasing the project back. By entering into this arrangement with the Steuben County Industrial Development Agency and the PILOT agreement, the property and its improvements will effectively be taken off the tax rolls for purposes of assessment, and therefore, should not decrease, in and of itself, the state aid received by the Wayland Cohocton School District. Because the properties are taken off the tax rolls, the assessed value of property within the district is in effect lowered, and should in fact, increase the amount of state aid to the district. The PILOT payments should not be factored into account in determining the basic state aid to the school district, and instead, should be able to be used for other projects the school district may want to pursue, but cannot without the extra funds offered by the PILOT payments.

Response 24D: See Section 3.9.2.2.1 and the Cushman & Wakefield report "Technical Memorandum – Evaluating Property Values" in Appendix L of the SDEIS for a discussion of property values and potential impacts due to the wind farm. Also please see the Response to Comment 5A.

Response 30B: See response to Comment 5A and results of Cushman & Wakefield study included in the SDEIS. Based upon the studies and analyses discussed in that study, there is no demonstrated need for a property value protection program. Although a limited property value protection program was put into place by the developer of the Fenner Project for the benefit of a limited group of property owners, CPP is not aware of any municipality in New York that has required that such a program be provided in connection with a wind energy project.

Response 33A: See response to Comment 5A and results of Cushman & Wakefield study included in the SDEIS.

Response 40G: The PILOT process is controlled by the Industrial Development Agency and the provisions of its Uniform Tax Exemption Policy. Further, the proposed PILOT payments are for fixed amounts per year.

Response 40H: See response to Comment 5A regarding the potential impact of the Project on local property values.

Response 40I: Guarantees of new job creation are not possible. The DEIS and SDEIS provide reasonable estimates of employment during Project construction and operation based on the experience of UPC and other wind power developers on other projects elsewhere in the United States. As a point of comparison, the Maple Ridge Project in Lewis County, New York created over 400 construction jobs and will employ an operations staff of 20.

Response 51H: The Project will, at its own cost and expense, maintain comprehensive general liability and property liability insurance with liability limits of not less than $1 million for injury to or death of one or more persons in any one occurrence, with an annual aggregate limit of no less than $2 million. The Project will also maintain adequate causality insurance for damage or destruction to its improvements situated on the premises. The liability insurance to be provided by CPP will be subject to review by the Town pursuant to Zoning Law Section 1130(2)(f)(ii).

Response 54C: See response to Comment 5A regarding property values.

Response 56B: The Project's potential impact on tourism is discussed in Section 3.9.2.2.2 of the DEIS.

Response 56D: Please see response to Comment 5A.

Response 57B: Please see response to Comment 5A.

Response 57C: See response to Comment 6F.

Response 58A: See response to Comment 5A.

Response 58E: See Section 3.9 of the DEIS and SDEIS and Appendix K of the SDEIS, which describe the local economic benefits anticipated from the Project. These include a PILOT agreement and lease payments to local landowners. Economic benefits associated with the construction and operation of the Project are also described including the direct and indirect economic impacts. Please also see the responses to comments 5A and 30B.

Response 60B: Please see response to Comment 5A above and Comment 285D in the Aesthetic and Visual Resources Section.

Response 61D: Please see response to Comment 5A and 24D regarding land value.

Response 63D: See response to Comment 5A with respect to property values.

Response 73E: See response to Comment 5A.

Response 74A: Towns must base current assessments on current conditions. Also see response to Comment 5A.

Response 74C: See response to Comment 5A regarding the likely affect of the Project on property values. Given that property values are unlikely to decrease as a result of the proposed Project, there should be no adverse affect on assessed valuation and tax revenue. In fact, the Project will provide positive economic benefits for the Town in the form of revenues from payments in lieu of taxes.

Response 74D: CPP proposes to sell the power from the Project into the wholesale power market. Individual residents will be able to purchase the power through their retail supplier. All residents of the town will benefit from the PILOT payment and other economic benefits offered by CPP.

Response 75B: The Project's potential impact on socioeconomics, aesthetic/visual resources, and public safety are fully addressed in the DEIS and SDEIS. See also responses to Comment 6F above, Comment 9C in the Community Character Section, and Section 3.10.2.2.7 of the SDEIS.

Response 84B: See response to Comment 5A.

Response 84C: See response to Comment 6E.

Response 85G: See response to Comment 5A.

Response 86C: Potential socioeconomic impacts of the Project are discussed in Sections 3.9 of the DEIS and the SDEIS. See also responses to Comments 6F and 12A.

Response 88B: See response to Comment 5A and results of the Cushman & Wakefield Study included in the SDEIS.

Response 90B: See response to Comment 5A.

Response 99A: See response to Comment 5A.

Response 104B: As described in the DEIS and in response to Comment 6F, CPP will be making average annual PILOT payments on the order of $700,000 over the life of the Project. These payments can assist with the support of the various municipal services and facilities including the local fire department.

Response 126: See response to Comment 5A.

Response 145: See response to Comment 5A.

Response 182G: See response to Comment 5A, the results of the Cushman & Wakefield study included as Appendix L to the SDEIS, and Section 3.9.2.2.1 of the SDEIS regarding potential effect on property values, especially the discussion of the Hoen (2006) study which specifically examined this question in relationship to turbine/project visibility. It should be noted that viewshed analysis indicates that the Project will generally be well screened from properties in wooded settings, especially those in valley areas.

Response 183B: See Response to Comment 5A, the results of the Cushman & Wakefield study included as Appendix L to the SDEIS, and Section 3.9.2.2.1 of the SDEIS regarding potential effect on property values.

Response 247B: Project benefits and needs were described in the DEIS and have been elaborated on in several previous responses (see response to Comments 9C (Community Character Section), 12A, and 147D1 (Air Resources Section)).

Response 301: Analyses included in the DEIS and SDEIS indicate that the proposed Project will have limited adverse environmental or economic impacts on the surrounding area. In addition, in many cases these impacts are offset or out-weighed by the beneficial environmental and economic impacts that will result from Project construction and operation.

Response 303: The PILOT agreement is still being negotiated with the Stueben County Industrial Development Agency. Also see response to comment 9G.

Response 305: See response to comment 58E.

Response 306: As indicated in the Transportation Assessment Report included as Appendix J to the SDEIS, public road improvements are anticipated to be limited to a relatively small number of intersection widenings. At the discretion of the affected highway departments, these road improvements will be removed following Project construction and the intersections returned to their pre-construction condition.

Response 307A: As noted in response to Comment 13E (Land Use and Zoning Section), residential setbacks in the Town of Cohocton are more stringent than those required by many other local wind ordinances in New York State. The local setbacks adequately protect adjacent landowners from significant noise, shadow flicker, and public safety impacts. The Town's Zoning Law includes several different setback requirements, which are intended to serve different purposes. Some of the setbacks do relate to adjacent property lines. Further, the Planning Board has the authority to require larger setbacks on a case-by-case basis if necessary to mitigate or avoid a significant impact.

Response 307B: The purpose of the Cohocton wind law is to protect the health and safety of Project neighbors and all Cohocton citizens. CPP's compliance with this law will minimize any adverse effects of the wind farm. In addition, the positive economic effects described in the DEIS and SDEIS will benefit all property owners in the town. Also, please see the response to comment 6A.

Response 308: CPP is unaware of any location where a homeowner's policy has been cancelled or premiums increased solely because of a wind turbine installation in the vicinity.

Sound

Response 5B: Both the original sound study in the DEIS (Appendix I) and the revised analysis in the SDEIS (Appendix I) indicate that operating turbines will not be audible from sites in the Town of Wayland, due to their distance from potential receptors (at least 6 miles), and the fact that Wayland is upwind of the Project in terms of prevailing wind direction. Loon Lake is not large enough, or close enough, to the proposed Project to influence sound transmission characteristics. Sound reflections off the surface of a lake would only be appreciable if the turbines were located immediately on the opposite shore from the point of observation.

Response 6B: The DEIS included a comprehensive Sound Study (Appendix I) and the SDEIS includes a revised Sound Study based on the revised Project layout and alternate turbines currently proposed (Appendix I). The FEIS includes supplemental analysis based on the latest sound data for the proposed Clipper C96 turbine (Appendix F of the FEIS). The conclusions of this final study indicate that the Project will fully comply with Town wind ordinance requirements; with the exception that turbine generated noise will slightly exceed 50 dBA at the corners of two non-participating properties on Brown Hill. The maximum predicted sound level at any non-participating residence is just under 43 dBA. For comparison purposes, Table

11 in the DEIS and the Table of Common Sounds and Associated Sound Pressure Levels in Appendix I of the SDEIS lists the decibel level of common sound sources. The generally accepted threshold sound level for possible sleep disturbance recommended by the EPA and World Health Organization is 35 dBA. The maximum predicted sound level outside any home in the Project area is 44 dBA - with most others being much lower. The noise reduction from outside to inside any typical home with the windows open is at least 10 to 15 dBA; consequently, Project noise should be essentially inaudible and below the 35 dBA sleep disturbance threshold inside all homes in the Project area.

Response 6E: According to the World Health Organization (Berglund & Lindvall, "Community Noise", 1995), the approximate threshold for sleep disturbance is a continuous interior sound level of about 35 dBA. A typical home provides an attenuation of at least 10 - 15 dBA, even when the windows are open, and much more when they are closed. Consequently, it is generally agreed that a steady outside sound level of 45 dBA or less precludes any problems with sleep disruption. The predicted exterior sound level from Project operation under downwind conditions at the commenter's residence at 10286 Avery Hollow Road is 39 dBA so the interior sound level will be sufficiently low that there shouldn't be any problems whatsoever with sleep disturbance.

Response 8C: Newcomb Hollow Road is not shown on the most recent sound contour maps for the Project contained in the SDEIS because the entire road is essentially outside the Project area in terms of potential sound impacts. Even under downwind conditions, Project operational noise should be imperceptible anywhere on the commenter's property (4561 Newcomb Hollow Road). A very low, Project-only sound level of about 35 dBA is conservatively predicted under downwind conditions at this location. Qualitatively, such a sound level would be comparable to the level inside a particularly quiet library. Since the Project sound level is so low, and only occurs during relatively windy conditions, it will essentially be hidden by the natural sound of trees rustling.

Response 13B: See response to Comment 13C in the Water Resources Section.

Response 14A: Operational sound from the proposed turbines should be roughly equivalent to that produced by turbines at other operating wind power projects in New York State

(Madison, Fenner, Wethersfield, and Maple Ridge). The increase in overall sound level relative to the background sound level that would otherwise exist is highly dependent on the point of observation or concern; consequently, it is not possible to make any meaningful comparisons with Fenner without looking at specific locations or distances. The greater setbacks and more stringent noise threshold required by the Town of Cohocton ordinance (as compared to the requirements in place in Fenner at the time that project was built) should reduce noise levels experienced by adjacent property owners when compared to the operating projects. In general, according to the NYSDEC, an increase of more than 6 dBA above the pre-existing background level may create adverse impacts. Conservative predictions from the Sound Study included in the DEIS (Appendix I) indicate that only a few dwellings over the entire Project area might intermittently experience such an increase. At most homes in the area Project noise will be completely inaudible at all times and increases of much less than 6 dBA are expected. The SDEIS includes a complete analysis of the sound impacts from the proposed Clipper turbines. See SDEIS Section 3.7.2 and Appendix I.

Response 16B: As with a common window fan, there is no noise specifically associated with the starting or stopping of the turbine rotors. The turbines only generate significant noise when the rotor reaches maximum speed during windy conditions. It is under this condition that turbine noise is modeled and evaluated in the noise assessment.

When the wind changes directions, the turbine nacelle automatically turns so that the blades are facing directly into it (avoiding additional aerodynamic noise that could result if the wind were to enter the blades at an angle significantly different from 90 degrees). The “yaw motor” that affects this movement makes a small amount of noise, but it is highly unlikely to be enough to be of any consequence at more than a thousand feet away (the distance to most homes from any turbine). This particular sound source is not tested as a part of the IEC (International Electrotechnical Commission) standard noise test procedure (IEC 61400-11); consequently, precise data on noise from the yaw motor is not available. The fact that this noise is not mentioned in the test procedure tends to indicate that it is not significant.

Any grinding sound produced by an operating turbine would typically be the result of a mechanical problem. If this were the case, the turbines’ sensors would either call for automatic shutdown or maintenance personnel would detect the problem and would shut the affected turbine down. In the case of any persistent turbine noise, the complaint resolution process described in the DEIS and Section 4.2 of the SDEIS provides the opportunity for the public to alert CPP to the problem and assure that it is resolved.

During stormy weather, general environmental noise levels are elevated due to high winds, rustling trees, pelting rain and lightning. These sounds make it relatively difficult to perceive any noise from a nearby wind turbine. Turbine rotors have a governing maximum rotational speed that is never exceeded even during unusually high winds, so operational noise from a typical turbine never exceeds the maximum noise level used in the modeling study and impact analysis. Under very severe wind conditions the rotors automatically shut down. Under such a circumstance, wind flow past a turbine may generate some aerodynamic noise but just how audible it would be over and above the other natural noises mentioned above is questionable, particularly inside a house where most people are during a storm.

Response 19A: In accordance with NYSDEC guidelines, one of the primary noise impact assessment criteria is based on an allowable 6 dBA increase above the measured ambient sound level. As part of the Sound Study included in the SDEIS (Appendix I), a field survey was performed to determine the existing background levels over the Project area. Predicted noise levels from the proposed project were modeled to identify the area defined by the 6 dBA cumulative increase contour line (measured background plus proposed project noise level), in this case, 42 dBA. This indicated areas that were above the 6 dBA increase where project noise might be audible.

A "Second Level" modeling study as described in the NYSDEC Noise Policy showed that most residences were located well outside the 42 dBA contour and are therefore unlikely to be able to hear project operational noise under most normal circumstances. There are several residences that may experience levels in the 42 to 44 dBA range, and one or two that might experience 45 dBA. However, given the conservative assumptions inherent in the modeling and the fact that sound levels in the vicinity of 42 - 45 dBA are not particularly loud in absolute terms, a significant adverse reaction to project noise is not expected. See Section 3.0 and 4.0 of the Noise Study in Appendix I of the SDEIS.

Absolute, or fixed, decibel sound criteria have also been considered in the analysis in relation to the local noise ordinance where specific limits are given. The sound study demonstrates that these criteria also will be met. Compliance with the ordinance is anticipated.

Response 34A: The DEIS, SDEIS and FEIS include sound studies that characterize and evaluate the various types and frequency of sound that will be produced by the turbines. The frequency spectrum of the Clipper C96 Liberty Turbine, as measured in field tests and reported in the noise assessment reports included in the SDEIS (Appendix I) and FEIS (Appendix F), is “broadband” in character, meaning that the sound energy is more or less evenly distributed over the audible frequency spectrum and that it has no distinctive features, such as tones or a lopsided spectrum that is heavy on either the low or high end. Such a sound is normally described as bland or not very noticeable. A “swishing” sound will exist, which is periodic modulation of the sound intensity. This sound is generally more clearly discernible close to turbines and less discernible at the longer distances typical of the surrounding homes. There may be occasional atmospheric conditions when the swishing sound will be audible at surrounding homes.

Concerns about excessive levels of low frequency noise are often raised with respect to wind energy projects; however, fears about this are unfounded. It takes a specific amount of low frequency noise, best measured in terms of the C-weighted sound level, to cause perceptible vibrations, or sounds that are felt rather than heard. The noise modeling done for the DEIS uses the full spectrum in its calculations, rather than just the A-weighted sound level, and calculates the C-weighted sound level at the nearest houses to any turbines. All of these levels are well below the minimum threshold for the onset of perceptible vibrations (about 70 dBC), so no adverse impact from low frequency noise is expected. Response to Comment 6E in the Public Safety Section, and Section 3.10.2.2.7 of the SDEIS, also discuss low frequency noise. Also see the response to Comment 40B in the Project Description section.

Response 40C: The L90 statistical sound level is commonly misunderstood. It was used *only* in the field survey to measure the minimum background sound level that exists in the Project area so that any impacts from Project noise could be compared to this low level of masking noise. The L90 level is not used in any way to predict or measure Project sound levels. The model predictions assume a constant and continuous noise from the Project turbines. For any constant noise, all statistical levels - such as the L90, L50, L1 or the average (Leq) – are all the same value. The L90 is used to capture the quiet lulls in naturally variable background sound levels to provide a conservative basis for evaluating the background noise level, so that potential noise impacts can then be analyzed.

For a separate discussion of rotor start up and shutdowns see response to Comment 16B.

Response 40D: The noise modeling scenarios used in the project Sound Studies are considered conservative for the following principal reasons:

- The maximum sound power level for the turbine is used as a starting point for the calculations (this noise level occurs only at wind speeds of 8 m/s or greater).
- The sound power level represents the sound level produced downwind of the turbine. Lower sound levels upwind and to the sides of each turbine have been ignored and the maximum noise level is assumed to exist in all directions.
- The model assumes that any given receptor point is simultaneously downwind of all the turbines in the project – which is a physical impossibility for a receptor point between two turbines, for example.
- A relatively low coefficient for ground absorption of 0.5 is used in the model calculations resulting in a relatively high predicted project sound level at any given point. Fields and wooded areas would normally be assigned a fairly high ground absorption value. Since the typical distance from any turbine to any residence is on the order of 1,500 ft. or more, ground interaction effects will be significant. We would certainly agree that ground absorption is negligible in the immediate vicinity of a turbine.
- The presence of woods has been ignored in all calculations whereas ISO 9613 would allow a significant loss to be taken when any sizeable wooded area lies between a source and a receptor point.

In general, a conscious effort was made to ensure that the predicted levels in the contour plots do not underestimate actual project noise, which is expected to be lower than shown.

Response 40E: A sound level of 35 dBA is an extremely quiet sound level that might be found, for example, in a library or remote desert area. Such a low level is not a common or typical noise limit for new projects and is found only in one or two European countries. This level is below the minimum natural background sound level measured in the field survey during 8 m/s wind conditions.

Response 40F: An outline of the proposed complaint resolution process is included in Section 4.2 of the SDEIS.

Response 40M: The property line noise limit of 50 dBA in the Cohocton wind ordinance is consistent with, or more restrictive than, those imposed by numerous other municipalities in New York State that have wind power ordinances. Towns with 50 dBA noise limits at the property line of non-participating landowners include the Towns of Fenner, Westfield, Eden, Henderson, Augusta, and Stockbridge, New York. In addition, by requiring that wind turbines be setback approximately 1000 feet farther from neighboring dwellings than from adjacent property lines, the Town's Zoning Law effectively requires that sound impacts at dwellings be lower than at property lines.

Response 40Q: See response to Comment 40D.

Response 40R: As described in Response 40D, the noise modeling for the project is consciously conservative to allow for a number of uncertainties, including the uncertainty inherent in measuring the sound power level of the WTG proposed for the project and uncertainties in calculating sound propagation losses. Noise level prediction is not an exact science and never can be. However, field testing at dozens of completed facilities indicates that modeling using the Cadna/A software (based on ISO 9613) is reliable and in most cases levels lower than those predicted are actually measured.

Response 54D: See response to Comment 5B regarding sound assessment.

Response 56H: The sound studies included in both the DEIS and the SDEIS indicate that the Project will result in minimal noise impacts and will comply with the noise limits contained in the Town Zoning Law. Beyond the absolute noise limit of 50 dBA, the sound study also evaluated the potential audibility of Project noise above the natural background level. A comparison of the measured background level over the site area and the predicted levels from the Project show that for the vast majority of homes in the area, Project noise will not be audible above the existing background level and that only a few, mostly participating, residences may be able to hear the turbines at certain times.

Response 58F: Penalties and other remedies for violation of the noise criterion are provided in the Town's Zoning Law.

Response 61B: Potential health effects associated with shadow flicker and low frequency noise are addressed in Section 3.10.2.2.7 of the SDEIS. See also response to Comment 25G (Land Use and Zoning Section).

Response 82A: The Noise and Health Fact Sheet states, in the most general way, that various physiological reactions have been observed as a result of exposure to noise. While these correlations may well be true, the Fact Sheet says nothing about wind turbines or even what levels of noise and exposure durations are necessary before these effects are observed. There is no way to tell if these symptoms, such as tension or "increased gastric emptying", would result from hearing the Project, a babbling brook or military jets flying over. The one numerical example that is given – that a sound level of 35 dBA or less is recommended by the EPA to prevent sleep disturbance – will not be exceeded by Project noise. The maximum predicted Project operational sound level *outside* any residence in the Project area is about 45 dBA. The noise reduction from outside to inside any typical house, even with the windows open, is 10 to 15 dBA; consequently, a maximum Project sound level of 30 to 35 dBA can be expected inside one or two of the closest homes with significantly lower levels inside all other residences. See also the response to Comment 56H, 88F, and others regarding potential noise impacts.

Response 85A: It is not known whether this braking noise occurs or how loud it is, but under the extremely high wind conditions required for the turbine to shut down the background sound level due to trees whipping in the wind would be so high that it would be very difficult for any sound from a wind turbine at least 1500 ft. away to be clearly heard by an outside observer. Such peak wind conditions are only likely during stormy and rainy conditions when most people are inside.

Response 88F: The likely duration and magnitude of sound generated by the operating turbines is fully described in the DEIS and the SDEIS (Section 3.7 and Appendix I in both documents), as well as Section 2.7 and Appendix F of the FEIS.

Response 101A: The residence at 9955 Wagner Gully Road is not shown on the original or recently revised noise contour maps based on the new turbine arrangement because it is well outside the area where any possible impact from project noise is conceivable. A special model calculation was run and it was found that, under downwind conditions, a project-only sound level of approximately 21 dBA might occur at this location. Such a sound level is so quiet that it is rarely observed and is below the sensitivity of many sound level meters. Qualitatively, this sound level is similar to the level that might be found in a remote desert area during dead calm wind conditions.

Response 107A: Twelve Mile Creek Road (CR 9) is shown on the latest sound level contour plots; however, it is well outside the area where any impact from Project operational noise is possible. Project operational noise is expected to be completely inaudible at all times along the entire length of this road.

Response 109: See response to Comment 19A.

Response 119: Please see the response to comment 107A.

Response 182F: The noise study presented in Appendix I of the SDEIS was prepared in accordance with generally accepted procedures for such studies. As described in the Sound Study, the Project is now proposing to use the Clipper Liberty wind turbine and NOT the Gamesa turbine. The commentator’s assertion that no data has been “gathered at actual installations of the proposed equipment” is incorrect. The turbine sound power level used as the primary input to the noise model comes from field measurements of an operating Clipper Wind Turbine prototype that is essentially identical to the turbines that are planned for the Project.

Section 2.6 of the report specifically addresses the issue of the wind speed profile (change in wind speed as a function of elevation) and the difference between speeds at the nacelle height and at the ground.

The wind speed data collected over the two week field survey period shows that the turbines will be non-operational (and generate no noise at all) approximately 30-40% of the time. Accordingly, the noise clearly will not be incessant. During calm, quiet times when an intrusive noise source would be most likely to cause disturbance, the Project will rarely be operating.

The subject of sleep disturbance was not deliberately avoided but rather was not mentioned because no sleep disturbance is expected. Please see response to Comment 6B with respect to sleep disturbance.

The quoted turbine sound level of 105.3 dBA may sound high but it must be realized that this is NOT the sound pressure level that exists at the tower base or nacelle, as is often erroneously believed. This value is the overall sound power level of the turbine (including noise from all sources aerodynamic and otherwise), which is a completely different quantity than the much more familiar sound pressure level – the quantity that is measured with instruments and heard by the ear. The typical sound pressure level at the base of a turbine like those proposed for this Project is around 55 to 58 dBA. Sound power levels have a much higher apparent magnitude because they include a relatively large factor that accounts for the radiating surface area of the source. Although always confusing to non-professionals, power levels are important because they allow the sound pressure level to be calculated at any distant point of interest.

Although it may appear to "dissipate into the air" as if by magic, sound originating at a certain point decays with distance in accordance with the laws of physics and acoustical science. The specific propagation loss calculations in the noise model were carried out in strict accordance with ISO 9613-2 Acoustics – Attenuation of Sound during Propagation Outdoors. See also, response to Comment 6E in the Public Safety Section.

Response 184: See response to Comment 6E in the Public Safety Section, Comment 25G in the Land Use and Zoning Section, and Section 3.10.2.2.7 of the SDEIS.

Response 238G: Subsequent to the publishing of the DEIS, a different wind turbine (Clipper Liberty C96) has been proposed, as well as a revised layout. The SDEIS describes these revisions. See Section 3.5.2.2.6 of the SDEIS for a discussion of shadow flicker and Section 3.7 of the SDEIS regarding sound. Mitigation measures proposed for receptors receiving shadow flicker or noise impacts are fully described in the SDEIS.

Response 297A: Any noise modeling using the Windpro software can essentially be considered preliminary in nature. A significantly more sophisticated program, Cadna/A, was used for the current Cohocton noise assessment. All sound propagation calculations in this program are done in strict accordance with ISO 9613 - Part 2 Acoustics – Attenuation of Sound during Propagation Outdoors. This standard calculates sound propagation losses assuming "standard day", or neutral, atmospheric conditions – without any real provision for simulating other conditions. However, because it is recognized that "non-standard" atmospheric conditions and "stable" thermal gradients may occur from time to time, increasing the relative audibility of Project noise, a number of conservative assumptions are made elsewhere in the model to provide some allowance for these more favorable sound propagation conditions. For example, the maximum, downwind sound level from each turbine is assumed to occur in all directions simultaneously (an observer between two units is modeled as receiving the downwind level from both at the same time, which is physically impossible), a low ground absorption coefficient is assumed for the entire site when such ground would normally be considered highly absorptive, etc.

The inherent objective of the model is essentially to predict sound contours that are unlikely to be exceeded under any wind or atmospheric condition. Most of the time, Project sound levels will be significantly lower than shown in the contour plots.

Response 297E: The noise output, or, more correctly, the sound power level, of wind turbines in the 1.5 to 2.5 MW class is remarkably similar. All turbines in the class generally fall into the range of 103 to 106 dBA re 1 pW. The assertion that the 2 MW

Gamesa G87 turbine is “13 to 20 dB’s louder” than the 1.5 MW GE 1.5sle model is completely erroneous. At most, the Gamesa unit is 3 dBA louder.

In any event, neither of these turbines will be used in the Project. UPC has now decided to use the Clipper C96 model, which has a maximum sound power level of about 103 dBA re 1 pW (in an 8 m/s wind).

Response 297F: As mentioned in response to comment 297A, the Windpro software was not used for the noise assessments included in the DEIS and SDEIS. The modeling in the current assessment considers the worst-case combination of wind speed and turbine sound output.

Response 297G: The current noise modeling fully considers the local topography in 3 dimensions. Each turbine is modeled as a spherically radiating noise source at 80 m above local grade.

Response 297H: “Radiant cooling”, or the thermal temperature profile created in the atmosphere by radiant cooling of the air near the surface, can cause the sound of any given noise source to be more perceptible than usual under certain circumstances at a distant point of observation. This possibility is indirectly considered in the current noise modeling as explained in response to comment 297A.

The octave band frequency content of the turbine sound power level, including the noise down to about 25 Hz, is used in the model to predict overall A-weighted sound levels over the site area. Low frequency noise, or the potential for disturbance or ill-effect from low frequency noise, is also considered separately in Section 3.7 of the latest noise assessment report (Hessler Associates, Inc. Report 1755-010606-D, 12/15/06). Appendix I to the SDEIS.

Response 297I: The Town of Cohocton Local Law #2 2006 “Windmill Local Law” includes a specific methodology for measuring operational sound levels from the Project and determining whether the Project is in compliance with the ordinance limit of 50 dBA at non-participating property lines.

Response 297J: This is a comment on the Local Law, and therefore, outside the scope of the DEIS.

Response 297N: A proposed Environmental Compliance Monitoring Program is described in Section 4.3 of the DEIS. It is also assumed that means of monitoring and enforcing of commitments made in the DEIS and SDEIS, including compliance with noise thresholds established by the Cohocton wind law, will be spelled out in the Special Use Permit for the Project that will be issued by the Town. Many of these commitments are also anticipated to be conditions of other required permits issued by various involved agencies.

Response 297O: The setbacks of turbines from both property lines and residences have been specified by the Town of Cohocton Windmill Local Law and are described in Section 3.2 and Appendix I of the SDEIS. The sound study in the DEIS and the SDEIS indicate that the predicted sound levels from the operation of the turbines will meet the requirements of the local law and that the impact of the sound of the turbines on neighboring property owners will be low.

Response 297P: Current sound contour plots (noise maps) now show all areas potentially affected by Project noise. Beyond the 42 dBA contour Project noise is likely to be rarely audible.

Response 297R: Please refer to the SEQR regulations at 6 NYCRR 617.2 (l) for the definition.

Response 297T: Section 3.7 of the noise assessment report included as Appendix I to the DEIS, (Report 1755-010106) discusses low frequency noise and use of the C-weighted scale for measuring it. The C-weighted sound level was predicted in the modeling assessment at the closest potentially affected residence and found to be well below the threshold where any kind of adverse impact might result.

Response 297U: During the background survey the prevailing sound level as a function of wind speed was determined for both high and exposed locations and also for sheltered locations in valleys because residences in both types of areas exist at the site. At the key wind speed of 8 m/s when the turbines generate the maximum amount of noise (relative to the background) the background level in high locations was found to be 37 dBA and a slightly higher level of 38 dBA was found in the sheltered monitoring location in Wagner Gully. The lower and more conservative level of 37 dBA was taken as the design background level for the entire Project area. It was not assumed that all residences are located in sheltered valleys – since many are obviously up on top of the hill – but rather it was assumed that the lower sound level existed at all residences to be conservative in the impact analysis.

Response 297W: A First Level Noise Impact Evaluation under the NYSDEC Noise Assessment Policy was conducted for the project. This evaluation models noise from the proposed project in a simple and conservative manner considering only the reduction in sound level with distance (See SDEIS Appendix I). The purpose of this analysis is to identify the area defined by the 6 dBA cumulative increase contour line (measured background plus proposed project noise level), in this case, 42 dBA.

A Second Level Noise Impact Evaluation modeling study which more realistically considered all normal sound propagation loss mechanisms was conducted for the residences identified as being on or within the 42 dBA contour line. Conservative assumptions were applied to increase the likelihood that the impact of project noise on the community would not exceed predicted levels. Because of the conservative assumptions, sound levels substantially lower than those predicted in the modeling plots are likely to occur.

The Second Level modeling study showed that most residences were located well outside the 42 dBA contour and are therefore unlikely to be able to hear project noise under most normal circumstances. There are several residences that may experience levels in the 42 to 44 dBA range and one or two that might experience 45 dBA. In theory, these levels mean that project noise may be audible above the typical minimum background sound level. However, it must be remembered that the modeling is conservative in a number of important respects:

The background design sound level of 37 dBA is the L90 level which represents the quietest 10% of time. As such, this level quantifies a very low value for masking environmental noise. Most of the time (90% of the time) a higher background sound level will exist during an 8 m/s wind condition.

The noise model also assumes that an 8 m/s wind is blowing simultaneously from all directions and that the turbine sound level experienced at any given point is the sound level that would occur downwind from all nearby turbines. Such a sound level is a physical impossibility in many situations.

The sound level used for the C96 is based on a prototype and the final production version will incorporate noise mitigation measures not present on the prototype. Therefore, the actual sound level of the production model is expected to be less than the value used in the modeling.

Given these conservative assumptions and the fact that sound levels in the vicinity of 42 - 45 dBA are not particularly loud in absolute terms, a significant adverse reaction to project noise is not expected. The maximum sound level of 45 dBA is normally considered an acceptable design limit and numerous regulatory agency (i.e. USEPA, WHO) standards and guidelines commonly use a nighttime noise limit of 45 dBA for new projects.

Response 297Y: The residence at 9955 Wagner Gully Road is not listed as a receptor or shown in the noise maps because it is well outside the region where any potentially adverse impact might occur.

Response 297Z: As mentioned in the response to Comment 297W, it cannot be definitively concluded that anyone on or inside the 42 dBA contour will be impacted because the predicted sound levels are conservative and are unlikely to actually be that high under most normal circumstances. The opinion expressed in the report that an adverse impact is unlikely at sound levels below 46 dBA is merely an attempt to give some qualitative meaning and context to the numbers.

Impact assessments worldwide almost universally consider residences rather than property lines as the point of concern because that is where the future noise source is likely to be heard on a consistent basis. Unless specific information is available on the location of future residences during the design phase of a project, only current residences are normally considered in such assessments. It would be unrealistic for a new project to anticipate all potential future residences – especially wind projects where the project area covers many square miles.

Response 299: Fencing around the turbine sites is not practicable or desirable, given the agricultural use of the surrounding land in most locations. Mitigation measures are described in Section 3.10 of the DEIS to protect public safety.

Transportation

Response 6D: The turbines will have very little effect on wind characteristics at the ground level. They are therefore not anticipated to have any affect on snow drifting or the need for plowing of local roads during the winter. A telephone inquiry to the Town of Fenner Highway Department indicated that turbines at that site had not changed the patterns of snowfall/drifting, or road plowing requirements (T. Bodley, Personal Communication).

Response 24M: A Transportation Assessment Report is attached as Appendix J to the SDEIS, and a revised Transporation Routing Plan is included as Appendix G to the FEIS. These documents define proposed travel routes from intersections with Route 390 to the Project site, and identifies specific intersections that will require improvement/expansion to accommodate the turning movements of large construction vehicles. All environmental impacts associated with these improvements/expansions are addressed in the SDEIS. No general road widening or culvert or bridge replacement are anticipated to be necessary. Because the proposed routes avoid the Village of Cohocton, no impacts to village roads and adjacent resources are anticipated.

Response 26D: The Transportation Assessment Report and revised Transporation Routing Plan prepared for the Project identified primary routes that would be followed by trucks delivering turbine/tower components to the Project site. None of these routes would pass through the Village of Naples. Local sources of gravel/crushed stone and concrete are concentrated in the Cohocton, Wayland and Bath areas. Cement mixers and gravel trucks coming from these areas would not need to pass through Naples to reach the Project site.

Response 26E: See responses to Comments 26C (Aesthetic and Visual Resources section) and 26D. No road closures in or around the Village of Naples are anticipated during construction. It is worth noting that during construction of the Maple Ridge Wind Power Project in Lewis County, no closure of state or county highways was required during two years of construction (W. Moore, Personal Communication).

Response 83I: The Town has retained environmental consultants (Bagdon Associates), engineering consultants (LaBella Associates) (sub-contracted by Bagdon) and legal counsel (Whiteman, Osterman, and Hannah) to review the DEIS, the SEQR process, and legal/liability issues. Bagdon Associates is a full service environmental consulting firm with extensive experience in the preparation and review of environmental impact statements and relevant support studies (noise studies, ecological investigations, etc.). Whiteman, Osterman and Hannah is a leading environmental, land use, and zoning law firm in upstate New York. LaBella is a leading engineering firm in upstate NY and is based in Rochester. Together, the three firms are providing the Town with independent advice with respect to the Town's review of the Project.

Response 300A: The SDEIS addresses proposed transportation routes in Section 3.8. Revised routing is addressed in Section 2.8 of the FEIS.

Response 300B: As stated in response to Comment 24M, specific sites where intersection improvements are necessary have been identified and all impacts associated with these anticipated public road improvements are addressed in Section 3.8 of the SDEIS and Section 2.8 of the FEIS. Specifically, the SDEIS addresses turning radii and road improvements anticipated to be needed along the proposed transportation routes.

Response 300C: Typical construction working hours are expected to be 6:30am to 5:00pm six days a week. Estimates of construction traffic are included in the Transportation Assessment Report included as Appendix J to the SDEIS. Construction will occur from mid May through October; distinct phases will require different equipment, and deliveries along with different impacts. The early stages will be dump trucks operating during normal construction hours (6:30 – 5), mid stages will have concrete trucks, and the actual wind turbines arriving on long trailers, this will also occur during normal construction hours. The final stages will have significantly less equipment/traffic, and will focus on placing the rotors, detail work. This stage may require certain extra hours in order to lift the rotors during calm winds (i.e. 5 AM). But these early hours will be on site, and will not require big trucks passing through off-site access at these hours.

Response 300D: Likely transportation routes are described in the revised Transportation Routing Plan included as Appendix G to the FEIS. Likely sources of gravel and concrete are local to the Project, as described in response to Comment 26D. These resources are abundant in the area and there is no reason to believe that construction of the proposed Project will preclude or adversely affect other construction activities.

Unavoidable Adverse Impacts

Response 147G1: See response to Comment 147E7 in the Project Description Section.

Response 147G2: As stated in the in the response to Comment 1B in the Biological Resources Section, post-construction avian and bat mortality monitoring plans will be developed in consultation with the NYSDEC and USFWS.

Response 147G3: As stated on page 79 of the DEIS, " If the preconstruction breeding bird survey indicates the presence of listed grassland bird species, the Project developer will undertake a post-construction habitat displacement study to ascertain whether, and to what extent, the operating turbines are disturbing/displacing nesting grassland birds."

Response 147G4: See response to Comment 147G2. Similar consultation would take place if the displacement study described in response to Comment 147G3 is undertaken.

Response 147G5: See response to Comment 147E1 in the Biological Resources Section and Comment 147E2 in the Project Description Section regarding Project lighting.

Response 147G6: Details of any monitoring protocols (including possible worker training) will be developed in consultation with the agencies, as indicated in responses to Comments 1B (Biological Resources Section), 147G2, and 147G4.

Response 147K1: See response to Comments 1B (Biological Resources Section), 147G2, and 147G4.

Response 147K2: See response to Comment 147K1.

Response 147K3: SEQR calls for agencies to review the environmental impacts of projects as early as possible in the project development process. Indeed, State and local permits necessary for construction of a project may not be issued until after an FEIS is accepted for the project. Consequently, the SEQR process for projects typically is completed before detailed conditions to be included in project approvals are developed. Lead agencies for wind energy projects in New York typically have completed their SEQR processes well in advance of the issuance of the environmental permits that may include detailed requirements for wildlife monitoring. Based on experience with previous projects, it is likely that such plans will be required as a condition of state and federal wetland permits, which must be issued before the project can be constructed.

Water Resources

Response 1A: A Wetland Delineation Report has been prepared and is enclosed as Appendix B to the SDEIS. The SDEIS includes revised wetland impact numbers and drawings showing areas of impact based on the revised Project layout. A Transportation Assessment Report has been prepared and is also included as an appendix to the SDEIS. The transportation study indicates that no bridge or culvert replacement will be necessary and that the only potential off-site wetland impacts occur where turning radii need to be improved at the intersections of public roads. These wetland impacts are addressed in the Wetland Delineation Report and Section 3.2.2.1.1 of the SDEIS.

Response 3D: Additional information on the construction and maintenance of the 115 kV transmission line, and associated environmental impacts, is included in Sections 2.0 and 3.0 in the SDEIS. Section 5.0 of the SDEIS includes additional information regarding the feasibility of installing this line underground. As now proposed, the transmission line will result in 1.4 acres of temporary disturbance and less than 0.1 acres of permanent wetland loss.

CPP also investigated various routes for the 115 kV line, specifically alternate routes across the Cohocton River Valley. The currently proposed route is described in the SDEIS. It was found that other routes were not feasible due to landowner preference (i.e., they didn't want the line) and environmental or logistical concerns (e.g., routing the line down Ryan Hollow Road would impact existing distribution lines, wetlands, and steep slopes).

Response 8E: Wetlands are generally being avoided, both on the generating site as well as along the transmission line route. This avoidance will minimize off-site impacts on water resources. Other means of minimizing impacts on these off-site resources include development and implementation of a sediment and erosion control plan and a stormwater management plan.

Response 13C: As discussed in the DEIS, no blasting is anticipated on this Project. It is worth noting that shallow bedrock was encountered on the Madison, Fenner, and Maple Ridge Wind Power Projects. Out of a total of over 200 foundation holes excavated for these Projects, blasting was necessary at only two tower sites (both on the Fenner Project). As discussed in the groundwater study included in the DEIS (Appendix C), the type of excavation and foundation work anticipated on the Cohocton Wind Power Project is not unusual, and is predicted to have only very localized and temporary impacts on ground water. If any blasting is necessary, it will be conducted in accordance with a blasting plan which will be approved by the Town.

Response 147F1: Anticipated temporary and permanent wetland impacts are described in the SDEIS, based on the revised Project layout and the completed on-site wetland delineation (SDEIS Appendix B). Means of avoiding, minimizing, and mitigating these impacts are also described in the SDEIS.

Response 147F2: See response to Comments 147E4 (Project Description Section) and 147F1.

Response 147F3: As described in the DEIS, a comprehensive sediment and erosion control plan will be implemented during construction, as required by the Project's SPDES permit/stormwater management plan.

Response 147J1: See previous responses to USFWS comments, particularly Comments 147E4, 147F15, and 147H2 (Alternatives Section).

Response 268: The commenter is correct that the proposed transmission line will cross New York State Freshwater Wetland AV-1. However, as stated in the DEIS, most of this crossing will utilize existing railroad ROW to minimize wetland disturbance associated with Project construction and operation. As indicated in the DEIS, CPP will obtain all necessary wetland permits from the NYSDEC and USACOE.

Response 269: Potential impacts to surface water and groundwater from installation of the transmission line poles are described in the DEIS and the Project groundwater study (DEIS and SDEIS Appendix C).

3.2 RESPONSE TO COMMENTS ON THE SDEIS

3.2.1 Public Hearing Comments

This Response Summary is the formal response to the oral comments received at the combined public hearing for the Cohocton Wind Power Project SDEIS and the Dutch Hill Wind Power Project DEIS, held by the Town of Cohocton Planning Board at the Cohocton-Wayland Central School on January 19, 2007. The original hearing transcript, with numbered comments identified, is included as Appendix J. This section contains separate alphabetical comment indexes (Tables 15 and 16, arranged by commenter) for general comments for which no response is necessary, and for substantive comments that have corresponding responses, which are also provided in this section.

Table 15. Cohocton SDEIS & Dutch Hill DEIS Public Hearing Substantive Comment List

Source	Comment Number	Primary Subject
Bolton, R. (Representative of the Environmental Compliance Alliance)	4.2	Sound
Bolton, R. (Representative of the Environmental Compliance Alliance)	4.3	Shadow Flicker
Buss, G.	8	NYS Windmill Law
Hall, J. (Spoke and submitted written speech)	13.1	NYS Department of State Entity Information
Hall, J. (Spoke and submitted written speech)	13.2	Local Windmill Law #2
Hall, J. (Spoke and submitted written speech)	13.3	Website
Hall, J. (Spoke and submitted written speech)	13.4	Permits & Approvals
Hall, J. (Spoke and submitted written speech)	13.5	Supplemental DEIS
Hall, J. (Spoke and submitted written speech)	13.6	Biological Resources
Hall, J. (Spoke and submitted written speech)	13.8	Clipper Wind Technology
Hersh, D.	7.2	Aesthetic & Visual Resources
Hersh, D.	7.3	Shadow Flicker
Hersh, D.	7.4	Sound
Hersh, D.	7.5	Aesthetic & Visual Resources
Hersh, D.	7.6	Project Design

Table 15. Cohocton SDEIS & Dutch Hill DEIS Public Hearing Substantive Comment List		
Source	**Comment Number**	**Primary Subject**
Hersh, D.	7.7	Property Values
Hersh, D.	7.8	Lease Agreements
Jones, B.	9.2	Socioeconomics
Jones, B.	9.3	Public Safety
Kemp-Conge, S.	10.1	Purpose, Need, and Benefit
Kemp-Conge, S. (Spoke and submitted written speech)	10.2	Socioeconomics
Kemp-Conge, S. (Spoke and submitted written speech)	10.3	Socioeconomics
Kota, B.	25.2	Property Values
Kota, B.	25.3	Property Values
Kota, B.	25.4	Dutch Hill Wind Power Project DEIS Executive Summary
Kota, B.	25.5	Purpose, Need, and Benefit
Morehouse, B.	2.2	Purpose, Need, and Benefit
Morehouse, B.	2.3	Segmentation
Morehouse, B.	2.4	Segmentation
Morehouse, B.	2.5	Project Design
Morehouse, B.	2.6	Project Design
Morehouse, B.	2.7	Project Design
Morehouse, B.	2.8	Sound
Morehouse, B.	2.9	Aesthetic & Visual Resources
Palmiter, B.	15.1	State Environmental Quality Review (SEQR)
Palmiter, B.	15.2	Project Design
Palmiter, B.	15.3	Project Design
Palmiter, B.	15.4	Meteorological Data
Palmiter, B.	15.5	Identity of Developer
Palmiter, B.	15.6	Aesthetic & Visual Resources
Palmiter, B.	15.8	SEQR
Palmiter, B.	15.9	Permits & Approvals
Palmiter, B.	15.10	Transportation
Palmiter, B.	15.11	Identity of Developer
Palmiter, B.	15.12	Socioeconomics
Palmiter, B.	15.13	Turbine Operation
Palmiter, K.	16.1	Project Design
Palmiter, K.	16.2	Property Values
Palmiter, K.	16.3	Geology, Soils, and Topography
Palmiter, K.	16.4	Public Safety
Palmiter, K.	16.5	Public Safety
Palmiter, K.	16.6	Biological Resources
Palmiter, K.	16.7	Project Decommissioning
Palmiter, K.	16.8	Turbine Operation
Sandford, D. (Spoke and submitted written speech)	1.1	Property Values
Sandford, D. (Spoke and submitted written speech)	1.2	Property Values
Sandford, D. (Spoke and submitted written	1.3	Property Values

Table 15. Cohocton SDEIS & Dutch Hill DEIS Public Hearing Substantive Comment List		
Source	**Comment Number**	**Primary Subject**
speech)		
Sandford, D. (Spoke and submitted written speech)	1.4	Property Values
Sandford, D. (Spoke and submitted written speech)	1.5	Property Values
Sandford, D. (Spoke and submitted written speech)	1.6	Property Values
Sandford, D. (Spoke and submitted written speech)	1.7	Property Values
Sandford, D. (Spoke and submitted written speech)	1.9	Property Values
Sandford, D. (Spoke and submitted written speech)	1.10	Property Values
Sandford, D. (Spoke and submitted written speech)	1.11	Property Values
Strausburg, R.	3.2	Socioeconomics
Strausburg, R.	3.3	Property Values
Trude, S.	11.2	Project Design
Trude, S.	11.3	Project Design
Trude, S.	11.5	Clipper Wind Technology
Trude, S.	11.6	Supplemental DEIS
Trude, S.	11.7	Property Rights

Table 16. Cohocton SDEIS and Dutch Hill DEIS General Comments From Public Hearing - No Response Necessary	
Source	**Comment Number**
Babcock, R.	23
Bolton, R. (Representative of the Environmental Compliance Alliance)	4.1
Bolton, R. (Representative of the Environmental Compliance Alliance)	4.4
Buss, G.	8
Coleman, C.	24
Feely, W. (Town Fire Chief and member of Town Board)	22.1
Feely, W. (Town Fire Chief)	22.2
Goldthwait, J.	18.1
Goldthwait, J.	18.2
Goldthwait, S.	5
Hall, J.	12
Hall, J. (Spoke and submitted speech in writing.)	13.7
Harold, D.	14
Hersh, D.	7.1
Hersh, J.	6
Hersh, T.	17
Jones, B.	9.1
Kemp-Conge, S. (Spoke and submitted speech in writing.)	10.4
Kemp-Conge, S. (Spoke and submitted speech in writing.)	10.5
Kota, B.	25.1

Laneer, T.	20
Morehouse, B.	2.1
Palmiter, B.	15.7
Robinson, C.	21
Sandford, D. (Spoke and submitted speech in writing.)	1.8
Strausburg, R.	3.1
Strausburg, R.	3.4
Strausburg, R.	3.5
Strausburg, R.	3.6
Trude, S.	11.1
Trude, S.	11.4
Wolcott, P.	19

This Response Summary is presented according to topic representing the issues raised in the various comments. Most individuals provided multiple comments that addressed multiple topics; therefore, each comment is listed under its appropriate topic.

Aesthetic and Visual Resources

Response 2.9: Please see comment response 2.3 in the segmentation section. The cumulative visual impact analysis was performed so that the cumulative impacts of the Dutch Hill and Cohocton Wind Power Projects and the WindFarm Prattsburgh Project could be understood. Refer to Section 8.2.2.3 and Appendix H, Figure 7 of the Dutch Hill Wind Power Project DEIS, and Section 8.0 and Appendix F, Figure 7 of the Cohocton Wind Power Project SDEIS.

Response 7.2: As stated in the Cohocton Wind Power Project SDEIS, the Project VIA and SVIA concluded that the Project would not have a significant adverse impact on community character. The Project will be significantly, or completely screened from most areas with concentrated residential development (Village of Cohocton, Village of Naples, etc.), and in the opinion of the VIA rating panel, generally appears compatible with a working agricultural landscape. In addition, noise, transportation, public safety, communications, land use and community services impacts also have been thoroughly reviewed and found to be small. It is also worth nothing that to the extent that the Project supports local farmers and helps keep land in active agricultural use, it will help preserve open space and maintain the area's rural character. Furthermore, by creating jobs, local expenditures, and municipal revenue, the Project will enhance the economic health and well being of the community. These financial benefits will be provided without the need for municipal and school district services and facilities required by most other forms of economic development. A viable economy and strengthened tax base are crucial to maintaining quality of life within a community.

Response 7.5: The contrast of the aviation warning lights with the night sky is strong in most dark, rural settings, and their presence suggests a more commercial/industrial land use. Viewer attention is drawn by the flashing of the lights, and any positive reaction that wind turbines engender (due to their graceful form, association with clean energy, etc.) is lost at night. While not disturbing (or even strongly perceptible) from roads and other public viewpoints, turbine lighting may be perceived negatively by area residents who may be able to view these lights from their homes and yards. However, it should be noted that nighttime visibility/visual impact will be reduced on this project due to 1) the proposed FAA lighting plan which proposes aviation warning lights on only half the turbines (Appendix F of the Cohocton SDEIS, and Appendix H of the Dutch Hill DEIS), 2) the steep slopes of Dutch Hill and other ridges that largely screen portions of the Project from many valley locations, 3) the concentration of residences in villages, hamlets, and along highways where existing lights already compromise dark skies and compete for the viewer's attention, and 4) UPC is researching the use of FAA approved shades on those turbines with lights to further reduce the ground perception.

Response 15.6: It is not clear what visual scenario the commenter believes to be the "worst case." The VIA, SVIA, and SVIA addendum for the Cohocton Wind Power Project, suggest that the greatest visual impact occurs when turbines are viewed at foreground distances and/or when the full extent of the project can be seen. Viewpoints were specifically selected to show both of these situations (see Viewpoints 94, 130, 133, 178, and 195 in the SVIA and SVIA addendum). In addition, Viewpoints 71A, 133, and 195 in the SVIA and SVIA addendum show the cumulative visibility and visual impact of multiple projects. As stated in the SVIA, viewpoints used for the development of simulations were selected to illustrate typical views of the proposed Project and the range of visual change that will occur with the Project in place.

Biological Resources

Response 13.6: Potential impacts to wetlands and archaeological resources are accurately described in the Sections 3.2.2 and 3.6.2 of the SDEIS for the Cohocton Wind Power Project. As indicated in this discussion, impacts to significant archeological resources are being avoided completely, and permanent impacts to wetlands will total less than 0.1 acre of filling, and 2.3 acres of vegetation conversion (in forested wetlands along the 115 kV transmission line).

Response 16.6: The presence of the turbines will not limit the landowners' ability to apply manure or other forms of fertilizer to adjacent fields. Experience with built projects elsewhere in New York State indicates that this activity occurs directly adjacent to built turbines, access roads, and substations.

Clipper Wind Technology

Response 11.5: The Clipper turbines have been tested and certified by Germanischer Lloyd (GL), and have now been installed Medicine Bow, Wyoming and at the UPC project in Lackawanna, New York. Additionally, Clipper turbines will be installed in two other projects before Cohocton.

Response 13.8: Section 2.4 of the Cohocton Wind Power Project SDEIS and the Dutch Hill Wind Power Project DEIS describe the proposed timeline. Construction will begin as soon as CPP and CPP II secure the necessary permits. CPP and CPP II are not sure of which reports the commenter speaks, but the commenter is mistaken. Clipper is producing turbines for the Cohocton and Dutch Hill Wind Power Projects to meet the 2007 build schedule.

Cohocton Windmill Local Law #2

Response 13.2: Local Law No. 2 was enacted by the Town on September 21, 2006, and then filed with the Secretary of State in November of 2006. Local Law No. 1 was in effect at the time that Local Law No. 2 was adopted, and was superseded only to the extent that it was inconsistent with Local law No. 2. The Cohocton SDEIS, and the Dutch Hill DEIS were both accepted as complete on December 20, 2006, after Local Law No. 2 became effective.

Dutch Hill Wind Power Project DEIS Executive Summary

Response 25.4: This comment is not clear. The Village of Cohocton is not mentioned on page 3 of the Wind Power Project DEIS. If the commenter is referring to Village of Cohocton on page 4 of Executive Summary, it is only being referenced as an example of one of the many areas within the Town of Cohocton which will be fully or partially screened from the view of the turbines.

Geology, Soils, and Topography

Response 16.3: Potential impacts on residential wells and proposed mitigation is described in Section 3.2 of the Cohocton Wind Power Project SDEIS and Dutch Hill Wind Power Project DEIS. As discussed in greater detail in Section 3.2.3 of the Cohocton Wind Power Project SDEIS, CPP will undertake pre-construction and post-construction surveys of all residential wells within 1,000 feet of a proposed turbine site.

Identity of Developer

Response 15.5: Canandaigua Power Partners, LLC (CPP) and Canandaigua Power Partners II, LLC (CPP II) are subsidiaries of UPC Wind Partners, LLC (UPC Wind or UPC). CPP is proposing to develop the Cohocton Wind Power Project, a wind-powered generating facility of up to 36, 2.5 megawatt (MW) turbines, which have a maximum generating capacity of up to 90 MW. CPP II is proposing to develop the Dutch Hill Wind Power Project, a wind-powered generating facility of up to 16, 2.5 megawatt (MW) turbines, which have a maximum generating capacity of up to 40 MW.

Response 15.11: The developer of the Cohocton Wind Power Project is CPP and the developer of the Dutch Hill wind Project is CPP II, both limited liability corporations that are wholly-owned subsidiaries of UPC.

Lease Agreements

Response 7.8: The revenues to leaseholders will come from the revenues of the projects, not Town taxes. The projects will make payments in lieu of taxes to the Town.

Meteorological Data

Response 15.4: Data collected from on-site meteorological towers is proprietary information. The Cohocton Wind Power Project DEIS did not indicate that this data would be provided in the Cohocton Wind Power Project SDEIS. Rather, it states that the data from the present, temporary meteorological towers is confidential and therefore not provided in the DEIS or the SDEIS. However, the data from the existing temporary meteorological towers has been presented to the Town and reviewed at a meeting. The data was not left in the Town's possession because it is trade secret material.

New York Department of State Entity Information

Response 13.1: CPP II was formed on February 9, 2006.

New York State Windmill Law

Response 8: CPP has not been able to identify the purported law to which the comment refers.

Permits and Approvals Required

Response 13.4: The building permit applications filed were preliminary ones. Final applications for building permits will be filed if the special use permits and site plan approvals that CPP and CPPII have sought are granted. Such final building permit applications will be filed after the issuance of those approvals, and will contain all signatures, insurance certificates, and other elements that are required by the Town's Zoning Law.

Response 15.9: UPC, CPP, and CPP II are registered to do business in the State of New York. This is the only registration or licensing needed.

Project Decommissioning

Response 16.7: The project will fully comply with the decommissioning requirements of the Cohocton Windmill Local Law #2. It should be noted that several turbine sites shown in the DEIS have been dropped from the currently proposed layout due to inadequate wind, based on pre-construction monitoring. CPP uses pre-construction wind monitoring to ensure that the turbines which are ultimately built will have adequate wind to operate in a profitable manner.

Project Design

Response 2.5: The commenter is correct. Figure S23 in the SDEIS for the Cohocton Wind Power Project is accurate in terms of indicating the limited area of land available to site proposed turbines. This figure was provided to illustrate the limited area of available land within the Town of Cohocton where wind turbines could be sited, and the developer's limited ability to relocate turbines.

Response 2.6: See response to Comment 2.5.

Response 2.7: The 50 dB noise threshold included in the Cohocton Windmill Local Law is the standard utilized in most local wind ordinances in New York State. The same threshold is used by the Towns of Fenner, Westfield, Eden, Henderson, Augusta, and Stockbridge, New York, among others.

Response 7.6: Turbine #1 is approximately 1,700 feet and Turbine #2 is approximately 1,800 feet from commenter's house.

Response 11.2: See response to Comment 2.5. Figure S23 in the SDEIS for the Cohocton Wind Power Project indicates that the proposed project can be accommodated, but that a substantially larger project or one with a significantly different layout, is precluded by required setbacks, available wind resource, and various environmental constraints.

Response 11.3: Figure S23 in the SDEIS for the Cohocton Wind Power Project is accurate in terms of indicating the limited area of land available to site proposed turbines. The most recent public available data including county records, town records, 911 emergency data and aerial photographs were used to determine locations of structures in and near the project area. Site surveys will be conducted to verify structure locations and setback distances.

Response 15.2: The Town of Cohocton Windmill Local Law and the New York State Department of Agricultural and Markets (NYSA&M) Agricultural Protection Guidelines do not require a cap on the number of turbines proposed. As discussed in Section 5.0 of the DEIS for the Dutch Hill Wind Power Project and SDEIS for the Cohocton Wind Power Project, the number of turbines is limited by the available wind resource, the number of participating landowners, setback requirements, and various environmental constraints. The project, as proposed, is in compliance with the local ordinance and adequately protects agricultural resources.

Response 15.3: There are no phases involved with the current projects. Each is a separate project.

Response 16.1: The 1,500-foot setback being utilized complies with the Town of Cohocton Windmill Local Law #2 and recommendations/example provided in the NYSERDA “tool kit” for municipalities. This setback is equivalent to, or exceeds, required setbacks in other municipal ordinances in New York. Recently enacted ordinances in the Towns of Clinton, Ellenburg, Altona, and Eagle, New York all mandate residential setbacks of either 1,000 or 1,200 feet. In addition, as described in the SDEIS for the Cohocton Wind Power Project, at 1,500 feet, potential adverse impacts associated with noise, shadow flicker, private wells, and public safety, are expected to be minimal. The turbine locations were also selected to maintain a minimum setback of at least 520 feet from all rights-of-way and public ways. Where setbacks may not meet the minimum, consent agreements will be obtained. This setback is in accordance with the wind turbine siting requirements of the Town of Cohocton Windmill Local Law. The Town's Zoning Law includes several different setback requirements, which are intended to serve different purposes. Some of the setbacks do relate to adjacent property lines. Further, the Town of Cohocton Planning Board has the authority to require larger setbacks on a case-by-case basis if necessary to mitigate or avoid a significant impact.

Property Rights

Response 11.7: Comment noted. The Town Zoning Law fully protects the rights of Town residents.

Property Values

Response 1.1: Cushman and Wakefield relied on a number of sources for the information used in their evaluations presented in Appendix L of the Cohocton SDEIS and Appendix N of the Dutch Hill DEIS. This included local real estate transactional experience as well as transactional experience at other locations with operating Wind Power projects. The conclusion that the wind projects are not likely to effect property values relies on this factual information as well as site specific factors such as property values being more affected by local economic conditions than the presence of turbines.

Response 1.2: With few exceptions premium priced homes are shielded by woods, topography or orientation. Cushman & Wakefield concluded that, although some of these homes may have views of the turbines, local economy and the national housing market will have a superseding effect on property value.

Response 1.3: Hoen inspected the views of all sale properties and adjusted for any impact and the result was that, for these impacts, the significance on sale price was negligible compared to other factors. The Hoen study incorporated both distance and view variables and the results did not uncover a statistically significant relationship between either proximity to or visibility of the windfarm and the sale price of homes. The same was true for homes within 1 mile or for homes that sold immediately following the announcement of the windfarm.

Response 1.4: The comment is a misreading of the Hoen study. In fact, Hoen collected data for 452 transactions from the Madison County Real Property and Tax Office that were coded “arms length transactions,” and, after removing 152 that were land only transactions and 20 that were coded incorrectly, used the remaining 280 arms length transactions for the analysis. (Hoen, 2006)

Response 1.5: There were no sales closer than ¾ of mile from a turbine, and the study reflects this. Hoen used all of the arms length transactions of the single family homes that occurred during the time period used for the analysis. It does not represent an error in the report as it is the actual sales data. See also response 1.3.

Response 1.6: See response to Comment 1.5 above. The study by Hoen was prepared as part of his graduate school work and was reviewed by faculty and others before publication. The study utilized a hedonic model, the best statistical tool for explaining choices. It provides an important contribution to the literature on the subject matter.

Response 1.7: The Renewable Energy Policy Project (REPP) reported a study in 2003, titled *Effect of Wind Development on Local Property Values*. REPP assembled a database of real estate transactions adjacent to every wind power project in the United States (10 MW or greater) that became operational between 1998 and 2001 (a total of 10 projects, including the Madison and Fenner Projects in Madison County, New York). The results of this study showed no negative affect on property value from existing wind farms. More specifically, the REPP study concluded that there is no evidence that the presence of the Madison and Fenner wind farms had a significant negative effect on residential property values in Madison County, New York (Sterzinger et al. 2003).

The REPP study has been criticized by some because it assumes that all properties within the study area have a view of the respective wind farm, does not account for property distance to the wind farm, uses a questionable statistical analysis, and includes inappropriate transactions (e.g., estate sales, sales between family members, sales due to divorce, etc.). To present a clearer understanding of the actual effects of existing wind farms on property values, a Master of Science thesis project was undertaken by Benjamin Hoen of Bard College. A summary of this report is set forth in Section 3.9.2.2.1 of the SDEIS for the Cohocton Wind Power Project and the DEIS for the Dutch Hill Wind Power Project.

The Hoen study's analysis of 280 home sales within 5 miles of the Fenner Wind Farm did not reveal a statistically significant relationship between either proximity to, or visibility of, the wind farm and the sale price of homes. Additionally, the analysis failed to uncover a relationship even when concentrating on homes within one mile of the wind farm that sold immediately following the announcement and construction of the Project. This study concluded that in Fenner, a view of the wind farm did not produce either a universal or localized effect on home values. To the degree that other communities resemble the Fenner rural farming community, similar conclusions are anticipated (Hoen 2006).

No sales within ¾ mile of a turbine had occurred during the study period. His study is significant because he developed and used a so-called hedonic model, the best statistical tool for explaining choices. He also inspected each property and rated the views from each site. Eventually we may have more of these studies as transactional data becomes available. However, this will always be difficult in sparsely populated rural areas where wind farms tend to be built.

Response 1.9: Cushman and Wakefield did incorporate the input of local and regional experts into their November 15, 2006 report (Appendix L of the Cohocton Wind Power Project SDEIS; Appendix N of the Dutch Hill Wind Power Project DEIS). In addition to the Cohocton Town Assessor, several realtors from localities adjacent to wind farms in upstate New York were also interviewed. Additionally, see response to Comment 1.5 above.

Response 1.10: Cushman and Wakefield was selected and retained by CPP and CPP II.

Response 1.11: See response 1.1. While the pending presence of nearby wind turbines may be considered undesirable by some perspective buyers, property value studies included or cited in the Cohocton Wind Power Project SDEIS and the Dutch Hill Wind Power Project DEIS indicate that wind power projects are unlikely to have a long term adverse affect on local property values. As an example, the study in Appendix M to the FEIS by Warren et al. (2005) indicates that public perception of wind power projects is generally positive, and that this reaction applies to local residents as well as the public in general. The commenter has not provided or cited any studies that contradict the property value studies cited or included in the Cohocton Wind Power Project SDEIS.

Response 3.3: Section 3.9.2.2.1 of the Cohocton Wind Power Project SDEIS, and comment response 1.7 above describe the results of a quantitative study that was conducted by the Renewable Energy Policy Project (REPP) in 2003, titled Effect of Wind Development on Local Property Values (Sterzinger et al, 2003). To present a clearer understanding of the actual effects of existing wind farms on property values, a Master of Science thesis project was undertaken by Benjamin Hoen of Bard College. A summary of this report is set forth in Section 3.9.2.2.1 of the SDEIS and comment response 1.7 above.

A site specific analysis of this concern was undertaken for the proposed Cohocton Wind Power Project by Cushman & Wakefield (see Appendix L of the SDEIS).

This study concluded that the proposed Project should have no impact on the values for undeveloped properties or existing farms. It also found that local property values will be much more susceptible to the local economy than to changes in the viewshed created by the proposed Project. Consequently, Cushman & Wakefield concluded that the project should have no significant impact upon future sales or values of developed properties given the prevailing conditions.

Given the results of the REPP, Hoen, and Cushman & Wakefield studies described above, and the similarity of the Madison County sites to the Cohocton Project area, it is reasonable to conclude that the proposed Cohocton Wind Power Project will not have an adverse impact on local property values. Also, see comment response 1.11 above.

Response 7.7: In assessing existing studies and newly collected data from communities where wind farms have been built and coexisted with residential development, wind farms have been found to have no demonstrable impact on property values, even near high end or executive home development.

The Renewable Energy Policy Project (REPP) (Sterzinger et al., 2003) reviewed data on property sales in the vicinity of wind projects and used statistical analysis to determine whether and to what extent the visual presence of turbines has had influence on prices of properties which have been sold.

The REPP report hypothesized that if wind development can reasonably be claimed to hurt property values, then review of sales data should show a negative effect on property values within viewsheds of the projects. The study found no significant empirical support that property values were diminished in any of 10 test cases from around the country.

The general characteristics of the area around the proposed Wind Power Projects suggest that adverse property value impacts may be negligible, if measurable at all. This observation is based on our study of property values at Maple Ridge near Lowville and the Hoen study at Fenner in Madison County. In fact, there is yet to be demonstrable evidence that wind power projects have any adverse impact on property values anywhere. Further, there is anecdotal evidence that the presence of a wind farm may even have improved values of some types of recreation or seasonal properties. See Dutch Hill Wind Power Project DEIS, Appendix N, Part 3 for more information. Additionally, property value assessment is thoroughly described in Section 3.9.2.2.7 and Appendix L of the Cohocton Wind Power Project SDEIS and section 3.9.2.2.7. For information on quality of life issues, see Response 7.2.

Response 16.2: See response to comment response 1.7.

Response 25.2: Property value assessment is thoroughly described in Section 3.9.2.2.7 and Appendix L of the Cohocton Wind Power Project SDEIS and section 3.9.2.2.7 and Appendix N of the Dutch Hill Wind Power Project DEIS.

Response 25.3: Local real estate agents and the County assessor were interviewed as discussed in then Cushman & Wakefield's Impact Evaluation of Wind Power Projects on Local Property Values provided in Appendix L of the Cohocton SDEIS and Appendix N of the Dutch Hill DEIS. The information provided contributed knowledge regarding historic value trends and recent real estate transactions.

Public Safety

Response 9.3: The assertion that low frequency noise from the project would result in still births or birth defects is considered baseless. Numerous field studies and other measurements of wind turbine noise indicate that the low frequency content of the sound is insignificant and below all recognized thresholds of perception or disturbance. In general, turbine noise at 1,000 feet or more may be considered about as harmful to human health as any number of common sounds, such as a ceiling fan or central air conditioning system.

For more detail, see Section 3.10.2.2.7 and Appendix I of the Cohocton Wind Power Project SDEIS regarding low frequency noise and its potential health effects.

Response 16.4: It is unlikely that blasting will be necessary. However, if blasting does occur, it will be done at least 1,500 feet from any participating residence. Blasting effects occur within a much smaller radius of the blast zone (typically 200 to 300 feet); therefore no damage to residential foundations is anticipated.

Response 16.5: As indicated in the Cohocton Wind Project SDEIS and Dutch Hill Wind Power Project DEIS, if blasting is found to be necessary, or likely, following the completion of the geotechnical study, then a blasting plan will be developed in accordance to all local, state and federal guidance and regulations and/or industrial practices. The plan will include, but may not be limited to, communications with adjoining land owners, the town, and the general public, monitoring practices during blasting, and blasting safety plans. The town will be provided with an opportunity to review the plan and provide comments.

Purpose, Need, and Benefit

Response 2.2: As stated in Section of 3.4.2.2 of the Cohocton Wind Power Project DEIS, the proposed project will displace an equivalent amount of fossil fuel-generated electric power. The estimated reduction in CO_2 is on the order of 334,400,000 pounds per year. According to a Renewable Energy Policy Project (REPP) Issue Brief (REPP, 2003), a single one megawatt (1.0 MW) wind turbine running for one year can displace over 1,500 tons of carbon dioxide (based on the U.S. average utility generation fuel mix and a 25% capacity factor). Please also see responses to written comments 99C and 147D1 on the Cohocton Wind Power Project DEIS.

Response 10.1: As stated in Section 1.0 of the DEIS, the Dutch Hill Wind Power Project will generate electric power capable of meeting the electrical needs of up to 17,596 homes and will provide increased stability to the price volatility of fossil fuel electricity generation in the region. Accordingly, it will benefit the residents of Cohocton.

As stated in Section 1.0 of the SDEIS, the Cohocton Wind Power Project will generate electric power capable of meeting the electrical needs of up to 39,500 homes and will provide increased stability to the price volatility of fossil fuel electricity generation in the region. Accordingly, it will benefit the residents of Cohocton.

Response 25.5: See Response to 10.1.

Segmentation

Response 2.3: CPP and CPP II has made their intentions public, and are proposing two projects within the Town of Cohocton, the Cohocton Wind Power Project and the Dutch Hill Wind Power Project. These two projects are separate projects, and neither depends upon the other, although, for convenience and a streamlined interconnection, and minimization of environmental impacts, both projects will be connected to a common substation, from which they will be connected to the power grid. Nonetheless, the cumulative impacts of the Cohocton Wind Power Project and the Dutch Hill Wind Power Project, together with other known wind projects such as WindFarm Prattsburgh, have been evaluated in the SDEIS for the Cohocton Wind Power Project, and the DEIS for the Dutch Hill Wind Power Project. In response to the comment regarding Project phases, all of the turbines proposed for the Cohocton Wind Power Project are located on Brown, Pine, and Lent Hills. Additionally, the Dutch Hill project and WindFarm Prattsburgh are not subsequent phases of the Cohocton Wind Power Project. Rather, the three are separate projects. Refer to comment response 2.9 in the aesthetic and visual resources section for a discussion of the cumulative visual impact analysis.

Response 2.4: Please see the response to Comment 2.3 above.

Shadow Flicker

Response 4.3: The model uses a 3 foot by 3 foot area to represent a receptor but the results of the shadow flicker analysis are applicable to any area within the property bounds to within a few minutes of shadow flicker per day ands shadow flicker results are reported in hours per year at each receptor site and are also represented graphically by isolines. The shadow flicker analysis is overly conservative in that it assumes 1) no screening of turbine shadows by intervening structures and trees, 2) the rotor is always turning, 3) the receptor always has a window facing the direction of the sun, and 4) the receptor dwelling is occupied at all hours when shadow flicker may occur. Although the analysis looks at receptors out to 3,000+ feet, actual impact at such distances is anticipated to be minimal, as discussed in Section 3.5.2.2.6 of the DEIS.

Response 7.3: The shadow-flicker model assumptions applied to the Dutch Hill Wind Power Project are very conservative and as such, the analysis is expected to over-predict the impacts. Additionally, many of the modeled shadow flicker hours are expected to be of very low intensity.

The results are therefore prudent projections of the anticipated shadow flicker levels that would be experienced at the nearby residences. Of the 126 modeled receptors (126 receptors being within approximately 1,500 meter of a wind turbine), only four receptors potentially receive shadow flicker for more than 25 hours per year. All other modeled receptors potentially receive little or no shadow flicker. For more information on Shadow Flicker, see Dutch Hill Wind Power Project DEIS, Appendix I.

For Cohocton Wind Power Project, modeling indicated that of 204 potential receptors within 1,100 meters (3,608 feet), 82 would experience no effect. Only three receptors could experience over 20 hours of shadow flicker (typically around sunrise or sunset) annually, and none would experience over 25 hours throughout a year. Analysis of the currently proposed layout inidicates that only one receptor is now predicted to receive over 20 hours of flicker annually (see Section 2.5 and Appendix E of the FEIS). As in the original analysis, Wind Engineers indicates that this number is significantly lower than that calculated for other wind power projects in New York and throughout the United States. Model assumptions and factors that would further reduce/mitigate potential shadow flicker impacts at receptor sites are as described in the Cohocton Wind Power Project DEIS.

Socioeconomics

Response 3.2: The local socioeconomic benefits of the project are described in Section 3.9 and Appendix K of the Cohocton Wind Power Project SDEIS and Section 3.9 and Appendix N in the Dutch Hill Wind Power Project DEIS. Construction of each project will benefit the local economy through local purchases of equipment, materials, and supplies. Operation of both projects is estimated to produce socioeconomic benefits for local residents in the form of lease payments, direct wages, and induced impacts from the lease payments and direct wages. In addition, approximately $700,000 in annual PILOT payments from the Cohocton Wind Power Project and approximately $500,000 from the Dutch Hill Wind Power Project that will supplement the budgets of local municipalities and school districts. These payments can be used to reduce and stabilize local tax rates and provide enhanced services and facilities. Whether these funds are used for tax rate stabilization and reduction, or increases in services and facilities, will be at the discretion of the individual taxing jurisdiction.

Response 9.2: The local economic benefits will continue as long as the projects continue to operate. The comment posits an unlikely scenario because the wind farm is financed to operate for 20-25 years and will not become obsolete in that time frame because the operation of the turbines for that period of time is the only way for the project sponsor to recoup its investment. Further, in the event that the projects cease operation before they are currently expected to cease operation, the decommissioning provisions of the Town's Zoning Law would require that the projects be decommissioned.

Response 10.2: While the project will not provide individual tax relief to the residents of Cohocton, the Project will enhance the economic health and well being of the community by creating jobs, local expenditures, and municipal revenue. These financial benefits will be provided without the need for municipal and school district services and facilities required by most other forms of economic development. Within a community, a viable economy and strengthened tax base are crucial to maintaining quality of life.

The proposed Projects will provide significant benefits to both the community and the environment. As stated previously, PILOT payments from the Cohocton Project will provide approximately $700,000 annually to local taxing jurisdictions. Additionally, the Dutch Hill Wind Power Project will annually generate close to $500,000 in PILOT payments. As described in Section 3.9 and Appendix K of the Cohocton Wind Power Project SDEIS (Section 3.9 and Appendix N of the Dutch Hill DEIS), local employment and expenditures, as well as annual lease payments to participating landowners will inject significant additional revenue into the local economy.

Response 10.3: Saratoga Associates was retained to conduct an economic analysis of the Dutch Hill Wind Power Project. (See Economic Analysis in Appendix N of Dutch Hill DEIS) This analysis was conducted using the RIMS II model. It is anticipated that construction of the proposed Project will employ a total work force of approximately 38 construction workers over a 7.5 month period. It is anticipated that the majority of this employment will be drawn from the Southern Tier and Finger Lakes labor markets, which, in light of the size of the labor force and the number of unemployed, can easily supply the required work force. Local employment will primarily benefit those in the construction trades, including equipment operators, truck drivers, laborers, and electricians.

The Economic Impact Analysis performed by Saratoga Associates utilized a conservative assumption that the Cohocton Wind Power Project will be an 82.5 MW (33 turbines) project, the smallest anticipated by CPP. An 82.5 MW Project would represent approximately $160 million in investment, and the construction phase of the Project will generate approximately 63 full-time direct jobs over a 7.5 month period. It is anticipated that the one-half to two-thirds of employment will be drawn from the Southern Tier and Fingers Lakes labor markets. Local construction employment will be primarily equipment operators, truck drivers, laborers and electricians.

Response 15.12: See Response to 10.3

Sound

Response 2.8: The asserted flaws in the background survey measurements, pointed out by other commentators (such as Bolton) and evidently referred to here, have been overstated. Self-induced microphone noise, which affects the very lowest frequencies and has relatively little influence on A-weighted sound levels (the quantity central to the analysis), is difficult to completely avoid and may have had a minor influence on the recorded levels; however, the likely overall effect is considered fairly insignificant and vastly lower than theorized by Bolton for several reasons:

- The L90 statistical level (the sound level exceeded 90% of the time) was used for each 10 minute interval, meaning that the background sound level was taken to be the level that occurred during the quietest lulls between wind gusts. Intermittently high sound levels due to wind, whether actually occurring or occurring as a self-induced false signal, are effectively excluded by the use of the L90 level.

- Special, laminated microphone windscreens were used that included a thin plastic septum between the two foam layers to prevent water damage. This layer also acts to some extent as a windbreak.

- The wind speed near the ground where the instruments were located is generally much less than at the standard height of 10 m or at the hub height of 80 m. Consequently, the noise monitors were not directly exposed to the 10 m wind speeds, to which each sound level recording was correlated.

Response 4.2: This comment is essentially a restatement of the written critique of the noise assessment prepared by Mr. Bolton. The principal issues have been addressed in our responses to written comment 25 for the Dutch Hill Wind Power Project and written comment 29 for Cohocton Wind Power Project.

Response 7.4: Unavoidable but mild noise impacts may occur during the construction phase of the Project. Construction noise, sounding similar to that of distant farming equipment, is expected to be sporadically audible at most homes within the immediate Project vicinity throughout the duration of construction. The maximum magnitude of construction noise at the nearest homes to individual turbine locations is not expected to exceed 51 to 58 dBA, depending on the particular activity.

During wind turbine operation at the Dutch Hill Wind Power Project, the sound model prediction indicates that project noise might be audible at up to two houses. These two residences are on or just inside the 44 dBA contour where the audibility of the wind turbines is expected to be intermittent, but because of modeling conservatism and seasonal considerations the probability is low of a significant adverse impact due to noise alone. No significant adverse impact is expected at any home in the Project Area due to project noise at Dutch Hill.

Based on on-site measurements at the Cohocton Wind Power Project site, 37 dBA is assumed to be the background sound level consistently available to mask Project sound at all locations. This is the ambient sound level that can reasonably be expected when the turbines are operating at maximum speed and producing the most sound.

During turbine operation at the Cohocton Wind Power Project site, a few homes might see Project-related sound levels approaching 45 dBA when the wind is blowing directly from a nearby turbine toward the house. All homes that are identified just inside the 45 dBA line are participating landowners. No non-participating landowners are within the 45 dBA line. This compares to a maximum predicted level of 46 dBA for the original Cohocton Wind Power Project DEIS (i.e., a slight reduction).

For more information on Sound impacts, see Section 3.7 of the Dutch Hill Wind Power Project DEIS, Section 3.7 of the Cohocton Wind Power Project SDEIS, and Section 2.7 of this FEIS.

State Environmental Quality Review (SEQR)

Response 15.1: It is unclear as to which application the Commenter is referring. The State Environmental Quality Review Act (SEQR) requires that an Environmental Assessment Form (EAF) is prepared and submitted to the lead agency. The

EAF form requires the signature of the project's applicant or sponsor. CPP completed and submitted an EAF to the Town of Cohocton for the Cohocton Wind Power Project on December 19, 2005; and CPP II completed and submitted an EAF to the Town of Cohocton for the Dutch Hill Wind Power Project in October of 2006. Both of the completed EAFs contained the signature of Paul Gaynor, President and CEO of UPC Wind, of which CPP and CPP II are subsidiaries.

While not required by SEQR, the Town of Cohocton requires the completion and submission of a Building Permit Application. CPP submitted a preliminary Building Permit Application to the Town of Cohocton for the Cohocton Wind Power Project on December 19, 2005. This Application was signed by an officer of UPC Wind. This submission was 6a preliminary one, intended to advise the Town of the Town permits that would be needed for the Project, and to initiate the SEQR process. More recently, CPP filed an application for a special use permit. That application is expected to be deemed complete shortly. Additionally, CPP II completed and submitted a Building Permit Application to the Town of Cohocton for the Dutch Hill Wind Power Project in October of 2006. The completed Building Permit Application contained the signature of Paul Gaynor, President and CEO of UPC Wind.

Response 15.8: See Response 15.1.

Supplemental Draft Environmental Impact Statement

Response 11.6: The SDEIS contains a thorough evaluation of the Cohocton Wind Power Project. The SDEIS was reviewed and incomplete sections are updated by the FEIS, or as the outstanding information becomes available. Responses to questions and comments that were posed at the public hearings for the Cohocton Wind Power Project DEIS and Cohocton Wind Power Project SDEIS (this document) are included in Section 3.0 of the FEIS. Additionally, written questions and comments that were submitted to the Town of Cohocton in response to the DEIS and SDEIS are also addressed in Section 3.0 of the FEIS.

Response 13.5: Refer to comment response 11.6 above. The remaining details of the transportation plan will be developed during the permitting process, and submitted to the Planning Board and other jurisdictional agencies for review.

Transportation

Response 15.10: Section 3.8.3 and Appendix J of the Cohocton Wind Power Project SDEIS (Section 3.8.3 and Appendix M of the Dutch Hill Wind Power Project DEIS) state that any damage to the roads will be repaired at the Project operator's expense. UPC will be coordinating with the town in regards to transportation issues, pre and post construction inspection of the roads and coordination needs.

Turbine Operation

Response 15.13: Turbines use electricity to get started. However, the amount of electricity that the turbines use is de minimus compared to the amount they produce or the project would not be economical for CPP and CPP II to build. The Clipper machine will consume about 10MWh/year while it will produce approximately 6570MWh/year.

Response 16.8: See response to 15.13.

Website

Response 13.3: There is a Cohocton Wind Power Project website at www.cohoctonwind.com.

3.2.2 Written Comments

This Response Summary is the formal response to the written comments received for the Cohocton Wind Power Project SDEIS, by the Town of Cohocton during the public comment period. Copies of the original comment letters, with individual comments numbered, are included in Appendix K. This section also contains separate alphabetical comment indexes (Tables 17 and 18, arranged by commenter) for general comments for which no response is necessary, and for substantive comments that have corresponding responses provided in this section.

Table 17. Cohocton SDEIS Written Substantive Comment List

Response Number	Source	Date	Primary Subject
34.1	Anonymous B	2/15/07	Avian
34.2	Anonymous B	2/15/07	Avian
34.3	Anonymous B	2/15/07	SEQR
34.4	Anonymous B	2/15/07	Avian
34.5	Anonymous B	2/15/07	Avian
34.6	Anonymous B	2/15/07	Avian
34.7	Anonymous B	2/15/07	Avian
34.8	Anonymous B	2/15/07	Avian
34.9	Anonymous B	2/15/07	Biological Resources

Table 17. Cohocton SDEIS Written Substantive Comment List			
Response Number	**Source**	**Date**	**Primary Subject**
34.10	Anonymous B	2/15/07	Avian
34.11	Anonymous B	2/15/07	Avian
34.12	Anonymous B	2/15/07	Avian
34.13	Anonymous B	2/15/07	Avian
34.14	Anonymous B	2/15/07	Avian
34.15	Anonymous B	2/15/07	Avian
34.17	Anonymous B	2/15/07	Avian
34.18	Anonymous B	2/15/07	Avian
34.19	Anonymous B	2/15/07	Avian
34.20	Anonymous B	2/15/07	Avian
34.21	Anonymous B	2/15/07	Avian
5.1	Babcock, R.	1/21/07	Sound
5.2	Babcock, R.	1/21/07	Property Values
5.3	Babcock, R.	1/21/07	Purpose, Need, and Benefit
28	Bolton, R.	1/30/07	Shadow Flicker
29	Bolton, R.	1/30/07	Sound
36.1	Cohocton Wind Watch	2/15/07	Project Design
36.2	Cohocton Wind Watch	2/15/07	SEQR
36.3	Cohocton Wind Watch	2/15/07	SEQR
36.4	Cohocton Wind Watch	2/15/07	SEQR
36.5	Cohocton Wind Watch	2/15/07	Project Design
36.6	Cohocton Wind Watch	2/15/07	SEQR
36.7	Cohocton Wind Watch	2/15/07	SEQR
36.8	Cohocton Wind Watch	2/15/07	Project Description
36.9	Cohocton Wind Watch	2/15/07	SEQR
36.10	Cohocton Wind Watch	2/15/07	SEQR
36.11	Cohocton Wind Watch	2/15/07	Project Description
36.12	Cohocton Wind Watch	2/15/07	Land Use and Zoning
36.13	Cohocton Wind Watch	2/15/07	Project Description
36.14	Cohocton Wind Watch	2/15/07	Avian
36.15	Cohocton Wind Watch	2/15/07	Shadow Flicker
36.16	Cohocton Wind Watch	2/15/07	Sound
36.17	Cohocton Wind Watch	2/15/07	Transportation
36.18	Cohocton Wind Watch	2/15/07	Permits & Approvals
36.19	Cohocton Wind Watch	2/15/07	Public Safety
36.20	Cohocton Wind Watch	2/15/07	Communication Facilities
36.21	Cohocton Wind Watch	2/15/07	Project Description
36.22	Cohocton Wind Watch	2/15/07	Project Description
36.23	Cohocton Wind Watch	2/15/07	Project Description
36.24	Cohocton Wind Watch	2/15/07	Agriculture
36.25	Cohocton Wind Watch	2/15/07	Land Use and Zoning
36.26	Cohocton Wind Watch	2/15/07	Land Use and Zoning
36.27	Cohocton Wind Watch	2/15/07	Purpose, Need, and Benefit
36.28	Cohocton Wind Watch	2/15/07	Project Design
36.29	Cohocton Wind Watch	2/15/07	Project Design
36.30	Cohocton Wind Watch	2/15/07	Public Safety

Table 17. Cohocton SDEIS Written Substantive Comment List			
Response Number	**Source**	**Date**	**Primary Subject**
36.31	Cohocton Wind Watch	2/15/07	Public Safety
36.32	Cohocton Wind Watch	2/15/07	Socioeconomics
36.33	Cohocton Wind Watch	2/15/07	Project Design
36.35	Cohocton Wind Watch	2/15/07	SEQR
36.36	Cohocton Wind Watch	2/15/07	SEQR
36.37	Cohocton Wind Watch	2/15/07	Purpose, Need, and Benefit
36.38	Cohocton Wind Watch	2/15/07	Socioeconomics
36.39	Cohocton Wind Watch	2/15/07	Public Safety
36.40	Cohocton Wind Watch	2/15/07	Public Safety
36.41	Cohocton Wind Watch	2/15/07	Public Safety
36.42	Cohocton Wind Watch	2/15/07	Public Safety
36.43	Cohocton Wind Watch	2/15/07	Water Resources
36.44	Cohocton Wind Watch	2/15/07	Water Resources
36.45	Cohocton Wind Watch	2/15/07	Avian
36.46	Cohocton Wind Watch	2/15/07	Avian
36.47	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.48	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.49	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.50	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.51	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.52	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.53	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.54	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.55	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.56	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.57	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.58	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.59	Cohocton Wind Watch	2/15/07	Historic and Arch. Resources
36.60	Cohocton Wind Watch	2/15/07	Socioeconomics
36.61	Cohocton Wind Watch	2/15/07	Socioeconomics
36.62	Cohocton Wind Watch	2/15/07	Socioeconomics
36.63	Cohocton Wind Watch	2/15/07	Socioeconomics
36.64	Cohocton Wind Watch	2/15/07	Socioeconomics
36.65	Cohocton Wind Watch	2/15/07	Project Description

Table 17. Cohocton SDEIS Written Substantive Comment List			
Response Number	Source	Date	Primary Subject
36.66	Cohocton Wind Watch	2/15/07	Public Safety
36.67	Cohocton Wind Watch	2/15/07	Project Description
36.68	Cohocton Wind Watch	2/15/07	Biological Resources
36.69	Cohocton Wind Watch	2/15/07	Alternatives Analysis
36.70	Cohocton Wind Watch	2/15/07	Project Description
36.71	Cohocton Wind Watch	2/15/07	Project Description
36.72	Cohocton Wind Watch	2/15/07	Cumulative Impacts
36.73	Cohocton Wind Watch	2/15/07	Sound
36.74	Cohocton Wind Watch	2/15/07	Cumulative Impacts
36.75	Cohocton Wind Watch	2/15/07	Cumulative Impacts
36.76	Cohocton Wind Watch	2/15/07	Cumulative Impacts
36.77	Cohocton Wind Watch	2/15/07	Cumulative Impacts
36.78	Cohocton Wind Watch	2/15/07	Aesthetic & Visual Resources
36.79	Cohocton Wind Watch	2/15/07	Aesthetic & Visual Resources
36.80	Cohocton Wind Watch	2/15/07	Aesthetic & Visual Resources
36.81	Cohocton Wind Watch	2/15/07	Cumulative Impacts
36.82	Cohocton Wind Watch	2/15/07	Socioeconomics
36.83	Cohocton Wind Watch	2/15/07	Mitigation
36.84	Cohocton Wind Watch	2/15/07	Avian
36.85	Cohocton Wind Watch	2/15/07	Cumulative Impacts
36.92	Cohocton Wind Watch	2/15/07	Public and Agency Involvement
36.93	Cohocton Wind Watch	2/15/07	Cumulative Impacts
36.94	Cohocton Wind Watch	2/15/07	Cumulative Impacts
1.3	Cohocton Wind Watch	1/16/07	Land Use and Zoning
1.4	Cohocton Wind Watch	1/16/07	Project Description
7.1	Dionisio, A.	1/23/07	Transportation
7.2	Dionisio, A.	1/23/07	Aesthetic & Visual Resources
7.3	Dionisio, A.	1/23/07	Property Values
7.4	Dionisio, A.	1/23/07	Aesthetic & Visual Resources
7.5	Dionisio, A.	1/23/07	Sound
9.1	Gates, M.	1/19/07	Sound
9.3	Gates, M.	1/19/07	Property Values
8	Goldthwait, Dr.	1/19/07	Sound
53.1	Jones, B and Strauss-Jones, L.	2/14/07	SEQR
53.3	Jones, B and Strauss-Jones, L.	2/14/07	3rd party review
53.4	Jones, B and Strauss-Jones, L.	2/14/07	Project Design
53.5	Jones, B and Strauss-Jones, L.	2/14/07	Project Description
53.6	Jones, B and Strauss-Jones, L.	2/14/07	Project Operation
53.7	Jones, B and Strauss-Jones, L.	2/14/07	Project Description
53.8	Jones, B and Strauss-Jones, L.	2/14/07	Project Description
53.9	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomics
53.10	Jones, B and Strauss-Jones, L.	2/14/07	Purpose, Need, and

Table 17. Cohocton SDEIS Written Substantive Comment List			
Response Number	Source	Date	Primary Subject
			Benefit
53.11	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomics
53.12	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomics
53.14	Jones, B and Strauss-Jones, L.	2/14/07	Project Construction
53.15	Jones, B and Strauss-Jones, L.	2/14/07	Project Construction
53.16	Jones, B and Strauss-Jones, L.	2/14/07	Transportation
53.17	Jones, B and Strauss-Jones, L.	2/14/07	Project Description
53.18	Jones, B and Strauss-Jones, L.	2/14/07	Transportation
53.19	Jones, B and Strauss-Jones, L.	2/14/07	Project Decommissioning
53.20	Jones, B and Strauss-Jones, L.	2/14/07	Avian
53.21	Jones, B and Strauss-Jones, L.	2/14/07	Avian
53.22	Jones, B and Strauss-Jones, L.	2/14/07	Avian
53.23	Jones, B and Strauss-Jones, L.	2/14/07	Avian
53.24	Jones, B and Strauss-Jones, L.	2/14/07	Avian
53.25	Jones, B and Strauss-Jones, L.	2/14/07	Avian
53.26	Jones, B and Strauss-Jones, L.	2/14/07	Avian
53.27	Jones, B and Strauss-Jones, L.	2/14/07	Avian
53.28	Jones, B and Strauss-Jones, L.	2/14/07	Avian
53.29	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomics
53.30	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomics
53.31	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomics
53.32	Jones, B and Strauss-Jones, L.	2/14/07	Public Safety
53.33	Jones, B and Strauss-Jones, L.	2/14/07	Public Safety
53.34	Jones, B and Strauss-Jones, L.	2/14/07	Cumulative Impacts
53.35	Jones, B and Strauss-Jones, L.	2/14/07	Cumulative Impacts
53.36	Jones, B and Strauss-Jones, L.	2/14/07	Avian
53.37	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomic
53.38	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomic
53.39	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomic
53.40	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomic
53.41	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomic
53.42	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomic
53.43	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomic
53.44	Jones, B and Strauss-Jones, L.	2/14/07	Public Safety
53.45	Jones, B and Strauss-Jones, L.	2/14/07	Socioeconomic
53.46	Jones, B and Strauss-Jones, L.	2/14/07	Other
10.1	Kemp-Conge, S.	1/19/07	Purpose, Need, and Benefit
10.2	Kemp-Conge, S.	1/19/07	Socioeconomics
10.3	Kemp-Conge, S.	1/19/07	Socioeconomics
6.1	Lessar, M. and Sammons, M.	1/15/07	Property Values
2.1	Lince, J. and S.	11/2/06	Land Use and Zoning
2.2	Lince, J. and S.	11/2/06	Property Values
35.6	Morehouse, B & S.	2/14/07	Socioeconomics
35.11	Morehouse, B & S.	2/14/07	Socioeconomics
35.12	Morehouse, B & S.	2/14/07	Aesthetic & Visual Resources
35.13	Morehouse, B & S.	2/14/07	Public Safety

Table 17. Cohocton SDEIS Written Substantive Comment List			
Response Number	**Source**	**Date**	**Primary Subject**
35.14	Morehouse, B & S.	2/14/07	Socioeconomics
35.15	Morehouse, B & S.	2/14/07	Aesthetic & Visual Resources
35.16	Morehouse, B & S.	2/14/07	Aesthetic & Visual Resources
35.17	Morehouse, B & S.	2/14/07	Aesthetic & Visual Resources
35.18	Morehouse, B & S.	2/14/07	Sound
35.19	Morehouse, B & S.	2/14/07	Sound
35.20	Morehouse, B & S.	2/14/07	Property Values
35.21	Morehouse, B & S.	2/14/07	Property Values
35.22	Morehouse, B & S.	2/14/07	Property Values
35.23	Morehouse, B & S.	2/14/07	SEQR
14.2	NYDOT	1/17/07	Permits & Approvals
30.1	NYDOT (Hintz, D.)	2/2/07	Transportation
30.2	NYDOT (Hintz, D.)	2/2/07	Transportation
31.1	NYS Dept. of Public Service (May, D.)	2/15/07	Project Description
31.2	NYS Dept. of Public Service (May, D.)	2/15/07	Project Description
31.3	NYS Dept. of Public Service (May, D.)	2/15/07	Project Description
31.4	NYS Dept. of Public Service (May, D.)	2/15/07	Project Construction
31.5	NYS Dept. of Public Service (May, D.)	2/15/07	Project Construction
31.6	NYS Dept. of Public Service (May, D.)	2/15/07	Other
31.7	NYS Dept. of Public Service (May, D.)	2/15/07	Project Construction
31.8	NYS Dept. of Public Service (May, D.)	2/15/07	Project Design
31.9	NYS Dept. of Public Service (May, D.)	2/15/07	Public Safety
31.10	NYS Dept. of Public Service (May, D.)	2/15/07	Project Construction
31.11	NYS Dept. of Public Service (May, D.)	2/15/07	Avian
31.12	NYS Dept. of Public Service (May, D.)	2/15/07	Avian
31.13	NYS Dept. of Public Service (May, D.)	2/15/07	Aesthetic and Visual Resources
31.14	NYS Dept. of Public Service (May, D.)	2/15/07	Aesthetic & Visual Resources
31.15	NYS Dept. of Public Service (May, D.)	2/15/07	Historic & Archaeological Resources
31.16	NYS Dept. of Public Service (May, D.)	2/15/07	Property Values
31.17	NYS Dept. of Public Service (May, D.)	2/15/07	Sound
31.18	NYS Dept. of Public Service (May, D.)	2/15/07	Community Facilities & Services
49.1	NYSDEC (Hogan, C.)	2/15/07	Project Construction
49.2	NYSDEC (Hogan, C.)	2/15/07	Avian
49.3	NYSDEC (Hogan, C.)	2/15/07	Avian
49.4	NYSDEC (Hogan, C.)	2/15/07	Avian
49.5	NYSDEC (Hogan, C.)	2/15/07	Avian
49.6	NYSDEC (Hogan, C.)	2/15/07	Avian
49.7	NYSDEC (Hogan, C.)	2/15/07	Avian
49.8	NYSDEC (Hogan, C.)	2/15/07	Avian
49.9	NYSDEC (Hogan, C.)	2/15/07	Water Resources
49.11	NYSDEC (Hogan, C.)	2/15/07	Water Resources

Table 17. Cohocton SDEIS Written Substantive Comment List			
Response Number	Source	Date	Primary Subject
49.12	NYSDEC (Hogan, C.)	2/15/07	Water Resources
49.13	NYSDEC (Hogan, C.)	2/15/07	Aesthetic & Visual Resources
49.14	NYSDEC (Hogan, C.)	2/15/07	Aesthetic & Visual Resources
49.15	NYSDEC (Hogan, C.)	2/15/07	Project Description
49.16	NYSDEC (Hogan, C.)	2/15/07	Transportation
49.17	NYSDEC (Hogan, C.)	2/15/07	Avian
16.2	Palmiter, B.	1/19/07	SEQR
16.3	Palmiter, B.	1/19/07	Permits & Approvals
16.4	Palmiter, B.	1/19/07	Transportation
16.5	Palmiter, B.	1/19/07	Socioeconomics
16.6	Palmiter, B.	1/19/07	Turbine Operation
18.1	Palmiter, B.	1/19/07	SEQR
18.2	Palmiter, B.	1/19/07	Project Design
18.3	Palmiter, B.	1/19/07	Project Design
18.4	Palmiter, B.	1/19/07	Meteorological Data
18.5	Palmiter, B.	1/19/07	Identity of Developer
18.6	Palmiter, B.	1/19/07	Aesthetic & Visual Resources
18.7	Palmiter, B.	1/19/07	Project Design
11.1	Palmiter, K.	1/19/07	Public Safety
11.2	Palmiter, K.	1/19/07	Property Values
11.3	Palmiter, K.	1/19/07	Geology, Soils, and Topography
11.4	Palmiter, K.	1/19/07	Geology, Soils, and Topography
11.5	Palmiter, K.	1/19/07	Geology, Soils, and Topography
11.6	Palmiter, K.	1/19/07	Agriculture
11.7	Palmiter, K.	1/19/07	Project Decommissioning
11.8	Palmiter, K.	1/19/07	Turbine Operation
27.2	Simolo, D.	1/27/07	Aesthetic & Visual Resources
20.1	Sokolow, A.	1/3/07	Aesthetic & Visual Resources
20.2	Sokolow, A.	1/3/07	Aesthetic & Visual Resources
3	Sokolow, A.	1/20/07	Website
32	Sokolow, A.	2/6/07	Public Safety
21.1	Sokolow, A. (email to NYDEC, USFWS, and the Town of Cohocton)	1/5/07	Avian
25.1	Sokolow, A. (Email to UPC, Ecogen, lead agencies, SCIDA and Town of Cohocton)	1/29/07	Sound
19.1	Steuben County Dept. of Public Works (Spagnoletti, V.)	1/3/07	Transportation
19.2	Steuben County Dept. of Public Works (Spagnoletti, V.)	1/3/07	Permits & Approvals

Table 17. Cohocton SDEIS Written Substantive Comment List			
Response Number	**Source**	**Date**	**Primary Subject**
19.3	Steuben County Dept. of Public Works (Spagnoletti, V.)	1/3/07	Permits & Approvals
23.1	Steuben County Dept. of Public Works (Spagnoletti, V.)	1/29/07	Transportation
23.2	Steuben County Dept. of Public Works (Spagnoletti, V.)	1/29/07	Transportation
23.3	Steuben County Dept. of Public Works (Spagnoletti, V.)	1/29/07	Permits & Approvals
17.2	Strasburg II, R.	1/19/07	Socioeconomics
17.3	Strasburg II, R.	1/19/07	Property Values
50	Town of Cohocton Highway Department (Simons, T.)	2/15/07	Permits & Approvals
37.1	Wing, D.	2/15/07	Aesthetic & Visual Resources
37.2	Wing, D.	2/15/07	Project Design
37.3	Wing, D.	2/15/07	Project Design

Table 18. Cohocton SDEIS General Written Comments - No Response Necessary		
Source	**Date**	**Comment Number**
Anonymous A	2/15/07	33
Anonymous B	2/15/07	34.16
Babcock, R.	1/21/07	5.4
Cohocton Wind Watch	2/15/07	36.34
Cohocton Wind Watch	2/15/07	36.86
Cohocton Wind Watch	2/15/07	36.88
Cohocton Wind Watch	2/15/07	36.89
Cohocton Wind Watch	2/15/07	36.90
Cohocton Wind Watch	2/15/07	36.91
Cohocton Wind Watch	1/16/07	1.1
Cohocton Wind Watch	1/16/07	1.2
Coleman, C.	2/15/07	40
Evans-Johnson, S.	2/15/07	44
Frederick, T.	2/15/07	45
Gates, M.	1/19/07	9.2
Gates, M.	1/19/07	9.4
Geen, W.	10/24/06	13
Goldthwait, Dr.	2/9/07	51.1
Goldthwait, Dr.	2/9/07	51.2
Goldthwait, Dr.	2/9/07	51.3
Harrold, D.	2/15/07	47
Harrold, D.	2/15/07	48
Harrold, P.	2/15/07	38
Johnson, S. and B.	1/23/07	4
Jones, B and Strauss-Jones, L.	2/14/07	53.2
Jones, B and Strauss-Jones, L.	2/14/07	53.13
Kemp-Conge, S.	1/19/07	10.4

Table 18. Cohocton SDEIS General Written Comments - No Response Necessary		
Source	**Date**	**Comment Number**
Kemp-Conge, S.	1/19/07	10.5
Laberge Group (R. Laberge)	2/2/07	24
Lessar, M. and Sammons, M.	1/15/07	6.2
Moody, R.	2/15/07	41
Moore, G.	2/15/07	42
Morehouse, B & S.	2/14/07	35.1
Morehouse, B & S.	2/14/07	35.2
Morehouse, B & S.	2/14/07	35.3
Morehouse, B & S.	2/14/07	35.4
Morehouse, B & S.	2/14/07	35.5
Morehouse, B & S.	2/14/07	35.7
Morehouse, B & S.	2/14/07	35.8
Morehouse, B & S.	2/14/07	35.9
Morehouse, B & S.	2/14/07	35.10
NYDOT	1/17/07	14.1
Palmiter, B.	1/19/07	16.1
Simolo, D	10/24/06	12
Simolo, D.	1/19/07	26
Simolo, D.	1/27/07	27.1
Sokolow, A.	1/20/07	3
Sokolow, A.	undated	52.1
Sokolow, A.	undated	52.2
Sokolow, A.	undated	52.3
Sokolow, A.	undated	52.4
Sokolow, A. (email to and response from NYDEC)	1/3/07	15.1
Sokolow, A. (email to and response from NYDEC)	1/3/07	15.2
Sokolow, A. (email to and response from NYDEC)	1/3/07	15.3
Sokolow, A. (email to and response from NYDEC)	1/3/07	15.4
Sokolow, A. (email to and response from NYDEC)	1/3/07	15.5
Sokolow, A. (email to and response from NYDEC)	1/3/07	15.6
Sokolow, A. (email to NYDEC, USFWS, and the Town of Cohocton with response from USFWS)	1/3/07	22.1
Sokolow, A. (email to NYDEC, USFWS, and the Town of Cohocton with response from USFWS)	1/3/07	22.2
Sokolow, A. (email to NYDEC, USFWS, and the Town of Cohocton with response from USFWS)	1/3/07	22.3
Sokolow, A. (email to NYDEC, USFWS, and the Town of Cohocton)	1/5/07	21.2
Sokolow, A. (email to NYDEC, USFWS, and the Town of Cohocton)	1/5/07	21.3
Sokolow, A. (email to NYDEC, USFWS, and the Town of Cohocton)	1/5/07	21.4
Sokolow, A. (Email to UPC, Ecogen, lead agencies, SCIDA and Town of Cohocton)	1/29/07	25.2
Sokolow, A. (Email to UPC, Ecogen, lead agencies, SCIDA and Town of Cohocton)	1/29/07	25.3
Strasburg II, R.	1/19/07	17.1
Strasburg II, R.	1/19/07	17.4
Strasburg II, R.	1/19/07	17.5
Towner, C.	2/15/07	39
Towner, R & J.	2/15/07	46

Table 18. Cohocton SDEIS General Written Comments - No Response Necessary		
Source	**Date**	**Comment Number**
Zeh, D.	2/15/07	43

This Response Summary is presented according to topic representing the issues raised in the various comments. Most individuals provided multiple comments that addressed multiple topics; therefore, each comment is listed under its appropriate topic.

Aesthetic and Visual Resources

Response 7.2: The commenter is correct. The proposed 115 kV transmission line will run parallel to Cayward Road for approximately 1.3 miles, primarily west of the Newcomb Hollow Road intersection. While this line will be visible in this area, this section of road is seasonal and lightly used and includes no homes that are occupied on a full-time basis. The line will be carried on approximately 120 treated wood pole structures that generally range in height from 61 to 92 feet above ground level, and will have span lengths in the range of 300 to 600 feet. Tower structures will be of three general types: unguyed single wood pole, guyed wood pole, and guyed three-pole wood structures.

Response 7.4: While the Cohocton turbines will be visible in some places, the Supplemental Visual Impact Assessment (SVIA) included as Appendix F to the SDEIS concluded that, from most viewpoints, the project will have a low to moderate visual impact. As stated in both the DEIS and SDEIS, the presence of turbines will help keep land in active agricultural use, and will thus preserve the area's open space and rural character. The SVIA addendum included as Appendix D to the FEIS confirmed these conclusions. As indicated in response to Comment 2.2, studies of public attitudes toward wind power projects consistently show strong public acceptance/approval of wind farms.

Response 18.6: The VIA and SVIAs prepared for the project do indicate that the project will have a visual impact, and that, in some views the turbines will dominate the view, change the character of the view, and/or appear out of context in their setting. However, as stated in these studies, the overall visual impact is judged to be low to moderate and the project does not appear inconsistent with a working agricultural landscape. Furthermore, the presence of turbines will help keep land in active agricultural use, and will thus preserve the area's open space and rural character.

Response 20.1: It is not clear what visual scenario the commenter believes to be the "worst case". The VIA and SVIAs suggest that the greatest visual impact occurs when turbines are viewed at foreground distances and/or when the full extent of the project can be seen. Viewpoints were specifically selected to show both of these situations (see Viewpoints 94, 130, 133, 178, and 195 in the SVIA and SVIA addendum). In addition, Viewpoints 71A, 133, and 195 in the SVIA and SVIA addendum show the cumulative visibility and visual impact of multiple projects. As stated in the SVIA, viewpoints used for the development of simulations were selected to illustrate typical views of the proposed Project and the range of visual change that will occur with the Project in place.

Response 20.2: The Project's visual impact was accurately evaluated in the DEIS and SDEIS. This evaluation included simulations of what the Project would look like from 23 representative viewpoints. These viewpoints were selected to illustrate typical views of the proposed Project that will be available to representative viewer/user groups, from the major landscape similarity zones and sensitive sites within the visual study area. The selected viewpoints also included a variety of viewer distances and lighting conditions to illustrate the range of visual change that will occur with the Project in place. Consequently, additional simulations and evaluation are not considered necessary.

Response 27.2: CPP will explore the feasibility of light shields to help block ground-level views of FAA obstruction warning lights on the turbines.

Response 31.13: Discussions with NYSDOT have not yet commenced, but CPP is committed to working together with the NYSDOT to determine the appropriateness of utilizing landscaping to mitigate any impacts to the I-390 scenic overlook.

Response 31.14: The Cohocton and Dutch Hill VIAs utilized different rating panels, thus some variability in scoring is to be expected. This variability is due in part to random chance (i.e., it is unlikely that any one group will ever score things exactly the same way as another group), and in part to the individual preferences/perceptions of different rating panel members. However, that being said, the observed differences in impact evaluation are relatively small. Dutch

Hill Viewpoint 71 received a composite score of 1.71, while Cohocton Viewpoint 71A received a composite score of 2.13. Both of these scores would be rounded to a score of 2 on the 1 to 5 scale, indicating a relatively low level of contrast. Viewpoint 195 received a composite rating of 4.13 from the Dutch Hill rating panel, and a composite score of 3.67 by the Cohocton rating panel. Both of these scores would be rounded to a score of 4 on the 1 to 5 scale, indicating a moderately high level of visual contrast. Both panels gave this viewpoint the highest contrast rating of all the viewpoints they evaluated. Thus, there is actually a high degree of consistency in the evaluation performed by the two panels, validates the panel approach (i.e., preventing the individual preferences/biases of any one evaluator from skewing the results).

Response 35.12: Cumulative visual impact of the proposed Cohocton Wind Power Project and other nearby wind power projects is fully addressed in the SDEIS, SVIA (Appendix F), and FEIS. It should be noted that the combined area of the Cohocton, Dutch Hill, WindFarm Prattsburgh, and Howard Wind Projects (approximately 12,950 acres) makes up approximately 1.4% of the total land area of Steuben County, and a significantly smaller percentage of the overall Finger Lakes region.

Response 35.15: An animated simulation of the proposed Dutch Hill Project from Interstate Route 390 (Viewpoint 98) was prepared as part of the Dutch Hill VIA (see CD included as Appendix F to the VIA). Because the proposed Cohocton turbines will not be highly visible from Route 390, an animated simulation was prepared from a viewpoint on Lent Hill (Viewpoint 110).

Response 35.16: Animated nighttime visual simulations from Viewpoints 68 and 178 are presented on the CD included as Appendix D to the SVIA (see SDEIS Appendix F).

Response 35.17: See responses to DEIS Comment 9A, 34B, and 183A (Aesthetics and Visual Resources Section). No additional visual impact analysis or public involvement is considered necessary.

Response 36.78: The statement that two projects can create balance in a particular view is taken directly from a rating panel member's evaluation form (see Appendix E of the Cohocton SVIA). The VIA and SVIA for the Cohocton Wind Power Project included an evaluation by a professional panel of registered landscape architects. As indicated in response to Comment 31.14, the ratings of identical viewpoints by an in-house panel of EDR landscape architects (on the Cohocton Wind Power Project) and a panel that included two independent rating panel members from the SUNY College of Environmental Science and Forestry (on the Dutch Hill Project) prove to be very similar. To our knowledge, there was no greater level of public involvement in the VIA prepared for the WindFarm Prattsburgh Project than was used for the Cohocton Wind Power Project.

Response 36.79: The SVIAs included an evaluation of the visual impact of the proposed transmission line. This evaluation included viewshed mapping and preparation and evaluation of simulations from four viewpoints that included the proposed line and/or substation.

Response 36.80: A recent study of real property transactions in the vicinity of the Fenner Wind Project in Madison County conducted by Benjamin Hoen of Bard College (2006) as part of his master degree thesis evaluated whether views within 5 miles of the turbines had affected transaction values of homes that had sold. Data was collected from assessor records for a period before and after the project. Data was ground truthed by inspecting each property sold after January 1, 2001 to rate and grade the relative view of the turbines from the house. Hoen concluded that examination "…of 280 home sales within 5 miles of the Fenner wind farm…failed to uncover any statistically significant relationship between either proximity to or visibility of the wind farm and the sale price of homes."

Response 37.1: The comment is noted. However, potential impacts on visual resources, property values, sound, and human health/safety are fully described in the DEIS and SDEIS (see Sections 3.5.2, 3.9.2, 3.7.2, and 3.10.2, respectively). The commenter offers no data that counters the findings of the DEIS/SDEIS or supports his opinion that the conclusions of these documents are incorrect.

Response 49.13: The VIA and SVIA discuss visual impacts to aesthetic resources of statewide significance. As indicated in those analyses views from the High-Tor Wildlife Management Area are generally screened by forest vegetation and/or topography. However, open views of the Project will be available from the Route 390 scenic overlook, and from several structures/sites eligible for listing on the

National Register of Historic Places. The visual impact of the Project from each of these areas was evaluated by a panel of landscape architects using visual simulations and rating forms. This evaluation and scoring provides an indication of the significance of the visual impact at each of these sites. Five simulations representative of worst case Project visibility from historic structures were evaluated. Although evaluation by the rating panel indicated a high degree of variability in perceived visual impact, composite scores from four of these sites were under 2.0 on the scale of 1 to 5. The remaining site (Viewpoint 194) received a composite score of 2.83. Scores in this range indicate a low to moderate level of visual impact. Rating panel comments indicate that visual impacts at these sites were generally limited due to a small number of visible turbines or the effects of screening. The SVIA addendum included as Appendix D to the FEIS generally confirmed these results. As indicated in Section 3.6.3 of the SDEIS, various mitigation options are available to mitigate visual impact to historic sites, and CPP will develop a plan to mitigate for unavoidable impacts to Register-listed or eligible historic structures inventoried within the Project area. This plan will be developed in consultation with New York State Office of Parks Recreation and Historic Preservation staff and will be designed to meet the needs of the local communities and focus on those resources, communities, and individuals that may be impacted by the Project. If necessary, a memorandum of agreement will be developed between the OPRHP and CPP that outlines the requirements of the mitigation plan.

The original visual simulations of the proposed Project from the Route 390 scenic overlook received an impact rating of 3.0 on the 1 to 5 scale, indicating a moderate visual impact, due primarily to the addition of the cleared right-of-way for the proposed 115 kV transmission line. Relocation of the proposed transmission line route decreased visual impact from this viewpoint (to an average score of 2.04), as described in Section 2.5 of the FEIS. As indicated in the VIA/SVIA, this is not the primary view at the scenic overlook, and visual impact could be mitigated through supplemental tree planting at this site. CPP will work with New York State Department of Transportation to determine whether such mitigation is necessary or desirable.

Response 49.14: If one or more historic structures are found to be within the viewshed of the Project and to have actual views of the Project, the structure will be assessed for significance in consultation with the State Historic Preservation Office (SHPO). If the permanent introduction of Project elements into the visual setting of a significant historic structure is determined by the SHPO to cause an adverse impact (i.e. alter characteristics of the resource that contributed to its eligibility to the National Register), then further efforts will be made to avoid, minimize, or mitigate those impacts, in consultation with the SHPO. As indicated in the VIA and SVIA, recreational areas are generally screened from view or located beyond 5 miles from the proposed project.

Agriculture

Response 11.6: As stated in the SDEIS, construction-related disturbance to agricultural land could include temporary disruption of farming practices (e.g., temporary blockage of farmers' access to fields). However, wind turbines and associated facilities have been located so as to minimize loss of active agricultural land and interference with agricultural operations, and Project construction will comply with NYSA&M Agricultural Protection Guidelines. The operating Project will be compatible with agricultural land use, which dominates the Project Site, and will serve to help keep land in agricultural use. Therefore, the presence and operation of the proposed turbines will not impact the spreading of manure or fertilizer near the turbines.

Response 36.24: Unless the affected landowner specifically asks for wider access roads to remain in place (presumably to facilitate farming operations), the roads will be narrowed to a final width of 16 feet by removing excess gravel and restoring the disturbed areas in accordance with New York State Department of Agricultural and Markets Agricultural Protection Guidelines.

Alternatives Analysis

Response 36.69: Section 5.3 of the DEIS and SDEIS address alternative layouts. As noted in Section 5.3, a number of siting criteria were applied in order to balance the goals of avoiding or minimizing environmental impacts, meeting all required setbacks, and assuring that assuring that there will be a sufficient wind resource for the project. Moving the turbine off of the ridge is not practicable because it will reduce access to the wind resource and therefore reduce production from the turbine to uneconomic levels. Although CPP does not understand to which ridge the commenter refers, any turbine moves have, in general, been made in order to comply with Town-required setbacks, to address participating landowner preferences, or to avoid, mitigate, or minimize identified environmental impacts.

Avian

Response 21.1: Potential impacts to raptors were addressed in the Avian Risk Assessment for the project and in the DEIS. There is an abundance of evidence that modern wind farms pose little threat to raptors. This is based on the characteristics of modern facilities relative to older wind farms, the diurnal activity habit of nesting and migrating hawks and eagles, and the extremely few fatalities that have been documented during post construction studies. It is also worth noting that not one bald eagle fatality has ever been documented at a wind power project in the United States.

The nearest nesting or wintering bald eagle locations are over 10 miles from the proposed project. At this distance the risk posed by the Project is minimal. As stated in the Avian Risk Assessment included in the DEIS, outside of California, raptors have not been found to be highly susceptible to turbine collision mortality. The NYSDEC has not expressed concerns regarding potential bald eagle impacts for this project.

Response 31.11: As stated in Section 3.3.3.2 of the DEIS, a post-construction avian and bat fatality monitoring program will be implemented in consultation with the NYSDEC and USFWS. The purpose of the on-site, post-construction monitoring program will be to determine if avian and/or bat collision fatalities are occurring as a result of Project operation, and if so, the rate of mortality. This data can then be correlated with pre-construction data, and ultimately this information can help to develop models that will more precisely predict the impact of future wind power projects. The protocols and study design will follow established/accepted procedures for monitoring collision mortality at wind power facilities and other tall structures. These methods include searches under turbines, coupled with analysis of carcass removal rates (scavenging) and searcher efficiency rates. In addition, new procedures may be implemented based on the findings of ongoing monitoring studies at other wind power facilities.

Response 31.12: As stated in Section 3.3.3.2 of the DEIS, the Project has been designed to minimize bird and bat collision mortality during operation. The turbines will be placed much further apart than in older wind farms where avian mortality has been documented, such as those in northern California. They will also be mounted on tubular towers (rather than lattice), which prevent perching by birds. In an effort to reduce avian and bat impacts, all electrical collection lines will be buried and aboveground segments of the 115 kV transmission line will follow Avian Power Line Interaction Committee (APLIC) guidelines for insulation and spacing.

As stated in Section 3.3.3 of the DEIS, CPP has committed to a post-construction collision mortality monitoring study and an avian displacement study. Study protocols will be developed in consultation with the NYSDEC and USFWS. Adaptive management will be employed to address any adverse impacts to birds and bats that are revealed by these studies.

Response 34.1: Results of avian and bat studies are presented in Section 3.3.1.2 and Appendix E of the SDEIS.

The field surveys conducted in the Project area incorporated many of the most current techniques being used to characterize wildlife communities and, more specifically, assess risk in the vicinity of proposed wind power developments in New York State. While not all of the surveys conducted at the Cohocton Wind Project were discussed with NYSDEC in advance of initiating the surveys, they reflect field survey methods and analyses commonly requested and accepted by the NYSDEC for such purposes. In 2004 and 2005 alone, more than a dozen proposed projects within the state were surveyed using radar, daytime visual methods, bat acoustic detectors, and breeding bird surveys. While the results of many of these surveys were not publicly available when the Risk Assessment for the Cohocton Wind Power Project was prepared, they have subsequently become available. For instance, the Cohocton Wind Project Risk Assessment included radar data from less than a dozen other seasonal studies in New York and the Northeast. The SDEIS, however, includes far more survey results.

Additionally, the Cohocton Wind Power Project is located in a part of the state that has received considerable attention with respect to wind farm development – both in the form of proposed projects and field surveys in support of those projects. For example, radar surveys were conducted at Cohocton during the spring of 2005. Additional radar surveys were conducted for WindFarm Prattsburgh and at another proposed project in Prattsburgh during the fall of 2004 and the spring of 2005. Radar surveys were also conducted in Howard, New York, approximately 16 miles south of the Cohocton Wind Power Project during the spring and fall of 2005. Nearly all of these other projects also conducted other surveys, including breeding bird point counts, visual hawk migration surveys, acoustic avian and bat surveys, and other types of bat surveys. The work conducted at Cohocton and available post-construction survey results alone provide an adequate information base on which to form accurate professional assessments of the potential impacts of the project. However, the abundance of additional information from other nearby sites further strengthens the assessment. In particular, there is no indication from the on-site data that any particularly unique wildlife communities or wildlife concentrations occur at the Cohocton Wind Power Project site. There is also no indication that the surveys conducted on-site were conducted during an "off" year.

Response 34.2: The results of the fall 2006 radar survey are summarized in Section 3.3.1.2.1 of the SDEIS, and a memo from Woodlot Alternatives presenting the interim results of this study is included in Appendix E of the SDEIS. Additional discussion of this topic, along with a copy of the final fall 2006 study report is included in Section 2.3 of the FEIS.

Response 34.4: Standard point count surveys typically requested and accepted by the NYSDEC were conducted at both Project sites. Point counts are repeatable survey methods that provide useful and comparable data on the species composition and relative abundance of breeding bird communities. The personnel at Woodlot Alternatives who conducted the surveys are highly qualified wildlife biologists with in-depth experience and knowledge of bird communities in the Northeast. They have conducted these types of surveys throughout New York and the Northeast.

Response 34.5: Bird studies include the use of the data from the USGS Breeding Bird Survey and the New York State Breeding Bird Atlas, which are directed by federal and state agencies, respectively.

Response 34.6: See response to comment 34.4.

Response 34.7: The pre-construction breeding bird surveys conducted within the Project area were in accordance with what is typically required by the NYSDEC for these types of assessments. Additional data is not necessary for permitting or pre-construction environmental review.

Response 34.8: The vast majority of bird fatalities occur during the migration season. This, combined with the fact that overall collision impacts to birds at existing facilities have been found to be very low (generally fewer than eight birds/turbine/year), clearly indicates that multiple years of data are not necessary to illustrate that the overall impact to nesting birds at the Project will be low.

Response 34.10: Because it is well documented that the majority of bird mortalities associated with wind turbines occur during the migration seasons, emphasis was placed on conducting field surveys during these time periods. These are also periods in which there will be the greatest density of birds on site. Additional efforts such as breeding bird surveys, bat surveys, and a literature review were also conducted to determine the presence of rare or protected species.

Response 34.11: The Project area provides a diversity of habitats for breeding birds and other wildlife species. As such, a diversity of breeding birds occur within and around the Project area, which was documented during point counts, area searches, and incidental observations collected over the course of the field investigations. The presence of the Spring Hill Wildlife Sanctuary (SHWS) was not overlooked. Instead, on-site information on the presence/absence of breeding birds in the project area, rather than in the adjacent town of Prattsburgh, was preferred. Additionally, the avian productivity data derived from the MAPS station at SHWS would not necessarily provide useful information for the evaluation of risk. The presence of the MAPS station and its long term past and future dataset may prove useful in tracking local or regional responses of the breeding bird community in the region.

Response 34.12: Consultation regarding the current and past occurrences of rare species was undertaken during the preparation of the DEIS for this project. Additionally, field surveys were conducted during the crepuscular time periods (dawn hours during breeding bird surveys and dusk/dawn during radar migration surveys), which are the principal activity periods for short-eared owls. No short-eared owls were observed during those field surveys. While it is certainly possible that a short-eared owl was observed in the Project area during the nesting season there is no evidence of a nesting pair or population currently occurring on the Project site.

Response 34.13: Northern harriers are known to occur in the Project area during both the migration and nesting seasons. Their use of agricultural areas and native grasslands is well documented. Considerable raptor use data has been collected at a number of wind facilities in agricultural and grassland habitats. That data documents relatively high use of the areas near those projects by harriers. Despite these high levels of use, Woodlot Alternatives is aware of only three northern harrier fatalities that have occurred at wind farms over the course of numerous post-construction assessments. These include two at Altamont Pass, California, an area that is known to pose a risk to raptors due to poor siting and the type and density of wind turbines present. This leaves only one harrier fatality documented at the more modern wind power sites outside of California that have been monitored for bird and bat fatalities, despite the relatively high use documented at some sites (such as Buffalo Ridge, Minnesota). These data, along with the diurnal habits and typically very low flight heights of foraging northern harriers, has led to the conclusion presented in the Risk Assessment and DEIS that the project will not create an undue adverse impact to northern harriers.

Response 34.14: Although appropriate habitat for sedge wrens may exist near the Cohocton Wind Power Project site, sedge wrens have not been identified in the area by the Breeding Bird Atlas, Breeding Bird Survey, or on-site Breeding Bird Survey conducted during 2006. Additionally, this species prefers wet meadows and marshes, which are areas avoided during the development of wind farms due to the difficulty of construction in hydric soils and the need for wetland permits for such activities. Consequently, impacts to this species or its habitat are unlikely.

Response 34.15: The bird expert's comment as presented by the commenter may be true. The habitat in that area may have once been suitable for these grassland bird species and portions of it still are. However, both species have been in decline since well before the 1980-1985 atlas efforts due to 1) conversion of farming practices to row crop and hay production and 2) 1950's abandonment of agricultural fields and subsequent succession to shrub and forested habitat. Both species were identified as historically present in the Cohocton area in the Risk Assessment for the Project and three grasshopper sparrows were observed at two of the 17 field point count locations during the on-site 2006 Breeding Bird Survey. It is acknowledged that both species could still occur in the Project area. Henslow's sparrows are species of fallow, usually wet, field areas, which are areas that were avoided in determining the Project's layout due to the difficulty of construction in hydric soils and the need for wetland permits for such activities. Consequently, impacts to this species or its habitat would not be expected.

Response 34.17: It is unclear to which USFWS guidelines the commenter is referring to with respect to bald eagles. However, with respect to the USFWS's Interim Guidance on Avoiding and Minimizing Wildlife Impacts from Wind Turbines, the project has been designed in accordance with recommendations that could be relevant to eagles. Turbines are not being placed adjacent to known eagle nesting locations. Site data indicate that eagle use of the Project area is extremely low (nesting season habitat is non-existent), and the Project area does not receive concentrated use by eagles during the migration season. In addition, food concentrations for bald eagles do not occur within the Project area (see site Development Recommendations 1, 2, 4, and 9 in the Interim Guidance document). In light of these factors, impacts to eagles have been minimized, and likely avoided altogether. Without more specific detail about exactly what the commenter is referring to, it is not possible to address this concern further at this time.

Response 34.18: Comparisons were made to other established hawk watch sites because they are generally located in areas with high concentrations of migrating raptors. Comparisons to these sites are appropriate because surveys are conducted there every day during both spring and fall. Such comparisons were not, however, the only basis for determining that the impacts to raptors, and specifically bald eagles, would be low. Numerous post-construction mortality surveys have been conducted at wind energy project sites. Very few raptor mortalities have been reported in those surveys. Additionally, no bald eagle fatalities have been reported from any wind power development. Finally, there is little, if any suitable habitat for eagles in the Project area. The presence of any bald eagles in the Project area during any season would be expected to be transitory in nature and during periods of good visibility (i.e. daytime).

Consequently, risk posed to bald eagles by the Project is considered low.

Response 34.19: See responses to DEIS Comments 95F (Biological Resources Section) and 105H (Avian Section) regarding the potential occurrence of, and threat posed by, avian “channeling”.

Response 34.20: Surveys during the breeding season would not provide an adequate picture of which avian species winter in the area. However, nearby Christmas Bird Count (CBC) survey results were reviewed to identify the bird community that likely occurs in the Project area during the winter months. Considering the large area that CBC data represents and the uniform rural landscape of the region, we believe that data from these counts are generally representative of the Project area as well.

Response 34.21: The great blue heron is listed as protected by the NYSDEC (i.e., there is no hunting season and the species is not considered a nuisance). Great blue herons are common throughout New York State. The listing of this species as a local occurrence by the Natural Heritage Program database was interpreted to mean that a rookery (nesting colony) of great blue herons had been documented in the area (see page 58 of the DEIS). As indicated in the DEIS, this rookery is far enough away that the proposed project presents little risk of collision mortality or habitat disturbance. The NYSDEC has not raised any concerns regarding this species or its occurrence in the area.

Response 36.14: The total turbine height (i.e., height at the highest blade tip position) will be approximately 420 feet (128 meters). The figure of 410 feet (125 meters) used in the Draft Avian and Bat Risk Assessment did not account for the height of the Clipper Liberty C96 turbines. The flight height data collected during the survey conducted in the fall of 2006 reported that the majority of migration during the fall survey period took place well above the height of the proposed turbines. The mean flight height of all targets was 358 m ± 10 m (1,176’ ± 33’) above the radar site. Therefore, the minimal difference in height (10 feet) does not significantly alter the conclusions of the Risk Assessment. Refer to Section 2.3 and Appendix B of the FEIS for a discussion of the avian conclusions.

Response 36.45: The field surveys conducted in the Project area incorporated many of the most current techniques being used to characterize wildlife communities and assess risk among New York State's various proposed wind power developments. Additionally, the Cohocton Wind Power Project is located in a part of the state that has received considerable attention with respect to wind farm development, both in the form of proposed projects and field surveys in support of those projects. The Dutch Hill Wind Power Project and the WindFarm Prattsburgh Project are within similar habitats/landscapes. Because there are similarities between the sites, data from multiple sites can be used to increase the overall knowledge base and strengthen conclusions. For this same reason, data from the Hamburg and Braddocks Bay, New York hawk watch sites were used as comparisons to data collected from the Project area because these established hawk watch sites are in known raptor migration flyways. Because these sites document migrating raptors and not breeding raptors, it makes no difference if they are located in rural or urban areas. The observed birds are in flight and pass through many habitats during migration.

Response 36.46: CPP has committed to conduct post construction operational monitoring and to implement appropriate mitigation measures in consultation with the jurisdictional wildlife agencies. See Section 3.3.3.2 of the DEIS and 3.3.2 and 3.3.3 of the SDEIS. This commitment constitutes the maximum practicable mitigation for avian impacts.

Response 36.84: The crossing of steep slopes, wetlands, and the Cohocton River is unavoidable along any potential transmission line routes across the Cohocton River Valley. An underground line, while reducing visual impacts and potential impacts to avian life, would likely result in more disturbance to these sensitive resources than an overhead facility; therefore, an overhead installation is proposed.

Response 49.2: Final results of the fall bird migration study are presented in Appendix B of this FEIS.

Response 49.3: It is acknowledged that missing only low migration nights, or only high migration nights, could affect the mean passage rate. However, probability suggests that it is unlikely that sampling would be biased in this manner. To assess the effect of sampling effort on the results of avian radar studies, Woodlot recently conducted a re-evaluation of seven 45-night spring radar data sets. That re-evaluation indicated that sampling with radar on as few as 15 to 20 nights yielded average migration characteristics (passage rate, flight height, and flight direction) that are not statistically different than the average calculated using 45-night data sets, assuming that the allocation of those fewer nights represents the range of weather conditions experienced over the full 45-night period. This re-evaluation has been presented at two recent industry and ecological conferences, including the Northeast Fish and Wildlife Conference held in Burlington, Vermont (Roy and Hengstenberg, 2006a) and the American Wind Energy Association (AWEA) Wind Power Project Siting Workshop (Roy and Hengstenberg, 2006b).

Response 49.4: General weather parameters are provided in the bat survey results data tables in the final fall 2006 report (FEIS Appendix B). This information is applicable to the radar survey. As noted in the response to comment 49.3 above, sampling of nocturnal migration activity within the appropriate migration window can, and does, provide a credible representation of the characteristics of night migration at a given site. This survey involved sampling methods in which blocks of days were surveyed within the known fall migration window. Additional information, such as additional weather notes and median flight heights could be provided, though these data would not significantly alter the overall conclusions of the Avian Risk Assessment. Additionally, and again as mentioned in response 49.3 above, the gaps in survey days are justified based on our Woodlot's re-analysis results and results from other nearby radar surveys.

Response 49.5: Prior to initiating radar surveys the scope of work was discussed with NYSDEC. During this meeting the NYSDEC expressed concern regarding the potential for migrants to use the Cohocton River Valley as a flyway, thus causing them to fly at low altitudes as they approach the Project area. For this reason the radar was oriented to the northwest, so that in the vertical made it could detect targets flying in the valley below. Additionally, passage rates were determined from horizontal mode, which samples migrants in a full 360 degrees around the radar. Random allocation of the 25 one minute samples recorded during each hour also helps decrease the probability of missing targets, because the one minute vertical and horizontal samples are taken during the same time periods. This often results in vertical and horizontal samples collected within the same approximate five minute period.

Response 49.6: While it may be possible that, during aerial breeding displays, there could be a higher possibility of horned larks colliding with the turbines, it should be noted that horned larks represented only approximately 6% of all observations at the Cohocton site. Because of this overall low abundance, few fatalities to this species would be expected. Additionally, this lower abundance will likely result in less intense territoriality of the species and fewer territorial defense distractions in calling males. This would result in a lower probability of collision.

Response 49.7: As stated in Section 3.3.3 of the DEIS, CPP has committed to a post-construction collision mortality monitoring study and avian displacement study. Study protocols will be developed in consultation with the NYSDEC and USFWS. Adaptive management will be employed to address significant adverse impacts to birds and bats that are revealed by these studies.

Response 49.8: See response to Comment C49.7.

Response 49.17: Post construction monitoring protocols will be developed in consultation with the NYSDEC and USFWS.

Response 53.20: The commenter's opinion that the numbers of raptors, specifically bald eagles were misrepresented is not true. All raptors seen or heard during the field surveys were documented. The fact that fewer raptors were observed during the two migration seasons indicates that a relatively small number of migrating raptors pass through this part of New York. For eagles, there is little, if any, suitable habitat in the Project area. The occurrence of bald eagles in the Project area during any season would be expected to be transitory in nature and during periods of good visibility (i.e. daytime). Even if there are nesting sites north of the Project area it does not mean that they will use or pass through the Project area. See Response 34.18 above.

Response 53.21: The radar used to conduct the studies is a 12kW unit, not 10 kW. Additionally, it has been fully demonstrated that radars of this type have more than enough power to accurately detect avian species because they are also capable of detecting insects. This sensitivity eliminates concerns regarding low bird counts. Additionally, most of the large number of avian radar surveys completed throughout the country have been conducted using these types of radars. This is the most current and accepted method for documenting nocturnal migration within a project area.

Response 53.22: The unidentified eye witness referred to in the comment is not correct. All of the radar surveys documented flight characteristics using marine radar connected to a computer with recording software. Data is recorded in this manner so that it can be analyzed at a later date. Within each hour of the radar survey a total of 25 randomly allocated one minute recordings of the radar screen are taken. This results in an enormous data base for later analysis. This also allows for a qualitative and, in some instances, quantitative, comparison of the different views and data sets from site to site.

Response 53.23: Video samples were analyzed using a digital video analysis software tool developed by Woodlot. For horizontal samples, targets were identified as birds and bats rather than insects based on their speed. The speed of targets was compared with wind speed and direction; targets traveling faster than approximately 6 meters per second were identified as a bird or bat target. The software tool recorded the time, location, and flight vector for each target traveling fast enough to be a bird or bat. The results for each sample were output to a spreadsheet. For vertical samples, the software tools recorded the entry point of targets passing through the vertical radar beam, as well as the time and flight altitude of the target above the radar location. The results for each sample were output to a spreadsheet. These datasets were then used to calculate passage rate, flight direction, and flight altitude of targets.

Hourly passage rates (in 1-hour increments post sunset) were calculated by tallying the total number of targets in the 1-minute samples for each hour and correcting for the number of samples collected in that hour. That estimate was then corrected for the radar range setting that was used in the field and was expressed as targets/km/hour (t/km/hr) ± 1 SE[3]. The hourly rates were used to calculate passage rates for each night and the entire season.

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[3] For the linear calculations (flight height and passage rates) standard error (SE) is calculated. For the circular data (flight direction) SE can not be calculated and instead circular standard deviation (SD) is calculated.

Mean target flight directions (± 1 circular SD[3]) were summarized in a similar manner: by hour, night, and for the entire season. Flight direction analysis and statistical analyses were conducted using software designed specifically to analyze directional data (Oriana2© Kovach Computing Services). The statistics used for this are based on Batschelet (1965), which take into account the circular nature of the data. Nightly wind direction was also calculated using similar methods and data collected from the central met tower, near the radar site. Mean wind speed was calculated using linear statistics (Zar 1999).

Flight altitude data were summarized using linear statistics. Mean flight altitudes (± 1 SE[3]) were calculated by hour, night, and overall season. The percent of targets flying below 125 meters (the approximate maximum height of proposed wind turbines) was also calculated hourly, for each night, and for the entire survey period.

The software includes a velocity calculator which uses target speed and wind speed to determine the overall target speed. The analyst inputs the ground speed of the target (as determined by measuring the distance traveled by the target on the radar screen in 30 seconds), the wind speed during that timeframe (from on-site met tower observations), and the angular distance (the distance in degrees between the target travel direction and the wind direction). The software then calculates the overall target speed using a mathematical calculation that accounts for these differences between the speed and direction of the target and the wind. Targets traveling less than 6 meters per second are considered non-bird or bat targets while those traveling faster than 6 meters per second are considered birds or bats, based on published flight speeds of birds, bats, and insects available in peer-reviewed literature.

Response 53.24: See response to Comment 53.23.

Response 53.25: Bat analysis and field investigations performed for the assessment used the most current methods, technology, and analyses available and were conducted by experienced biologists during the course of the field investigations.

Response 53.26: As indicated in Response 53.21 and 53.25 above, state of the art modern radar equipment fully capable of detecting small birds and bats was used. These radars provide site-specific data on the characteristics of nocturnal bird migration and are widely used for this purpose. In contrast, the radars recommended by the commenter would not provide the site-specific flight characteristics needed to assess potential impacts to migrating birds because they use much larger ranges than x-band radar. Additionally, the use of Doppler radar will not provide information on flight heights and flight direction within the Project area.

The use of a 12 kW x-band radar, such as the one used at the proposed Project, is the most commonly used and accepted method to characterize nocturnal bird migration at proposed wind power project sites. It not only allows for detection of small birds but also provides their flight directions and heights as they move over the landscape. This allows for a better and more accurate assessment of bird movements within the Project site. Other information that x-band radar can provide which Doppler radar can not, is evidence of, site-specific movements such as “funneling” (or lack of such movements). Because the radars recommended by the commenter sample such a large area (landscape level) they are not capable of documenting which, if any, topographic features influence bird movement within a given area. For this reason, Doppler radars and Navy radars are not useful as an aid to properly siting a wind power project.

The use of x-band radar has limitations for surveying bats because any radar is not capable of distinguishing between nocturnally migrating bats and passerines. It is not needed for surveying raptors because they can be visually surveyed during daylight and can be identified to species. Consequently, it was not used for this purpose. The radar was only used for nocturnally migrating birds, although occasional observations of probable bat targets also occur. Birds that migrate during the day, like raptors, are not surveyed using this technique; instead visual surveys following Hawk Migration Association of North America (HMANA) protocols were conducted. This allows for species identification, and documentation of flight height and flight direction. Bats can be detected by radar, but are only considered targets because species identification using marine radar is not possible. For this reason, acoustic bat detectors were also deployed on site to document bat use of the project area. These surveys are designed to document possible bat species presence and heavy use areas. The bat detectors are also deployed high in met towers to get data from as close as possible to the heights of the proposed turbines.

Response 53.27: It appears that the commenter is using fatality data from communication towers to estimate fatalities at wind farms. This process is flawed for several reasons. First, available information on fatalities at communication towers essentially reflects “big” events and not a typical night during migration. This will severely skew any assessment upwards. Second, the commenter arbitrarily chose to assume that a wind turbine would kill twice as many birds, as a communication tower. There is absolutely no scientific data in which to base such an assumption. Actual data indicated that because wind turbines are much smaller (± 125 meters) than communication towers, they present less risk to birds. Communication towers extend up to 700 meters above the ground. This is well into the airspace in which night migrants most commonly fly. Additionally, the largest fatality events have been documented at the tallest towers. In contrast, few night migrants fly at the heights of wind turbines. The guy wire arrays of communication towers add significantly to the surface area on which night migrants collide. Also, communication towers are lighted (with steady burning lights) at altitudes where birds are flying. This results in attraction of birds, which can cause confusion and exhaustion. This increases their likelihood of colliding with the tower or guy wire arrays. Finally, the commenter ignores the published accounts of fatalities at existing wind energy facilities, which is are better understood than tower collisions. For instance, multiple studies have investigated the actual rate of collisions at wind turbines, and have documented mortality rates that are generally low; typically less than eight avian fatalities per turbine per year.

Response 53.28: Sufficient data exist to adequately describe the dominant species occurring in the Project area and to characterize the flight habits of nocturnal migrants passing through or over the Project site. While year-to-year variation could occur at any given site, the characteristics of avian habitat use or night time flight habits do not. Birds respond to habitat loss or change in generally predictable ways. The abundance of radar survey data that have documented consistently similar flight heights and flight directions is proof of this. While multiple years or seasons of data can be useful when assessing population trends, this was not the goal of the pre-construction surveys. Although the variation in abundance that could occur from year to year is unknown, it is known that abundance does not change by orders of magnitude each year. Rather, the small changes that have been documented during multi-year surveys do not significantly strengthen assessments using such data.

Response 53.36: See response to Comment 36.76 regarding cumulative avian impacts.

Biological Resources

Response 34.9: Consultation with state and federal agencies regarding rare wildlife has been conducted to identify known or potential occurrences of such species in the Project area. To the extent available, relevant information regarding these species has been reviewed during the course of DEIS and SDEIS preparation. Data collection has included field surveys to verify the presence of species, when possible. In some cases, habitat based assumptions or assumptions of habitat use, have been used to infer potential impacts. Finally, the scope and extent of field surveys have been based on field methods commonly requested and accepted by NYSDEC during the consultation process.

Response 36.68: The above-ground 115 kV transmission line does cross several areas of wetland. However, these wetlands are primarily scrub-shrub and emergent/wet meadow communities that will be largely unaffected by the presence of the overhead line (i.e., little or no clearing or soil disturbance will be required). The only permanent wetland disturbance along this line will result from the placement of poles (although the wetlands are being spanned or otherwise avoided in most cases) and the clearing of trees in a few forested areas. Excavation impacts associated with the placement of a buried line are being avoided. Thus, siltation and sedimentation impacts to wetlands and streams along the line will be minimized.

Communication Facilities

Response 36.20: The turbine blade radius is correctly described as 48 meters (equivalent to a blade diameter of 96 meters) in Table 1 of Licensed Microwave Search and Worst Case Fresnel Zone Study (Appendix N of the SDEIS).

Community Facilities and Services

Response 31.18: CPP will coordinate with all affected utilities as required by law. CPP is already in direct coordination with the transmission and distribution groups of the electric utility, and in communication with the phone, fiber optic, and cable groups. Also refer to Section 3.10 of the DEIS and SDEIS.

Cumulative Impacts

Response 36.72: As stated in the SDEIS (page 112) and in Section 2.15 of the FEIS, the projects evaluated for cumulative impact were those for which information on the proposed layout and design was publicly available. Although the general location of other projects may be known, details regarding specific turbine numbers, dimensions, and location, were not available to the Applicant, and therefore could not be used in the cumulative impact analysis.

Response 36.74: Additional discussion of cumulative impacts is included in the Cohocton SDEIS and FEIS. Projects under consideration in this analysis include the Ecogen, LLC Prattsburgh/Italy Wind Farm Project, the WindFarm Prattsburgh Project, the Howard Wind Project, and the UPC Dutch Hill Project. The focus of the revised cumulative impact analysis is on potential cumulative visual, noise, shadow flicker, transportation and economic impacts.

Response 36.75: Cumulative visual impact was evaluated in the SVIA (Appendix F) from three representative viewpoints. These viewpoints were selected to show open views of turbines from multiple projects, at different distances and directions and under a variety of lighting conditions. As such, they adequately illustrate the potential cumulative visual effect of multiple proposed wind power projects in the area. Any view of the Project from the 12-mile Creek area would be very limited (i.e., include relatively few turbines) due to its valley location and screening provided by adjacent topography and vegetation.

Response 36.76: All indications from post-construction avian impact mortality surveys at existing facilities are that the overall impact of any given project to avian resources is extremely is low. In some cases, small impacts to local bird populations may not actually be measurable due to the difficulty in locating carcasses in some habitats. Even with so few birds colliding with turbines at any given project, cumulative effects could theoretically accrue. However, avian mortality in particular has been documented as occurring predominantly during the migration seasons and across a large number of species. This further limits the likelihood of cumulative impacts to any species. According to The Nature Conservancy (2007), more than three billion birds are estimated to be breeding in the boreal forests of Canada alone (to and from which some of the birds migrating through west-central New York would be traveling). In light of this, any small cumulative effect from several wind power projects in west-central New York would not result in population-level effects on these migratory species.

Additionally, the suggestion that there would be cumulative effects assumes that low fatality rates for a species cannot be mitigated. Many options for mitigating limited avian and bat mortality at facilities exist. Finally, in determining potential cumulative effects there would have to be some reliable certainty in what projects to include within any assessment. Presently, there is uncertainty if any, all, or some proportion, of the projects listed by the NYSDEC will actually receive a permit, obtain financing, and be constructed. In light of this uncertainty, evaluation of cumulative effects, if they were to occur, would be even more difficult and inaccurate.

Response 36.77: There is no business or ownership relationship between CPP or its ultimate parent company (UPC) and the developers of the Ecogen Prattsburgh-Italy Valley Wind Farm. As stated in the DEIS and SDEIS, only a generic EIS was prepared for the Ecogen project and, to date, final turbine locations remain unknown.

Response 36.81: As discussed in Section 8.0 of the Cohocton SDEIS, significant cumulative effects on local transportation routes are not anticipated due to the fact that the Projects are separated by over a mile and the local roads to be used for both the Cohocton Wind Power Project and the Dutch Hill Wind Power Project are limited. The revised Transporation Routing Plan (FEIS Appendix G) does not alter this conclusion. Only Loon Lake Road, NYS Route 415 and Davis Hollow Road, will be used by both projects and only for a total distance of approximately 2 miles. Additionally, preliminary turbine component delivery routes were selected to avoid major population areas such as business and residential areas in the Village of Cohocton. Prior to construction, the Applicant and/or contractor will obtain all necessary permits from the town and county highway departments and the NYSDOT. A final transportation routing plan will be provided to the Town of Cohocton and Steuben County, and will specify the local, county, and state roads to be used as haul routes by construction/transportation vehicles. This plan will provide the final turbine component delivery routing, and will identify any changes from the revised Routing Plan included in the FEIS. Any such changes, and related changes in impacts, will be reviewed by the relevant agencies at that time. Design plans will be completed for all public road improvements, and will be made available to the affected local towns (and jurisdiction having responsibility for the affected roads) for review prior to the initiation construction activities. The road improvement plan will be designed to avoid and minimize safety issues associated with the use of the approved haul routes, and will be develop based on input from town, county and state transportation officials. It will include such items as school bus routes, and scheduling. No road closures are anticipated and to the extent it may be necessary, a traffic management plan will be prepared in consultation with appropriate transportation officials. Where road improvements are required best management plans will be implemented to control such things as dust in construction areas.

Response 36.85: The Dutch Hill project is not a second phase of the Cohocton Wind Power Project. Rather, the two are separate projects. As stated in the SDEIS, the Cohocton Wind Power Project will be owned and operated by a separate project company, on a separate site, with a separate, independently controllable electrical interconnection. Construction and operation of the Project is not dependent upon the development or operation of the Dutch Hill Project, and the two projects will not be functionally dependent upon each other. Although the two projects will share a 115 kV transmission line from Lent Hill to the Brown Hill substation, each project will be separately interconnected to the Lent Hill collection station. The use of a shared transmission line to the Brown Hill substation is for purposes of convenience, and avoidance of the impacts that could result from construction of two separate interconnecting lines. Review of the Cohocton Wind Power Project pursuant to SEQR, and subsequent issuance of the permits necessary to construct and operate the Project, will not commit any reviewing agency to approve the Dutch Hill project. To the contrary, the Dutch Hill project will be separately reviewed. To assure that all environmental impacts were fully and appropriately reviewed, the Cohocton SDEIS included a cumulative impact assessment of the interactions between the two projects.

Response 36.93: Although the Cohocton Wind Power Project could stand alone with its own interconnection, this design would not make sense from either an environmental or economic perspective. More lines and substations would mean more environmental impacts and higher cost, which would in turn increase the price of electricity to consumers. Also, see Response 36.85 above.

Response 36.94: See response to Comments 36.72 and 36.74 above.

Response 53.34: A cumulative grid analysis is not within the scope of the cumulative impact analysis both because such electrical impacts are not environmental impacts under SEQR and because such analyses are entirely under the purview of the New York Independent System Operator (NYISO). The NYISO does extensive studies to ensure grid stability for all projects that wish to interconnect into the grid. The NYISO would not allow a project to deliver electricity onto the grid if such delivery would endanger grid stability. One of the purposes of the interconnection review process is to identify whether system upgrades are needed to maintain stability, and the developer must pay for the required upgrades if it wants to interconnect.

Response 53.35: See response to Comment 36.72 regarding the projects evaluated for cumulative impact. The potential cumulative socioeconomic impact of the Cohocton and Dutch Hill Projects was fully evaluated in Section 3.9 of the SDEIS. The fact is that in an economically depressed area, such as Steuben County, the proposed wind power projects (if built) will add jobs. Additionally, the PILOT payments promise to improve schools and economic development in the area, which may make the area more desirable and thus bolster property values.

Geology, Soils, and Topography

Response 11.3: Potential impacts on residential wells and proposed mitigation are described in Section 3.2 of the SDEIS. As discussed in greater detail in Section 3.2.3 of the SDEIS, CPP will undertake pre-construction and post-construction surveys of all residential wells within 1,000 feet of a proposed turbine site.

The Groundwater Study presented in the SDEIS indicates that activities associated with the construction of the proposed Project will be routine and are unlikely to result in adverse affects to the groundwater/aquifer. As discussed in the SDEIS, no blasting is anticipated for the Project. If bedrock is encountered it is anticipated to be ripable, and will be excavated with an excavator. If the bedrock is not ripable, it will be excavated by breaking hammer, pneumatic jacking, hydraulic fracturing, or blasting. Blasting will be utilized only if the other potentially available methods of excavation are not practicable. CPP anticipates that few, if any, turbine sites will require blasting. If blasting is required, it will be conducted in compliance with a Blasting Plan, and in accordance with all applicable laws and good engineering practices to avoid impacts to sensitive receptors. If blasting is proposed at a tower site, the nearest groundwater wells will be identified, and if necessary, pre- and post-blasting inspections of the wells will be conducted.

It is worth noting that shallow bedrock was encountered by the Madison, Fenner, and Maple Ridge Wind Power Projects. Out of a total of over 200 foundation holes excavated on these Projects, blasting was necessary at only two tower sites, both of which were on the Fenner Project. As discussed in the groundwater study included in Appendix C of the SDEIS, the type of excavation and foundation work anticipated on the Cohocton Wind Power Project is not unusual, and is predicted to have only very localized and temporary impacts on groundwater.

Response 11.4: It is unlikely that blasting will be necessary. Please see the response to Comment 11.3 above. However, if blasting does occur, it will be done at least 1,500 feet from any residence. Blasting effects occur within a much smaller radius of the blast zone —typically 200 to 300 feet; therefore, no damage to residential foundations is anticipated. All blasting of this type is covered by heavy blast mats and will be performed by experienced licensed professionals in accordance to all state and federal requirements. No material would move or fly, and any effects felt would be primarily audible, rather than movement.

Response 11.5: As stated in Section 2.4 of the SDEIS, little if any blasting is anticipated for installation of tower foundations. However, if blasting is found to be necessary on a limited basis, a pre-blast survey of all structures within the vicinity of the subject tower foundation including houses, barns, bridges, etc. will be conducted by the blasting contractor. Further, the blasting will be conducted utilizing minimum charges, exploded in a manner to minimize shock wave propagation beyond the immediate area. Accelerometer measurements will be collected for confirmation. Please also see the responses to Comments 11.3 and 11.4 above.

Historic and Archaeological Resources

Response 31.15: As stated in Section 3.6.3 of the SDEIS, visual impacts on historic structures will be assessed for significance in consultation with the SHPO. If the permanent introduction of Project elements into the visual setting of a significant historic structure is determined by the SHPO to cause an adverse effect (i.e. alter characteristics of the resource that contributed to its eligibility to the National Register), then efforts will be made to avoid, minimize, or mitigate those impacts. CPP will consult with the SHPO and, to the extent any mitigation is required, propose mitigation measures for implementation as approved by the SHPO.

Response 36.47: The archaeological survey for the Cohocton Wind Power Project was conducted during the summer and fall of 2006. An area field assessment was conducted in October 2005. Specific dates for archaeological field testing were 5/15/06 through 6/2/06, 6/13/06, and 10/2/06 through 10/6/06.

Response 36.48: Archaeological fieldwork for the proposed access roads, buried cable routes, and overhead transmission line has been completed.

One approximately 8-acre temporary laydown area will service both the Dutch Hill and Cohocton Wind Power Projects, to stockpile materials and equipment during construction. The laydown area is expected to be on the east side of the Cohocton River; its location has not been finalized at the time of this filing. Once the location is determined, the laydown area will be assessed for the presence/absence of cultural resources in compliance with the SHPO's January 2006 guidelines for wind projects, and in consultation with NYS OPRHP.

Response 36.49: Detailed aerial photographs of the Project Area and archaeological sites are included in the Phase 1A and Phase 1B reports. These are high-quality panchromatic 2002 photographs that provide a broader view of the Project Area than photographs of individual landforms.

Response 36.50: Turbine 27 is approximately 210 feet from the Edmond Road site.

Response 36.51: The archaeological survey was conducted under the SHPO Guidelines for Wind Farm Development Cultural Resources Work (the SHPO Guidelines) issued in January 2006 by the OPRHP. These guidelines specifically state: "Within each zone shovel testing will be conducted using a five meter interval or other acceptable methods such as plowing/disking for previously plowed farm land." All systematic surface inspections were conducted for plowed/disked fields with at least 70% surface visibility.

Response 36.52: Testing was conducted following the SHPO Guidelines. These guidelines specifically state: "Within each zone shovel testing will be conducted using a five meter interval or other acceptable methods such as plowing/disking for previously plowed farm land." Additional surface inspection was conducted for each prehistoric artifact find, but no additional material was recovered.

Response 36.53: The SHPO Guidelines require assessment of a representative sample of settings and landforms that may contain cultural resources within a project area. This strategy means that some areas (particularly redundant upland knolls) within the overall Project area will not be tested. The archaeological testing conducted is fully representative of the upland environment.

Response 36.54: The Lent Hill 2 site was identified near the impact area for turbine 1 atop Lent Hill. GPS coordinates were taken during the survey to geo-reference the site. Layout maps were obtained from CPP and EDR and overlain on the associated USGS 7.5' topographic map and DOT planimetric maps. Accurate GPS information was available for each turbine location to aid the archaeological survey work.

Response 36.55: The initial field visit and Phase 1A report for the WindFarm Prattsburgh Project was completed in 2003; the intensive field survey and Phase 1B report was submitted in the spring of 2006 (work is still on-going). The site files information for documented archaeological sites has not changed since 2003, and was considered as relevant to the Cohocton Wind Power Project. The site files search is meant only for background research; not as a true or accurate predictor of archaeological site locations. To update the file search, the new OPRHP GIS database was accessed. That database shows no sites atop Pine, Lent or Brown Hills in the Cohocton Wind Power Project Area (see Figures 1 and 2 in FEIS Appendix N).

A field visit was conducted for the Cohocton Wind Power Project in October of 2005 prior to the completion of the Phase 1A report. As presented in the 1A report, the field visit consisted of a drive-over and description of the Project area. Wording from the Prattsburgh report was used for the Cohocton 1A report since much of the area is similar in terms of the environment, historic settlement, and current landuse.

Response 36.56: The statement was taken from the sensitivity assessment and indicates a relatively low potential for sites atop Lent Hill and Pine Hill. Further discussion of the two potential MDS locations (the Wheaton and Edmond Road sites) as well as the difficulty of correlating 19 century historic and modern maps is presented in the Phase 1A report under the Historic Context Section. Summaries of the associated historic archaeological sites are provided in the Phase 1B report.

Response 36.57: Soils information included in the archaeological report provides a general description of soil characteristics of the project area. Detailed information regarding soil hue and chroma (as would be determined using a Munsell color chart) is not required for an archaeological investigation at this level (reconnaissance survey). This level of detail is typically provided only in a soil survey or wetland delineation where detailed soil characteristics are critical to the results of the investigation. Detailed soil characteristics (e.g., Munsell codes and texture) are part of the typical field methodology for archaeological site examination or data recovery excavations.

Response 36.58: Archaeological sampling at each turbine site was in full compliance with SHPO requirements/standards, and was adequate to access the potential for the occurrence of archaeological resources in these areas.

Response 36.59: There are not 17 substations shown on the referenced figures. These sites are indicated as being access roads, turbine sites, **or** substations, where shovel testing (as opposed to systematic surface survey) was performed.

Identity of Developer

Response 18.5: Canandaigua Power Partners, LLC (CPP) and Canandaigua Power Partners II, LLC (CPP II) are wholly owned subsidiaries of UPC Wind New York, LLC, which, in turn, is a wholly owned subsidiary of UPC Wind Partners, LLC (UPC Wind or

UPC). CPP is proposing to develop the Cohocton Wind Power Project, a wind-powered generating facility of up to 36, 2.5 megawatt (MW) turbines, which have a maximum generating capacity of up to 90 MW. CPP II is proposing to develop the Dutch Hill Wind Power Project, a wind-powered generating facility of up to 16, 2.5 megawatt (MW) turbines, which have a maximum generating capacity of up to 40 MW.

Land Use and Zoning

Response 1.3: Under the Town Zoning Law, the operations and maintenance building is an accessory structure to the Windmill facility, and is therefore an authorized use in the Agricultural-Residential District as a Special Permit Use. CPP has applied for the required special use permit to authorize construction of the project, including any operations and maintenance buildings with the Town of Cohocton. Any operations and maintenance buildings will be counted as project infrastructure and will be included in the PILOT agreement.

Response 2.1: The temporary meteorological towers are not part of the Cohocton or Dutch Hill wind power projects. They will be removed prior to commercial operation of the projects. The towers were properly classified by the Town's Code Enforcement Officer as Commercial Antenna/Communications Towers, and have been issued the appropriate Special Use Permits by the Planning Board.

Response 36.12: Cohocton Windmill Local Law No. 2 of 2006 is currently in effect and applicable to the Cohocton Wind Power Project.

Response 36.25: Storage areas and staging/construction areas will be identified prior to site preparation, and coordinated with all agencies. Normal permitting standards apply and will be pursued to ensure the sites are deemed suited for the temporary activity. Under the Town Zoning Law, the staging area is an accessory use that is part of the overall project. It is, therefore, an authorized use in the Agricultural-Residential District as a Special Permit Use. The Planning Board will review and approve the location of the staging area. Also, please see Response 1.3 above.

Response 36.26: See Response 1.3 above.

Meteorological Data

Response 18.4: Data collected from onsite meteorological towers is proprietary information. The DEIS did not indicate that this data would be provided in the SDEIS. The data from the existing temporary meteorological towers has been presented to the Town and reviewed at a meeting, however, the data was not left in the Town's possession because it is trade secret material.

Mitigation

Response 36.83: Impact avoidance, minimization and mitigation measures proposed by CPP are described throughout the DEIS and SDEIS. All of the general types of mitigation mentioned in this comment are being proposed by CPP. Summaries of mitigation measures proposed in the DEIS and SDEIS are included in Section 1.2 of the FEIS.

Other

Response 31.6: To the extent that CPP retains maintenance responsibilities within the ROW, ROW management along the 115kV transmission line will include the periodic removal or pruning of tall vegetation that may interfere with the electric line either through cutting or mowing. Selective use of herbicides may be considered except in wetland areas.

Response 53.46: Comment noted. The Cohocton DEIS and SDEIS provide a comprehensive evaluation of the potential environmental issues associated with the proposed wind power project.

Permits and Approvals Required

Response 14.2: The comment is noted. CPP plans to obtain the necessary permits for all utility crossings.

Response 16.3: CPP and CPPII are registered to do business in the State of New York.

Response 19.2: CPP plans to enter into a road use agreement, as needed, with the Steuben County DPW provided that CPP utilizes County roads. Roads will be assessed for weight carrying capacity and catalogued, to ensure they are in similar condition at completion of the project. For the county, a use and occupancy permit will be applied for to accommodate the electrical crossings, and a permit to modify the county roads as needed for the transport of over-weight and over-dimensional (OWOD) loads.

Response 19.3: CPP will work with both the Town of Cohocton and Steuben County DPW to obtain all necessary permits. CPP has already been in contact with both the Town of Cohocton and Steuben County DPW to this end.

Response 23.3: Please see the response to Comment 19.2 above.

Response 36.18: As stated on page 10 of the SDEIS, the Cohocton Wind Power Project could be as large as 36 turbines or as small as 33 turbines. Thus (assuming the use of 2.5 MW turbines) the 82.5 MW estimate used in the economic analysis is a realistic, if conservative, estimate of the proposed project's generating capacity. It is also consistent with Interconnection studies performed by the NYISO. As stated in numerous instances, the Cohocton and Dutch Hill Projects are considered separate/independent projects. The two are considered together in the economic analysis only to provide an estimate of the cumulative economic impact of the two projects (as discussed in Section 8.0 of the SDEIS).

Response 50: CPP expects to work with the Town of Cohocton Department of Public Works and the Steuben County Department of Public Works to receive highway work permits. In addition, CPP expects to work with the New York State Department of Transportation to receive special use permits for oversize/overweight vehicles, highway work permits and use and occupancy permits.

Project Construction

Response 31.4: No need for off-right-of-way access roads is anticipated. Impacts for access roads are addressed in Section 3.0 of the SDEIS and Section 2.0 of the FEIS.

Response 31.5: CPP will have construction, transportation and project management yard plans that will be designed to avoid and minimize resource impacts.

Response 31.7: CPP investigated the underground crossing of Route 390. It was determined that this alternative was not feasible for a number of reasons, which included: the logistical issues in collecting sufficient thermal resensitivity data by boring through Route 390 to determine the heat dissipation design for the cables;

NYSDOT's objection to placement of this high voltage line underground within the ROW; and the logistical difficulty in maintaining or replacing this line if a fault occurs within this underground section. Therefore, the underground crossing was rejected as impracticable and unreasonable, and an overhead crossing was selected.

Response 31.10: As indicated in the DEIS, the Project will comply with all NYSA&M Agricultural Protection Guidelines including the restoration of the temporary staging area. Following completion of construction (including turbine erection) on all disturbed agricultural lands, excess gravel and fill will be removed from along the access roads and crane paths, around towers and in temporary parking and staging areas. Exposed subsoils will be decompacted with a deep ripper or heavy duty chisel plow to a minimum depth of 18 inches. Soil decompaction will be conducted prior to topsoil replacement. Following decompaction of the subsoil, the surface of the subsoil will be rock picked to remove all rocks four inches in size or larger. Following rock picking, stockpiled topsoil will be returned to all disturbed agricultural areas. The topsoil will be regraded to match original depth and contours to the extent possible. The surface of the regraded topsoil will be disked and any rocks over four inches in size will be removed from the soil surface. Restored topsoil will be stabilized by seeding and/or mulching in accordance with guidance provided by the Environmental Monitor in consultation with the landowner/farm operator.

Response 49.1: Section 4.3 of the SDEIS states that CPP will hire environmental monitors. NYSA&M recommends that the project sponsor hire a competent agricultural inspector to supervise site preparation, construction and restoration activities, and meet the standards that are formally reviewed and adopted. Two years of post-construction monitoring of restored agricultural land will also be conducted in accordance with NYSA&M Guidelines. Agricultural inspection and supervision is critical to a wind power project due to its concentrations of localized activity, stretched out over the expanse of the numerous tower sites, access ways, and buried cable zones. The environmental monitors on site will ensure compliance with environmental commitments and permit requirements, and will have stop work authority.

Response 53.14: According to the manufacturer (Clipper), the volume of concrete required is approximately 550 cubic yards per wind turbine generator, or a total of 19,800 cubic yards for all turbines. A 10 cubic yard concrete truck typically carries 8 cubic yards per trip. Therefore, it is anticipated that 2,475 truckloads will be required to pour out the Cohocton Wind Power Project.

Response 53.15: All material excavated from turbine foundation holes will generally be used as backfill. It is anticipated that all of this material will be placed over the foundation and compacted. In some cases excess excavated rock may be used as base material for nearby access roads, and any excess topsoil will be spread on adjacent agricultural fields. On wind power projects constructed in New York to date, no off-site removal of excavated material has been required.

Project Decommissioning

Response 11.7: As stated in Section 2.6 of the DEIS, prior to the start of construction, a financial instrument will be in place to ensure that sufficient funds are available for removal of the wind turbines and associated equipment at the end of the Project's operational life. Megawatt-scale wind turbine generators typically have a life expectancy of 20-25 years. The current trend in the wind energy industry has been to replace or "re-power" older wind energy projects by upgrading older equipment with turbines that are more efficient. However, if not upgraded, or if the turbines are non-operational for more than one year, they will be decommissioned in accordance with the Town of Cohocton Windmill Local Law.

Decommissioning would consist of the following elements: all turbines, including the blades, nacelles and towers will be disassembled, and transported off site for reclamation and sale. All underground infrastructure at depths less than 48 inches below grade will be removed. All underground infrastructure at depths greater than 48 inches below finished grade (including the subsurface collection conductors, and foundations) will be abandoned in place. Areas where subsurface components are removed will be graded to match adjacent contours, stabilized with an appropriate seed mix, and allowed to re-vegetate naturally.

Response 53.19: Sufficient funds for decommissioning will be available. Financial assurance for decommissioning will be provided in compliance with the Cohocton Zoning Law.

Project Description

Response 1.4: The number of turbines referenced in the Management Summary of the archaeology report (Appendix G of the Cohocton SDEIS) is correct. This text indicates that a total of 61 potential turbine sites were investigated, but that, as of September 2006, only 36 turbine sites were being considered. This is consistent with the number of proposed turbines described in the SDEIS.

Response 31.1: Guyed, three-pole structures will not be used at major angle points. Rather, guyed single-pole structures will be used.

Response 31.2: There are four guyed angle structures along the 115 kV transmission line where it crosses Wetland AV-1 (Figure 3 of FEIS Appendix N). All will be single wood poles. Structure 55, at the southern end of this stretch, where the line angles west and crosses the railroad, will have 8 guy wires and 4 anchors, some of which may fall within the wetland. Structures 70 and 71, near the intersection of the railroad with Flint Road will each have 4 guy wires and two anchors. The guys for these structures are not anticipated to intrude on the wetland or interfere with the road or railroad. The northern-most angle structure in this stretch is structure 73, located southeast of the intersection of Flint Road and Jones Road. This structure will have 4 guys and 2 anchors, which are not anticipated to impact either the roads or wetland in this area. Final design drawings of the line are currently in preparation.

Response 31.3: Comment noted. Figure 3 of FEIS Appendix N provides detail of the transmission line crossing Wetland AV-1. Final wetland impacts will be described in a U.S. Army Corps of Engineers' Joint Application for Permit currently being prepared for the Project.

Response 36.8: The Project Description in the SDEIS indicates that a maximum of 36 wind turbines are proposed within the Project site. A review of the SDEIS did not find any mention of adding an additional 25 wind turbines to the Project at a future time.

Response 36.11: The online NYISO interconnection queue is incorrect. The Cohocton Wind Power Project will be capable of generating up to 90MW.

Response 36.13: Minor shifts of the proposed turbine layout that have occurred since preparation of the SDEIS are described in Section 2.0 of the FEIS, and their impacts fully addressed. As indicated in that section of the FEIS, these shifts have not resulted in any significant changes to potential environmental impacts. The project also remains in full compliance with the requirements of the Cohocton Windmill Local Law.

Response 36.21: The town of Avoca has been notified and CPP is working with the town in regard to this section of 115kv line.

Response 36.22: The Clipper Wind turbine is in commercial production, and has been certified by Germanischer Lloyd. Even if it were not, however, the SEQR process would not be premature. The proposed Clipper turbines have been tested and certified, and CPP would not be investing millions of dollars in these machines if there were serious risks of malfunction. The Project would be unable to obtain financing if there was any significant concern regarding turbine reliability.

Response 36.23: The DEIS indicates that, in accordance with the FAA requirements, obstruction warning lights and wind instrumentation would be mounted on the turbine nacelle. This statement is true for both the Gamesa G87 turbine described in the DEIS and the Clipper Liberty C96 turbine described in the SDEIS.

Response 36.65: CPP will obtain all necessary permits and approvals from local, state and federal agencies for the siting of the transmission line. The transmission line is sited as far away from residences as possible considering the constraints of land ownership and other environmental concerns. The closest non participating landowners are 500 feet from the line, and there are only three of those. The rest are located at a distance of 1,000 feet or more from the line. Additional information on the construction and maintenance of the 115 kV transmission line, and associated environmental impacts, is included in Sections 2.0 and 3.0 in the Cohocton SDEIS. As now proposed, the transmission line will result in 1.4 acres of temporary disturbance and less than 0.1 acre of permanent wetland loss. Regarding concerns for EMF, as stated in Section 3.10.3.2.6 of the Cohocton DEIS, because no significant impacts from EMF are expected, no mitigation is required. Please see response to comment 31.9 in the Public Safety section.

CPP has placed all interconnection lines as far as possible from residences and areas of public use to address any public concerns. Also, to mitigate the potential effects of EMF from the Project to the maximum extent practicable, CPP will voluntarily adhere to the electric field strength interim standards established in the PSC's Opinion No. 78-13, and the magnetic field strength interim standards established in the PSC's Interim Policy Statement on Magnetic Fields, issued September 11, 1990. Please see Section 3.10.3.2.6 of the SDEIS for further details. The reference to the letter consulting the DOH is unclear and no specific letter was attached to the comment letter.

Response 36.67: CPP stated that it would connect individual turbines via underground lines (the collection system) but it has never promised to place transmission lines, i.e. lines that connect the collection system to a substation or utility high voltage line, underground. However, to minimize visual impacts, the 34.5kV line that connects Dutch Hill to Lent hill substation has been routed underground to the maximum extent possible. Only the sections of lines in steep slopes, where NYSEG over-build is possible, or where physical features preventing undergrounding (the Cohocton River and railroad tracks) is this above line aboveground.

Response 36.70: Changes regarding the output of the project are covered in the SDEIS. Fewer turbines are now proposed than what were evaluated in either the DEIS or the SDEIS. Potential impacts have therefore been reduced.

Response 36.71: Changes in the output of the Project were addressed in the SDEIS in Section 2.1. The project now has fewer turbines than originally contemplated, thereby decreasing impacts.

Response 49.15: CPP will develop an environmental compliance program and employ environmental monitors to oversee compliance with environmental commitments and permit requirements. The compliance program will include the following elements: planning, training, preconstruction coordination, construction and restoration inspection.

The monitoring program will include the inspection of construction work sites by the environmental monitor. The monitor will be present during construction at environmentally sensitive locations, will keep a log of daily construction activities, and will issue periodic/regular reporting and compliance audits. Additionally, the monitor will work with the contractors to create a punch list of areas for restoration in accordance with issued permits. Following construction, CPP or an environmental monitor will maintain a monitoring presence for two years following completion of site restoration (in accordance with NYSA&M requirements) to evaluate areas disturbed during construction and assure that agricultural and ecological functions and values are restored and maintained over the long term.

Response 53.5: The production of the wind turbines at the Cohocton Wind Power Project is described in Section 9.0 of the DEIS and SDEIS and is based on wind resource data for the site. Based on this data, a capacity factor of approximately 30% is anticipated including losses. The availability (or "availability factor") relates to the reliability of a wind turbine or other power plant and refers to the percentage of time that a plant is ready to generate. Modern wind turbines have an availability of 98% or more and therefore will not significantly effect electric production. The power produced will be distributed to the grid through the transmission connection and will be usable to by the electric load serviced by the grid. Based on a nameplate capacity of 90MW the annual electric production should be approximately 236,520 MWH.

Response 53.7: Wind data is proprietary. However, if much less than a 30% capacity factor were projected, the Project would not be economical. Please refer to the response to comment 18.4 above.

Response 53.8: Comment noted. Downstate New York does not have the wind resources or available private lands for wind farm development.

Response 53.17: Comment noted. Disturbances of the peace, or other violations of law, will be addressed by appropriate law enforcement agencies in accordance with their normal policies.

Project Design

Response 18.2: The Town of Cohocton Windmill Local Law and the NYSA&M Agricultural Protection Guidelines do not require a cap on the number of turbines proposed. As discussed in Section 5.0 of the DEIS and SDEIS, the number of turbines is limited by the available wind resource, the number of participating landowners, set-back requirements, and various environmental constraints. The project as proposed is in compliance with the local ordinance and adequately protects agricultural resources.

Response 18.3: At present, neither CPP nor any affiliate is seeking approval for any more turbines than the Dutch Hill Wind Farm turbines and Cohocton Wind Farm turbines.

Response 18.7: Section 2.2.6 of the SDEIS indicated that the Project operations and maintenance (O&M) facility would include a 25,000± square foot building. The building would resemble an agricultural building, and would be located within the Project site in the Lent Hill area. Some additional information regarding the location, size, and appearance of the proposed O&M Building, is included in Section 2.2.6 of the SDEIS. CPP's application for a special use permit includes the office and operations building with the Town of Cohocton.

Response 31.8: Although the Dutch Hill Wind Power Project could have its own interconnection and thereby operate completely separately from the Cohocton Wind Power Project, this was not desirable from an environmental or financial perspective. Building a separate interconnect line for Dutch Hill would have resulted in a second transmission line and likely two new substations, 34.5 to 115 on Dutch Hill and 115 to 230kV on Brown Hill. Building this infrastructure would result in significantly more visual and environmental impacts than sharing interconnection between the projects. Furthermore, as it is UPC's commitment to deliver wind power to New York rate payers at the lowest cost possible, this kind of extra infrastructure can not be justified.

Response 36.1: The Clipper Liberty C96 is in commercial production, and has been certified by Germanischer Lloyd.

As discussed in Section 2.7 of the FEIS, new field measurements of the Clipper Liberty C96 prototype have become available since the original assessment was submitted that show that the turbine will not produce any significant tones and that its overall sound level will be about 2 dBA quieter (compared to the preliminary sound power level data used in the original study).

Response 36.28: The SDEIS and FEIS identifies specific proposed turbine sites and quantifies the anticipated area of construction-related disturbance at each of these sites. Vehicular access to the proposed 115 kV transmission line is anticipated to be accommodated through the use of existing roads and farm lanes. Once on the right-of-way, vehicular activity is anticipated to disturb a 20-foot wide corridor along the entire right of way, and a 50 by 100 foot area at each pole site. The impacts associated with an 8-acre laydown/staging area are also described in the SDEIS. Any changes to the proposed project and associated impact calculations are included in the FEIS.

Response 36.29: As set forth in the Cohocton DEIS and SDEIS, it is unlikely that blasting will be needed. Further information as to the need for blasting will not be available until the complete geotechnical survey is completed. Any blasting that may be needed will be conducted pursuant to a blasting plan that will be reviewed and approved by the Planning Board. The impacts of blasting will be quite localized, and the commitment to develop a plan for the Town's approval constitutes impact avoidance and mitigation to the maximum extent practicable. Please see the responses to Comments 11.3 through 11.5 above.

Response 36.33: See responses to DEIS Comments 51J and 78A/78B (Public Safety Section).

Response 36.5: The change in turbines and project output are precisely why CPP decided to produce an SDEIS. Because turbines were reduced from 41 to 36, the impacts of the revised project are generally less. The Clipper Liberty C96 is a full certified wind turbine and has units in operation.

Response 37.2: Turbine setbacks from roads, property lines, and adjacent residences are in compliance with the requirements of the Cohocton Windmill Local Law. The setback requirements in the law apply to structures and dwellings in existence as of the time that the special use permit application for the wind energy project was deemed to be complete and referred to the Planning Board for review and hearing. Issuance of a building permit does not mean that a structure will actually be built, and therefore cannot reasonably be used to trigger setback requirements.

Response 37.3: This comment is outside the scope of the DEIS or FEIS.

Response 53.4: The Cohocton Windmill Local Law requires a setback from public roads equivalent to maximum structure height plus 100 feet. The proposed Project is in full compliance with this requirement.

Project Operation

Response 53.6: The amount of electricity consumed by a wind turbine is negligible compared to what is produced. A Clipper Liberty C96 Turbine uses approximately 10MWh/year and it produces over 650 times that number per year. Contrary to the assertion in the comment, CPP does pay for this electricity and it is included in the cost of operating the wind turbine. This further illustrates the comparatively small nature of this use compared to what it produces because if it were not small, the project would not be economical.

Property Values

Response 2.2: While the pending presence of nearby wind turbines may be considered undesirable by some perspective buyers, property value studies included and/or cited in the SDEIS indicate wind power projects are unlikely to have a long term adverse affect on local property values. Appendix M to the FEIS indicates that public perception of wind power projects is generally positive, and that this reaction applies to local residents as well as the public in general.

Response 5.2: Section 3.9.2.2.1 of the DEIS describes the results of a quantitative study that was conducted by the Renewable Energy Policy Project (REPP) in 2003, titled *Effect of Wind Development on Local Property Values*. REPP assembled a database of real estate transactions adjacent to every wind power project in the United States (10 MW or greater) that became operational between 1998 and 2001 (a total of 10 projects, including the Madison and Fenner Projects in Madison County, New York). The results of this study showed no negative affect on property value from existing wind farms. More specifically, the REPP study concluded that there is no evidence that the presence of the Madison and Fenner wind farms had a significant negative effect on residential property values in Madison County, New York (Sterzinger, et. al., 2003).

The REPP study has been criticized by some because it assumes that all properties within the study area have a view of the respective wind farm, does not account for property distance to the wind farm, uses a questionable statistical analysis, and includes inappropriate transactions (e.g., estate sales, sales between family members, sales due to divorce, etc.). To present a clearer understanding of the actual effects of existing wind farms on property values, a Master of Science thesis project was undertaken by Benjamin Hoen of Bard College. A summary of this report is set forth in Section 3.9.2.2.1 of the SDEIS.

The Hoen study's analysis of 280 home sales within 5 miles of the Fenner Wind Farm did not reveal a statistically significant relationship between either proximity to, or visibility of, the wind farm and the sale price of homes. Additionally, the analysis failed to uncover a relationship even when concentrating on homes within one mile of the wind farm that sold immediately following the announcement and construction of the Project. This study therefore concluded that in Fenner, a view of the wind farm did not produce either a universal or localized effect on home values. To the degree that other communities resemble the Fenner rural farming community, similar conclusions are anticipated (Hoen, 2006).

A site specific analysis of this concern was undertaken for the proposed Cohocton Wind Power Project by Cushman & Wakefield (see Appendix L of the SDEIS).

This study concluded that the proposed Project should have no impact on the values for undeveloped properties or existing farms. It also found that local property values will be much more susceptible to the local economy than to changes in the viewshed created by the proposed Project. Consequently, Cushman & Wakefield concluded that the project should have no significant impact upon future sales or values of developed properties given the prevailing conditions.

Given the results of the REPP, Hoen, and Cushman & Wakefield studies described above, and the similarity of the Madison County sites to the Cohocton Wind Power Project area, it is reasonable to conclude that the proposed Cohocton Wind Power Project will not have an adverse impact on local property values.

Response 6.1: Refer to Comment Response 5.2.

Response 7.3: Refer to Comment Response 5.2.

Response 9.3: See response to Comment 2.2.

Response 11.2: Refer to Comment Response 5.2

Response 17.3: Refer to Comment Response 5.2.

Response 31.16: The bibliography represents the body of knowledge considered by Cushman and Wakefield in forming their opinion. The actual memorandum is intended as a summary of their research and findings, not a thesis.

Response 35.20: Cushman and Wakefield relied on a number of sources for the information used in its evaluations presented in Appendix L of the Cohocton SDEIS. This included local real estate transactional experience as well as transactional experience at other locations with operating Wind Power projects. The Cushman and Wakefield report also presents data from a study by Hoen that examined the effect of wind turbine presence on property value for the Fenner wind project. Hoen inspected the views of all sale properties and adjusted for any impact and the result was that, for these impacts, the significance on sale price was negligible compared to other factors. The Hoen study incorporated both distance and view variables and the results did not uncover a statistically significant relationship between either proximity to or visibility of the windfarm and the sale price of homes. The same was true for homes within 1 mile or for homes that sold immediately following the announcement of the windfarm.

The conclusion by Cushman and Wakefield that the wind projects are not likely to effect property values relies on this factual information as well as site specific factors such as property values being more affected by local economic conditions than the presence of turbines.

Response 35.21: Cushman and Wakefield did incorporate the input of local and regional experts into their November 15, 2006 report (SDEIS Appendix L). In addition to the Cohocton Town Assessor, several realtors from localities adjacent to wind farms in upstate New York were also interviewed.

Response 35.22: Please see the response to Comment 35.20 above.

Public and Agency Involvement

Response 36.92: Consistent with the requirements and objectives of SEQR, the public hearings were combined so as to avoid public confusion, to promote efficiency, and for the convenience of the public. See, 6 NYCRR §§617.3(h), 617.9(a)(4).

Public Safety

Response 11.1: This is a comment on the Town's Zoning Law, not on the proposed project. CPP is not aware of any larger setback recommendations of the manufacturer, Clipper Wind. Further, the proposed layout was developed in consultation with Clipper, and has been approved by Clipper. The 1,500-foot setback from dwellings set forth in the Town's Zoning complies with the recommendations/example provided in the NYSERDA "tool kit" for municipalities. This setback is equivalent to, or exceeds, required setbacks in other municipal ordinances in New York. Recently enacted ordinances in the Towns of Clinton, Ellenburg, Altona, and Eagle, New York all mandate residential setbacks of either 1,000 or 1,200 feet. In addition, as described in the SDEIS, at 1,500 feet potential adverse impacts associated with noise, shadow flicker, private wells, and public safety, are expected to be minimal. The turbine locations were also selected to maintain a minimum setback of at least 520 feet from all rights of way and public ways. Where setbacks may not meet the minimum, consent agreements will be obtained. This setback is in accordance with the wind turbine siting requirements of the Town of Cohocton Windmill Local Law. The Town's Zoning Law includes several different setback requirements, which are intended to serve different purposes. Some of the setbacks do relate to adjacent property lines. Further, the Planning Board has the authority to require larger setbacks on a case-by-case basis if necessary to mitigate or avoid a significant impact.

Response 31.9: The expected magnetic and electric fields at the edge of the 50 foot ROW from the 115kv transmission line are expected to be 40 mG for the magnetic field and 0.6 kV/m for the electric field. These fields are well within the DPS guidelines.

Neither UPC nor its interconnection consultant MSE Power Systems are aware of substation studies being performed routinely for wind or other generation projects in New York and would want to discuss the matter further with the PSC before committing to undertake such a study.

Response 32: See responses to DEIS Comments 51J and 78A/78B (Public Safety Section).

Response 35.13: The turbines are designed, engineered and constructed to withstand major icing events. All modern wind turbines must meet rigorous Germanischer Lloyd Standards which require high wind speed, structural, safety, electrical and icing events. The Clipper turbines have been certified as meeting these requirements. In addition, the turbines are currently installed in areas with heavier ice than this region of NY. The machines will automatically shut down if icing causes the slightest imbalance. Blades are designed to carry the loads of ice accretion without failure.

Response 36.19: The basic physics of turbine icing and ice shed are not significantly changed by turbine size/rotor diameter. To the extent that larger dimensions could lead to greater distance of ice throw, this risk is adequately addressed through greater required setbacks for roads and property lines (i.e., setbacks are tied to turbine height plus a 100 foot safety factor). Although the residence setbacks do not change with height, at 1500 feet, they place residences well beyond the risk area for ice shed.

Response 36.30: As indicated in Section 3.10.1.1 (page 132) of the DEIS, icing of the turbines would typically cause an imbalance in the rotor blades and/or stoppage of the anemometer on the nacelle. Either of these conditions would result in turbine shut down.

Response 36.31: Emergency response procedures and coordination with emergency service providers is adequately discussed in the DEIS (Section 3.10 and 3.11). CPP has committed to meet with local emergency service providers and develop a coordinated emergency response plan prior to project construction. The only specialized training and equipment the emergency responders will need is training and instruction for high angle rescue, which CPP will provide.

Response 36.39: CPP will work with the Fire Department to ensure that they are trained to deal with a potential emergency related to the wind farm project. As part of the normal commissioning process, the turbines will be identified within the fire response systems, and special training review conducted by the wind turbine commissioning team with the designated local fire authorities.

Response 36.40: As stated in Section 3.10.3 of the DEIS, CPP will comply with all applicable OSHA requirements during both construction and operation of the project. To minimize safety risks to construction personnel, workers will be required to adhere to a safety compliance program protocol, which will be prepared by CPP (or its representative) prior to construction. In addition, material safety data sheets (MSDS) for potentially hazardous materials will be provided to local fire and emergency service personnel. The contractor and/or CPP will also coordinate with these entities to ensure that they are aware of where various construction and maintenance activities are occurring, and avoid potential conflicts between these activities and the provision of emergency services (e.g., road blockages, etc.).

Response 36.41: Procedures and staffing for turbine monitoring and shutdown are described in Section 2.5 of the DEIS and SDEIS.

Response 36.42: Water may not be available at hilltop sites, and any water needed will have to come via fire tanker, as it would to a house in the same locale. Wind turbines are constructed of metal and fiberglass and have a small reservoir of lubricating oil. Fires in turbines are very rare, as there is so little to burn. The lube oil is in the gearbox, devoid of air, and has limited ability to burn. Fires are usually combated with foam or other non water extinguishers of the type used in industrial fires, and certain agricultural operations.

Response 36.66: CPP will obtain all the necessary permits and approvals from local, state and federal agencies. CPP has only approached the residents that it is interested in talking with about leases for the transmission route. CPP is not aware of any residents that were not contacted by CPP, and CPP has not threatened the use of eminent domain.

Response 53.32: Public health and safety issues are thoroughly reviewed in Section 3.10 of the DEIS and SDEIS. See also responses to comments on the DEIS regarding public safety.

Response 53.33: See Section 3.10.2.2.7 of the SDEIS regarding the occurrence and impact of low frequency noise.

Response 53.44: Public health and safety issues are thoroughly reviewed in Section 3.10 of the DEIS and SDEIS. See also responses to comments on the DEIS regarding public safety.

Purpose, Need, and Benefit

Response 5.3: To the extent that the Project supports local farmers and helps keep land in active agricultural use, it will help preserve open space and maintain the area's rural character. By creating jobs, stimulating the expenditure of dollars locally for project supplies and material, and increasing direct local expenditures, and provision of municipal revenue, the Project will enhance the economic health and well being of the community. These financial benefits will be provided without the need for municipal and school district services and facilities required by most other forms of economic development. A viable economy and strengthened tax base are crucial to maintaining quality of life within a community.

The proposed Project will provide significant benefits to both the community and the environment. As stated previously, PILOT payments will provide approximately $700,000 annually to local taxing jurisdictions. As described in Section 3.9 and Appendix K of the SDEIS, local employment and expenditures, as well as annual lease payments to participating landowners will inject significant additional revenue into the local economy.

As described in the SDEIS, the Project will generate electric power capable of meeting the electrical needs of approximately 39,500 homes. Power production by the Project will displace an equivalent amount of fossil fuel-generated power with no emissions to the air or water. Thus, the Project will not contribute to acidic participation, mercury contamination, global warming, asthma, or other respiratory ailments. As also described in the SDEIS, these environmental benefits will be achieved with very few impacts to the natural and cultural resources within the Cohocton area.

Every kilowatt hour of power generated by the wind will eliminate the need for a comparable amount of fossil fuel-generated power. Additional discussion of this matter is included in Sections 3.4.2.2 and 9.0 of the SDEIS. The effect of wind generation on the New York electric system was evaluated in *The Effects of Integrating Wind Power on Transmission System Planning, Reliability and Operations Report on Phase 2: System Performance Evaluation*, one of the most comprehensive reports on the subject. The report was prepared by GE Energy Consulting for The New York State Energy Research and Development Authority and dated March 4, 2005. The report evaluated the effect of adding up to 3,300 MW of wind power to the NY grid which represents 10% of the projected 2008 peak load. The study used the NYISO 2008 system model and actual wind profiles from historical weather records to conduct the analysis. The report includes a discussion of the effect of wind power on the spinning reserve requirement, emission reductions, effective capacity and cost reduction in addition to a number of other transmission system planning, reliability and operational concerns.

Operating reserve is one of the requirements under the reliability rules established by the New York State Reliability council (NYSRC) and enforced by the New York Independent System Operator (NYISO). The operating reserve is based on the largest single system contingency loss and is presently set at 1,200 MW. One component of the 10 minute operating reserve consists of units that are operating and synchronized such that they can pick up load within 10 minutes upon loss of a generating element or generating capacity that can be made available such as canceling an energy sale to other systems (sometime referred to as spinning reserve). It also consists of non-synchronized load that can be made available within 10 minutes. The report concludes that even with the addition of 3,300 MW of wind generation, no change in the spinning reserve criteria are required. Because of the geographical diversity of wind across the system, the simultaneous loss of wind through out the system is not a credible contingency. Even though there may be periods of no wind, they are likely to be preceded by periods of very little wind according to the report, and therefore, there is no need to change the existing 1,200 MW value as the largest single system contingency.

The study also evaluated the displacement of existing electric generation units and the resultant emission reductions utilizing the Multi-area Production Simulation model (MAPS) using 2001 and 2002 actual load shape data and wind data and NYISO 2008 projections. Several cases were examined and each showed that the presence of wind generation would displace existing fossil fuel units and result in a decrease in air emissions. The report indicated that 65% of the displaced energy would come from gas fired unit, 15% from coal and 10% from oil with another 10% from imports. Unit commitment practices will affect the relative proportions of energy displaced but the general trend is the same. This displacement of fossil fired units results in a reduction of all associated air emissions. The report analyzed the magnitude of these reductions for the 2001 and 2002 data by assigning values to the two pollutants that are presently traded, NO_x and SO_2 and found potential reduction of 12,000 tons and 6,500 tons respectively for the 3,300 MW of wind generation.

The study also found that the wind generation had the potential to dramatically reduce the cost of system operation while reducing emissions and dependence on fossil fuel. The study reported decreases in the zonal prices that ranged from a few percent to as much as 10%.

Therefore it is reasonable to assume that the electrical energy produced by the wind project will result in a decrease in air emission through the offset of fossil fired units while providing cost savings and decreased dependence on fossil fuel.

Response 10.1: As stated in Section 1.0 of the SDEIS, the Cohocton Wind Power Project will generate electric power capable of meeting the electrical needs of up to 39,500 homes and will provide increased stability to the price volatility of fossil fuel electricity generation in the region. Accordingly, it will benefit the residents of Cohocton.

Response 36.27: The Purpose, Need and Benefit of the Project was discussed in Section 2.3 of the DEIS.

Response 36.37: CPP is aware of no members of the public, besides the commenter, who believe they will receive free electricity. The electricity will be supplied to then interconnected electrical grid on a New York State Electric and Gas 230kV line, and will be purchased by load serving entities for use by both local and regional customers. CPP will be paying substantial tax revenues to the Town, School District and County. These are the main financial benefits of the project to individual tax payers.

Response 53.10: See response to Public Hearing Comment 2.2 and DEIS Comment 147D1 (Air Impacts Section).

State Environmental Quality Review (SEQR)

Response 16.2: It is unclear as to which application the Commenter is referring. The State Environmental Quality Review Act (SEQR) requires that an Environmental Assessment Form (EAF) be prepared and submitted to the lead agency. The EAF requires the signature of the project's applicant or sponsor. CPP completed and submitted an EAF to the Town of Cohocton on December 19, 2005. The completed EAF contained the signature of Paul Gaynor, an officer of CPP and President and CEO of UPC Wind, of which CPP is a subsidiary. Refer to Comment Response 18.5 (Identity of Developer Section) for an explanation of the relationship between UPC Wind and CPP.

CPP also submitted a preliminary Building Permit Application to the Town of Cohocton on December 19, 2005. This Application was signed by an officer of UPC Wind. This submission was a preliminary one, intended to advise the Town of the Town permits that would be needed for the Project, and to initiate the SEQR process. More recently, CPP filed an application for a special use permit. That application is expected to be deemed complete shortly.

Response 18.1: See Comment Response 16.2.

Response 34.3: Section 8 of the SDEIS considers the cumulative impacts of the Cohocton Wind Power Project and other known wind energy projects in the area. No segmentation has occurred through use of corporate names or any other means. The cumulative impact analyses in the DEIS and SDEIS fully satisfy all cumulative impact analyses obligations under SEQR, and assure that the SEQR processes for the Cohocton and Dutch Hill projects are no less protective of the environment than if the two projects had been addressed in a single review process because they fully analyze the potential impacts of constructing and operating the Dutch Hill and Cohocton projects at the same time. Further, even if the two projects had no independent utility, segmented review of them as separate phases of a single project would have been warranted initially because insufficient information about the Dutch Hill project was available at the time that the SEQR process for the Cohocton project was initiated, and at the time that the DEIS for the Cohocton project was accepted as complete.

CPP has made its intentions public, and is proposing two projects within the Town of Cohocton, the Cohocton Wind Project and the Dutch Hill Wind Project. These two projects are separate projects, and neither depends upon the other, although, for convenience and a streamlined interconnection, and minimization of environmental impacts, both projects will be connected to a common substation, from which they will be connected to the power grid. Nonetheless, the cumulative impacts of the Cohocton Wind Project and the Dutch Hill Wind Project, together with other known wind projects, have been evaluated in the SDEIS for the Cohocton Wind Project, and the DEIS for the Dutch Hill Wind Project. Any future proposals, whether by UPC or another project developer, would be subject to their own, rigorous, environmental review. In the absence of any concrete proposal beyond the speculation provided by the commenter, there is no reason to prohibit any further wind project development.

Response 35.23: Please see Response 34.3 above.

Response 36.2: While the property value report references the Perry project and while the avian report uses data from the UPC WindFarm Prattsburgh project with the NYSDEC's blessing, to say that "many of the studies were used in the Perry and Prattsburgh wind farm projects" is a gross exaggeration which is simply untrue. UPC Wind owns the project companies that are developing the WindFarm Prattsburgh, Cohocton and Dutch Hill projects and so it is beneficial to the Cohocton avian study to have the Prattsburgh data available. With regard to the property value study, the same consultant, Barton DeLacy of Cushman & Wakefield, prepared both the Perry report and the Cohocton report, but was separately engaged by the companies pursuing the projects.

Response 36.3: The very purpose of preparing an SDEIS is to review changes in a project, or new information, that is of sufficient significance that additional public review and comment is warranted. See, 6 NYCRR §617.9(a)(7).

Response 36.4: When an SDEIS is proposed with respect to a project, it is both permissible and common for the response to public comments on the original DEIS to be included in the FEIS.

Response 36.6: Comment noted. As a legal matter, this comment is not correct. One of the primary purposes of an SDEIS is to address changes in a project from the form in which it was originally proposed.

Response 36.7: Consistent with the requirements and objectives of SEQR, the public hearings were combined so as to avoid public confusion, to promote efficiency, and for the convenience of the public. See 6 NYCRR §§617.3(h) and 6 NYCRR §§ 617.9(a)(4).

Response 36.9: The cumulative impacts analyses in the Cohocton SDEIS fully satisfy the requirements of SEQR. Also, see Responses 31.8 and 34.3 above.

Response 36.10: Please see the response to Comments 31.8 and 34.3 above. In addition, the Cohocton Wind Power Project would be economically viable on its own. It will share certain facilities with the Dutch Hill Project as a matter of efficiency and to minimize environmental impacts, but it also could have been proposed as a complete stand-alone project. The cumulative impacts of the Cohocton and Dutch Hill Projects are thoroughly reviewed in the Cohocton DEIS and SDEIS.

Response 36.35: A comprehensive responsiveness summary addressing all agency and public comments (written and oral) on the DEIS and SDEIS is included as Section 3.0 of the FEIS.

Response 36.36: Responses to comments that were prepared by the Applicant or its consultants have been reviewed, modified as necessary, and approved by the lead agency and its consultants.

Response 53.1: Comment noted. Although the Payment in Lieu of Taxes (PILOT) agreement has yet to be finalized, based on other wind power projects in New York, it is anticipated that the Cohocton Wind Power Project will generate approximately $700,000 annually (over the life of the project) for the affected taxing jurisdictions. This money can be used to reduce or stabilize local taxes, or finance desired municipal facilities and services. In addition, Project construction and operation will result in significant expenditures for local goods and services, including some increase in local employment. Additional information on the economic benefits of the Project is included in the Economic Impact Analysis included as Appendix K to the SDEIS.

Shadow Flicker

Response 28: The analysis of shadow flicker presented in Appendix H of the SDEIS was conducted by WEI utilizing WindPRO software, a standard software package used by permitting agencies and consultant in the United States and numerous other countries. The model is provided with the required inputs (turbine location, receptors, topographic and elevation data, turbine rotor diameter and hub height wind speed and direction data and sunshine hours) and calculates detailed shadow flicker results at each assessed receptor location, providing the number of shadow flicker hours per year and for everywhere surrounding the project, an iso-line plot. The suns path with respect to each turbine is calculated to determine the cast shadow path every 2 minutes, every day over a one year period. The commenter suggests that by using a 1 meter by 1 meter square window as a receptor, a minimal case analysis has been provided. The amount of shadow flicker a receptor can potentially receive however does not increase significantly when evaluating an area greater than one square meter. In fact an area twice that size will only receive a few seconds more shadow flicker corresponding to the time it takes the shadow to move the additional distance. Consequently, a property line stretching several hundred feet perpendicular to the path of the shadow will only receive a few more minutes of total shadow flicker for every day when shadow flicker can occur. The amount of time is dependant on the distance to the turbine and the further away the quicker the shadow moves across the property. As an example:

a. A 1 meter by 1 meter square receives 3 hours and 16 minutes of shadow flicker per year. A total of 46 days of the year could potentially be affected and the longest possible shadow-flicker time on is 28 minutes in one day.

b. A 25 meter by 1 meter rectangle in the same area will receive 4 hours and 1 minute of shadow flicker per year. A total of 49 days of the year could potentially be affected and the longest possible shadow flicker time is 32 minutes in one day.

Also, the term “near worst case” analysis takes into consideration all other parameters and not simply the effect on a home window as incorrectly referred to by the commenter. This includes the fact that objects that might block or obscure the turbine are not factored in, and intensity is not considered, only flicker or no flicker, even if the flicker is barely noticeable. Object that could obscure the turbines include trees and buildings and intensity is affected by haze, fog, alto and cirrus cloud presence and the distance between the turbine and receptor.

The commenter also references “football size shadows”. Turbines do not cast shadows of this size. Shadows are cast by the blades which are 1 to 3 meters in width and approximately 45 meters in length and not by the entire rotor diameter as suggested by the comment. The blade tip does not cast a very distinct shadow, only the root of the blade. Shadows may be longer than the causing object but never wider. Therefore, football field size shadows do not occur. It is not possible for a turbine to cast a shadow of 2 to 4 miles in length because it is a relatively thin “flag pole” structure as opposed to a more massive structure such as a building or mountain. Therefore, the example of the ridgeline shadow of Bare Hill cost upon Johnson Hill cited in the comments is an inappropriate analogy as a turbine will not cast a shadow in the same way as a mountain ridge.

Distinct shadows as see at the base of a pole or other structure will not be present at or near any dwelling because of the distance from the turbines. Shadow flicker outside of a dwelling will be much less noticeable because the affected area is much better lit than an area within a dwelling behind a window. Only direct sunlight casts a shadow where diffuse light make shadows less distinct. The contour plots in Appendix I of the DEIS show the typical butterfly contour of the wind turbine’s shadow flicker area. The plots are approximately 2000 meters wide and not close to the 2 to 4 miles suggested in the comment. Also, the longer shadows (1000 meter and greater) would not be well defined but would rather be rather diffuse and non distinct, being minimally noticeable on a clear day and practically non existent on a hazy day. At sunrise and sunset there will be no distinct shadows because the sun’s disk appears much greater at low angles due to the atmospheres effect on the suns rays and because the blades will cover much less of the sun's disk.

The shadow flicker evaluation presented in Appendix I of the DEIS was conducted in accordance with standard industry practices using a well recognized and universally used model. It provides conservative results as described, to predict the potential hours of shadow flicker for a number of receptors and does not contain any critical modeling errors that would render it fatally flawed as suggested by the commenter.

Response 36.15: The tower height and blade diameter reported on page 2 of the WEI shadow flicker briefing (Appendix H of the SDEIS) are incorrect. Supplemental modeling was conducted for 80-meter towers assuming blades with a 96-meter diameter, as shown in the individual shadow flicker updates (also Appendix H of the SDEIS).]

Socioeconomics

Response 10.2: While the project will not provide direct individual tax relief to the residents of Cohocton, the Project will enhance the economic health and well being of the community by creating jobs, local expenditures, and municipal revenue. As stated previously, PILOT payments will provide approximately $700,000 annually to local taxing jurisdictions. The local taxing jurisdictions will have discretion to determine how to utilize the PILOT revenues that they will receive. As described in Section 3.9 and Directory K of the SDEIS, local employment and expenditures, as well as annual lease payments to participating landowners will inject significant additional revenue into the local economy. These financial benefits will be provided without the need for municipal and school district services and facilities required by most other forms of economic development. A viable economy and strengthened tax base are crucial to maintaining quality of life within a community.

Response 10.3: Guarantees of new job creation are not possible. The SDEIS provides reasonable estimates of employment during Project construction and operation based on the experience of UPC and other wind power developers on other projects elsewhere in the United States. As a point of comparison, the Maple Ridge Project in Lewis County, New York created over 400 construction jobs and will employ an operations staff of 20.

Response 16.5: See Comment Response 10.3.

Response 17.2: See Comment Response 10.2.

Response 35.6: The projects have undergone numerous public meetings in which neighboring property owners have been welcomed to comment on the project. The Cohocton Planning Board has held site plan review meetings in which neighboring property owners were provided the opportunity to speak about the project. Further, a public hearing has been held on CPP's special use permit application. Lease agreements are still being negotiated with the landowners.

Response 35.11: The commenter does not cite or include any data contradicting the power generation and PILOT revenue figures included in the SDEIS. These figures are based on realistic assumptions/expectations, and are considered accurate and, indeed, conservative.

Response 35.14: Section 3.9.2.2 of the DEIS describes the results of a quantitative study that was conducted by the Renewable Energy Policy Project (REPP) in 2003, titled *Effect of Wind Development on Local Property Values*. REPP assembled a database of real estate transactions adjacent to every wind power project in the United States (10 MW or greater) that became operational between 1998 and 2001 (a total of 10 projects, including the Madison and Fenner Projects in Madison County, New York). The results of this study showed no negative affect on property value from existing wind farms. More specifically, the REPP study concluded that there is no evidence that the presence of the Madison and Fenner wind farms had a significant negative effect on residential property values in Madison County, New York (Sterzinger, et. al., 2003).

The REPP study has been criticized by some because it assumes that all properties within the study area have a view of the respective wind farm, does not account for property distance to the wind farm, uses a questionable statistical analysis, and includes inappropriate transactions (e.g., estate sales, sales between family members, sales due to divorce, etc.). To present a clearer understanding of the actual effects of existing wind farms on property values, a Master of Science thesis project was undertaken by Benjamin Hoen of Bard

College. A summary of this report is set forth in Section 3.9.2.2.1 of the SDEIS.

The Hoen study's analysis of 280 home sales within 5 miles of the Fenner Wind Farm did not reveal a statistically significant relationship between either proximity to, or visibility of, the wind farm and the sale price of homes. Additionally, the analysis failed to uncover a relationship even when concentrating on homes within one mile of the wind farm that sold immediately following the announcement and construction of the Project. This study therefore concluded that in Fenner, a view of the wind farm did not produce either a universal or localized effect on home values. To the degree that other communities resemble the Fenner rural farming community, similar conclusions are anticipated (Hoen, 2006).

A site specific analysis of this concern was undertaken for the proposed Cohocton Wind Power Project by Cushman & Wakefield (see Appendix L of the SDEIS). This study concluded that the proposed Project should have no impact on the values for undeveloped properties or existing farms. It also found that local property values will be much more susceptible to the local economy than to changes in the viewshed created by the proposed Project. Consequently, Cushman & Wakefield concluded that the project should have no significant impact upon future sales or values of developed properties given the prevailing conditions.

Given the results of the REPP, Hoen, and Cushman & Wakefield studies described above, and the similarity of the Madison County sites to the Cohocton Wind Power Project area, it is reasonable to conclude that the proposed Cohocton Wind Power Project will not have an adverse impact on local property values.

In regard to views from Loon Lake, cross section analysis in the original VIA suggests that views of the Brown Hill turbines will be well screened by existing vegetation and topography (see VIA Figure 7, Sheet 2). Ballooning conducted on November 11, 2005, also indicated that views of the Brown Hill turbines from Loon Lake will be limited, at best. This is demonstrated by photos from Viewpoints 36, 37, and 38, included in Appendix B of the original VIA (DEIS Appendix F). See also response to Comment 2.2 in the Property Values Section.

Response 36.18: As stated on page 10 of the SDEIS, the Cohocton Wind Power Project could be as large as 36 turbines or as small as 33 turbines. Thus (assuming the use of 2.5 MW turbines) the 82.5 MW estimate used in the economic analysis is a realistic, if conservative, estimate of the proposed project's generating capacity. It is also consistent with the application submitted to NYISO listing of the Cohocton Wind Power Project's size. As stated in numerous instances, the Cohocton and Dutch Hill Projects are considered separate/independent projects. The two are considered together in the economic analysis only to provide an estimate of the cumulative economic impact of the two projects (as discussed in Section 8.0 of the SDEIS).

Response 36.32: Pursuant to the Cohocton Windmill Local Law II, CPP will provide security to cover decommissioning expenses.

Response 36.38: The economic analysis prepared and included in the SDEIS is based on the U.S. Department of Commerce Bureau of Economic Analysis RIMS II Model, which is the standard for modeling of economic impacts associated with development projects. The RIMS II Model (The Regional Input-Output Modeling System) which is widely used in both the public and private sector, provides a systematic analysis of economic impacts accounting for inter-industry relationships within regions to determine how regional economies are likely to respond to project and program changes. With the RIMS II, regional input-output multipliers are used to determine changes in output, earnings, and employment (US Department of Commerce, 1997). While the terms of the PILOT agreement have not yet been finalized, the estimated value of these payments (approximately $700,000 annually) is described in the SDEIS. The commenter does not offer any data or analysis that refutes the findings of the economic analysis included in the SDEIS.

Response 36.60: The no action alternative is addressed in Section 5.0 of the DEIS. The no action alternative assumes the status quo and that the Project Site would continue to exist as active agricultural land, residential property and vacant land. This no action alternative would not affect current zoning, ambient noise conditions, traffic or public road conditions, television/communication systems, and would maintain community character, economic and energy-generating conditions as they currently exist.

Response 36.61: The Projects will utilize the Empire Zone if it is available. If not, the projects will utilize a different tax payment schedule. In either event, the projects will be under a PILOT program with SCIDA.

Response 36.62: Very little of the land currently used for agriculture within the Project site will need to be taken out of production. According to Table 3 of the FEIS, only 113 acres of agricultural land will be disturbed by construction activities; of this, approximately 12.7 acres will be converted to built facilities and the rest will be stabilized and restored. None of the affected parcels will be taken out of agricultural production altogether. Use of existing farm lanes during construction will reduce the acreage of affected agricultural land even further. Sections 301(5), 305(1)(d)(iv), and 306(2)(c) of NYS Agriculture And Markets Law Article 25AA indicates that wind farm use of property in an agricultural district is not considered a conversion to a non-agricultural use and therefore, does not trigger any penalty tax consequences.

Response 36.63: Although the Payment in Lieu of Taxes (PILOT) agreement has yet to be finalized, based on other wind power projects in New York, it is anticipated that the Cohocton Wind Power Project will generate approximately $700,000 annually (over the life of the project) for the affected taxing jurisdictions. This money can be used to reduce or stabilize local taxes, or finance desired municipal facilities and services. In addition, Project construction and operation will result in significant expenditures for local goods and services, including some increase in local employment. Additional information on the economic benefits of the Project is included in the Economic Impact Analysis included as Appendix K to the SDEIS.

Response 36.64: The benefits of the proposed action include positive impacts on socioeconomics (e.g., increased revenues to local municipalities and lease revenues to participating landowners short-term and long-term employment, and purchase of local goods and services), air quality (by off-setting generation from fossil-fuel burning power plants), and climate (reduction of greenhouse gases that contribute to global warming). By eliminating pollutants and greenhouse gases, the Project will also benefit ecological and water resources as well as human health. Additional information on the socioeconomic benefits of the proposed

Project is included in Section 3.9 of the Cohocton DEIS.

In regards to property values - Section 3.9.2.2 of the DEIS describes the results of a quantitative study that was conducted by the Renewable Energy Policy Project (REPP) in 2003, titled *Effect of Wind Development on Local Property Values*. REPP assembled a database of real estate transactions adjacent to every wind power project in the United States (10 MW or greater) that became operational between 1998 and 2001 (a total of 10 projects, including the Madison and Fenner Projects in Madison County, New York). The results of this study showed no negative affect on property value from existing wind farms. More specifically, the REPP study concluded that there is no evidence that the presence of the Madison and Fenner wind farms had a significant negative effect on residential property values in Madison County, New York (Sterzinger, et. al., 2003).

In regards to bonding, the fact that Canandaigua Power Partners is an LLC should not affect whether the Town requires a bond. UPC is a financially solid company with considerable experience in the development and operation of wind power projects. UPC's owners include private equity firms Madison Dearborn Partners and DE Shaw, two of the largest and most successful private equity firms in the world. As noted in DEIS Response 9E (Project Description Section), in the unlikely event UPC is not able to continue construction or operation of the project, protections will be in place to protect the residents of Cohocton. The Town of Cohocton's Zoning Law requires such contingency measures be put into place. Section 1130(2)(f) of the Zoning Law requires that, prior to issuance of a building permit, the developer provide a letter of credit or other acceptable surety to ensure the removal of the windmills if their use is discontinued. The Town's Engineer and Attorney are empowered to determine whether the surety provided by the developer is adequate and satisfactory. In addition, prior to issuance of a building permit, the developer most provide liability insurance at a level determined by the Town Board, to cover damage or injury which may result from the failure of any part of the wind energy facility and transmission line. Section 1130(2)(f) also requires that the developer provide a performance bond, letter of credit, or other surety to ensure that any environmental contamination by oil will be addressed.

Response 36.82: Section 8.0 of the Cohocton SDEIS describes the anticipated cumulative number and economic effect of the temporary (construction) workers that will be required for the two projects.

Cumulative employment during the construction period has been estimated to be approximately 101 full time construction-related jobs for a 7.4 month period. This employment is relatively short term, and is not expected to result in workers permanently relocating to the area. For the duration of construction there could be a temporary increase in local population and demand for temporary housing by out-of-town workers. However, this demand will be relatively modest, and can easily be accommodated by the available housing in Cohocton and the surrounding communities. Beyond this relatively minor (and positive) short-term impact, Project construction will have no significant impact on population and housing. This number of workers represents the maximum number of temporary workers anticipated if the projects are constructed concurrently.

The Cohocton and Dutch Hill Wind Power projects will be constructed at the same time. After considering applicable skills, equipment, insurance, and price, UPC will hire locally as much as is feasible.

Response 53.9: Given the predicted capacity factor of approximately 30%, which is an estimate based on the available site wind resources data, the Cohocton Wind Power Project is anticipated to produce approximately 236,500 Megawatt hours (MWh) per year or enough electricity to power 39,500 typical homes in New York State based on US Department of Energy electric usage data. This level of production would be sustained over the life of the project which is on the order of 20 to 25 years, providing a significant source of energy generated from a renewable resource. If much less than a 30% capacity factor were projected, the Project would not be economical for CPP to pursue. See response to DEIS Comment 335E (Effects on Use and Conservation of Resources Section).

Response 53.11: PILOT payments do not cover the entire cost of a given project. Rather, PILOT payments provide revenues to local municipalities and school districts in place of traditional property tax revenues. Instead of paying property taxes, the developer will make an agreed-upon payment comparable to a percentage of tax that would normally be assessed.

Typical PILOT agreements and terms vary, and are based on population, receipt sharing payments, and the amount of federal land within a given locale. Under a typical agreement, funds are distributed to all local governments and school districts with a split that is negotiated by the developer.

The projected PILOT payments are estimates that were calculated based on information provided by CPP. Negotiations vary by municipality, and PILOT payments that are made in one community vastly differ from those that are made in others.

Substantial gains will be generated for all taxing jurisdictions in the Town of Cohocton, for which average annual PILOT payments of $700,000 represent approximately 34% of the total 2006 tax levy.

As a result of falling milk prices, many farmers have suffered losses on their land. Long-term opportunities for increased income through the lease of land will offer both direct and indirect benefits for participating landowners. Landowners receive an annual lease payment, while still being able to farm and allow grazing on all areas surrounding wind turbines.

According to the U.S. Department of Energy, Energy Efficiency and Renewable Energy, land lease payments average 2 – 3% of gross revenues, approximating average nationwide payments between $2,500 and $4,500 per megawatt of energy produced, per year. Gross revenues of $25 million were assumed for estimating lease payments for landowners in the Town of Cohocton and land payments were calculated using 2.5% of gross revenues. Assuming these conditions, it is projected that lease payments of approximately $625,000 per year will be made between the two wind farms. This amounts to an annual payment of $5,000 per megawatt of energy produced, which is greater than the average nationwide payments.

Response 53.12: Because the project is financed for its entire life, even if CPP goes bankrupt, the project will be acquired by the commercial lender and operated for life of the equipment, or 20-25 years. The chance of the federal government or the State of New York reneging on the Production Tax Credit or the purchase of Renewable

Energy Credits once the project is in operation is practically non existent.

Response 53.29: Potential impacts to tourism are addressed in Section 3.9.2 of the DEIS. While this discussion suggests that adverse effects should be minimal, additional evidence suggests that wind farms actually stimulate tourism in a wide variety of places around the world. The following are just a few examples:

- Approximately 12,000 eco-adventure windmill tours are given each year by Elite Land Tours, a Palm Springs, California-based Company. These tours are world-famous, have received rave reviews from PBS, the New York Times, the Los Angeles Times, the Discovery Channel, the Travel Channel, and have been featured on national German, Korean, and Japanese television. Elite Land Tours was recently awarded “Attraction of the Year” by the Palm Springs Desert Resorts Convention and Visitors Authority, and the windmill tour was chosen as one of the “111 great things to do” in the Coachella Valley. The tour offers visitors the chance to learn of the international wind energy history, the current utilization of wind power, and the future of the electric industry. It also teaches visitors how to be more ecologically aware and environmentally friendly. These tours generate $20 per adult, and $10 per child, with discounts given to seniors, and groups of 20 or more (Elite Land Tours, 2007).
- Wind farm tours are common in other parts of the United States, including Iowa, Texas, Colorado, Oregon, Washington, Vermont and the nearby Fenner Wind Farm in New York. Such tours are even more popular across the globe, where the technology has been in place for much longer.
- It is estimated that 5,000 people take the Codrington Wind Farm tour in Australia each year, generating $7 per adult, $5 per child and $19 per family of four. It is estimated that an additional 50,000 people visit the viewing area each year.
- A tourism impact assessment was conducted in Australia, examining existing wind farms throughout Australia, Scotland, Wales, and England. The study found that “current wind farms seem to have attracted new visitation into their regions and they also seem to provide an additional destination for visitors already in the region or traveling through as part of a broader organized tour.” The report concludes that “wind farms have had no adverse impact on

regional tourism and that they provide an added value as an additional attraction in a region. If accepted and promoted by the regional community, they can provide a positive in terms of increased tourism, additional tourist expenditure and the encouragement of new businesses…such as tours and hospitality.” (Sinclair Knight Merz, 2004)

- Denmark is the leading user and exporter of wind energy in the world. The country has experienced a 25% increase in tourism in or around their wind farms.
- Gigs Harbor, Washington started a “Wind and Wine Tour” five years ago, which offers visitors the opportunity to tour many of the 80 prized wineries in the region, as well as several privately-owned wind farms for three days/two nights. The tour costs $250 per person, which includes transportation, lunch and hotel accommodations. The Wind and Wine Tour is so popular that it typically sells out 10 months in advance (U.S. Department of Energy, 2007). The proposed luxury hotel and spa could team up with the proposed wind farms and create a similar attraction.
- The Finger Lakes Tourism Alliance lists “farm tours and agritourism sites” under their attractions and activities. The Farm Sanctuary, located in Watkins Glen, is currently the only attraction that offers such agritourism. The Farm Sanctuary offers tours of the farm, a visitor center, a gift shop, and Bed and Breakfast cabins on the farm (Finger Lakes Tourism Alliance, 2007).
- The believed 5% loss in the $200 million industry could be reversed into capitalizing on the up-and-coming agritourism industry. The development of wind farms in the Southern Tier could greatly add to this largely untapped market, greatly benefiting the Finger Lakes region.

Response 53.30: There is a good deal of evidence that wind farms will not have an adverse effect on property values and may even have positive impacts on property values:

- A study in Denmark shows the changed mindset of residents in Nysted, a small beach town and tourist attraction. Initially, residents were deeply concerned and opposed to the development of the turbines in their community. They did not want the turbines to impede their views, reduce property values or negatively impact tourism. According to Mayor Lennart Damsbo-Andersen, the residents now look back and wonder what they were so worried about (Beinecke, 2006).

- A study entitled "Impacts of Windmill Visibility on Property Values in Madison County, New York," was described in Section 3.9.2.2.1 of the SDEIS. The report analyzed the sale of 280 residential homes within a 1-mile and a 5-mile radius of the Fenner Wind Farm in Madison County, New York. Results from the study cast doubt upon the widely held belief that windmills tend to lower the values of surrounding properties and homes, indicating that there were no adverse impacts on the property values of the homes within either a 1-mile or a 5-mile radius of the farm. The author of the study suggests that perhaps this was due to the wind farm fitting into the community's "sense of place", and the payments to the community balancing any adverse impacts that the turbines could have generated (Hoen, 2006).
- A recent study that concluded that property values of homes with views of a wind farm in Atlantic City, New Jersey rose faster than those homes that did not have such views (Golubcow, 2006).

Also, see Response 2.2 and 17.3 under Property Values.

Response 53.31: As described in the DEIS and SDEIS (Section 3.9) the Project will have significant socioeconomic benefits for the Town of Cohocton and the Wayland-Cohocton Central School District. These benefits will improve the local economy and make the town a more desirable place to live. The lack of economic development and associated tax base is a primary reason why towns in Steuben County and the southern tier of New York State have traditionally had difficulty attracting and retaining new residents. Also, see Response 53.30.

Response 53.37: Comment noted. As described in the Cohocton SDEIS, the gross energy revenues expected to be derived from operation of the Project are expected to be approximately $36.81 million per year. Please see Appendix K of the Cohocton SDEIS for further details.

Response 53.38: See Response 53.29.

Response 53.39: See Response 53.29.

Response 53.40: The studies simply state that the best available data fails to demonstrate diminution in property values. Local real estate “experts” may fear change but have no better transactional data. Also, Refer to Response 5.2 under Property Values.

Response 53.41: Traffic volume in the area is very low and mostly consists of local residential traffic and farm vehicles. Nearly all of the local intersections are 90-degrees and have good visibility for stopping sight distance.

A major objective of route selection was to eliminate roads that required traveling through the Village of Cohocton and residential neighborhoods where local traffic would be inconvenienced.

The only potential adverse impact to municipal budgets and taxes is the impact of Project construction on local roads, and the need to repair or upgrade these roads to accommodate construction vehicles/activity. To mitigate this impact, construction-related damage or improvements to state, county, or Town roads will be the responsibility of the Project developer, and will be undertaken at no expense to the Town or county (see additional detail in the discussion of transportation mitigation in SDEIS, Section 3.8.3).

Response 53.42: As stated in Section 2.6 of the SDEIS, all costs of Project decommissioning are the sole responsibility of the Project developer, and will not represent a cost to the Town or landowners participating in the Project.

Response 53.43: Avian collision impacts have been found to be very low at existing facilities in the region (generally fewer than eight birds per turbine per year). The bird and bat studies submitted with the DEIS and SDEIS suggest that the risk of avian collision fatalities is very low at the Cohocton Wind Power Project as well.

Furthermore, as stated in Section 3.3.3.2 of the DEIS, the Project has been designed to minimize bird and bat collision mortality during operation. The turbines will be placed much further apart than in older wind farms where avian mortality has been documented, such as those in northern California. They will also be mounted on tubular towers (rather than lattice), which prevent perching by birds. In an effort to reduce avian and bat impacts, all electrical collection lines will be buried and the aboveground segments of the 115 kV transmission line will follow Avian Power Line Interaction Committee (APLIC) guidelines for insulation and spacing.

Response 53.45: CPP has no basis upon which to evaluate the commenter's assertion. CPP's analyses were based on conservative assumptions of benefits and were calculated by Saratoga Associates, a professional environmental and economic firm.

Sound

Response 5.1: Sound impacts were evaluated and discussed in Section 3.7.2 and Appendix I of the SDEIS. The sound impact modeling study was conducted per the NYSDEC's Program Policy (2001), *Assessing and Mitigating Noise Impacts*, and demonstrated that a few homes might see Project-related sound levels approaching 45 dBA when the wind is blowing directly from a nearby turbine toward the house (see Figure S18, Sheet 1 of the SDEIS). All homes that are identified just inside the 45 dBA line shown in this figure are participating landowners. No non-participating land owners are within the 45 dBA line. This compares to a maximum predicted level of 46 dBA for the original Project (i.e., a slight reduction).

Proposed mitigation measures are described in Section 3.7.3 of the SDEIS, and have been accomplished through the design of the turbine and through the incorporation of setback distances from receptors during the siting of the turbine. Additional mitigation measures will include the implementation of a complaint resolution procedure to assure that any complaints regarding construction or operational sound are adequately investigated and resolved.

Response 7.5: The sound studies included in the SDEIS indicate that the Project will result in minimal noise impacts and will comply with the noise limits contained in the Town of Cohocton Windmill Local Law. Beyond the Town's noise criterion of 50 dBA at adjacent property lines, the sound study also evaluated the potential audibility of Project noise above the natural background level. A comparison of the measured background level over the site area and the predicted levels from the Project show that for the vast majority of homes in the area, Project noise will not be audible above the existing background level and that only a few, mostly participating, residences may be able to hear the turbines at certain times.

Response 8: Please see Response 29 below.

Response 9.1: The sound level contour plot referred to by the commenter was based on preliminary noise information from the turbine manufacturer that was obtained before certain noise abatement measures were installed on the prototype turbine. Since that time, modifications have been made to the unit and new field data has become available indicating that the overall sound level of this turbine model will be lower. These changes are discussed in Section 2.7 of the FEIS. More recent sound contour plots show that all of the homes on Lewis Road are well outside the 42 dBA threshold where project noise is expected, under most normal circumstances, to be comparable to the natural background level. The 50 dBA sound contour line has also contracted slightly so it no longer crosses the property lines of the land parcels on Lewis Road in the vicinity of the commenter's residence. Refer to Graphic C of the revised sound report in Appendix F of the FEIS.

Response 25.1: The turbine locations were selected to maintain a minimum setback of 1,500 feet between the tower and the nearest dwellings, areas, or structures customarily used by the public. This turbine setback complies with the Town of Cohocton Windmill Local Law, and minimizes the visual and sound effects of the turbines.

The operational noise of the Dutch Hill Wind and Cohocton Wind Power Project were evaluated to determine the magnitude of any cumulative effects. The Cohocton turbines are located generally to the east of the Dutch Hill Wind Power Project area with the closest turbine being approximately 1.5 miles away.

Additional noise modeling was conducted to evaluate any potential noise impacts on residents in the area due to the cumulative noise of both projects. Since the closest distance between wind turbines from the projects is approximately 1.5 miles, the noise from the two projects will not be additive and there will be no cumulative increase in noise at any receptor on the Cohocton Wind Power Project site (see Section 8 of the SDEIS).

Response 29: The lengthy evaluation of the noise assessment prepared by Richard Bolton of the Environmental Compliance Alliance has been received and carefully reviewed. It should be noted that similar evaluations, all harshly critical of the noise assessment procedure and conclusions, have been prepared by Mr. Bolton for essentially every proposed wind energy project in the State of New York regardless of location or what engineering firm conducted the analysis.

The review, which is longer in length than the noise assessment itself, contains too many specific points to be addressed on an individual basis. Instead, a few responses are offered to the three salient points listed in the conclusion.

Survey Methodology and Self-Generated Wind Noise

First, the background survey results are criticized as being artificially elevated due to self-generated microphone wind noise. The charts and graphs (Figures 3 and 4) shown in the report for wind induced error are for the standard foam windscreens used for short-term manned measurements either indoors or outdoors in fair weather and not the type of windscreens used in the study, which are intended for long-term environmental monitor service. The survey windscreens included a very thin plastic septum between the two foam layers that prevents rain from damaging the microphone and also acts as a kind of windbreak. Consequently, the influence of self-generated wind on the levels recorded in the survey is minimal. For example, the sound level measured under the relatively high wind conditions associated with maximum turbine noise was only 39 dBA – an extremely quiet level that might, for instance, exist in a library or conference room.

In general, despite suggestions to the contrary, there currently are not any ideal windscreens commercially available for monitoring through inclement weather. Even the 6” diameter $1800 model referred to in the write up is acknowledged to be un-calibrated for wind induced error and therefore of little use. The four alternative techniques reported by the United Kingdom’s Energy Technology Support Unit and offered as solutions are completely impractical for a long-term field survey. The fluffy microphone shield shown in Figure 8, for example, probably would work in dry conditions, but would not do very well in a rainstorm.

Additionally, and importantly, the L90 statistical measure used in the survey also acts to screen out any sporadic noise spikes that may have occurred due to wind gusts since it essentially records the quietest lulls during the measurement interval. In this case, the reported background level is the quietest 1 min of every 10 minute measurement period – or effectively the sound level in the relative calms between wind gusts.

Lastly, it should be pointed out that the wind speeds near the surface where the instruments were placed are normally considerably lower than at 10 m or at turbine hub height. Recent anemometer measurements immediately adjacent to the microphones during a similar field survey showed that a relatively calm wind of 2 to 5 mph was present at the instruments while the 10 m wind speed was approximately 25 mph.

<u>“Non-vegetated Measurements”</u>

The report is critical of the fact that the background measurements were taken at a time of year when the trees were bare, the implication being that the leaves soak up distant sounds and make the general sound level at any given location lower than it would be during the wintertime. The fallacy in this concern is that the background sound levels sought in the survey are the background levels during fairly windy conditions – and not during calm periods. Without question, leaf rustle during windy periods in the summertime greatly increases the general ambient sound level, which is why a special effort was made to complete the survey in April before the trees leafed out. Had the survey been made a month later much higher background levels, ostensibly more favorable to the project, would have likely been recorded.

<u>Modeling Atmospheric Effects and Modulation</u>

The noise modeling is criticized as “primitive” for not specifically calculating project sound levels under a variety of atmospheric conditions and during “well-known refraction effects that ‘focus’ different sounds”. The fact of the matter is that there is no practical way of making such calculations. Sound propagation can essentially only be calculated - as it was for this assessment - for “average” conditions using ISO 9613-2 Acoustics – Attenuation of Sound during Propagation Outdoors, or several other essentially identical international standards. The ISO algorithm does not actually represent average conditions, per se, but rather assumes a slight downwind condition and somewhat favorable propagation conditions as a base case.

The “different software model” (than Cadna/A) mentioned in connection with the Pubnico Point Wind Farm study on p. 14 as being able to calculate sound levels for specific wind directions and atmospheric conditions is the “CONCAWE” algorithm, which is an optional calculation methodology contained within the Cadna/A program. This well-known methodology was not used for the following principal reasons:

- The sound power level used as a model input is already the downwind level; i.e. wind turbine power levels are developed from measurements downwind of the subject turbine and contain no information on the lateral directivity of the sound. Therefore the directionality that results from using CONCAWE and effectively blowing a wind over the model produces a fundamentally erroneous contour plot where the downwind levels are doubled, in a sense, and sound levels in other directions are off by an unknown factor.
- Attempts to normalize the basic sound power level so that the predicted downwind level with CONCAWE is not doubled have been made and have resulted in dramatically quieter upwind levels of unknown reliability (i.e. the plots under-predict sound levels in certain directions). Consequently, these trials led to the conclusion it would be more prudent not to use CONCAWE and use the more conservative omni-directional downwind assumption that was employed in the modeling.

It is illuminating to note with regard to the Pubnico Point study that the project-only sound level of 49 dBA predicted at the critical receptor point using the conventional ISO 9613-2 methodology was significantly higher than the level actually measured at this location most of the time, as illustrated in Figure 4 of FEIS Appendix N.

Most of the time the total sound level (red trace) - including both project and background noise - was in the low to mid 40’s - even during times when a normally problematic south wind was blowing. During two periods of atmospheric conditions most favorable to sound propagation, lasting a few hours each (out of 5 days), the measured sound level rose above the model prediction, by no more than 3 to 4 dBA.

As observed in this Canadian study, certain atmospheric conditions do occasionally occur that cause above average wind turbine sound levels. In order to allow for these conditions, the model predictions are consciously conservative – meaning that under most normal conditions a sound level lower than shown in the contour plots will actually occur. Some of the principal conservatisms in the model are:

- Assuming maximum downwind noise levels in all directions from every turbine (neglecting the quieter levels that occur upwind and laterally)
- Using a very low ground absorption coefficient of 0.5 (rather than a justifiable higher value such as 0.8) resulting in higher predicted levels at any given point
- Neglecting any possible attenuation from wooded areas

In essence, there is no other practical way to approach the issue of occasional atmospheric conditions that favor sound propagation relative to standard or average conditions because, if for no other reason, representative boundary conditions, such as the vertical temperature and wind gradients associated with the worst-case scenario for any given site, are not known.

The modulation effect also discussed in the Pubnico Point study is the periodic “swish, swish” sound that is a characteristic of all wind turbines. When modeling or making noise impact predictions, the usual way of accounting for sound sources that have a tone or other identifying characteristic is to add a 5 dBA “penalty” to the predicted broadband sound level. As illustrated by the comparison between the predicted and measured levels at the critical design point in the Pubnico Point analysis, where the actual sound level was generally 5 dBA or more below the predicted value of 49 dBA using ISO 9613-2, the conservatism that has been included in the Cohocton model effectively accounts for this penalty under most conditions.

As a final note on the Pubnico Point study, a predicted project-only noise level of 49 dBA in an otherwise quiet rural environment, where background levels are commonly in the 30’s dBA, would typically be considered a likely adverse impact

- so it is not surprising that complaints were received at this location engendering the field survey. Significantly lower project sound levels are predicted at all potentially sensitive receptors in the Cohocton Wind Power Project area.

Response 31.17: As discussed in Section 2.7 of the FEIS, new field measurements of the Clipper Liberty C96 prototype have become available since the original assessment was submitted that show that the turbine will not produce any significant tones and that its overall sound level will be about 2 dBA quieter (compared to the preliminary sound level data used in the original study). These new data were incorporated into the updated sound assessment included in Section 2.7 of the FEIS.

Response 35.18: Although it may seem counterintuitive, the sound levels produced by wind turbines are not necessarily proportional to the rotor diameter or electrical output rating. In this instance, the 2.5 MW Clipper Liberty C96 actually has a lower net sound power level than the 2.0 MW Gamesa G87 that was once being considered for the project. The Clipper machine is about 3 dBA lower.

Response 35.19: The asserted flaws in the background survey measurements, pointed out by other commentators (such as Bolton) and evidently referred to here, have been overstated. Self-induced microphone noise, which affects the very lowest frequencies and has relatively little influence on A-weighted sound levels (the quantity central to the analysis), is difficult to completely avoid and may have had a minor influence on the recorded levels. However, the likely overall effect is considered fairly insignificant and vastly lower than theorized by Bolton for several reasons:

- The L90 statistical level (the sound level exceeded 90% of the time) was used for each 10 minute interval, meaning that the background sound level was taken to be the level that occurred during the quietest lulls between wind gusts. Intermittently high sound levels due to wind, whether actually occurring or occurring as a self-induced false signal, are effectively excluded by the use of the L90 level.
- Special, laminated microphone windscreens were used that included a thin plastic septum between the two foam layers to prevent water damage. This layer also acts to some extent as a windbreak.

- The wind speed near the ground where the instruments were located is generally much less than at the standard height of 10 m or at the hub height of 80 m. Consequently, the noise monitors were not directly exposed to the 10 m wind speeds that each sound level recording was correlated to.

Response 36.16: Page 16 of the Environmental Sound Survey and Noise Impact Assessment Report in Appendix I of the SDEIS references a 93 meter rotor diameter for the Clipper Liberty C93 wind turbine prototype from which sound power level data for the study were obtained. Since publication of the assessment, new data has become available and is described in the responses to Cohocton comments 31.17 and 35.18 and in Section 2.7 of the FEIS.

The reference on page 17 to the G87 is an illustrative example of expected sound levels at lower wind speeds for a wind turbine similar to the C96. The information on page 18 shows the current 1/3 octave band sound power level spectrum for the Clipper Liberty C96 based on the available data from the prototype (C93) and the estimated spectrum after the noise mitigation measures for the commercial version of the wind turbine (C96). New data indicates a lower sound level than presented in the DEIS and discussed in Section 2.7 of the FEIS, and described in the responses to Cohocton comments 31.17 and 35.18.

Response 36.73: Sound level contours were not shown in the Cohocton analysis for the Twelve Mile Creek valley because project noise will be insignificant and inaudible at that distance. Consequently, there would be no cumulative noise increase regardless of the sound levels produced by the Prattsburgh projects.

Third-party Review

Response 53.3: The Town has retained experienced experts and legal counsel to assist the Planning Board in reviewing the studies submitted by CPP and CPPII. The experts and counsel retained by the Town provided an independent review of the Applicants' work product.

Transportation

Response 7.1: Transportation impacts were evaluated and discussed in Section 3.8 and Appendix J of the SDEIS. Some modifications to the routes described in the SDEIS are described in the FEIS, Section 2.8 and Appendix G Newcomb Hollow

Road will likely be used as part of the Cohocton Wind Power Project. Newcomb Hollow Road was inspected and found to be a well maintained gravel road free of ruts and of sufficient width to be used for the transportation of equipment and material to the site without major changes.

Response 16.4: Section 3.8.3 and Appendix J of the SDEIS state that any damage to the roads will be repaired at the Project operator's expense.

Response 19.1: Section 3.8 and Appendix J of the SDEIS and Section 2.8 and Appendix G of the FEIS identify and recommend road improvements such as geometric alterations, pavement structural enhancements and repairs, and bridge and highway appurtenance modifications that will be necessary to accommodate construction vehicles and the delivery of project components. All road/bridges will be inventoried beforehand, changes to be made, and any impacts, will be approved and recorded in conjunction with road officials. Modifications made for construction/transport will be rehabilitated at the completion of the project.

Response 23.1: See Comment Response 19.1.

Response 23.2: Bridge road construction specification and actual condition will be reviewed and approved for the intended use. Most of the equipment will be traveling on long, weight spreading, multi-axle trailers. This will help to prevent damage as the weights applied may be less than typical local traffic. Section 3.8 and Appendix J of the SDEIS and Section 2.8 and Appendix G of the FEIS identify the following mitigation techniques that will be utilized to avoid or minimize transportation-related impacts and to provide long-term improvement to the local road system:

Insufficient Roadway Width

- Widening roadway to accommodate construction vehicles.
- Rerouting construction traffic to wider roadways.
- Insufficient cover over drainage structures
- Adding cover over structures.
- Reinforcing structures with bracing.
- Using bridge jumpers to clear structures.
- Replacing structure prior to construction.

- Replacing structure during or after construction if damaged by construction activities.
- Rerouting construction traffic to avoid structures.

Poor Structure Condition

- Replacing structure prior to construction.
- Replacing structure during or after construction if damaged by construction activities.
- Using bridge jumpers to clear structures.
- Rerouting construction traffic to avoid structures.
- Inadequate bridge capacity
- Using bridge jumpers to clear bridge.
- Replacing bridge components that provide insufficient capacity.
- Reinforcing bridge with additional longitudinal or lateral support beams.
- Rerouting construction traffic to avoid structures.

Insufficient Roadway Geometry

- Constructing appropriate turning radii at intersections where construction traffic is anticipated[4].
- Rerouting construction traffic to avoid insufficient roadway geometry.
- Profile adjustments to roadways with insufficient vertical geometry.
- Use of public roads by heavy equipment or oversized vehicles during Project operation and maintenance will be coordinated with state, county, and local Highway Department officials.
- Any damage to the roads will be repaired at the Project operator's expense.

Response 30.1: Section 3.8 and Appendix J of the SDEIS state that prior to construction, the Applicant and/or contractor will obtain all necessary permits from the town and county highway departments and the NYSDOT, for activities including new access points, improving existing roadways, crossing highways with buried electrical interconnects, and operating oversized vehicles on the highways.

[4] Approximately 0.5 acres of land will be temporarily modified by adding gravel/fill to allow truck turning movements.

Response 30.2: See Comment Responses 19.1, 23.2, and 30.1.

Response 36.17: Up to 36 turbines are proposed as outlined in the SDEIS. The 48 turbines referenced on page 2 of the Transportation Study is a typographical error.

Response 49.16: To determine if there are any existing traffic capacity or congestion problems, ESS Group reviewed the latest NYSDOT Highway Sufficiency Ratings data for I-390, SR 121, and SR 415. According to the data reviewed for these trucking routes, there is adequate lane width capacity to accommodate the proposed construction vehicle traffic generated by this Project. In addition to reviewing the NYSDOT highway capacity data, ESS Group conducted its own highway safety inspection (5/04/06 and 8/15/06) of all State, County, and Town roads in the Project Area and determined that in general, the Project Area experiences light traffic volumes and that there are no existing traffic capacity or congestion problems.

ESS Group also conducted an on-site bridges and culvert inventory. This inventory identified 31 bridges (24 bridges on I-390) and 31 culverts (2 culverts on I-390) along roadways within the study area. Twelve (12) of the culverts had cover of 12" or less over the top of the structure and may require improvements prior to use by construction vehicles. All of the bridges along the proposed routes will require a complete safety review by the NYSDOT Bridges and Structures Division prior to granting any Special Hauling Permits for the Project.

Required improvements will be defined when the final transportation routing plan is developed. An engineering and improvement plan will be developed in coordination with state, county, and local highway departments, and undertaken by the Project developer/contractor (at no expense to these departments) prior to the arrival of oversize/overweight vehicles onsite.

Response 53.16: It is highly unlikely that the complete closure of routes 21 and 371 will occur. The actual distance traveled on Route 21 is approximately 400 feet and therefore closing the route and re-routing traffic for such a short stretch of highway is very unlikely. Furthermore, there is adequate pavement width (65 feet) on Route 21 to allow large-radius turning vehicles to safely move through the I-390/Route 21 interchange. (See Appendix A: Figure C3 and Figure C4 and Truck Route C2 on Map 1 in Appendix J of the SDEIS).

The actual distance traveled on this Route 371 is approximately 0.3 miles (1700 feet). Closing Route 371 and re-routing traffic for such a short stretch of highway is also very unlikely. Furthermore, there is adequate pavement width (32 feet) on Route 371 to allow large-radius turning vehicles to safely move through the McKay Street and Pine Hill Road intersections once improvements are made at these locations. (See Appendix A: Figure C21 and Figure C22 and Truck Route C2 on Map 1 in Appendix J of the SDEIS).

The expected number of turbine component delivery vehicles is less than 100 as opposed to the 169 stated in the comment. This is based on Truck Route C2 serving a total of 11 turbines sites assuming it takes 9 vehicles to deliver one turbine to the construction site. Each turbine transport vehicle will have its own professionally trained escort as well as State or local police officers to assist with traffic control and safety as required by NYSDOT special hauling permits. While it is possible some delays may occur at these locations, the duration of stopped traffic would be for minutes and not hours and days as postulated in the comment.

Response 53.18: It should be noted that these comments appear to refer to a (draft) Clipper document – specifically to pages titled “Typical Road Allowable Vehicle Grades” and “Typical Road Allowable Bumps and Dips.” These are guidance from Clipper for typical sites.

The transport company will be responsible for specifying the final transportation route for the required permit and will take into consideration the turbine components, transport equipment and road condition in order to meet the safety requirement of NYSDOT. While there may be some local roadways with sections that may be 10% or greater in the project area, that alone should not exclude them from the preferred truck route.

While conducting extensive fieldwork over a three day period, ESS videotaped and photographed over 80 miles of state, county and local highways and roads. No “Bumps and Dips” of any consequence were noted on any of the roads evaluated. In the event that the transport company identifies a problematic roadway condition (usually associated with extended lowbed trailers), it would propose and implement the appropriate engineering solution to NYSDOT for approval prior to using the route.

Turbine Operation

Response 11.8: It is true that the turbines use electricity to get started. However, CPP must pay for that electricity. The amount of electricity that the turbines use is miniscule compared to the amount they produce. The Clipper machine will consume about 10MWh/year while it will produce approximately 6570MWh/year.

Response 16.6: Please see Response 11.8.

Water Resources

Response 36.43: The blue lines on Figure 5 in Appendix G to the SDEIS (Cultural Resource Management Report) represent both access roads and buried cable locations. The dashed lines on Figure 5 in Appendix B to the SDEIS (Wetland Delineation Report) represent buried cable locations. Both of these figures indicate a buried cable connection extending north from Turbine 9 to Moore Road, and then preceding west along Moore Road toward Turbines 7 and 8. The figures are consistent, and no jurisdictional wetlands were identified along this cable route.

Response 36.44: All data sheets included in the Cohocton Wetland Delineation Report are for the Cohocton Wind Power Project. Some data sheets that had been printed for the Dutch Hill Project were used because the field crews ran out of Cohocton sheets. In almost all cases the words Dutch Hill were crossed out and the project name was changed to Cohocton.

Response 49.9: Page 30 of the SDEIS states that impacts associated with public road improvements will be temporary and that any fill placed in wetlands or streams will be removed and pre-construction contours re-established following construction. CPP's intent is to avoid permanent wetland/stream impacts along public roads. Also on Page 30, permanent impact to Wetland R19A (resulting from construction of the access road to Turbine 14) and Wetland AV-1 (resulting from the installation of transmission line poles) is acknowledged. Estimates of all temporary and permanent wetland impacts will be refined as project engineering advances, and will be fully described in a Joint Application for Permit. See also response to Comment 49.11.

Response 49.11: Possible wetland impacts associated with public road improvements and construction and maintenance of the 115 kV transmission line were included in the wetland impact calculations included in the SDEIS. Wetlands or streams along Van Aucker Road, Edmond Road, and Wentworth Road that could be impacted by road improvements were identified (see Wetlands ERA, VAA, VAB, and WRA in Table S3 in the SDEIS). As indicated on page 30 of the SDEIS, approximately 1,700 square feet of temporary wetland filling is anticipated along public roads. This discussion also indicates that eight transmission poles fall within delineated wetland boundaries, and that 2.3 acres of forested wetland within the transmission line ROW will be converted to a scrub-shrub community for the operational life of the line. Updated wetland impact assumptions are presented in Section 2.2 of the FEIS, and wetland impact calculations will be refined as project engineering proceeds. Final wetland impacts will be described in a U.S. Army Corps of Engineers' Joint Application for Permit currently being prepared for the Project.

Response 49.12: The direct impacts to wetlands and streams will be minimized by utilizing existing or narrow crossing locations and previously disturbed areas whenever possible. Special crossing techniques, equipment restrictions, herbicide use restrictions, and erosion and sedimentation control measures will also be utilized to reduce impacts to water quality, surface water hydrology, and aquatic organisms.

Where crossings of surface waters and wetlands are required, the Applicant will employ the Best Management Practices associated with particular, applicable streamside and wetland activities, as recommended by the NYSDEC and the USACE, and required by the issued wetland/waters permits. Specific mitigation measures for protecting wetlands and surface water resources will include no equipment access areas, restricted activities area, sediment and siltation control. The use of these mitigation measures should help to prevent any incidental concrete spills from impacting wetlands or surface waters during construction.

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FIGURES

APPENDIX A

Revised Wetland Delineation Figures

APPENDIX B

Fall 2006 Survey of Bird and Bat Migration

APPENDIX C

Agency Correspondence

APPENDIX D

Supplemental Visual Analysis

APPENDIX E

Revised Shadow Flicker Modeling

APPENDIX F

Updated Noise Modeling Results

APPENDIX G

Revised Transportation Routing Plan

APPENDIX H

Communication Studies

APPENDIX I

DEIS Public Hearing Transcript

APPENDIX J

DEIS Written Comments

APPENDIX K

SDEIS Public Hearing Transcript

APPENDIX L

SDEIS Written Comments

APPENDIX M

Height Comparison Figure

APPENDIX N

Warren, et. al Public Attitude Study

APPENDIX O

SDEIS Response Figures