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New York State Dept. of Public Service

August 12, 2011

AUG 1 6 2011

DIRECIÓR Ofc. of Energy Efficiency and the Environment

Town Board, Town of Orangeville NYS Dept. of Ag & Markets – Rochester NYS DOT

Wyoming County Board of Supervisors

Wyoming County Ag & Farmland Protection Board

Wyoming County Highway Dept.

NYS Parks & Recreation

US Dept of Interior, Fish & Wildlife

US Army Corps of Engineers

Town of Orangeville, Zoning Bd. of Appeals

Re: Town of Orangeville, Wyoming County Stony Creek Energy, LLC - Statement of Findings

Dear Involved and Interest Agencies:

Please be advised that this office represents the Town of Orangeville Town Board who was lead agent for the above-referenced project. Based upon a thorough and full examination and analysis of the DEIS and FEIS, the public comments received concerning these documents and the applicant's responses, the Town Board has prepared its own written SEQR findings statement.

At its August 11, 2011 board meeting, the Town Board of the Town of Orangeville issued its Statement of Findings and Rationale for Decision relative to Stony Creek Energy, LLC. In accordance with 6 NYCRR §617.12, enclosed herein please find copy of same.

Very/trug/ /ours.

David M. DiMatteo ØMD/lap

/ Enclosure PC to Susan May, Supervisor NYS DEC – Buffalo NYS DEC – Albany NYS PSC Wyoming County Planning Board Wyoming County Health Dept.

Stony Creek Energy, LLC

87 North Main Street

Post Office Box 190 Warsaw, New York 14569-0190

Telephone (585) 786-2110 Facsimile (585) 786-0126

State Environmental Quality Review Findings Statement

Pursuant to Article 8 (State Environmental Quality Review Act - SEQR) of the Environmental Conservation Law and 6 NYCRR Part 617, the Town Board of the Town of Orangeville as the Lead or an Involved Agency makes the following findings.

Name of Action: Stony Creek Wind Farm

Description of Action:

Stony Creek Energy, LLC is proposing to construct a wind-powered generating facility consisting of up to 59 General Electric 1.6-100 wind turbine generators ("WTGs"), each with a maximum height of nearly 430 feet, which includes an operation and maintenance (O&M) facility, a system of gravel access roads, a 34.5 KV electrical collection system of buried electrical cable from the 59 WTG(s) to a substation, and one 262 foot permanent meterological tower.

Location:

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The property is located in the Town of Orangeville as set forth on the attached map.

Agency Jurisdiction:

Date Final Environmental Impact Statement Filed:

July 6, 2011

Facts and Conclusions Relied on to Support the Decision:

See attached Statement of Findings and Rationale For Decision.

Certification To Approve/Fund/Undertake :

Having considered the draft and final Environmental Impact Statement and having considered the preceding written facts and conclusions relied on to meet the requirements of 6 NYCRR Part 617.11, this Statement of Findings certifies that:

- 1. The requirements of 6 NYCRR Part 617 have been met; and
- 2. Consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is the one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable.
- 3. (And if applicable) Consistent with the applicable policies of Article 42 of the Executive Law, as implemented by 19 NYCRR Part 600.5, this action will achieve a balance between the protection of the environment and the need to accommodate social and economic considerations.

Signature of Responsible Official

Town Supervisor Title of Responsible Official Name of Agency

Susan May

Name of Responsible Official

August 11, 2011

Date

Address of Agency

3529 Route 20A Warsaw, New York 14569

cc: Other Involved Agencies Applicant

TOWN OF ORANGEVILLE TOWN BOARD STATEMENT OF FINDINGS AND RATIONALE FOR DECISION STONY CREEK ENERGY LLC

1.0 INTRODUCTION

The Town of Orangeville, Wyoming County, New York (the "Town") has received an application from Stony Creek Energy LLC, ("Stony Creek") for the construction and operation of a Wind Energy Conversion Farm¹ and related electrical collection, substation, and access road infrastructure in the Town (the "Stony Creek Wind Farm," or the "Project,"), pursuant to the Town of Orangeville's Local Law No. 2 of 2009 (the "Town Law"), regulating the siting of Wind Energy Conversion Devices (WECD²) and/or farms, as described herein. This document is the Statement of Findings issued by the Town Board of the Town of Orangeville ("Town Board"), pursuant to its responsibilities as Lead Agency under the State Environmental Quality Review Act (ECL Article 8 and its implementing regulations at 6 N.Y.C.R.R. § 617.11 "SEQRA").

2.0 THE SEQRA PROCESS

This document represents the conclusion of the environmental review of the proposed Stony Creek Wind Farm. The Town Board has acted as Lead Agency in evaluating the environmental, economic, and social implications of the Project. The Lead Agency is the governmental body "principally responsible for undertaking, funding or approving an action, and therefore responsible for determining whether an environmental impact statement is required in connection with the action, and for the preparation and filing of the statement if one is required." The Town Board declared the Project to be a Type I action and, after issuing a Notice of Intent to Act as Lead Agency, acted as Lead Agency. The Town Board conducted scoping, including collection of public comments, to determine what issues should be included in the DEIS and the methodologies to be employed. A Final Scoping Document was issued by the Lead Agency on January 14, 2010. Stony Creek prepared the Draft Environmental Impact Statement ("DEIS"), and after public comment on the DEIS, the Town prepared the Final Environmental Impact Statement ("FEIS") with the assistance of the Town's legal and technical experts.

¹ A Wind Energy Conversion Farm is defined in Town Law II.A as: The siting of two (2) or more mechanical devices such as a wind charger, windmill or wind turbine designed and used to convert wind energy into a form of energy for commercial sale. The net metering of the output from a wind charger, windmill or wind turbine pursuant to a tariff filed with the New York State Public Service Commission shall not be considered a Wind Energy Conversion Device and is not subject to regulation by this local law.

² A Wind Energy Conversion Device is defined in Town Law II.a as: The siting of one (1) mechanical device such as a wind charger, windmill or wind turbine designed and used to convert wind energy into a form of energy for commercial sale. The net metering of the output from a wind charger, windmill or wind turbine pursuant to a tariff filed with the NewYork State Public Service Commission shall not be considered a Wind Energy Conversion Device and is not subject to regulation by this local law. WECD is used in this document to represent both the singular and plural.

Under the SEQRA regulations, this Findings Statement must:

- 1. consider the relevant environmental impacts, facts and conclusions disclosed in the FEIS;
- weigh and balance relevant environmental impacts with social, economic and other considerations;
- 3. provide a rationale for the Town's decision;
- 4. certify that the requirements of SEQRA have been met; and
- 5. certify that consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable.

3.0 PROJECT DESCRIPTION - PHYSICAL IMPROVEMENTS

3.1 Individual WECD Sites

The Project Area is bounded by: the Attica-Orangeville town line to the north; Warsaw- Orangeville town line to the east; Almeter Road and Wilder Road to the south; and Syler Road and a line 3,000 feet west of Gassman Road to the west. The Project Area covers approximately 14,500 acres, and entails the installation and erection of 59 WECD within the Town. The WECD to be installed are General Electric 1.6-100 WECD generators. The WECD is a three-bladed, upwind, horizontal-axis WECD with a rotor diameter of approximately 328 feet (100 meters). The nacelle is located at the top of each tower and contains the electrical generating equipment. The WECD rotor and the nacelle are mounted on top of a tubular tower giving a rotor hub height of 262.5 feet (80 meters). The maximum height (when a rotor blade is at the top of its rotation) for each WECD is 426.4 feet (130 meters). Once installed, each WECD foundation will use a spread footer foundation approximately 5 feet thick and 50 feet wide, with each foundation buried approximately 8-12 feet deep depending on the site specific geology. Blasting is unlikely to be required because the shales and siltstones present on site are characterized as fractured and fissile (easily split along close parallel lines), and if encountered can be removed by mechanical methods (i.e., excavation). In the unlikely event that blasting is required, blasting activities will be conducted in accordance with the Blasting Plan provided in DEIS Appendix I, by a blasting contractor certified by New York State, and in compliance with all applicable Federal and regional requirements, which will minimize impacts. If blasting is necessary to construct the Project, Stony Creek will design the blasts so that vibration levels are less than 25 mm/sec at any non-participating dwellings.

Construction at the WECD sites will not temporarily or permanently impact any wetland areas. It is estimated, however, to temporarily impact 36.22 acres of forest, and 70.35 acres of agricultural or scrub land, for a total of 106.6 acres. Permanent forest impacts will be only 2.51 acres because forest will be allowed to re-grow on 33.71 acres. Total permanent impacts from the WECD sites will not exceed 7.8

acres. After installation is complete, disturbed areas at the WECD sites will be restored with subsoil and stockpiled topsoil, and seeded with native plant species or species consistent with current land use. Within active agricultural fields, restoration of the disturbed area will be in accordance with New York State Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Windpower Projects (1/4/2008) ("NYSDAM Guidelines"). Excess gravel will be removed from each site, including any geotextile fabrics that are exposed. Foundations and underground infrastructure will be in place for the life of the Project.

Preparing the sites for installation of the foundations and WECD will require excavating surface materials approximately 8 to 12 feet deep and approximately 25% wider than the approximately 50 feet overall width of the spread footer. In the event groundwater is encountered, dewatering will be performed as needed, to maintain the strength of the subsurface load-bearing materials. If dewatering is necessary, Stony Creek will work to expedite these phases of construction to limit any impacts. Dewatering would be accomplished using one or more portable pumps, typically powered by a portable generator, located at the foundation site. These sites are set back from non-participating dwellings by ¼ mile or more, so noise from de-watering equipment would be minimal. The management of groundwater extracted from dewatering activities will be in accordance with the Storm Water Pollution Prevention Plan ("SWPPP"), which satisfies the requirements of the State Pollution Discharge Elimination System ("SPDES") General Permit (GP-02-01) as regulated by the New York State Department of Environmental Conservation ("NYSDEC") and the Town, and will also include any appropriate best management practices (for example, one measure Stony Creek may use is the placement of sediment bags on the outlets of dewatering hoses). The SWPPP includes applicable limits on turbidity in runoff water.

The Project also includes one existing 262 feet (80 meter) tall permanent meteorological tower. This tower will temporarily impact approximately one acre and permanently impact approximately 0.1 acre; no wetlands or forest areas will be disturbed

3.2 Delivery and Storage ("Laydown") Area

A Project of this scale requires one temporary central delivery and staging area (also referred to as the "Laydown Area"). This site will be used for construction trailers, material storage, WECD nacelles, towers, and blades, cable reels, and parking for construction workers. The staging area will temporarily occupy approximately 10 acres; no wetlands or forests will be impacted. Stony Creek has located the construction staging area in an open and relatively flat field on the west side of Orangeville Center Road south of Centerline Road. The staging area will be graded as necessary and finished with a gravel surface. For security purposes, Stony Creek plans to install temporary fencing and security lights around the staging area. Upon completion of Project construction, Stony Creek will restore the staging area by removing the gravel surface, re-grading the area with stockpiled topsoil, and seeding. There will be no permanent impacts to the area. Use of this area will be in full compliance with the Project's SWPPP, and in accordance with applicable NYSDEC and Environmental Protection Agency ("EPA") regulations.

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During the Project construction phase, the large WECD components (i.e., tower sections, nacelle, and rotor blades) will be delivered to specific WECD sites by a delivery truck. Each of the individual sites will serve as the staging area for the erection of that specific WECD. Use of land for staging areas in active agricultural areas will be minimized in accordance with the NYSDAM Guidelines, to avoid unnecessary compaction of the soil and maximize preservation of agricultural capacity. While temporary parking will be required at each WECD location as the construction progresses, the majority of construction crews will park at the laydown area; others will park off the public roads on the Project's previously disturbed and designated areas such as access roads and WECD sites, as required.

3.3 Access Roads

The Project entails construction and use of approximately 14 miles of access roads to connect each WECD to a public road for equipment and vehicular access for construction and maintenance of the facilities, as well as access by emergency services, if needed. Access roads, both temporary roads needed for construction and permanent routes for maintenance, have been sited to minimize impacts on wildlife habitat and agricultural land. Construction of the access roads is estimated to temporarily impact 0.28 acres of wetlands, 28.86 acres of forest, and 84.15 acres of other land uses (i.e. active and former agricultural land, scrub land, and developed areas), for a total of 113.3 acres. The 0.28 acres of wetland impact will be permanent, but due to re-growth along the road shoulders and temporary soil stockpile areas, only 9.14 acres of forest will be the permanently impacted, and only 38.5 acres in total will be permanently impacted by access roads.

Stony Creek will construct the access roads using standard construction methods. Following clearing and grubbing, if necessary, Stony Creek will strip and stockpile the topsoil in the area where road construction will occur. Next, the subgrade will be graded and compacted. Where possible, the roads will be constructed flush with the surrounding grade, in order to minimize impact to stormwater flow. To assure the construction of safe roads, the Town is requiring that Stony Creek build the access roads using a geotextile fabric, covered by gravel base and top layers. Any alternate design shall be submitted to the Town Zoning Enforcement Officer (ZEO) for review and approval. The gravel depth will be varied to accommodate site conditions, but is expected to average 12 inches during construction.

At locations where an access road is constructed over a stream, Stony Creek will install a culvert in the streambed with gravel fill on each side of the culvert. Stony Creek will also install culverts at wetland crossings where significant cross-drainage is evident. Roadside ditches/swales will be constructed as dictated by the terrain to convey storm water runoff away from the roadways. Road construction will comply with the SWPPP and NYSDAM Guidelines where applicable, as well as applicable Town standards.

Some negative impacts will occur as a result of the proposed chosen routes, but the Town believes the balanced approach used in road siting, as expressed in the FEIS layout, which reduced wetlands impacts and forest fragmentation relative to the DEIS layout, minimizes impacts to the maximum extent practicable. Specifically, there will be unavoidable impacts on a very small amount of federal jurisdictional wetlands (approximately 0.28 acres of permanent impact). The Town finds, if the Project

layout were modified so as to eliminate all impacts on wetland, other impacts would be unacceptably increased. This occurs because rerouting the access roads would mean significant additional lengths of roads being constructed. In addition to the increased length of roads construction impacts (primarily noise and dust), for every foot of road increased, there would be an increase of up to 60 square feet of disturbance of forest, farmland, and/or wildlife habitat. Each additional mile of road would add approximately seven (7) acres of soil and vegetation disturbance. The FEIS layout minimizes impacts to wetland areas to the maximum extent possible without a major increase in the length of the roads. In addition to the increased length of roads in the Project Area, layout changes to further reduce wetland impacts would be inaccessible due to small wetlands or streams. This would create additional visual impacts inconsistent with the rural character of the area due to the numerous entrance roads cutting into forested and open space areas, and would create additional traffic impacts in the areas. By contrast, these impacts are limited because the FEIS layout has as many as six WECD along one access road with a single entrance from a public road.

3.4 Electrical Collection Systems

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Wind energy generating facilities are unique in the field of power generation because of the distance at which WECD are located from the electrical grid interconnect point. Like access roads, this presents potential environmental impacts due to construction of an electrical collection system ("ECS") connecting the widely dispersed WECD with the electrical grid interconnection point.

The Town has acted to minimize the impacts from the construction of the new system, which has a total length of approximately 28 miles. Construction of the ECS is estimated to temporarily impact approximately 1.74 acres of wetlands, 11.02 acres of forest, and 42.25 acres of agricultural and scrub land, for a total of 55 acres. Impacts in wetlands will be temporary, except that the 0.22 acres of wooded wetlands impacted by ECS installation are assumed to be permanently impacted as they will be managed after construction with periodic mowing or clearing to ensure that cables can be accessed without significant tree clearing and to minimize interference with cables by tree roots. Similarly, the 11.02 acres of impacted forest will be allowed to partially revegetate, but will be managed to provide access to the ECS cables. There will be no other permanent impacts to land uses due to the ECS. Improvements to the site layout have eliminated the need for even short spans of overhead lines.

3.5 Operations and Maintenance Building

To service the Project post-construction, there will be an Operations and Maintenance ("O&M") facility for Project offices, garages, workspace, and storage area for parts, tools and materials. The O & M Building will temporarily impact up to five acres and permanently impact up to two acres; no wetlands or forest areas will be disturbed.

3.6 Substation and Switchyard

The Project includes the construction of an electric substation on Centerline Road, which will increase the voltage of the 34.5 kV ECS to the 230 kV voltage of the existing transmission line owned by New York

State Electric and Gas ("NYSEG"). This site will also include a switchyard. The switchyard will contain breakers, switches, meters, and other equipment that the owner of the transmission line, NYSEG, requires in order to control the flow of power to the transmission line. The substation and switchyard are herein collectively referred to as the "substation."

Because this NYSEG line already serves the area, no new transmission line is needed for the Project, thereby minimizing its visual impact and vegetation disturbance (for example, compared to the neighboring Wethersfield-Bliss project, which required a new 5.5 mile long 230 kv transmission line).

The substation will temporarily impact approximately five acres and permanently impact approximately 2 acres of agricultural land; no wetlands or forest areas will be disturbed. Stony Creek will incorporate appropriate erosion and stormwater control measures, as dictated by the SWPPP, and will employ appropriate operational controls such as rock outlet protection, vegetative measures, diversion swales and other typical stormwater management features.

3.7 Environmental and Agricultural Monitoring Program, Building Permits

The Town will require certain on-going activities to ensure the physical improvements described in Sections 3.1 to 3.6 comply with the provisions of this Findings Statement, and any permits and applicable laws. Stony Creek will be required to implement (1) an Environmental Monitoring Program and (2) an Agricultural Monitoring Program for the Project. The two programs will reflect permit conditions and other commitments made by Stony Creek during the application review process with the Town and other agencies regarding wetland and stream disturbance, vegetation removal, stormwater management, erosion control, and agricultural impacts. Stony Creek will employ one or more monitors to implement these programs. Monitors will have credentials required for understanding the needs of this Project. It will be their responsibility to include timely reviews to substantiate compliance with the conditions in this Findings Statement, all Town permits, and the permits of any other agency. The monitors will copy the Town on any reports issued to another agency. In addition, monitors will copy all reports, internal and external, to the Town's Special Use Permit Compliance Monitor (SUP Monitor). The SUP Monitor will assist the Town in ensuring compliance with the conditions of the Special Use Permit Conditions. In addition to reviewing the Environmental and Agricultural Monitors' reports, the SUP Monitor's responsibilities will include: regular field visits during construction, reclamation and operation; attendance at construction work planning and training sessions as appropriate; review of drawings, records, and agency correspondence; and interviews with construction and operations personnel.

In addition to Wyoming County Building Inspectors, building plans will be reviewed by by a technical expert hired by the Town (the Town Monitor) and/or the ZEO for compliance with the conditions of the Special Use Permit.

4.0 ALTERNATIVES

4.1 Analysis

Pursuant to the requirements of SEQRA, the Town Board has evaluated Project Alternatives. SEQRA requires consideration of reasonable alternatives to assess ways of avoiding or minimizing environmental impacts associated with a proposed project, including the No Action Alternative. At the outset, the Board notes that SEQRA requires Environmental Impact Statements to provide: "a description and evaluation of the range of reasonable alternatives to the action that are feasible, considering the objectives and capabilities of the project sponsor." (6 NYCRR §617.9(b)(5)(v)). Thus calls for Town-owned projects (which is not feasible in any case since the Town lacks control of the Project Area) or energy efficiency by the full range of energy consumers, are not properly within the dimensions of review mandated by SEQRA. The Board conducted a full review of the Stony Creek proposal, the revision to that proposal made by Stony Creek in response to comments to the DEIS, and the various alternatives listed in the Final Scope.

In order to understand the range of viable alternatives, it is necessary to understand the site selection process employed by Stony Creek, which consisted of a preliminary screening analysis, including:

<u>Availability of sufficient wind resources</u>. WECD must be sited in locations where data indicate that sufficient wind with adequate speeds, frequency, and duration exists on a consistent basis. The higher elevations of the Project Area are exposed to regular winds blowing across Lake Erie from the west and southwest. The general orientation of the ridges and plateaus along an axis perpendicular to the wind allows for an efficient layout of WECD. Through the use of modeling software, meteorological data, and topographic data, the WECD are sited to optimize exposure to wind from all directions, with emphasis on exposure to the prevailing wind directions in the Project Area. A Project Area with adequate wind resources was identified and potential Project sites were investigated within this Project Area.

<u>Proximity to existing transmission lines</u>. A key consideration for wind project siting is the accessibility of an existing utility system to deliver the power generated into the energy grid. Use of existing transmission facilities, to the extent possible, minimizes environmental impacts associated with construction of new power transmission facilities, which would include visual impacts, clearing ROWs and other construction impacts. Connection to the NYSEG 230-kV transmission line running through the Town of Orangeville minimizes these potential impacts. The availability of this high-voltage transmission line also enhances the efficiency of the Project by reducing transmission line "losses."

<u>Proximity to existing roads</u>. The Project Area is well situated within the local and regional transportation networks to accommodate the vehicles necessary for delivery of WECD components and construction equipment. The Project Area contains two principal transportation arteries: NYS Route 238, traversing north to south along the eastern edge of the Project Area, and U.S. 20A, crossing west to east through the center of the Project Area. Transportation in and through Wyoming County and the Town is provided by a well-developed system of local and county roads. The roads are suitable for delivery of the equipment needed to construct and maintain the Project. The Project Site also includes many existing

farm and logging roads. Improving these existing roads for Project access will avoid disturbance of additional areas for new roads.

<u>Availability of</u> private lands. The Project Area is comprised of privately owned lands. Many of the properties are larger parcels that are in agricultural use and have a low population density, making them attractive for wind energy development. Larger, sparsely settled parcels require fewer easements and less encroachment on residential uses. Because Stony Creek is a private developer, Project site selection was limited to those locations where it is able to enter into voluntary agreements with landowners for development. Sufficient land was required to space WECDso as to minimize wake losses and maximize the capture of wind energy. WECD-to-WECD spacing in the Project layout exceeds the 500 feet spacing requirement of the Orangeville Town Zoning Code Section 1116(B)(2).

<u>Presence of Environmental and Land Use Constraints</u>. Stony Creek conducted a preliminary analysis of the Project Area to determine the presence of environmental and land use constraints. This analysis revealed that there were relatively few potential disturbances to sensitive ecological resources, land and water resources, cultural and visual resources, and landowners at the proposed Project Site. In addition, the results of a microwave path analysis were used to locate the WECD outside FCC regulated microwave transmission corridors and each WECD was subject to micrositing to avoid interference with line-of-sight communications.

At potential Project sites, Stony Creek analyzed site-specific criteria, including geology and soils, water resources, wetlands, threatened and endangered species, avian and bat issues, public roads, land use, and visual impacts. This process also entailed examination of a full range of environmental considerations, including effects on agricultural resources, to avoid or minimize significant impacts wherever possible. The Project was designed based upon these parameters. In accordance with the SEQRA regulations and the Final Project Scope, the Board has considered following alternatives: No-Project Alternative, Maximum WECD Build-out, fewer WECDs, lower WECD height, much smaller WECDs, and alternative energy sources (solar). The alternative discussion was expanded in the FEIS to reflect the latest version of the GE WECD (Model 1.6-100) and the minor differences in impacts that would result using the 1.6-100. The Site Plan was revised to reduce forest and wetlands impacts. That model and revised plan, as presented in the FEIS, are now the preferred alternative because of the reduced impacts over the models reviewed in the DEIS, although the models and the impacts are very similar.

4.2 No Project (i.e. "No Action") Alternative

The purpose of consideration of the "no action" alternative is to examine the future condition of the Project Area if there is no Project. The No-Project Alternative would eliminate the impacts from the Project; however it would also eliminate the Project Benefits which the Town Board believes are important to its community. Specifically, the "No Action" alternative assumes the proposed Project Area would continue to be used as vacant undeveloped and agricultural lands. No WECD, ECS, access roads or other developments would be constructed in the Project Area and therefore potential adverse environmental impacts associated with the construction and operation of the Project would not occur. If

the "No Action" alternative were selected, then no socioeconomic benefits would accrue to the area. In particular, no new payments would be made to local farmers, who would therefore forgo payments that could sustain agriculture in the community. No revenue from the Project to local governments or schools would be forthcoming and no new construction or permanent jobs would be created. The State, local communities, the public and the environment would lose the opportunity to add a significant source of clean, renewable energy to New York State's energy mix; and would thereby lose the opportunity to reduce dependence upon fossil fuels, which are known to contribute to acid rain, green house gases (carbon dioxide (CO2), sulfur dioxide (SO2), or nitrogen oxides (NO_x)), smog, and other environmental harms. Energy security would not be enhanced. Lastly, the No Action alternative would not add any new renewable generation capacity to the state, and would fail to advance the State's Renewable Portfolio Standard and Energy Plan goals. In view of the significant local benefits that would be lost, and given the Town Comprehensive Plan's support for renewable energy, the Town Board finds that the "No Action" alternative is not preferred.

Moreover, the Town believes that the potential environmental impacts of the Project can be mitigated., With respect to visual impacts, while the WECD will be visible across a large area, the Town Board does not find that this alone creates an unacceptable negative impact, particularly when balanced with the economic and social benefits and impacts. Potential noise and other concerns are mitigated by setbacks imposed by the Wind Law and the individual WECD locations ultimately selected. Most other impacts are limited to the construction period and are temporary, and can be adequately mitigated. On the other hand, substantial benefits will accrue over the life of the facilities. The Town Board believes the Project benefits outweigh the negatives, and thus rejects the No-Action Alternative.

4.3 Maximum WECD Build-Out

"Maximum WECD Buildout" means adopting a layout that places the maximum number of WECD to achieve the maximum possible output for the wind resource. If WECD were installed in this area without any regard to impacts to streams, wetlands, or forested areas with a spacing of 3 rotor diameters in all directions, Stony Creek has determined that the Project Area could fit 168 WECD, which would have a maximum generating capability of 268.8 MW. Impacts to visual resources would likely be the same, as additional towers would not appreciably increase or decrease the visibility of the Project. Avian and bat impacts could increase due to the additional towers and the habitat impacts. Compared to the Preferred Alternative (as revised in the FEIS), this Alternative would generate 40% more local revenue and renewable energy, but it would result in temporary and permanent habitat area impacts that would be between 2.2 and 2.4 times that of the FEIS Preferred Alternative. Also, this Alternative would cost approximately 2.8 times as much to construct, but would produce only 1.4 times as much electricity, and the existing transmission line may lack capacity to allow full revenue potential to be reached. The maximum build alternative results in a Project that is less financially viable, and one that has proportionally more habitat area impacts compared to the renewable energy and local tax benefits that it creates. For these reasons, this Alternative is not justified.

4.4 Fewer WECDs

A "Fewer WECDs" alternative would be a layout that focuses on using the original Preferred Alternative but reducing the number of WECD to reduce potential impacts to forested areas. Stony Creek considered a Fewer WECD alternative with a goal of reducing the number of WECD impacting wetlands and forest habitat. Stony Creek assumed that this layout would have 31 WECD, which if built with the GE 1.6-100, would have a generating capability of 49.6 MW. Compared to the layout for the FEIS Preferred Alternative (which has already been set to minimize the impact to wetland and sensitive habitat) the fewer WECD alternative eliminated the majority of the WECDs, roads, and ECS in forest areas. While this Alternative results in less absolute area impacts and less impacts to forest areas, it will produce significantly less revenue for local jurisdictions with a similar visual impact. This Alternative does not make efficient use of all of the renewable energy resource in the Project Area and it results in more habitat impacts for every megawatt of installed generation, particularly compared to the FEIS Preferred Alternative as revised to reduce forest impacts.

4.5 Lower WECD Height

This Alternative examined use of the original Preferred Alternative layout but with WECD that have a shorter tip height. Stony Creek evaluated using the shorter Vestas V47 WECD installed in the same 59 WECD layout as the Preferred Alternative, and therefore causing the same infrastructure impacts. These WECD have a generating capacity of 0.67 MW each, resulting in a total Project generating capacity of 39.5 MW, or about 40% of the generating capacity of the Preferred Alternative. However, the smaller WECD have a lower capacity factor, resulting in an estimated annual energy production that is only 25% of the Preferred Alternative. The Board notes that the lower height does not appreciably reduce the visual impacts or other impacts. Therefore, impacts per MW and per MWh are both higher than in the Preferred Alternative. Because this Alternative does not make efficient use of all of the renewable energy resource, and will result in 75% less renewable energy and associated benefits, it has no benefits over the FEIS Preferred Alternative.

4.6 Much Smaller WECDs

During the Scoping session, some residents requested evaluation of small-scale WECDs, specifically by using the WindTamer brand WECD instead of the utility scale WECD of the Preferred Alternative. The WindTamer is a diffuser type WECD whose blades and generator are contained in a relatively small housing, intended for residential and commercial use in "behind the meter" applications. They are distinctly different in scale from the utility scale WECD of the FEIS Preferred Alternative. The goal of the proposed Project is to generate wholesale electricity using renewable energy. If the Project were to be reconfigured to use WindTamer WECD to generate the same amount of electricity as the original or FEIS Preferred Alternative, the Project would need 19,667 WindTamer 96GT WECDs, resulting in greatly increased impacts per MW. Therefore, this Alternative is not a viable or practical approach.

4.7 Alternative Energy Source (Solar)

Many of the benefits that accrue from the Project result from use of a renewable energy source. The Final Scope therefore called for evaluation of a solar photovoltaic Project as an alternative. If a solar project with the same generating capacity as the Preferred Alternative were built in the Project Area, approximately 944 acres would be permanently disturbed, or almost 19 times more land than required by the FEIS Preferred Alternative. In addition, this land would need to be cleared or already cleared, so it is assumed that the 944 acres of a solar project would require removal of an equal amount of agricultural land from production. The solar photovoltaic alternative is therefore not a viable alternative as the total amount of permanent disturbance to agricultural land would be significantly greater. The Board also notes (in response to a comment) that geothermal energy is not a feasible alternative for this Project Area, because the required thermal gradient does not exist, i.e. there are no hot springs of the type used to economically generate electricity such as those, e.g., in Iceland, or underground hot water reserves such as those found in the Reno, Nevada area.

4.8 FEIS Preferred Alternative

One of the hallmarks of SEQRA process is the timing of a DEIS: "The purpose of a draft environmental statement is to relate environmental considerations to the inception of the planning process, to inform the public and other public agencies *as early as possible* about proposed actions that may significantly affect the quality of the environment, and to solicit comments which will assist the agency in the decision making process in determining the environmental consequences of the proposed action."¹ As a result, in all projects covered by SEQRA the review is on-going throughout the design and application process. In the case of Stony Creek, the design and layout of the Project and its components have been continuously evaluated since they were first presented to the Town. As a result of various comments by the public and other agencies, as well as improvements by GE in the technology of its products, the Preferred Alternative was slightly revised. Accordingly, Stony Creek will use the GE 1.6-100 WECD. This WECD has the same maximum power output as the GE 1.6xle addressed in the DEIS, but employs a slightly longer blade (8.75 meters or 28.7 feet longer), with no change in the hub height. In addition, it is quieter than the GE 1.6xle addressed in the DEIS.

Stony Creek re-evaluated the location of WECD, roads, and cables upon completion of updated wind analyses, several environmental studies, including detailed wetland delineations and surveys for the Jefferson Salamander, noise studies, and shadow flicker studies, and after review of comments received from the public and state and federal agencies. The WECD locations in the FEIS contain several adjustments intended to minimize impacts to wetlands, to minimize impacts to known breeding pools for Jefferson Salamander, and to minimize fragmentation of forests and agricultural fields. Compared to

N.Y. Envt'l Conserv. Law § 8-0109(4) (emphasis added).

the original layout, the revised layout relocated eleven WECD to different portions of the Project Area, while the other 48 WECD are either unchanged or in the same general location as in the DEIS. Minor adjustments have been made to Project access roads primarily to minimize wetland impacts, forest impacts, and the number of driveways required. Similarly, the FEIS Preferred Alternative layout includes several adjustments to cable routes, again made primarily to minimize impacts to wetlands and forest areas, but also to reduce the number of junction boxes required. With the exception of the slightly taller WECDs, the changes all reduce impacts. Further, a technical review of the changes in the Project layout and equipment concluded there were no new significant adverse impacts of the Project not addressed in the DEIS. For example, with the GE 1.6-100 WECD and revised layout, maximum Project noise at non-participating dwellings will not only meet the Town Code requirement of 50 dBA, but will in fact be less than 45 dBA at those receptors. Thus, noise impacts are reduced as compared to the DEIS. As to the larger height, the Board reviewed the revised visual analysis including updated photo simulations. The Board notes that the effect of increased height is, as with all visibility issues, subjective; views of the WECD will be objectionable to some individuals and not to others, and the visibility of the WECD is an unavoidable impact. The Board has studied the marginal impact of the higher towers and finds that the difference to be barely perceptible. The Board has rendered its decision herein with full knowledge of the slightly higher level of visual impacts and finds that, based upon the analysis in the FEIS, there are no additional significant impacts associated with the change in equipment.

The proposed Project has been sized to maximize its output and thereby defray its fixed costs, to maximize its environmental benefits through the production of clean energy, and maximize local economic benefits through landowner easement payments, tax and non-tax payments, and other local economic benefits, all while minimizing environmental and other impacts on the Project Area. The Town Board does not find any evidence that changing the Project design or size, or the Project components, would further reduce the environmental impacts of the Project while optimizing the efficiency of the available wind resource. The Board finds the FEIS Preferred Alternative minimizes impacts to the maximum extent practicable, and the balancing of the social, environmental, and economic factors supports approval of this Alternative. The Board finds that the range of alternatives examined have been sufficient to provide the public and involved agencies with enough information to weigh the costs and benefits of the FEIS Preferred Alternative, and further, based on the alternatives analyzed, adverse environmental impacts of the Project will be minimized by the FEIS Preferred Alternative.

4.9 Supplement Draft or Full Environmental Impact Statement

The Town Board has received correspondence both before and after the public comment period suggesting a Supplemental DEIS or FEIS ("SEIS") is required due to deficiencies in the DEIS or due to the Project changes analyzed in the FEIS. As to an SEIS, the SEQRA regulations state:

(7) Supplemental EISs.

(i) The lead agency may require a supplemental EIS, limited to the specific significant adverse environmental impacts not addressed or inadequately addressed in the EIS that arise from:

(a) changes proposed for the project; or

(b) newly discovered information; or

(c) a change in circumstances related to the project.

(ii) The decision to require preparation of a supplemental EIS, in the case of newly discovered information, must be based upon the following criteria:

- (a) the importance and relevance of the information; and
- (b) the present state of the information in the EIS.

(iii) If a supplement is required, it will be subject to the full procedures of this Part.²

As to the first point (alleged deficiencies in the DEIS), the Board disagrees and reaffirms its determination that the DEIS was adequate and the proper start for commencing public review of the Project. All of the substantive comments and inquiries have been addressed in the FEIS, and there is no newly discovered information or change in circumstances. The marginal impacts from the change in WECD model and site layout are very close to the impacts examined in the DEIS, and the Board notes that the correspondence asserts disagreements with the Project rather than evidence of any deficiency in the EISs.

As to the changes in Project after the DEIS, The Board also notes again that SEQRA requires the DEIS to be prepared as early as possible in the review process. Thus, changes in a Project are expected; otherwise the public and agency comment process would be meaningless. Here changes were made both in response to the public input and DEC's changes in wetland and related buffer areas. Layout changes were made to reduce impacts. Improvements in technology lead to the selection of a longer blade. The minor impacts resulting were fully evaluated through updated visual reports, such as updated photo-simulations, and a shadow flicker study, and an updated noise analysis. No change went unexamined in the EIS. The resulting impacts from the change in WECD model and site layout are less than and/or the same as those environmental impacts examined in the DEIS. Thus, there are no additional significant adverse impacts associated with the Project that were not evaluated in the DEIS.

As stated by the Court of Appeals, a lead agency should "prepare a SEIS if environmentally significant modifications are made <u>after</u> issuance of a FEIS."³ No changes have been made in the Project between the issuance of the FEIS and these Findings, and the environmental impact of every post-DEIS change - most of which were reduced in impacts -was fully vetted in the FEIS, discussed in public meetings,

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² 6 N.Y.C.R.R. § 617.9(a)(7).

Jackson v. New York State Urban Dev. Corp., 67 N.Y.2d 400, 429 (1986) (emphasis added).

subject to a public hearing, and analyzed in these Findings. Thus, the "present state of the information in the EIS" is that the environmental impacts associated with the Project have been identified and the Board has taken a hard look at them, culminating in this Findings Statement, which constitutes the Board's reasoned elaboration for its decision. No case for requiring a Supplemental EIS exists.

In the event that unforeseen circumstances require further modification to the layout and/or WECD model as proposed in the FEIS, these changes will be reviewed to determine if the modifications are environmentally significant. Appropriate analysis, depending on the scope of the required modifications, will be performed by Stony Creek and reviewed by the Town through its expert to determine whether resulting environmental impacts would be significantly different from those described in the FEIS. Where modifications to the Project do not result in additional significant adverse environmental impacts identified in the FEIS, a Supplemental EIS will not be required.

5.0 PROJECT BENEFITS

5.1 Air Quality and State Renewable Energy Goals

The Project is expected to have a long-term beneficial impact on air quality in the region impacted by fuel-based electric generators serving the New York State electric market, even after considering the life-cycle emissions impacts of constructing and operating the Project. It is well documented that electric generation by fossil fuel-fired facilities contributes to serious environmental and health problems from CO₂, SO₂, NO_x, particulate matter, and mercury emissions. The Project is expected to displace electricity generation from other sources that would have otherwise emitted significant levels of these pollutants, or to eliminate the addition of such pollutants to the environment by non-renewable sources. The Town notes that this finding is consistent with and supported by State and Federal studies that have determined wind power can displace fossil fuels in providing current and future energy needs. The Town made this determination based on the most recent information regarding the role of renewable energy in the New York energy generating fuel mix. That information included an energy deliverability study specifically focused on the ability of existing renewable generators in Western New York to deliver energy to the transmission grid with the Project in place, under a variety of future conditions. That study concluded that Stony Creek should be able to deliver its full rated generating capacity to the grid with no impacts or "bottlenecking" of other renewable generators. The Town finds the Project will have a significant long-term beneficial impact on air quality by producing electricity without any emissions to the atmosphere. As discussed in the DEIS, using conservative assumptions including use of the lowerrated 1.5-xle WECD, the Project is expected to reduce power plant air pollution in New York State by about 4.1 billion pounds of CO₂, 15 million pounds of SO₂ and 5.6 million pounds of NO_x over 20 years, by displacing or avoiding the need to add dirty fossil fuel-based electric generation. The Board has based its decision using this calculation, even though the Project nameplate output is being increased by use of the 1.6-100 WECDs. The Board notes that its calculations of emissions displacement are based on a 30% capacity factor for the WECDs. The use of this factor is supported by a GE study for the New York

State Energy Research and Development Authority ("NYSERDA")⁴ which states "[c]apacity factors of inland wind sites in New York are on the order of 30% of their rated capacity." The FEIS Preferred Alternative features the GE 1.6-100 WECD, which has an expected capacity factor of 34%. Thus, the Town has used a conservative estimate and air quality benefits may actually be greater. The Board also notes a significant portion of America's total energy requirements are provided through foreign sources. The Project adds to the Nation's energy security by reducing the need for imported fuels.

The Project will also help New York achieve its renewable energy goals, which the State has been aggressively increasing. In January 2010, the NYS Public Service Commission adjusted the Renewable Portfolio Standard ("RPS") goal to require addition of renewable generation able to produce 10.4 million MWh per year by the year 2015.⁵ As of March 2010, NYSERDA reported that contracts were in place for 4.3 million MWh per year, leaving a remaining goal of 6.1 million MWh per year. With expected annual generation of approximately 280,000 MWh/year, the Project will contribute approximately 5% of the remaining RPS goal. While the Project will not single-handedly make the state reach its renewable goals, it can be an important contributor toward meeting them.

5.2 Economic Benefits

The Town finds there are significant economic benefits arising from this Project. In fact, the Stony Creek Project is one of the largest economic development projects in the history of the Town, representing over \$ 100 million in investment in the community, and creating jobs and municipal and school district revenues for the life of the Project. The Board finds there will be significant financial benefits to the community from the Project, including direct transfer payments, labor costs from the hiring of electrical workers, crane operators, equipment operators, carpenters, and other construction workers, as well as landowner payments.

Conversely, the studies presented and the comments received do not support evidence of any measurable adverse economic effects. The Town recognizes that the Project will have some impacts on the communities' infrastructure; however, the Town Board finds the economic benefits more than offset the potential impacts.

5.3 Employment

Construction of the Project will result in direct and indirect employment. Construction will result in demand for gravel, concrete, meals, hotels, and miscellaneous services such as drain tile repairs. The

⁴ The Effects Of Integrating Wind Power On Transmission System Planning, Reliability, And Operations Report on Phase 2: System Performance Evaluation Prepared for: The New York State Energy Research And Development Authority by: GE Energy Consulting March 4,2005 (NYSERDA 2005).

⁵ State of New York Public Service Commission, "Order Establishing New RPS Goal and Resolving Main Tier Issues," Case 03-E-0188, Issued and Effective January 8, 2010, page 13.

value of these contracts and purchases is estimated to be over \$6,000,000. When wages to construction employees from the region are added in, total construction revenues from the Stony Creek Wind Farm to the local and regional economy are projected to be approximately \$10,000,000. Experience in constructing other wind farms in Wyoming County has shown that local companies can play a significant role in construction. These estimated benefits are based on the U.S. Department of Energy Job and Economic Development Impact ("JEDI") Model, which the Board finds to be a reliable model.

During wind farm operations, the Project will employ up to 7 skilled operators, management, and administrative personnel (with a total estimated payroll and benefits of \$280,000). It is anticipated that individuals in the local community would be trained to complete the necessary tasks, and current residents would fill the majority of these jobs to the extent practicable. The exception would be any specialized wind farm managers and maintenance leads, where an individual would need to be brought to the Project Area if there were no one qualified within the community. This or any increase in the local population due to the Project would be negligible, and no impact on the housing market is anticipated.

5.4 Taxes, PILOT Payments, Host Community Payments

There are three types of direct transfer payments resulting from the proposed Project: Taxes, Payment In-Lieu of Taxes ("PILOT") payments, and a Host Community Agreement ("HCA"). Because the Project will be titled in the name of the Wyoming County Industrial Development Agency ("WCIDA"), it is exempt from most real estate taxes.

The Project will make significant payments to local jurisdictions. Stony Creek has filed an application for assistance with the Wyoming County Industrial Development Agency, which will require a Payment-in-Lieu-of-Taxes ("PILOT") agreement. Stony Creek will make annual PILOT payments based on the number of megawatts of electrical generating capacity installed. PILOT funds would be directed to the taxing jurisdictions where the WECD are located and distributed based on the applicable tax rates. The annual PILOT payments would be directed to Wyoming County, the Town of Orangeville and the school districts servicing the areas where the WECD are located. Additionally, a Host Community Agreement ("HCA") would be entered into by Stony Creek and the Town of Orangeville, whereby the Project would make set payments directly to the Town, beyond the PILOT payments.

In general, total PILOT and HCA terms for wind projects built in New York State have resulted in wind projects paying an average overall rate of approximately \$8,000 per megawatt. Stony Creek proposes to enter into combined PILOT and HCA agreements whereby the project would pay an overall annual rate of \$8,367/MW, with 20% of this amount (\$1,673/MW) being paid under the PILOT and 80% of this amount (\$6,694/MW) being paid under the HCA. This Project, with 94.4 MW installed capacity, will result in payments from the Stony Creek Wind Farm PILOT and Host Community Agreements totaling over \$789,000 per year.

The Town Board finds that the Project will not adversely impact the local tax base. Schools do not lose state aid when they receive PILOTs. Because wind farms require few, if any, municipal services, the payments will increase the revenues of local taxing jurisdictions without causing an increase of tax rates

for residents and businesses. In fact, Host Community Agreements for Wyoming County wind farms have enabled towns to eliminate or drastically reduce Town property taxes while increasing services to the local community. The Project will also pay special district taxes such as those collected for the local fire departments, thus reducing the share of the budget paid by current taxpayers. Although several commenters allege that the Project would harm property values, they did not provide substantive evidence of such harm. The Board notes that there are similar projects in surrounding towns and property values have not been harmed. The Board specifically notes the 2009 Lawrence Berkeley National Laboratory study which analyzed house prices from 7,459 transactions within ten communities associated with 24 wind farms across the United States, including 2 wind farms in New York State, and concluded that "Neither the view of the wind facilities nor the distance of the home to those facilities is found to have any consistent, measurable and statistically significant effect on home prices." The Board finds this study, the others cited in the EISs, and the experience with property values in Wyoming County as reliable evidence the property tax base will not be damaged.

5.5 Benefits to the Town's Agricultural Community

The Project requires leasing a substantial amount of land from local farmers. As a consequence, Stony Creek will pay local landowners, many of them farmers, significant lease and royalty payments. Agriculture is the largest industry in the Project Area, and in recent years many local farmers have faced significant economic challenges. The lease and royalty cash flow from the Project payments may well make the difference for the survival of a number of local farms, a specific goal of the Town Comprehensive Plan. In light of the local communities' historical reliance on a strong agricultural economy, the Project represents an important economic and social contribution and benefit.

5.6 Population and Housing

The Project is not expected to have a long-term impact on housing and population in the Town, but it may result in short-term impacts on local lodging. It is estimated that during the construction period there will be a temporary influx of construction workers to the Project Area, and there will also be additional non-local personnel delivering equipment or materials. Local contractors and labor will be utilized to the extent practicable, and these individuals will commute to the Project Site. This will mitigate the temporary increase in local population and the need for additional local housing. Construction workers coming from outside the Project Area. Stony Creek will communicate with local merchants about needs for lodging and other services during construction.

6.0 AGRICULTURAL USES

6.1 Agricultural Districts

6.1.1 Impact

Protection of farm land is a key issue for the Town. Of the approximately 14,500 total acres in the Project Area, 5,349 acres (36.8% of the total) are used for agricultural purposes. Under Article 2S252SAA

of the New York Agricultural District Law, local agricultural districts have been established to protect and encourage the continued use of existing farmland. One agricultural district lies within the Project Area: Wyoming Agricultural District No. 5. Based on the percentage of WECD in agricultural district lands and the estimates of total area impacts, the temporary and permanent area impacts to lands in Agricultural District No. 5 are approximately 322 acres and 43 acres respectively. This represents 6% and 0.8% of the total agricultural land in the Project Area.

6.1.2 Mitigation

Mitigation of anticipated Project impacts was initiated during initial site selection. The selection of facility sites, including WECD locations, access roads, substation, and electrical collection systems, involved consultation with the several agencies, including NYSDAM. Based on comments from NYSDAM, facility sites on active farms were placed on the edge of agricultural fields to the greatest extent possible (without increasing impacts on wetlands) to minimize the loss of agricultural land and impacts on wooded areas. To the extent practical, roads and cables were also located on the edge of agricultural land and sited to avoid crossing drain tiles. In areas where crossing drain tile is considered unavoidable, Stony Creek will repair drain tiles.

Furthermore, Stony Creek has designed the collection system to minimize impacts on productive agricultural lands by placing the electrical collection system underground, avoiding overhead lines. The Town Board has reviewed the proposed collection system layout and considered the relative impacts associated with underground utility corridors, and based on this review, feels that Stony Creek has mitigated potential impacts to the maximum extent practicable.

6.2 Agricultural Productivity

6.2.1 Drainage

Potential impacts that may occur include changes to the natural drainage patterns of agricultural lands. These impacts will be mitigated by installing subsurface intercept drain lines and ditch plugs and, where necessary, culverts and water bars to maintain natural drainage patterns. In addition, Stony Creek will reconstruct and repair damaged agricultural tile drain in accordance with standard practices employed at other projects.

6.2.2 Croplands

In accordance with NYSDAM Guidelines, mitigation measures for windpower projects will be applied to all disturbed areas during and after construction to prevent soil erosion and sedimentation. Other potential impacts on agricultural land from construction activities include the direct loss of any crops and pastureland grown at the time of construction and the long-term loss of agricultural productivity. The Town Board notes that any crops and pastures that lie within the Project Site (i.e., WECD sites, crane pad areas and access roads) will be lost, and this loss cannot be mitigated beyond the site selection criteria noted above, which has been utilized to minimize losses of agricultural fields. The Town Board is also concerned that soil fertility may decrease if mixing of soil layers occurs. To avoid or minimize this potential impact, the full topsoil depth will be restored in work areas after completion of construction activities.

6.2.3 Soil Compaction

Soil compaction and erosion also may affect long-term farmland productivity. Stony Creek will decompact impacted agricultural areas by first decompacting the subsoil in accordance with NYSDAM Guidelines and Town requirements. Decompaction will be performed when soil conditions are dry enough to allow for proper shattering of the subsoils. Following decompaction of the subsoil and prior to topsoil replacement, rocks greater than 4" will be picked and removed from the subsoil. Following decompaction and rock picking, Stony Creek will replace the topsoil, pick rocks 4" and greater from the topsoil surface, disc the topsoil, and apply seed.

6.2.4 Soil Mixing

Other soil impacts that can affect agricultural productivity include the introduction of rocks and weeds into the soil. The introduction of any rocks or rock material is expected to be minimal since the construction corridor is not large; however, in agricultural areas Stony Creek will remove rocks greater than 4 inches in diameter after the topsoil is restored. Soil impacts such as loss of organic matter, topsoil-subsoil mixing, deterioration of soil structure, and soil settling or slumping will be minimized by the use of construction techniques designed to minimize these types of soil impacts. This includes segregation of topsoil and subsoil into separate stockpile areas or through the use of geotextile membranes. These impacts will be confined to the Project Site and restoration will be performed to offset any long-term effects, in accordance with NYSDAM guidance and Town law. Restoration will also include follow-up inspection in accordance with the Project's Invasive Species Control Plan to ensure that invasive species do not establish themselves in restored areas. If excavated material does not meet backfill requirements (e.g., unsuitable fill material), Stony Creek will ensure that adjacent agricultural land is not used to replace the backfill. If imported soils are needed for this process, they will be similar in texture and organic matter content to the soils already present.

The amount of prime farmland that will be permanently impacted by conversion to non-agricultural land use will not significantly affect soil resources within the Project Area. The acreage of soils permanently converted to non-agricultural land uses by the Project is less than 1 % of those soils in Wyoming County. Prior to the start of construction, Stony Creek and its contractors will conduct a landowner preconstruction meeting to discuss detail construction procedures and schedules and to introduce landowners to the construction managers who will be available on-site to address issues that may arise during construction. During Project construction, one or more environmental monitors will be present on site to ensure that construction is proceeding in compliance with the mitigation measures in this section.

As part of compliance with the NYSDAM Guidelines, and following the Stony Creek Agricultural Mitigation Plan in the FEIS, Stony Creek will perform post-construction monitoring to assess potential impacts to crop yields in areas that were impacted during construction. The assessment will be conducted in consultation with NYSDAM and with reference to NYSDAM's "Special Crop Productivity Monitoring Procedures."

The Town Board finds that the mitigation measures described above, including the Stony Creek Agricultural Mitigation Plan, minimize the impacts to agricultural lands to the maximum extent practicable.

7.0 WETLANDS AND OTHER WATER RESOURCES

The Project has been designed to avoid wetland and other water resource areas to the maximum extent practicable. But siting constraints and the presence of large and scattered wetland complexes within the Project area, coupled with recent DEC efforts to expand its jurisdiction, prevent the total avoidance of wetland and other water resources. The relative value of such resources varies with location of these facilities. Extensive analyses of site and route alternatives were undertaken by Stony Creek to avoid and minimize to the maximum extent practicable impacts on wetlands and other water resources arising from the Project. The Board believes this has been accomplished.

7.1 Impacts

Construction of access roads, collection lines, and WECD sites is estimated to result in disturbance of slightly less than 2.02 acres of wetlands, (compared to 12.9 acres of temporary disturbance estimated in the DEIS) of which approximately 0.28 acres will be permanently impacted by placement of fill for access roads (compared to 0.6 acres of permanent disturbance estimated in the DEIS). Impacts to wetlands have been minimized by the change in layout since the DEIS. The majority of impacts will be construction phase impacts (approximately 1.74 acres) which are temporary, short term and reversible. These areas will be restored at the completion of Project construction. The NYSDEC also regulates upland areas adjacent to NYSDEC wetlands within a 100 foot buffer of the wetland boundaries. Wetland impacts include NYSDEC regulated upland adjacent areas.

7.2 Mitigation

Potential wetland impacts were mitigated foremost through the positioning of WECD, access roads and collection lines to avoid these areas whenever feasible. As set forth at Tables 12 and 13 of the FEIS, and DEIS § 3.4.2 and FEIS §§ 4.1.5, 5.1 and 6.12, Stony Creek delineated wetlands in the field within a predefined area surrounding the initial layout of Project related components. Based upon the results of the field delineation, the locations of WECDs, roads and electrical collection facilities were refined in the FEIS Preferred Alternative to avoid wetlands whenever feasible. Numerous other mitigation measures have been developed, including that a SWPPP in accordance with the NYSDEC SPDES General Permit (GP-02-0I) will be implemented to provide erosion and drainage control measures for the duration of construction and operation. Proper construction equipment use and maintenance to prevent introduction of invasive, non-native species into wetland areas will be required under the Project's Invasive Species Control Plan, including post-construction monitoring of restored areas. Procedures for dewatering in the vicinity of wetlands will be in accordance with the SWPPP as well. Protective mats will

be used as needed to avoid unnecessary compaction of soils. Debris and excess materials from construction activities will be promptly removed from wetland and adjacent areas following the completion of construction.

In light of the relatively small acreage impacted and the mitigation measures described above, the Town Board finds that the impacts on wetlands and regulated buffer areas have been mitigated to the maximum practicable extent.

8.0 GROUNDWATER

8.1 Impacts

Operation of the Project is not expected to permanently impact shallow groundwater within the Project Area because the Project will only add small areas of impervious surface (WECD pedestals) to the Project Area. Each WECD and associated crane pad permanently impacts less than 0.2 acres, with a total of 52 acres of distributed infiltration reduction over the entire watershed resulting from the Project. The majority of the surface materials above the WECD base will be restored with native soil allowing for continued infiltration of rain water into the subsurface. For those acres that are permanently impacted with low permeability surfaces, the storm water (i.e., recharge water) will be shed to the sides, and allowed to drain into the vegetated soils around the improvements, with minimal net effect to recharge rates for the region. The effect on groundwater recharge is therefore expected to be minimal.

No Sole Source or Primary Water Supply Aquifers are located within or adjacent to the Project area. One Principal Aquifer is located in the southeastern portion of the Project Area. No WECD are proposed within the boundaries of this aquifer. Ground disturbance due to the presence of one access road and one buried cable crossing the area above this aquifer is expected to have minimal impact on the aquifer because of the small percentage of area impacted and relatively shallow nature of the ground disturbances involved. Based on the conclusions of the Wellhead Protection Study for Varysburg, it is reasonable and conservative to assume that a WECD will not affect a drinking water well if the WECD is located 500 feet or more from the well. Based on information provided by the Wyoming County Health Department, no Project facilities are planned within 500 feet of any well owned by a non-participating property owner.

Dewatering of the excavation site may be conducted to facilitate proper placement of foundations. Impacts to unconfined, unconsolidated, shallow groundwater resources and/or natural springs (if encountered) may include temporary lowering of the water table within the immediate vicinity of the excavation during tower excavations via pumping, but it is not anticipated that the groundwater levels would be affected more than 50 to 100 feet away from the pumping activity.

A majority of the WECD will be constructed within active agricultural fields that have historically been modified to drain the shallow groundwater table in order to allow for farming activities. In these fields, impacts to the groundwater table from any dewatering activities will be limited in extent. In addition, soils within the WECD areas are low permeability clay which further restricts the range of impact to

water levels from temporary dewatering activities. No short-term impacts are anticipated within the deeper bedrock zones.

The deepest foundation installation depth for the Project, and therefore the component with greatest potential impact to horizontal flow of groundwater, is the WECD foundation. The WECD foundation depth is well above the source of groundwater supply for most residential wells typically used in the area. In addition, the displacement of the WECD foundation is similar to the displacement from a residential foundation. Residential water supply wells are typically near or adjacent to the dwelling and its foundation. The Town Board notes that:

- the WECD will be located a minimum of 1,320 feet from a non-participating dwelling;
- no impacts are anticipated to any water well greater than 500 feet from a WECD; and
- Based on information provided by the Wyoming County Health Department, no Project facilities are planned within 500 feet of any well owned by a non-participating property owner.
- Therefore, no significant adverse impacts to groundwater supply, quantity, or quality from the Project are anticipated.

The substation, maintenance facility, ECS and access roads are essentially surface features; installation of these features will have no impact on the deeper groundwater levels from which drinking water is drawn. None of the Project surface features will extend to the levels where drinking water wells typically exist, and foundations at the substation and maintenance facility will be typically less than four feet. The ECS will require a maximum depth of approximately 4 feet. The access roads themselves will cause no change in the flow of groundwater, as they are a surface feature. The substation and maintenance facilities will require shallow foundations and slab on grade construction and will not have an impact on groundwater.

8.2 Mitigation

Impacts from spills, erosion or sedimentation would be prevented and controlled by implementation of the SWPPP and Spill Prevention Plan and/or Spill Prevention, Control, and Countermeasure (SPCC) Plan during construction and by the SPCC Plan during operation. Groundwater entering the excavation, if any, will be pumped out during installation of the foundations and will be discharged to an area approved by the landowner that will either direct the flow towards existing water bodies or temporarily retain the water until it can infiltrate back into the ground. The Board concludes these measures minimize the already minimal likelihood of impacts.

9.0 SURFACE WATER

No significant impacts are expected to streams or water bodies located within or near the bounds of the Project as a result of construction or operation. Direct impacts to surface waters in the Project Area will be relatively minor because the proposed WECD, ECS and access roads will be located primarily on

ridges and hilltops away from streams and floodplains. Further, the changed layout requires fewer stream crossings as compared to the DEIS.

Project operations will have minimal impact on stream and surface water quality because the impervious surfaces created for the permanent operation of the Project will generally be limited to the gravel surfaces of the access roads, substation, and O&M facility. Surface water from these improvements will shed to adjacent vegetated areas and will not impact adjacent streams or surface water bodies. Project dust control activities during construction will be conducted to avoid significant runoff to surface waters. In addition, Stony Creek will be responsible to design for and obtain a stormwater permit from NYSDEC for all Project components (see Section 13).

Each WECD will contain approximately 62 gallons of gearbox oil in the nacelle. Chances of oil from the WECD impacting surface waters are minimal because : leaks are infrequent; the WECD nacelle base includes a containment that would help prevent oil from leaking out of the nacelle; oil that leaked out of the nacelle would most likely be contained inside the WECD tower; the volume of oil is relatively small compared to the various containments mentioned here; and a substantial loss of oil would be promptly detected and cleaned up in accordance with SPCC procedures. The greatest potential impacts of hazardous materials entering surface waters would be from a minimal leak of truck fuel or hydraulic oil from construction vehicles.

During construction Stony Creek will follow the erosion and sediment control measures and spill prevention plan of SPDES General Permit (GP-02-0I) and the SWPPP. During construction, appropriate erosion control measures (e.g., silt fences and hay bales) will be used to control the downstream transport of sediment and minimize the area of impact. During construction Stony Creek will not drive heavy vehicles through free-running streams.

In particular, the FEIS documents approximately 17 pages of expert review and response to comments specifically concerning impacts to water quality in the Attica Reservoir. That review indicates that, taking into account: the nature and quantities of the potential pollutants; the area topography and soils; and the implementation of spill prevention, control, and response procedures; neither Project construction nor operation is likely to directly impact the Attica Reservoir. In addition to the spill prevention and response measures previously referenced, the potential for indirect impacts to the waters of the Attica Reservoir will be mitigated by required practices to manage and control stormwater runoff from areas that are directly impacted by Project construction and operation, as discussed above. These measures, and those outlined below for access roads and ECS cable, will, in the opinion of the Town Board, protect these resources.

9.1 Surface Waters - ECS

ECS Stream crossings are listed in FEIS Table 22. Stony Creek plans to complete stream crossings for ECS cables by trenching across the streambed or by using directional bores. To mitigate the temporary impacts of these crossings and to ensure any impacts are not permanent, Stony Creek will employ the following mitigation measures:

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<u>Dry Stream Beds</u>. When installing ECS cables across DEC-protected streams, Stony Creek will ensure the streambed is dry when construction activities are taking place. Many of the stream crossings listed in FEIS Table 22 may be intermittent streams with no flow during the period when construction is taking place. If a stream does contain flow when construction needs to occur, then Stony Creek will temporarily dam flow upstream before conducting construction activities in the stream bed.

<u>Wooded Banks</u>. Of the 20 locations where ECS circuits will cross DEC-protected streams, five are in wooded areas, three are in hedgerow areas, and nine are in scrub areas, and three are in active agricultural fields. For the eight ECS crossings in wooded or hedgerow areas, Stony Creek will keep the crossing as perpendicular to the stream bank practicable so as to minimize unnecessary solar heating of the stream from cleared vegetation. Also, for these crossings, to the extent practicable, Stony Creek will leave tree stumps in place along the stream bank to prevent erosion and stream bank disturbance.

<u>Stormwater Protection</u>. When performing construction in the vicinity of DEC-protected streams, Stony Creek will install and maintain the silt fences and other appropriate measures to prevent silt and turbid water from entering the stream from construction areas.

<u>Prevention of Drainage from the Trench into the Stream</u>. To prevent water from the ECS cable trench from entering into the DEC-protected stream, before Stony Creek trenches through a stream bank, it will backfill or plug the upland portion of the ECS cable trench to prevent water from collecting in the trench and potentially draining into the streambed.

<u>Timely Construction</u>. Stony Creek shall complete ECS crossings of DEC-protected streams as one operation without unnecessary delays in different phases of construction.

Two of the ECS circuit crossings are crossings of Crow Creek tributaries that are potential breeding streams for wild brook trout. For these crossing, Stony Creek will employ the mitigations measures listed above, plus it will ensure that no work is done in these streambeds in the winter months from October 1 through May 31 when the brook trout could be spawning.

9.2 Surface Waters - Access Roads

Access road impacts to streams will be limited by the fact that the crossings are located in areas of low bank relief, where streams run intermittently, or where an existing farm lane crosses a stream. In addition to locating these crossings in areas where impacts will be minimal, Stony Creek will minimize temporary and permanent impacts to streams by adhering to SWPPP requirements, including applicable requirements to limit turbidity of runoff and to the terms of the stream crossing permits. Mitigation will include employing the following measures:

<u>Culvert Sizing</u>. In locations where access roads cross NYSDEC-protected streams Stony Creek will install culverts to maintain stream flow under the access road. Stony Creek will size the culverts to accommodate the flow for a 25-year design storm, or it will construct an overflow spillway that will direct the water immediately back to the stream.

<u>Culvert Installation Depth</u>. In locations where access roads cross DEC-protected streams Stony Creek will install culverts a minimum of 1 foot below the elevation of the streambed.

<u>Dry Stream Beds</u>. When installing a culvert across a DEC-protected stream, Stony Creek will ensure the streambed is dry when construction activities are taking place. Two of the stream crossings may be intermittent streams with no flow during the period when construction is taking place. If a stream does contain flow when construction needs to occur, then Stony Creek will temporarily dam flow upstream before conducting construction activities in the stream bed.

<u>Erosion Protection</u>. When installing permanent culverts in DEC-protected streams, Stony Creek will install a rocked headwall and a downstream splash apron to prevent erosion. Stony Creek will use an even mix of rock sizes from 6 to 18 inches in diameter.

<u>Stormwater Protection</u>. When performing construction in the vicinity of DEC-protected streams, Stony Creek will install and maintain the silt fences and other appropriate measures to prevent silt and turbid water from entering the stream from construction areas.

<u>Timely Construction</u>. Stony Creek shall be required to complete ECS crossings of DEC-protected streams as one operation without unnecessary delays in different phases of construction.

Three of the stream crossings are planned to be crane roads where the width of the travel lane will be approximately 30 feet wide. The extra width of crane roads is offset by the fact that one of these is a replacement of an existing crossing of an un-protected stream, and the fact that the other two crossings are in an area where the stream appears to be an intermittent stream in a hayfield. The Board finds neither of these crossings will result in a significant impact to the existing streams.

10.0 AIR QUALITY

The Project is expected to have a long-term beneficial impact on air quality in the region that is presently impacted by fuel-based electric generators serving the New York State electric market. It is well documented that electric generation by fossil fuel-fired facilities contributes to serious environmental and health problems from $CO_2 SO_2$, NO_x , particulate matter, and mercury emissions to the atmosphere (and sulfur and mercury deposition). The Project is expected to displace electric generation from other sources that would have emitted significant levels of these pollutants.

Thus, the Town finds the Project will have a significant long-term beneficial impact on air quality by producing electricity without any emissions to the atmosphere. The Project is expected to reduce power plant air pollution in New York State by approximately 4.1 billion pounds of CO_2 , 15 million pounds of SO_2 and 5.6 million pounds of NO_x over 20 years, by displacing fossil fuel based electric generation, based on an analysis prepared by GE Energy.

10.1 Construction Impacts

Minor, temporary adverse impacts on air quality are anticipated during Project construction. Construction equipment will produce emissions from engine exhaust and fugitive dust. These operations will be temporary and distributed through the Project site, and, therefore, will not result in significant impacts on air quality. Nonetheless, to mitigate any potential impacts, best management practices will be followed during site preparation and construction to control fugitive dust emissions.

11.0 TRAFFIC AND TRANSPORTATION

11.1 Ground Transportation

11.1.1 Impacts

The Town is fortunate to possess a well-developed system of local and county roads. The nature of the communities in the Project Area is rural/agricultural and local road traffic is well below capacity. The imposition of a large construction project will have impacts on the local and county roads. Most traffic impacts will occur during the construction phase. Because of the type and manufacture of equipment delivery vehicles and associated trailers, impacts from large delivery vehicles dedicated to the delivery of WECD components and associated materials are anticipated to be minimal. Delivery vehicles will range in size from oversized/overweight tractor-trailers (to deliver tower sections, WECD nacelle, rotor blades, and cranes) to smaller vehicles such as dump trucks, concrete trucks, fuel delivery trucks, mechanics vans, and pickup trucks. Traffic associated with heavy dump truck type deliveries such as for gravel and/or other aggregates and concrete truck deliveries are most commonly associated with road damage situations. Stony Creek will develop a plan in concert with the Town Highway Superintendent to minimize this temporary and controllable impact. Personal vehicles will consist of automobiles and light trucks.

11.1.2 Mitigation

Small construction vehicles will be used on a regular basis during the construction period to deliver supplies, personnel, and other Project necessities. Suppliers for the Project have not yet been selected but are expected to be local contractors using the most direct route to the Project Site. Small construction vehicles will not have difficulty reaching the Project Site using any local roads while complying with all town, county, and state ordinances. Concrete trucks are expected to be the heaviest of these small construction vehicles, requiring a road capable of safely handling a vehicle with a gross weight of more than 80,000 pounds (40 tons).

The use of public roads for oversize/overweight commercial transportation requires permitting from NYSDOT. Stony Creek will obtain the necessary permits from NYSDOT prior to construction. Stony Creek is also entering into a Road Use Agreement with the Town (and Wyoming County, if necessary) to compensate for damage caused to roads or related structures (e.g., bridges, culverts) as a result of the Project. The Road Use Agreement will be secured by either a performance bond or other form of security acceptable to the Town.

Further mitigation for traffic impacts will include:

- Proposed routes have been designated that avoid more densely occupied locales as much as possible.
- Parking at the WECD construction sites generally will be restricted to company vehicles; a shuttle service for laborers and contractors will connect with a series of centralized parking area within the active WECD sites.
- Mechanical street sweepers will be deployed as required to remove mud from local streets.
- Mandatory safety orientation for contractors and employees shall include discussion of vehicle safety concerns.

11.2 Air Transportation

An FAA lighting plan has been prepared in accordance with the FAA obstruction marking and lighting guidelines to minimize risk of collision with passing aircraft. FAA approval of this plan will be obtained prior to construction. In addition, two small, private airfields not listed in the DEIS were identified in the FEIS. These airfields are apparently not registered with the FAA or reported to airnav.com and thus did not fall within the DEIS scope. Nevertheless, the locations of these small, private airfields were reviewed in the FEIS and found to be approximately 0.9 to 1.1 miles from the nearest proposed WECD. In addition, there are no WECD less than 1.5 miles from these airfields that are in direct alignment with the runways. Pilots using these airfields will have the benefit of the registration, charting, and lighting of WECD in accordance with FAA requirements.

With these mitigation measures, the Town finds that potential adverse impacts on the ground transportation and air transportation systems are not significant, and that impacts related to ground and air transportation have been mitigated to the maximum extent practicable.

12.0 ELECTROMAGNETIC INTERFERENCE

12.1 Microwave Beams

Microwave paths are line-of-sight, point-to-point communication links that transmit telephone and other data via microwave antennas paths, using dishes approximately 10 feet in diameter and mounted on towers at heights to clear terrain and other physical obstacles (e.g. hilltops, buildings) that could interfere with transmission of data along the microwave path. The diameter of the microwave path varies with distance from the antennae. The maximum diameter is referred to as the "Worst Case Fresnel Zone" or "WCFZ." WECD can obstruct microwave paths if the blades or other portions of the WECD physically pass through the path.

Microwave beams in the Project Area were identified and mapped by Comsearch, a firm that developed and maintains comprehensive technical databases regarding licensed microwave networks throughout

the United States. The Comsearch report found that two microwave paths intersect the Project Area. The report also found that none of the WECD or WECD blades were located within a WCFZ. Therefore, the Project will not impact microwave communications.

12.2 Broadcast Signals

Reception of off-air broadcast television signals can be degraded by the presence of WECD in the vicinity of the receiver. Degradation, if any, can be caused by "reflection" of the television signal off of the moving WECD blades as the signal travels from the transmitter to the receiver. Stony Creek commissioned Comsearch to assess television reception in the Project Area and the potential for the Project to cause significant problems with television reception from the 42 broadcast television stations that are within 40 miles of the center of the Project Area. These are geographically dispersed around the Project Area. Television reception impacts may occur at some dwellings in the Project Area on some channels. The level of degradation, if any, will vary depending on the exact location of the WECD(s), receiver, and transmitter tower, and whether the television signal is digital or analogue. Cable television service is not affected by WECD. Similarly, satellite television (aka "direct broadcast service") is unaffected by WECD.

To mitigate against possible impacts to television reception, Stony Creek will manage a complaint management process where residents can identify issues believed to be caused by the Project, including concerns about television reception. Stony Creek will respond promptly to such concerns, and where the Project is found to be causing television reception problems, Stony Creek will provide mitigation such as improving antennas or providing services (such as annual reimbursement for basic cable or satellite service) that would help the resident have television reception similar to what it had just prior to the Project beginning to operate.

Whether WECD impact the strength of AM and FM broadcasts depends on the proximity of the WECD to the broadcast antenna. In general, WECD will not affect broadcasts from AM transmitters that are 2 miles or more away, and they will not affect broadcasts from FM transmitters that are 2.5 miles or more away. Comsearch determined the closest AM transmitter is WCJW located approximately 6.4 miles away the Project Area center, and the closet FM transmitter is WCOU, located approximately 5.3 miles away from the Project Area; therefore no impact is anticipated or mitigation necessary.

12.3 Other Interference

Amateur radio operators, also known as HAM operators, can suffer interference if their receivers or transmitters are located within 600 feet of a WECD. No known facilities are within that perimeter, and any property owner within 600 feet of a WECD would be a participating property. Land line telephones are unaffected by WECD, as are cellular phones. The Board notes that in the Town of Sheldon, Verizon installed a cellular tower in a field where five WECD were located within 2,000 feet of the tower. No action is required to address interference with these sources.

WECD also have the potential to affect federal radio communications and radar. The federal government, through the National Telecommunications and Information Administration, provides a method for wind farm developers to check whether or not a proposed project is likely to interfere with federal telecommunications including those that use microwave, radio and radar technologies. The only such interference identified was under the jurisdiction of the Department of Commerce, specifically the National Oceanic and Atmospheric Administration ("NOAA") the federal government agency that manages weather radar stations around the country. The DOC specified that the Project could have a moderate impact on NOAA's weather radar WSR-88D located in Buffalo, NY. The issue of interference with this specific radar has occurred at other Wyoming County wind farms and has caused the wind farms to be visible on the weather radar maps as fixed patterns covering a relatively small portion of the overall sweep of the Buffalo radar. The visibility of the Stony Creek Wind Farm on the weather radar would be similar to the visibility of other wind farms on the radar map.

Invenergy discussed the issue of WECD visibility on weather radars with NOAA staff, and NOAA has indicated its staff is able to manually distinguish between the unchanging patterns of WECD on their radars and the passing weather events. Over time it is anticipated that the NOAA will develop methods to filter and screen out WECD from their radar systems, as occurs with other types of large structures. Because the NOAA is able to interpret the WECD images on the radar maps, no further mitigation is required.

A similar potential impact to that on Doppler weather radars is the potential for WECD affect long range radars operated by the Department of Defense ("DOD"). Effects may include reduced radar sensitivity, an increase in radar clutter, and potential areas of lost coverage. For these effects to be realized, a WECD must be within the line-of-sight of the radar. Stony Creek completed a screening of the Project Area using the preliminary screening tool provided by DOD, which showed the WECD are likely to impact air defense and homeland security radars. Ultimate determination on the issue will be made prior to construction when Stony Creek files form 7460 - Notices of Proposed Construction to the FAA with the final WECD coordinates, WECD height, and ground surface evaluation. The filing of the 7460 -Notice of Proposed Construction initiates the FAA review through the Obstruction Evaluation / Airport Airspace Analysis ("OE/AAA") office. The OE/AAA will review and evaluate the WECD' impacts to federally regulated civilian and military radar systems. If OE/AAA process determines that the impacts to civilian or Air Defense and Homeland Security radars from any specific WECD were such that it would impair the air traffic safety and homeland security missions causing issuance of a Notice of Presumed Hazard determination, Stony Creek will work with the FAA and DOD to mitigate those impacts, including potential relocation of specific problematic WECD. If a favorable determination from the FAA and DOD cannot be obtained for any particular WECD, then that specific WECD would not be constructed at that location. Because this mitigation eliminates any impact, the Board finds no further mitigation is required.

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13.0 CONSTRUCTION IMPACTS ON LAND

13.1 Current Land Use and Project Impacts

The Project area covers 14,500 acres, of which approximately 295 will be impacted temporarily or permanently. Current land uses within the Project area are mostly active agricultural and forest. Forested land accounts for approximately 40% of the Project area, and consists of a mixture of deciduous and evergreen forests and evergreen plantations. Residential development within and adjacent to the Project area is typical of rural areas, with dwellings and farms clustered at crossroad hamlets, located on individual agricultural properties, or situated along roadways. The hamlet areas are: Dutch Flats on Buffalo Road near the northern town line; Halls Corners located on Route 20A near the eastern town line; Johnsonburg, located on the border shared with the Town of Sheldon; Orangeville Center situated in the middle of the Town; and Quaker Town, located along Quaker Town Road between Hermitage and Orangeville Center Road. The hamlet of Johnsonburg is the largest community in Orangeville. Dwellings in the Project Area were mapped so that potential impacts to non-participating properties could be fully examined.

Approximately 2.02 acre of wetlands, 76.1 acres of forested land, and 217.8 acres of other land (land in active or former agricultural use, shrub/scrub habitat, or developed areas) will be temporarily disturbed for Project construction. Disturbed areas for construction will be restored with the exception of those areas which accommodate permanent Project facilities, resulting in total acreage of permanent disturbance of approximately 0.28 acres of wetlands and buffers, 38.5 acres of other land and 11.7 acres of forestland. In addition, 0.22 acres of wetland forest and 11.02 acres of non-wetland forest in ECS corridors will be managed to limit vegetative regrowth to shrub/scrub successional stage, in order to protect ECS cables from damage by tree root growth. The Town Board finds the various siting and restoration protocols have resulted in minimizing the impacts to land from construction.

13.2 Erosion & Sedimentation

Construction activity can cause erosion and sedimentation impacts; therefore the Town requires specific mitigation measures to protect the soils, particularly agricultural soils, in the Project Area. Some of the soil types located within the Project Site have been classified as having severe erosion potential. The Town also notes that short-term increases in erosion can occur as a result of the removal of vegetation during clearing and grading activities, and the subsequent exposure of topsoil to precipitation and high winds. In addition, in areas where vegetation is slow to become re-established increased erosion can occur. Increased erosion of soils is of special concern adjacent to water bodies, where it can result in increased sedimentation. Accordingly, erosion control measures, re-vegetation, and maintenance plans will be implemented as part of the SWPPP to reduce unnecessary impacts and to comply with applicable regulations, including any requirements for control of turbidity in runoff.

Temporary erosion controls, including interceptor diversions and sediment filter devices (e.g., hay bales and silt fences), will be installed prior to initial ground disturbance. As required, temporary trench breakers will be installed immediately following trench excavation for cabling, and mulch or erosion control fabrics (e.g., jute netting) will be used on critical slopes or areas to control erosion. Temporary erosion control devices will be inspected on a daily basis at a minimum, and after each rain event as specified in the SWPPP to ensure proper functioning. Stony Creek will rectify any deficiencies that are observed in the erosion control devices. Turbidity will be monitored and controlled in accordance with NYSDEC requirements.

If ECS cables are installed in areas where the local slope is 15% or more, Stony Creek will seed the area after backfilling to encourage vegetation that will stabilize the backfill and minimize erosion. If necessary, Stony Creek will also install water bars to prevent erosion until vegetation is established.

During construction, Stony Creek and the Town will monitor the effectiveness of temporary erosion control devices, as well as the effectiveness of re-vegetation and permanent erosion control devices. Temporary erosion control structures will be maintained until the affected areas are successfully revegetated with native species. Post-construction monitoring of restored areas will also be completed to ensure native species re-populate the area, and that proliferation of invasive species is minimized. Following successful re-vegetation of construction areas, temporary erosion control devices will be removed.

13.3 Sub-Surface Drainage Tile

If areas of sub-surface drainage tile are encountered, disturbed or damaged during construction, they will be completely restored to their original condition. In addition, where Project roads are constructed or existing roads are improved, design of these roads will include drainage systems that, based on the Town's review, may improve drainage in many of the existing areas where high erosion from runoff exists. Such improvements include properly sized culverts or improved drainage ditches.

13.4 Forest Fragmentation

Comments received on the DEIS revealed the following concerns regarding forest fragmentation:

Smaller forests patches typically support fewer plant and animal species than larger forest tracts. Species diversity decreases with decreasing patch size and with increasing patch isolation.

Species in smaller isolated patches are different than species in larger intact tracts.

Habitat fragmentation may reduce or alter the distribution of species.

In pre-settlement times, Western New York forests occurred in expansive, largely uninterrupted tracts dominated by hemlock, white pine, and northern hardwoods communities, including beech-sugar maple-basswood-elm-hemlock associations; and oak and oak-chestnut associations, with forests likely covered nearly 100% of the Project Area. Settlement brought forest clearing, largely for agriculture, reaching its zenith in Wyoming County when 89% of the county was tilled or was in pasture/orchards. Currently, approximately 41% of Wyoming County, and 51% of the Project Area is in forest cover.

Stony Creek evaluated the potential forest fragmentation impacts of the Project Stony Creek by mapping locations of large forest blocks in the Project Area. Forest boundaries were identified using aerial photography, but those areas that were known to have substantial development or disturbance (e.g., recreational activities, residential development) were not mapped as intact forest areas. In performing the mapping, Stony Creek made the observation that there are many more disturbances at ground level than appear in the aerial photographs. For instance, the block bounded by Orangeville Center, Centerline, Syler, and Dunham Roads appears on aerial photographs as one large forest block, but it is broken up by residential roads and structures. The Board, whose members are familiar with these blocks, concurs. FEIS Appendix A.2.i is a map of the large forest blocks in the forest area. The analysis found 36 large blocks of forest, covering approximately 5,400 acres in the Project Area. The largest block of forest in the Project Area is an area between Quakertown, Centerline, Griffin, and Hermitage Roads that is an intact forest block of approximately 660 acres (of which only 444 acres is interior forest).

After mapping forest areas, Stony Creek evaluated the forest boundaries to identify the amount of habitat in the Project area that could potentially support "interior forest birds." To identify areas of interior forest, Stony Creek relied on expert habitat management recommendations for interior forest bird species. Accordingly, areas were only counted as "interior forest" if they met the following criteria:

- The area was not within 300 feet of a forest edge.
- The area was greater than 10 acres.
- Within the area, there are no gaps in forest canopy of 30 feet or more.

After applying the criteria for interior forest habitat, Stony Creek found approximately 2,400 acres of interior forest, spread out over 25 patches ranging in size ranging from 10 acres to 440 acres. FEIS Table 16 lists all of the interior forest areas in the Project Area. Most of the interior forest patches in the Project Area are relatively small areas of less than 100 acres each; only six of the interior forest areas are 100 acres or more.

Interior forest areas will be impacted by the Project where cables or access roads are run through the forest area. In general, cleared areas for one ECS circuit will be less than the 30 feet width used as a limit for defining forest habitat (area impact assumptions in the DEIS and the FEIS assume cleared areas for ECS installation will be 15 feet wide), and thus these cuts should have limited impact on fragmentation of forest interior areas. Cleared areas for access roads will generally be wider and could have more of an impact on interior forest areas.

FEIS Table 16 lists all of the interior forest areas in the Project Area and any impacts the Project would have to these areas. Of the 25 interior forest areas in the Project Area, 17 (68%) will not be affected by the Project. Of the 8 that will be affected, 3 will be partially crossed, and 5 will be fully crossed by roads or cables. Modifications to the Project layout that have been made in the FEIS have significantly reduced potential impacts; the largest interior forest area, an area of 400 acres of interior forest located between Griffin, Quakertown, Hermitage, and Centerline Roads, is not affected at all by the proposed

Project. The Board finds that these changes, along with the original siting protocol, have minimized potential impacts of forest fragmentation to the maximum extent practicable and that these impacts have been minimized in comparison to the DEIS.

14.0 LAND USE REGULATIONS

The Town of Orangeville recently completed a comprehensive overhaul of its land use regulations, including the adoption of a Town Comprehensive Plan and, in 2009, an updated zoning code. The new Code contains a comprehensive regulatory scheme for wind farms, which under the prior law were not subject to any setbacks. The Plan and Code went through their own SEQRA review processes, and the New York State Supreme Court and the Appellate Division have both upheld the law and the SEQRA review.

On September 29, 2009, the Town Board enacted Local Law No. 2 of 2009, entitled "2009 Amendments to the Town of Orangeville Zoning Law and Official Zoning Map". This law constituted a complete revision of the Town's preexisting Zoning Law of 1964 and includes a new Article XI, Section 1116 intending to govern prospective large-scale development of land within the Town for wind energy use. The 1964 Law, as amended in 2001, would have conditionally permitted some wind development within the Town, subject to provisions more restrictive than the recently enacted zoning amendments with respect to the permissible height of individual towers or windmills but without many of the other restrictions and controls now enshrined in Section 1116. It was in response to the recent decade's flurry of wind development in immediately surrounding towns, and in further response to expressions of interest by wind developers in siting similar projects within the Town of Orangeville, that Town officials enacted Section 1116 thereby establishing wind development as a specially permitted use in the Town, more precisely within its Low Density District, while comprehensively regulating such development. In general, Section 1116 requires every wind energy conversion device meet various set back requirements and further sets forth standards for the design; construction; road and maintenance access; safety; clearance; lighting; signage and landscaping; and other aesthetics of windmills and wind farms, among many other facets of wind development. As far as the operation of a wind farm is concerned, Section 1116 sets forth a maximum audible noise level of L₁₀ 50 dBA (50 dBA), as measured at any off-site dwelling, school, hospital, church, public park or public library, unless the developer has obtained a noise easement. The Law further delineates standards for shadow flicker; electromagnetic interference; and potential impact on birds. The special use permitting process requires various studies and maps, including plot plans; visual impact assessment and mitigation plans; shadow flicker maps; electromagnetic interference testing; avian analysis; noise studies and maps; well water impact studies; and storm water management plans The local law regulates the siting of WECD through performance standards in order to protect the health, welfare, safety, peace and tranquility of the residents of each of the Town. The enactment of this Law was additionally preceded by legislative moratoria on the placement of windmills within the Town along with the enactment of the Town's Comprehensive Plan in December 2007. The Comprehensive Plan and Zoning Amendments each went through their own SEQR review and the New York Supreme Court and the Appellate Division have upheld both. The Project has been designed in accordance with the requirements of this local law and this Statement of Findings and

Decision represents the necessary approvals of the Special Use Permits and the Site Plan, except as to WECD T-28, which requires an area variance for the setback from Bantam Road.

14.1 Comprehensive Plan

Various provisions of Town Law require a town to exercise its zoning power in accordance with a comprehensive plan. The Town Board adopted its Comprehensive Plan late in 2007 prior to the amendments to the Town's Zoning Law. The Town Board finds that the Project is consistent with the Town Comprehensive Plan. This Plan sets forth certain goals and policies of the Town based upon a land use survey and public input. The Project meets one of the overall community goals, "Encourage the attraction, retention and expansion of a sufficient number and variety of businesses and industries to provide jobs and a healthy tax base," for the reasons outlined in the public benefit section of these Findings. Relevant goals include Section 1309 on "Alternative Energy Sources," which sets the goal of allowing "development of alternative energy sources to take place within the Town but direct it to those areas that are most appropriate." The Comprehensive Plan further articulates in Section 1309 that one important zoning goal of The Town is to allow development of alternative energy sources to take place within the Town but direct it to those areas that are most appropriate for that purpose.

In furtherance of that goal, the Town's Zoning Law Code limits siting of wind energy conversion devices to the appropriate district, the Low Density District which is designed primarily to provide agricultural uses and to protect predominately agricultural areas from suburban and urban development, encourage the continuation of agriculture, reduce land use conflicts and preserve open space and natural resources. And this Project further meets this goal by limiting the impacts to environmental resources and meeting all noise setbacks and required separations from non-participating dwellings.

The Project also supports the Agricultural goals outlined in Section 1302, which states that: "Agricultural Development is important and should be protected in the Town of Orangeville", and "Retain appropriate areas of the Town for agriculture." The Project will support these goals through revenues to participating land owners in the Project, particularly active farmers, as well as revenues to the Town and other taxing jurisdictions that will reduce the financial burdens on farmers so they can keep their land in active agricultural. The Project has been sited to minimize impacts to agricultural land, thereby preserving the agricultural base of the community.

For these reasons the Town Board finds that the proposed Project is consistent with the Comprehensive Plan, current land uses (especially agriculture), and the requirements of the Town Zoning Law, and further, that development of the Project in accordance with Town law will mitigate any potential land use impacts to the maximum extent practicable.

14.2 Compliance with Special Use Permit and Site Plan

Construction and operation of wind energy conversion devices/farms in the Town of Orangeville require issuance of a Special Use Permit pursuant to Town of Orangeville Zoning Law §§ 302 (D), 304(B), and 1116(C). The special use permit process is a technique to regulate land uses which the Town seeks to

encourage in a particular district. A Special Use Permit requires conformance to additional standards as set forth in the Law designed to protect surrounding properties and the neighborhoods from any negative impacts of the permitted use. Special Use Permits also require an accompanying Site Plan approval, which is governed by Town of Orangeville Zoning Law § 306. Site plan review is a regulatory technique whereby a reviewing board examines the layout and design of a development proposal in accordance with the criteria set forth in the Zoning Law to ensure compliance. Pursuant to Town of Orangeville Zoning Law § 1100(G)(2), authority to issue both approvals is reserved by the Town Board for commercial communication towers and wind energy conversions devices/farms.

The Town Board has reviewed the applications, including the addendums reflecting the FEIS Preferred Alternative, the related provisions of the EISs, and public comment on the zoning issues. As to the Site Plan, the Board has reviewed Plans containing all of the items required by Town of Orangeville Zoning Law § 306(C), including the plans for the O & M Building, substation, and laydown area. The Board has considered all of the factors in Town of Orangeville Zoning Law § 306(D), and particularly notes that the adequacy of storm water and drainage facilities for each site was reviewed and conditions adopted to avoid off-site impacts.

The Board has reviewed the Project under the provisions of Town of Orangeville Zoning Law, and, except as to WECD T-28, the Board finds the requirements of §§ 304(B) and 1116 have been met. The Board has reviewed the Project under the Special Use Permit criteria in § 302(B)(3), and as to each item upon which written findings are required, the Board finds:

a. The Project properly addresses ingress and egress to each WECD site and proposed structures thereon, as well as to the O & M Building, Substation, and laydown area. The Board reviewed the traffic impacts with particular reference to vehicular and pedestrian safety, and convenience, traffic flow and control, and access in case of fire or catastrophe, and finds that the Project provides for safe, adequate access.

b. The Board reviewed the off-street parking and loading areas, particularly the laydown area where most parking of workers and equipment loading and unloading will occur. These areas will provide for safe parking that will not hinder the public; nor will they create noise, glare or odor effects on adjoining properties, and properties generally in the district. The Board particularly notes the economic impact of the proposed special permit use is discussed elsewhere in these findings, and the off-street parking and loading area impacts reflect the economic activity in the Town.

c. The Board reviewed refuse and service areas, with particular reference to the items in (a) and
 (b) above, and finds these have been addressed in a manner that insures waste will be properly and promptly removed.

d. As to utilities as appropriate, the Board notes the ECS will be placed underground and the ECS corridors are placed in a manner that is compatible with the surrounding area. The Board notes virtually any other development would involve more intrusive above-ground utilities.

e. As to screening and buffering, the Board notes the laydown area will have temporary buffers which will be removed upon completion and site restoration. The Board notes it is not possible to fully screen WECD, but the setbacks have provided adequate separation from non-participating properties.

f. There are very few signs in the Project, but the proposed signs, temporary and permanent, are unobtrusive and feature minimal lighting. All lighting has been minimized, and lights positioned to reduce glare and other impacts, so that they are compatible with typical lighting of properties in the district.

g. The Board reviewed required yards and other open space, and finds all requirements are met except as to WECD T-28, which needs an area variance.

h . The Board finds the Project is generally compatible with adjacent properties and other property in the zone district, particularly given the agricultural and rural nature of the zone, the Town Comprehensive Plan, and the Town Law's allowance for these facilities as a special use in the zone.

15.0 VISUAL IMPACTS

15.1 Impacts

The Project will introduce highly visible WECD into the existing landscape. Additionally, the WECD will be visible at night due to required FAA lighting. Parts of that visual landscape already include WECD from projects in neighboring communities, but in some areas the WECD represent a change in the viewshed for the primarily rural residential areas that surround the Project site. The Board recognizes that the visual impact of the WECD represents an unavoidable adverse impact. For the reasons stated herein, the Board believes these impacts have been mitigated or offset to the extent practicable.

To fully understand the scope of visual impacts, the Board required completion of a Visual Resource Assessment (VRA), which was updated to reflect changes in the FEIS Preferred Alternative, including the greater blade length and width (and thus greater total height of the WECD). The Board notes that its decision is based on these revised plans, although the visual impacts of the original and revised Projects are very similar -for example, WECDs, or parts of WECDs, would be visible at only an additional 1.1% of the 185,000 acres within the viewshed analysis area.

The VRA includes analysis of existing viewsheds and photo-simulations of the proposed WECD at various distances, from viewpoints designated by the Town. The VRA provides an overview of the existing visual character of the study area in order to establish the baseline condition from which to evaluate visual change. The Project study area is dominated by rolling hills of agricultural and forested land. There are developed community centers (Village of Attica, Village of Gainesville, Village of Warsaw, and Village of Wyoming), but overall the area is relatively rural and undeveloped. Several other wind farms are visible in the viewshed.

The VRA includes an inventory of 139 aesthetic resources in its study area, of which 12 are of statewide importance and 91 of local importance. The VRA evaluated each of the aesthetic resources to

determine whether the Project might present a visual impact to the resource, and if so, to characterize the type of impact on each resource. The evaluation consisted of reviewing viewshed maps, aerial photos, and field observations to determine whether or not individual resources would have a view of the proposed Project. The Board relied on this study, including the photo simulations, in determining what the visual impacts would be, and notes that no evidence was presented disputing the range of visibility or the impacts. Further, the analysis conducted for the FEIS concluded that there are no additional material adverse visual impacts as compared to the layout in the DEIS. Importantly, of the five visual resources of statewide significance that have the potential for visibility, all of these resources would have views of the Project that would be characterized as "background" views, which will result in less impact than if the Project were closer.

The current land uses around the Project are primarily rural agricultural, and thus agricultural buildings are a visible part of the same landscape. While this Project will result in a change to the visual landscape with the addition of the WECD, the Board finds this change is compatible with the current agricultural uses, as the WECD will not interfere with the agricultural uses of the surrounding land, and these buildings are already a distinct part of the Town' s visual landscapes. To further avoid the visual impacts of the Project, the WECD have been setback in accordance with the requirements of Town Law. WECD are set back 700 feet from non-participating property lines, 1.2 times their total height from a public road, and 1,320 feet from any non-participating homes. These setbacks assist in minimizing visual impacts.

Although some impacts are unavoidable, mitigation measures that will be taken to minimize visual impacts of the Project include:

- Stony Creek will use WECD that are painted with a non-reflective paint to minimize reflected glare. The color of the blades, nacelle, and tower will be a neutral off-white or light gray. The FAA finds this color improves aviation safety, and it is well suited to minimize visual contrast with the background sky.
- To minimize visual complexity, Stony Creek will use WECD that have tubular style towers of uniform design and color, and with the same number of blades (3) which will rotate in the same direction. The Board notes this is the same basic design of the existing WECD located approximately 1.5 miles south of the Project Area in the Town of Wethersfield and also in the Town of Sheldon.
- With the exception of T-28, whose approval will require a setback variance from the Zoning Board, WECD will be setback from roads by a distance of 1.2 x tip height or more, which will provide a minimal level of mitigation because WECD bases may be blocked by vegetation between the road and the WECD base.
- The substation and O&M building will be designed with minimal necessary exterior lighting.

- Stony Creek will design and construct the O&M Building to integrate architecturally with the surroundings.
- Fencing used for the substation and O&M building storage yard will be non-reflective chain link.
- Exterior lighting of the WECD, substation, O&M building, and used for temporary task lighting will be designed and installed to avoid unnecessary lighting and visibility of the Project at night.
- To minimize impact of the FAA lights to viewers at ground level, Stony Creek will use nacelle lights with the lowest intensity allowed by the FAA. The number and spacing of FAA safety beacons will be limited to the minimum necessary to ensure public safety while minimizing visual impacts to the maximum extent practicable.
- To the maximum extent practicable, Stony Creek will bury the ECS cables and avoid use of overhead lines.
- Stony Creek will design roads to generally follow existing farm or logging roads where practicable and follow existing topographic contours to minimize cut and fill.

Visual impacts will be limited by decommissioning and removing WECD at the end of their useful life. The Board has reviewed the security required to cover the expected costs of decommissioning. The amount of the decommissioning bond will be determined in accordance with Town Law § XI.1116(G)(3), and may or may not include a credit for salvage or resale depending on the age of the Project. Pursuant to Town Law § XI.1116(G)(3), the Town Board has the right to review the amount of the decommission bond annually.

The Board recognizes there are certain receptors in the Project viewshed listed or eligible for listing on the National Register of Historic Places. Stony Creek will provide a financial offset in an amount up to \$1,500 per installed MW capacity of the Project for unavoidable impacts to these properties by providing funds for improving these properties at the discretion of the Town. The Board may enter into a mitigation plan agreement with the New York State Historic Preservation Office (NYSHPO) and Stony Creek to implement this requirement, but the determination that said financial mitigation to the Town is required is the decision of the Board regardless of any NYSHPO requirements.

The Board received a number of comments that the visual impacts are inconsistent with the rural character of the community. The Board observes that the Project introduces elements inconsistent with the existing viewshed, but finds that:

- the impacts are consistent with the Comprehensive Plan (which supports wind farms);
- much of the viewshed of surrounding area is home to several wind farms of similar impact (and thus the negative aspects of the visual impact are limited as the local skyline already includes similar intrusions);

- impacts have been mitigated to the maximum extent practicable by set back requirements, neutral color and conformity; and
- on balance, the impacts do not outweigh the benefits of the Project.

15.1.1 Shadow Flicker

The visual impact review included an evaluation of shadow flicker impacts, including a review based on the FEIS Preferred Alternative. The Orangeville Code requires that annual expected shadow flicker at sensitive receptors shall be limited to thirty (30) hours per year. Of the approximately 566 houses and structures in the Town of Orangeville, 438 are within ¾ mile of a proposed WECD and were explicitly analyzed in the shadow analysis. Based on that analysis, which was performed by a landscape architectural firm, the Board finds that the Project will meet that requirement. In addition, some WECD have been moved further away from the closest non-participating dwellings, minimizing impacts compared to those in the DEIS.

As with any solid object located outside, shadows can be cast by WECD when the sun is out and behind the WECD. Also like other outdoor objects, the length and direction of a shadow from a WECD will vary with the position of the sun in the sky, with the longest shadows occurring for brief periods just before sunset and sunrise. The shadow from an operating WECD is somewhat unique in that the moving rotor will cast shadows that move across the nearby areas. When these shadows pass across an un-shaded window, they can create alternating patterns of light that is referred to as "shadow flicker."

Shadow flicker will not be an everyday event or be of extended duration when it occurs because it can only occur when the sun is out and the WECD is rotating, and it can only occur when the position of the sun and receptor are aligned. For houses with a WECD to the east, shadows could occur shortly after sunrise. For houses with a WECD to the west, shadows could occur before sunset. Distance from the WECD also affects shadow flicker intensity. With greater distance from a WECD shadows become less intense and less sharp, reducing the potential impact of shadow flicker if it does occur. Beyond ten WECD rotor diameters the intensity of shadows from WECD are often considered negligible, but the study area used was the ¾ mile (3,960 ft) stated in the Code. There are no hospitals or libraries in the analysis area, and there is one church which will experience no more than two hours of shadow flicker annually. The houses that are in the Project Area but more than ¾ mile from a WTG are not expected to have any hours of shadow flicker. A summary of expected shadow flicker hours for Orangeville dwellings and dwellings where shadow hours will exceed 30 hours per year are shown in Tables 5 and 6 of the FEIS⁶. Expected annual shadow flicker hours will be under 30 hours per year at all non-participating dwellings.

⁶ NYSDEC took jurisdiction over an increased number/acreage of wetlands many months after initial adjustments were made to the DEIS layouts to minimize wetland impacts. This change in wetland status necessitated additional modifications to the proposed layout, which in turn created small changes to the calculated impacts due to shadow flicker . Additional studies to quantify these changes were conducted and the results were reviewed with the Town Board and presented in revised FEIS appendices. Inadvertently, the resulting minor changes to FEIS

Table 5.	Summary o	f Expected S	Shadow	Flicker H	lours for	Orangeville House	es
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Estimated Hours of Shadows Per Year	Number of Houses in the Project Area	Percentage of Houses in the Project Area
0 hrs/yr	; 406	71.9%
0-2 hrs/yr	13	2.3%
2-10 hrs/yr	77	13.6%
10-20 hrs/yr	29	5.1%
20-30 hrs/yr	27	4.8%
30+ hrs/yr	- 13	2.3%
Total	565	100.00%

Table 6. Participating Dwellings with Over 30 Hours of Expected Annual Shadow Hours

House ID	Address.	Expected Potential Shadow Hours per Year (hh:mm)	Participating Owner?
H-0152	3090 Orangeville Center Road	91:48	Yes
H-0326	2181 Nesbitt Road	88:12	Yes
H-0309	2029 Route 238	68:44	Yes
H-0375	2045 Gassman	54:46	Yes
H-0144	3175 Orangeville Center Road	52:50	Yes
H-0307	2026 Route 238	46:22	Yes
H-0345	3600 Orangeville Center Road	45:33	Yes
H-0298	2194 Route 238	42:43	Yes
H-0255	2380 Krotz	42:17	Yes
H-0284	2324 Route 238	36:43	Yes
H-0308	2006 Route 238	36:05	Yes
H-1201	4135 Route 20A	35:31	Yes
H-0243	2510 Orangeville Center Road	30:59	Yes

Some residents at houses where expected shadow flicker is less than 30 hours per year may experience shadow flicker and find it annoying, so to mitigate against this, Stony Creek will implement the complaint management program described in FEIS Appendix A.3.f to investigate complaints related to the Project, including those related to shadow flicker. Where shadow flicker is occurring at a dwelling where expected annual shadow flicker hours is 20 hours or more per year, Stony Creek will fund installation of mitigations such as window blinds or new plantings to block the shadows.

16.0 WILDLIFE IMPACTS

Tables 5 and 6 were not updated. They are therefore included here. The changes did not affect the conclusions of the FEIS.

The Orangeville Town Board has evaluated the potential impacts of the Project on various wildlife species, including state and federal threatened and endangered species, and state species of concern. The review demonstrates that the Project is not expected to create significant impacts on these wildlife species. The Project has been sited -including changes made to create the FEIS Preferred Alternative -to minimize impacts to species and related habitat. Additionally, mitigation measures have been identified to further reduce the potential for significant impacts. While not all impacts can be avoided, the Town Board believes the Project has been designed to minimize impacts to the maximum extent practicable.

The conclusions of the Board are consistent with a New York State Energy Research and Development Authority (NYSERDA) study, Comparison of Reported Effects and Risks to Vertebrate Wildlife from Six Electricity Generation Types in the New York / New England Region. This Study compared the effects on vertebrate wildlife, as reported in scientific literature, from various types of electric generation - coal, oil, natural gas, nuclear, hydro and onshore wind. Wildlife effects from exposure to stressors were identified for the following life cycle stages: resource extraction, fuel transportation, construction of facility, power generation, transmission and delivery, and decommissioning of facility; thus the study provides a comprehensive look at the impact of energy acquisition on wildlife, based on key factors in determining the type of effect include: births rate, death rate and availability of habitat. The NYSERDA study concluded that as a generation source, wind has the lowest cumulative potential risks of the six energy sources assessed.

16.1 Avian Species

The Board has focused particular attention on potential impacts of the Project on birds and bats. Stony Creek has made extensive investigations of the Project site. After a field reconnaissance site visit in May 2007 provided preliminary information concerning the studies needed to understand the extent to which the Project Area is used by avian species, a preconstruction work plan was submitted to the NYSDEC on November 30, 2007, and comments on the work plan were issued in a letter from the NYSDEC dated January 9, 2008. In compliance with this work plan, Stony Creek had qualified biologists perform the following studies:

- Desktop review of natural resources and available avian studies
- Breeding Bird Survey (conducted in Spring 2007)
- Bat Activity Surveys (conducted in Fall 2007 and Spring, Summer and Fall of 2008)
- Owl and Winter Raptor Surveys (conducted in Jan-March 2008)
- Raptor Migration Surveys (conducted in Spring and Fall 2008)
- Additional bird studies were conducted related to Northern Harrier, Bald Eagle, and forest birds.

16.1.1 Forest Birds

In Spring 2010, Stony Creek hired biologists to perform point count surveys at forest locations where WECD are proposed. Surveys were performed at nine observation points selected in coordination with NYSDEC. These points were grouped in three interior forest areas where WECD are proposed. The main goal of the 2010 point count surveys was to address concerns that the proposed Project could impact birds in interior forest areas that were not properly surveyed in 2007. But even though the areas above were selected as being in the largest forested areas where WECD are proposed, their current condition was not found to be undisturbed, forest interior habitat. Instead, biologists found these areas, which have been surmised by some to be large undisturbed forest areas, were actually disturbed by ATV paths, trails, snowmobile corridors and forestry activities. Habitat fragmentation and loss, exotic and invasive flora and fauna, and successional changes in forest structure have affected habitat quality and quantity in these areas, likely influencing the abundance and presence of forest dwelling birds. 57 species were identified during the 2010 forest bird point count surveys. Of the 57 observed species one was a statelisted species. At five of the nine survey locations, biologists observed Cooper's Hawk, listed as a special concern species in New York. This species was not observed in the 2007 breeding bird survey. As discussed in DEIS Section 3.4.3, effects of Project construction and operation to Cooper's Hawk and other similar species are not expected to be significant. Stony Creek will monitor potential collision fatalities by all birds as part of the Post Construction Monitoring Plan. None of the 57 species observed in the 2010 forest bird point count surveys were listed as federally-listed or state-listed as endangered or threatened.

Further, because terrestrial habitat impacts have been minimized by changes in the layout of the WECD, there are no new significant adverse impacts to avian species not considered in the DEIS.

16.1.2 Northern Harriers

Because Northern Harriers are listed as threatened in New York, the NYSDEC requested additional information on the level of Northern Harrier use at the site, beyond what was observed in the 2007 and 2008 studies. Northern Harriers were observed in the Project Area during studies conducted in 2007 and 2008 relatively infrequently. During the spring of 2010 Stony Creek conducted additional surveys to assess use of the Project Area by Northern Harriers. Stony Creek's 2010 survey was conducted from three observation points in open fields in suitable habitat where Northern Harriers had been previously documented (Attachment 3 of FEIS Appendix A.4.a). Surveys were conducted at each point in early May, in early June, and again in late June, 2010. Biologists observed Northern Harriers, including adult males and adult females, on six occasions on three different days. Most of the observations were made near Orangeville Center Road and Centerline Road. The Biologists watched for but did not observe behavior that would indicate presence of a nest. Northern Harriers typically forage at heights below typical WECD rotor heights; however Northern Harriers has been documented at other wind farms in the United States. It is noteworthy that the pair observed at the Stony Creek site did not appear to be breeding.

As discussed in DEIS Section 3.4.3, effects of Project construction and operation to Northern Harrier and other similar species are not expected to be significant. Stony Creek will monitor potential collision fatalities by all birds as part of the Post Construction Monitoring Plan

The additional information collected on the Northern Harrier does not indicate that the Project Area serves a significant function as nesting habitat.

16.1.3 Bald Eagles

Bald Eagles have been observed by NYSDEC officials and casual observers alike at/near Attica Reservoir No. 3, including eight recorded sightings from 1999 and 2008. NYSDEC also reported a single winter record of a pair of adult eagles at the reservoir on January 10, 2008; and seven spring and summer records from April 19 to August 3 of mostly adult pairs with only one juvenile sighting record. Both New York Breeding Bird atlases (1985 and 2005) included "probable" ratings for Bald Eagles in this location, and an eagle pair was reported on 6/19/2000. The most recent date of a reported sighting prior to this survey occurred near Attica Reservoir on January 10, 2008. The nearest confirmed nesting pair were last observed in 2003 during surveys associated with the 2nd New York Breeding Bird Atlas, in Block 2472D in Letchworth State Park, approximately 20 miles southeast of the reservoir. But Bald Eagles were not observed at Stony Creek as part of any of the surveys conducted prior for the DEIS. They were not seen during the summer breeding bird survey, the spring or fall raptor migration survey, or during the winter raptor survey.

However, based on comments of regional NYSDEC staff indicating use of Attica Reservoir #3 by Bald Eagles, Stony Creek hired biologists to specifically conduct surveys in 2010 to identify and characterize Bald Eagle use of the Project Area. Bald Eagles were observed on six occasions, including observations on five of the six days in which surveys were conducted, while on the sixth day biologists surveyed the reservoir area for four hours but saw no bald eagles. In the 24 total hours of observations, all of the eagles observed were north of the proposed WECD locations, and most were seen flying over the reservoir itself. The closest eagles appeared to come to any proposed WECD locations was ¾ mile.

As part of the 2010 Bald Eagle surveys conducted in 2010, Stony Creek had biologists search for Bald Eagle nests in the Project Area. A total of 13.5 person-hours were spent searching the area surrounding the Attica Reservoir for eagle nests. Searches were completed within 2 miles of the observation point, including a band approximately 500 feet wide along the entire circumference of the reservoir, and at Bantam Swamp along Bantam Road. Additionally, wetlands, tributaries, and reservoir outflow areas within 2 miles of the observation point were searched. Although apparently suitable habitat was observed in the search area, no bald eagle nests were located. Based upon results at Stony Creek and at other wind farms, raptor fatalities are anticipated to be few, and below significance in terms of effects to local populations. The risk to Bald Eagles is likewise insignificant, and mitigated to the maximum extent practicable by compliance with applicable laws and regulations for protected species, including those that are specific to Bald Eagles.

NYSDEC has so far determined that no Take permit is required in regard to Bald Eagles Stony Creek will continue to comply with state and federal laws, regulations, and policies pertaining to protected wildlife, and will work with the U.S. Fish and Wildlife Service to insure the Project's compliance with applicable laws and regulations. As to its review, the Town Board has determined that potential impacts have been mitigated to the maximum extent practicable.

Because Bald Eagles were not observed within ¾ mile of the proposed WECD locations and no nests were discovered during the survey, there are no new significant impacts to the Bald Eagles not considered in this review.

16.1.4 Post-Construction Studies

The Board also reviewed available post-construction mortality surveys. No threatened or endangered bird or species have been killed at operating wind farms in New York or Wyoming County. During 10 studies conducted at six large scale wind farms there have been six bird fatalities noted of species that are on New York's list of special concern, but no endangered or threatened species. These studies support the Board's conclusion that the Project will have no impact on federal or New York-listed threatened and endangered species and very low to no impact on species of special concern. The Board believes adequate mitigation will occur through Stony Creek's compliance with applicable laws and regulations for protected species, including those that are specific to Bald Eagles.

16.2 Bats

Stony Creek conducted bat acoustic studies on-site in fall 2007 and spring, summer, and fall 2008, to document possible migratory bat activity in the Project Area and, particularly, bat activity near the rotor zone of the proposed WECDs. The studies involved collection of data from Anabat[®] detectors located at various heights at meteorological towers in the Project Area, and additional detector locations at ground level in fringe areas between open fields and forest. The Board also reviewed post-construction evaluations of bat mortality. As with birds, the Board believes the bat studies provide the necessary record to determine potential impacts.

The bat study's results were are comparable to other preconstruction studies carried out in New York State and indicated that bat activity at the Project Area peaks in the summer. Bat calls were recorded and analyzed to categorize them by species or guild. Results of this analysis found that the Myotis species, common in New York State, is also common to the Project Area. Forested areas are considered to be the best habitat in the Project Area for bats, and while there could be impacts from loss of forested areas, the forested areas that will be permanently lost from the Project are not considered high quality for bats. Less than 2% of the forested areas could be impacted temporarily during construction, and 0.5% of the forested areas in the Project Area could be permanently impacted by the Project. Thus, as relatively small percentages of the forested areas in the Project Area will be affected, the impact to bats from habitat loss should be minor. Further, because bats are known to populate open areas adjacent to forest areas, the access route corridors are not expected to have any more impact on the bat habitat that the loss of the forest area itself. Thus fragmentation of forest is not expected to be a significant impact on bats. In sum, since forest areas are not expected to be degraded by the Project, thus forest area degradation will not be an impact on bats from the Project.

Operational impacts to bats, from tower and blade collisions, are a matter of concern. The studies in the record indicate that impacts to migrating bats is the greatest concern, as the species composition of mortalities found during post-construction studies indicates that migrating tree bats, e.g., hoary bat, eastern red bat, eastern pipistrelle and the silver-haired bat, are most at risk. Mortality rates at the Maple Ridge project in New York show that 74% of bat kills in 2006 were migratory tree bats. Evidence also indicates bats also appear to be most susceptible when they migrate between mid-July and October since mortality rates are highest during this period. On the other hand, bat mortality during breeding season has been found to be virtually non-existent even when the populations are high in the vicinity of the WECD. Based on the results of post-construction studies that indicate bat fatality is correlated with forested areas, in particular forested ridges in the Appalachian Mountain region, the lack of such habitat cover within Project Area indicates that the probability of impacts to migrating bats may be low. Further indications of low risk from operation of the Project may be low is found in the recorded flight heights of bats. The 2008 surveys found that over 90% of the calls were at the tree detectors (at heights of 2 m) rather than at the met tower detectors (at heights of 25m or 45m). This trend suggests that a vast majority of bats in the Project Area are flying low to the ground, outside of the rotor swept zone. Therefore, bat fatality from the sweeping motion of WECD is expected to be low.

16.3 Jefferson Salamanders

An extensive evaluation was conducted of potential impacts on small water bodies that serve as breeding areas for the Jefferson Salamander, a state Species of Concern (but not a Threatened or Endangered Species). The NYSDEC reported that Jefferson salamanders were suspected to be in these areas as part of its review of transmission lines installed in the area by the Noble Wethersfield wind project. Stony Creek hired the environmental firm Shoener Environmental to conduct salamander surveys in the Project Area. The surveys were managed by a biologist with salamander survey experience and have been reviewed by the Board and its expert. The surveys were coordinated with the NYSDEC, including locations and dates of the surveys, which coincided with the species' breeding and egg incubation period, thus surveys were conducted in April and early May, 2010. The Board finds these surveys to be a reliable study of the potential impacts on the species.

In response to the survey results, changes were made to the Project. The FEIS Preferred Alternative layout moved WECD57 and 58 completely out of the wooded areas where NYSDEC was concerned about presence of the Jefferson Salamander. Access roads and ECS corridors were similarly moved, and the FEIS Preferred Alternative layout minimizes impacts to this salamander by avoiding those ponds found to have the heaviest concentrations of egg masses and by avoiding wetlands to the extent practicable. As a result, impacts to the Jefferson Salamander have been minimized in comparison to the DEIS, and have been mitigated to the maximum extent practicable for the Project.

16.4 Other Wildlife

Stony Creek evaluated the general conditions of specific fauna through observation by professional biologists during the habitat and avian assessments. During the field walks, no significant fauna species were observed, which is consistent with active agricultural areas that dominate the Project site.

Importantly, as noted above and aside from transient species, no threatened or endangered non-avian wildlife communities have been identified within the Project area. It is anticipated that there will be temporary, minimal impacts to mammals, reptiles, amphibians and fish in the Project Area. By largely avoiding wetlands and buffers, even temporarily, impacts to amphibians, reptiles and small mammals that use these habitats will be minor. As WECD, ECS and access roads will be located away from streams to extent practicable and ECS stream crossings will be done using methods to minimize impacts to streams, no impacts on fisheries are expected. There are Mammal species using agricultural lands, which are common and opportunistic, and their populations have flourished as a consequence of human development. These species are mobile, and, with the exception of small rodents and insectivores, can readily avoid or leave an area that is disturbed by Project construction. Once the WECD are constructed and operational, these species will return once accustomed to the WECD presence. Some rodents and insectivores may be impacted during construction, but these species are abundant and reproduce quickly in large numbers. Active agricultural fields do not typically harbor large numbers of rodents and insectivores because of repeated disturbances from plowing, tilling, spraying and/or mowing. These species are more likely in undisturbed successional field habitats. As to larger animals, these species will return to disturbed areas during Project operation, especially since these species are active at dawn or dusk and there will be minimal human activity associated with operation of the WECD.

Permanent impacts are similarly expected to be minor. Since most mammals do not inhabit active farmland in high numbers, permanent impacts from the construction of Project components within agricultural fields are expected to be minimal. Other habitat types provide wildlife food and a place for cover, nesting, resting and rearing, but as the Project has been designed to avoid or minimize fragmentation of forested habitat, wooded habitat loss will be small and should not pose any threat to local mammalian or reptile species who call the forest home. Total estimated permanent impact to forest areas is estimated to be less than 0.5% of the forested areas in the Project Area. Additionally, most of the wooded habitat in the Project Area already consists of fragmented woodlots and regenerating stands of hardwood which places limitations on their value as habitat for many faunal species. These isolated plots of woodland provide little interior forest habitat. Because of the lack of wetland habitat within the Project Area and because Project components have been sited away from wetland and stream areas, permanent impacts to fish, amphibians and reptiles including streambed disturbance or siltation are anticipated to be minimal.

Across all habitat types present within the Project Area, wildlife may become habituated to the presence of WECD and other Project components. Although there will be changes to habitat type, the wildlife species present within the Project Area are relatively tolerant of human activities and are species common to Western and Central New York. Overall, no significant losses of wildlife are anticipated.

16.5 Mitigation

Notwithstanding the anticipation of limited impacts, the Town will require certain mitigation measures. As noted, the primary type of mitigation is siting facilities in less harmful areas, and the FEIS Preferred Alternative accomplishes this goal. ECS lines are buried to eliminate risk of birds colliding with aboveground wires; the met tower is an un-guyed tower to eliminate guy wires that pose a collision risk to birds; and to the extent practicable WECD, access roads and ECS routes have been located away from wooded areas which will minimize disturbances to woodland birds. The Project complies with the New York State Department of Environmental Conservation "Guidelines for Conducting Bird and Bat Studies at Commercial Wind Energy Projects." As required by the Orangeville Zoning Law, Stony Creek will perform post-construction monitoring for a period of three years as recommended by the USFWS and the NYSDEC and as outlined in the updated Post-Construction Monitoring Plan. The Plan describes how the second and third years of studies may be adjusted depending on the level of mortality found in previous year(s). The Town will receive all reports. To minimize impacts to bats, Stony Creek will, to the extent practicable, perform clearing of older, mature trees in the winter months of November, December, January, February, and March.

17.0 NOISE

From the time that it began work on its revised Zoning Law the Town Board has recognized noise presented an important issue with regard to the construction and operation of wind farms. The Town designed its law to provide protection for non-participating properties in the community, and it required Stony Creek to prepare a detailed noise analysis to assess the potential significant noise impacts of the Project on the community. These were supplemented by the responses to inquiries in the FEIS, and updated noise study reflecting the FEIS Preferred Alternative -which features a quieter WECD than the GE 1.6 xle analyzed in the DEIS. Based on its review of these studies -including post-construction measurements from other wind farms - as well as the various public comments, the Board finds it has a reliable basis on which to evaluate the impacts of noise on the community.

17.1 Noise from Construction

Construction includes improvements to existing roads and new construction of facility access roads; then clearing where needed, excavation, foundation, and backfill work at the WECD and the substation, followed by WECD erection, ECS installation, and substation installation. Noise during decommissioning will be similar. Typical on-site equipment used to construct the wind farm project will include trucks, cranes, dozers, excavators, trenchers, and graders. Many of these noise sources are typical in an agricultural community like Orangeville.

To limit construction noise, the following standard mitigation measures will be employed during the construction and decommissioning phases of the Project:

• Installing effective exhaust mufflers in proper working condition on all engine-powered construction equipment at the site, with prompt replacement of mufflers found to be defective.

- Requiring contractors to comply with federal limits on truck noise.
- Requiring contractors to ensure that their employee and delivery vehicles are driven responsibly.
- Limiting nighttime construction work to activities which cannot be completed in the daytime, and only when permitted by the Town Board.
- Requiring contractors to notify the community in advance of any blasting activity, if necessary.

17.2 Noise from Operations

To evaluate the noise impacts of the wind Project during the operations phase, a noise study was prepared, and then updated to reflect the FEIS Preferred Alternative. Based on comments received on the DEIS, the additional analyses were performed including use of a "penalty" for night time noise and also a more robust evaluation of background noise. When the full Project is operating, the primary source of noise will be from the WECD, which produce low level broad band noise that varies with wind speed. In addition, the main transformer in the Project substation and the small individual transformer at the base of each WECD will create a steady low level of noise. To predict the total sound levels from the proposed Project, Stony Creek's consultant developed a computer model that included all three of these noise sources at their proposed locations. The computer model was developed using the computer noise modeling program, Cadna/A, and model inputs included a 3-dimensional model of the terrain in the Project Area, realistic assumptions on ground absorption and atmospheric attenuation so as to not underestimate the actual sound levels. This Noise Study used a conservative approach that assumed downwind noise conditions existed at all locations, and that used estimated maximum levels of WECD sound. As summarized in FEIS Table 8⁷ noise study showed that the noise from the WECD will not exceed Town legal limits nor create a significant adverse impact.

⁷ NYSDEC took jurisdiction over an increased number/acreage of wetlands many months after initial adjustments were made to the DEIS layouts to minimize wetland impacts. This change in wetland status necessitated additional modifications to the proposed layout, which in turn created small changes to the calculated impacts due to shadow flicker and noise. Additional studies to quantify these changes were conducted and the results were reviewed with the Town Board and presented in revised FEIS appendices. Inadvertently, the resulting minor changes to FEIS Tables 8 were not updated. They are therefore included here. The changes did not affect the conclusions of the FEIS.

Table 8. Project Noise Levels for High Wind Periods in the DEIS and FEIS Analyses

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H-2015	Nesbitt Rd.	Seasonal	Participating	51 dBA	50.4 dBA	-0.6 dB
H-0152	Orangeville Center Rd.	Year-round	Participating	50 dBA	47.0 dBA	-3.0 dB
H-2010	Quakertown Rd.	Seasonal	Participating	49 dBA	47.1dBA	-1.9 dB
H-0144	Orangeville Center Rd.	Year-round	Participating	49 dBA	45.8dBA	-3.2dB
H-0298	NYS Route 238	Year-round	Participating	49 dBA	46.9 dBA	-2.1 dB
H-0309	NYS Route 238	Year-round	Participating	48 dBA	46.9 dBA	-1.1 dB
H-0307	NYS Route 238	Year-round	Participating	48 dBA	46.2 dBA	-1.8 dB
H-2016	Nesbitt Rd.	Seasonal	Non-participating	48 dBA	44.6 dBA	-3.4 dB
H-0138	Orangeville Center Rd.	Year-round	Participating	48 dBA	45.3 dBA	-2.7 dB
H-0326	Nesbitt Rd.	Year-round	Participating	48 dBA	47.9 dBA	-0.1 dB
H-0308	NYS Route 238	Year-round	Participating	48 dBA	45.7 dBA	-2.3 dB
H-0906	NYS Route 238	Year-round	Non-Participating	46 dBA	43.8 dBA	-2.2 dB
H-0253	Nesbitt Rd.	Year-round	Non-Participating	46 dBA	42.7 dBA	-3.3 dB

Notes:

- This table includes the dwellings where the DEIS Noise Analysis for the 1.6xle case predicted the maximum Project noise levels of 48 dBA or higher for participants and 46 dBA or higher for nonparticipants.
- All noise levels in this table are maximum Project noise levels calculated using Cadna and assuming all WECD operating at maximum sound power levels with the wind direction such that every WECD is upwind from the dwelling being analyzed.
- DEIS Noise levels were reported only to integer values.

The Board concurs with the conclusion of the noise study that residents at times will be able to hear the WECD but overall impact is not expected to be significant. As a result of the new equipment, noise impacts will be reduced as compared to the "worst case" scenario (based on use of the GE 1.6 xle WECD and the DEIS layout) that was analyzed, as required, in the DEIS. The ability to hear sound from the WECD will vary with ambient sound levels. WECD may be more easily heard during early morning/nighttime hours when ambient sound levels are their lowest, and they will be more difficult to hear during daytime hours when ambient sound levels are highest. Annoyance of a resident to a new sound source depends not only on the sound from the source compared to the ambient sound, but on non-acoustic factors, such as the resident's activity and his/her attitude toward the source. Even during times when the WECD may be audible, the sound levels are estimated to be low enough so as to not be an annoyance for all but the most sensitive residents in the community. This is demonstrated by the Noise Study which shows maximum noise levels from the Project will be in accordance with the requirements of the Orangeville Zoning Law, which was designed to set reasonable limits on this new noise source. The Town Board reaffirms that the standards in the Town's Law is in accord with the agricultural and rural character of the Town, and no evidence has been presented during the environmental review demonstrating a need for lower limits.

The Board also examined the issue of low frequency sound, as did its expert. When low frequency sound is substantially greater than the background ambient sound, it may be noticed in the community and can cause annoyance. The most significant concern associated with intense levels of low frequency sound is that it can induce vibration in a building structure. But modern WECD, including the GE WECD proposed for this Project, incorporate the upwind rotor design, which has greatly decreased the generation of low frequency sound. The slowly modulating mid-frequency broadband sound ("swish") from the rotating WECD blades is not a low frequency sound. The Noise Study provided octave band data for WECD noise emissions, including sound power levels for octave bands centered on 31.5, 63, and 125 Hz -frequencies that are in the range considered to be "low frequency," and the study used the attenuation rate appropriate for these lower frequencies.

The noise study also reported ambient low frequency noise as measured in the Project Area. The study found that the range of low frequency (dBC) noise levels from the WECD in similar to, or less than, the ambient low frequency (dBC) noise levels present in the community without any WECD operating. Accordingly, significant negative impacts from low frequency noise are not presented by the Project.

The Board received many comments on the noise issue. Some addressed various studies and reports such as the Minnesota White Paper. The Minnesota Department of Health document contains quotes from a range of different documents but does not include any original research. In fact, the final recommendation of the report is "Any noise criteria beyond current state standards used for placement of WECD should reflect priorities and attitudes of the community," which is precisely what the Town Board did. The Minnesota White Paper was considered by the Town Board previously as part of its consideration of the local law. That paper supports the decisions of the Town Board.

One commenter asserted that the ambient noise levels in the community were lower than stated in the studies, providing his own measurements of L90 noise levels at various points in Orangeville. But this commenter did not provide documentation on how the measurements were made - there was no information on the make or model of equipment used; calibration data; type of windscreen; exact locations; durations of measurements; or means for filtering out wind, insect, and car noise, or qualifications of the person taking the measurements. This is basic information which is necessary for evaluation of a noise study, and which was provided in the DEIS and FEIS noise studies.

In addition, as explained in detail in the FEIS, use of L90 noise levels as a baseline would require comparison of Project noise levels to existing sound levels at the quietest 10-minute periods of the year, when there is no sound from birds, wind, or insects. The NYSDEC Guidance (DEC Policy DEP-00-1 "Assessing and Mitigating Noise Impacts") does not suggest that such an approach should be used, and comparing WECD noise to the sound levels at the quietest times of the year would inappropriately compare noise of WECDs, which only operate when the wind is blowing, to an ambient acoustic environment that would occur when winds are low or non-existent.

As an additional check on the noise study modeling, the Town Board reviewed a post-construction noise measurement study from the High Sheldon Wind Farm at Sheldon that indicated the model accurately predicts WECD noise emissions. This included evidence that during high wind conditions the total noise

at 1500 ft from an operating WECD is in the range of 42 and 45 dBA, values which include both ambient noise and the noise from the WECD. Thus the Board finds the noise study a credible and reliable basis on which to base its decision.

As to the NYSDEC guidance, the Board also reviewed the Project pursuant to that document, and found the Project was properly evaluated and that the noise study supports the Board's conclusion. As to existing noise levels, the Guidance states "A quiet seemingly serene setting such as rural farm land will be at the lower end of the scale at about 45 dB(A)," which is a higher level than the studies predicted and the Town used. The NYSDEC Guidance suggests that noise will not be a nuisance if it does not exceed ambient sounds by 6 dB at community receptors, and the Noise Study indicates that the Project will meet this requirement.

The Town also examined the potential for noise from the substation. The closest dwelling to the substation is a non-participating dwelling located approximately 1,250 ft away, where the sound level is predicted to be 42 dBA. The transformer sound will have a tonal component that is inherent to the transformer. If a tonality penalty of 5 dB is added to the predicted noise level, and equivalent noise level of 47 dBA would exist at this dwelling. This level is less than the Town Law limit of 50 dBA limit. There are also two non-participating dwellings between 1,800 and 1,900 feet from the center of the substation. At these distances, noise from the transformer is predicted to be between 40 and 41 dB. Noise levels at these locations will be under 50 dBA, even after application of a 5 dB tonality penalty. To ensure noise levels at dwellings are as low as or lower than the levels predicted in the FEIS noise analyses, Stony Creek will use a main station transformer that has a sound power level of 102 dBA or less. Therefore, the Board finds there will be no adverse impacts from substation noise.

The Board finds the Project as proposed has mitigated noise impacts to the extent practicable, particularly by requiring minimum separation between noise sources and non-participating residents. The FEIS Preferred Alternative features a quieter WECD than the "worst case" analyzed in the DEIS. And in accordance with the Orangeville Zoning Law, a Post Construction Noise Study will be conducted within one (1) year of commencement of commercial operation to ensure that the Project is in compliance with the standards of the Law.

18.0 SAFETY ISSUES

The Board evaluated health and safety impacts associated with the Project, including fire safety, ice shed and stray voltage impacts and emergency preparation, all of which are discussed below (Traffic safety issues are discussed in the Traffic and Transportation Section).

The Board acknowledges it received many comments on this subject, and it responded to all substantive comments in the FEIS. In particular, a number of commenters referred to the work of Dr. Nina Pierpont, but the Board notes that expert after expert has refuted both her methods and conclusions; as one British expert stated: "It should be noted that no conclusions on the health impact of WECD can be drawn from Pierpont's work due to methodological limitations including small sample size, lack of exposure data, lack of controls and selection bias." The Board particularly notes the statement of Dr. G.

Leventhall, MSc, PhD, FinstP, HonFIOA, who is cited numerous times by commenters themselves, and that Dr. Leventhall concluded "Dr. Pierpont makes the common mistake of taking a one-dimensional view of sound, considering only frequencies and ignoring the importance of levels." The Board has made its determination based on the evidence in the record including the studies referenced therein, and finds the Project will be implemented in a manner that protects the health, safety and welfare of the community.

18.1 Emergency Preparedness

Stony Creek has prepared an Emergency Response Plan, which outlines the coordinated response the company, Wyoming County, and local fire, emergency medical, and transportation services will undertake in case of emergency. In addition to implementing the ERP, a number of other measures will be implemented. Compliance with existing OSHA regulations is of course required, and will effectively mitigate potential safety-related adverse impacts of the Project to construction and operations personnel. Only authorized personnel (those working on the construction of the Project) will be present within construction areas. Prior to construction, the Project construction personnel will meet with local emergency service providers to review local emergency preparedness requirements and to coordinate emergency response. For emergency response, the Project will be monitored continuously by the owner's remote operations facility, and a member of the local O&M team will be on-call 24 hours a day. At the entrance to every access road, Stony Creek will install a steel sign mounted on a steel road sign pole that will identify information required by the Wyoming County emergency services department, including the access road number and the ID's of the WECD accessible from that road. Stony Creek will train its Project employees in the use of the Tractel rescue equipment, and will arrange for special training that may be required for fire departments to provide fire protection and emergency services for the Project and its operators.

18.2 Gas and Electric Lines

Stony Creek will contact Dig Safely NY prior to performing any ground excavation for construction, and as part of the Dig Safely NY service, any underground electric lines would be identified. If buried electric lines are identified, Stony Creek will take necessary steps to avoid interfering with the identified lines. Stony Creek will build two WECD within 200 feet of the Dominion Transmission, Inc. (DTI) pipeline, and it will install one ECS circuit across the DTI right-of-way. Stony Creek will coordinate construction near the pipeline with DTI. Stony Creek will work with DTI to install markers or fencing delineating the bounds of the DTI right of way near WECDT-42, T-4S, and T-48 and the WECD worksites for these WECD will be modified from the standard circular footprint so as to avoid activities on the DTI right-of-way. No blasting will be used for these WECD foundations. As to the ECS system, electromagnetic fields induced from the ECS will be minimal and will not affect the cathodic protection systems of the pipeline. As required by DTI guidelines, Stony Creek will install the ECS cables in steel conduit for the full width of the DTI right-of-way at a depth that is underneath the DTI pipe by 24 inches or more and at an angle that is approximately perpendicular to the longitudinal direction of the pipe. If construction of access roads or widening of public intersections results in construction traffic traveling over underground gas pipelines, Stony Creek will protect such lines by use of temporary steel plates and other measures that may be

determined appropriate after consultation with the owner of the gas pipeline. Stony Creek will repair any damage it causes.

During the operations period, Stony Creek will perform annual tests of the grounding system for any WECD installed within 600 ft of a natural gas transmission pipeline. If testing finds the grounding system performance has degraded in such a way that it could risk the cathodic protection system of the DTI gas pipeline, Stony Creek will repair the grounding system or take other appropriate actions to ensure protection of the gas pipeline.

18.3 Fire

The Project poses little danger of fire. The WECD are composed of steel and fiberglass components. While the most flammable component of the WECD is the 62 gallons of gearbox oil, located in the nacelle, the inside of the nacelle is coated with flame resistant foam insulation. To protect against the possibility of fire from maintenance activities, service personnel will have a fire extinguisher at any time hot work is being performed in the nacelle. As a further precaution, the area immediately surrounding each WECD tower will be devoid of vegetation and will be covered in gravel, eliminating fuel and reducing the chance of spreading a fire. Stony Creek will work with local fire departments as requested in implementing procedures for responding to a fire at a WECD site. If a WECD were to catch fire, the Board concurs with Stony Creek that it be allowed to burn itself out. The responsibility of the local fire department would be limited to ensuring that no ground fires resulted from the WECD fire.

The O & M Building and substation will be built in accordance with the Uniform Fire Prevention and Building Code. The substation transformer and the pad-mount transformers will be designed and built to standards of the Institute of Electrical and Electronics Engineers and the American National Standards Institute ("ANSI"). Transformers will be equipped with a high speed protection feature that will detect and isolate electric faults, which offers a greater level of fire protection, plus all transformers will be enclosed in steel making them highly resistant to fire. Further, the pad-mount transformers physically separate chambers for the oil cooled windings from the electric connections, minimizing the chance of fire due to a fault in the transformer electric connections, minimizing the chance of fire due to a fault in the transformer electric connections.

Fire safety planning is incorporated into the emergency planning process discussed in the prior subsection.

18.4 Snow and Ice Shedding

The Board has evaluated the potential threat of snow and ice shedding by a WECD. Snow and ice can occur on the WECD tower, nacelle and blades, and it can occur on the blades whether they are rotating or idle. Snow and ice buildup should not be a concern when proper setbacks are used and operating procedures are followed, and the Town finds that setbacks in the Zoning Law are more than adequate to protect against potential safety impacts from ice shed. The Town also notes the WECD proposed employ a WECD control system including a pitch system alarm. While WECD can continue to operate

with moderate buildup of snow and ice on the blades, greater levels of snow or ice accumulation will cause the WECD control system to shut down the WECD. Once shutdown, the WECD will not begin operating until the O&M team manually restarts it.

Most snow and ice will drop in the immediate vicinity of the WECD, but the Board has also reviewed the potential for "Ice throw," which describes a concern that the rotating blades could "sling" ice significant distances from the WECD base. Actual operating experience, as reviewed by the Board, shows that such "slinging" is not a major factor in the distance that snow or ice falls from a WECD, and the setbacks created by the Board provide safety for the public. The Board notes the exception is WECD T-28, for which a variance is requested to be closer to Bantam Road. The Town Board does not make the decision on the variance (and any approvals granted for T-28 are conditioned on obtaining the variance), but to the extent health and safety is a SEQRA issue, the Board finds that during winter periods when Bantam is not maintained, traffic on the road is reduced and ice shedding risk, while not zero, is minimized. The Board acknowledges that there is also a slight increase in risk due to the fact that icing may also occur during periods when the road is maintained, although such conditions are anticipated to be relatively infrequent.

For any WECD located within 500 feet of a snowmobile trail identified by the local snowmobile club, Stony Creek will maintain signs warning snowmobile trail users of potential snow and ice shedding. The signs will be located at points approximately 500 feet from the WECD, and Stony Creek will confer annually with the local snowmobile club to learn of any changes in snowmobile routes that might result in the trail being within 500 feet of a Stony Creek WECD.

18.5 Blade Throw and Tower Collapse

The Board has reviewed the record as it relates to the potential for tower collapse or blade throw. State of the art braking systems, pitch controls, and other speed controls on WECD minimize the chances of WECD blades from rotating at the excess speeds that have caused the extremely infrequent instances of tower collapse. Chances of WECD failures are mitigated by use of WECD that are certified by an independent agency as meeting appropriate design requirements. Stony Creek will hire a quality inspector during construction to verify that foundations are installed in accordance with design documents. As to particular hazards, the Board notes a WECD collapse would not threaten gas pipelines in the area because they would be protected from damage by the fact that they are buried below grade. Together with the very low probability of a tower collapse, there is no anticipated adverse impact to the high pressure gas pipeline from tower collapse.

The Board notes that it has reviewed information on two tower collapses in New York, and in both instances the debris field was smaller than the setbacks required by the Town's Law. Location of WECD outside the required setback distances from the centerline of public roads, from nonparticipating property lines, and from non-participating dwellings or public buildings, will mitigate the potential of injury to the general public from tower collapse or blade failure. The only exception is that Stony Creek has requested a variance from the Zoning Board of Appeals to locate WECD T- 28 a distance less than the setback distance from Bantam Road -a lightly travelled dirt road that is not maintained in winter

months. The Town Board does not make the decision on the variance (and any approvals granted for T-28 are conditioned on obtaining the variance), but to the extent health and safety is a SEQRA issue, the Board finds there is a relatively slight increase in risk to the public by granting this variance because of the low probability that T-28 would collapse, and because the likelihood of such a collapse occurring at the same time that someone is driving on Bantam Road is lower still.

19.0 CULTURAL AND HISTORICAL RESOURCES AND IMPACTS

Cultural resources consist of archeological, historic, and architectural resources. Archeological resources are known archeological sites and areas of reasonably believed to have a higher probability of containing archeological sites. Historic resources are historic properties (usually buildings) that are listed, or eligible for listing, on the State and National Registers of Historic Places (NRHP). Architectural resources are historic structures and structures of particular importance.

To fully understand potential impacts on these resources, Stony Creek commissioned Phase IA and Phase IB Cultural Resources Investigation for the Project, in consultation with the State Historic Preservation Office (SHPO). The study covered the area defined by the NYSHPO as the area of potential effect (APE). To limit impacts from roads, cables, and WECD being installed at sites with archeological artifacts, Stony Creek's consultant performed 2,000 shovel tests at sites that historic maps and land features showed were most likely to contain artifacts. The study found no prehistoric sites, no significant historic sites, and no sites recommended for avoidance or additional investigation. The shovel tests identified no evidence that any significant archeological sites were present in the APE.

Stony Creek's consultant also conducted an architectural reconnaissance field survey of the Project footprint and APE. The preliminary architectural investigation was conducted in compliance with the NYSHPO Guidelines for Wind Farm Development Cultural Resources Survey Work. Its purpose was to assess the existing historic character of the APE for the presence or absence of potentially significant architectural resources, namely historic buildings, districts, or landscapes. The consultant reviewed the state's on-line SPHINX resources for any previously recorded historic and architectural resources in the Project Area and 5-mile APE. A field survey identified any buildings in the Project Area and 5-mile viewshed that appeared to be more than 50 years old and could be eligible for listing in the NRHP; resulting in a list of properties "to be surveyed." The Project is located in a historically rural agricultural region and the historic building stock is representative of the region's rural development with examples of farmsteads dating from the early-to-mid-nineteenth century. The study identified National Register (NR) structures, an NR-Listed Historic District, and individual NR-eligible (NRE) structures (including 18 cemeteries). The study found that no historic structures will be physically altered as a result of the Project, nor will access to historical, recreational, and commercial resources be impeded.

The Board has reviewed these studies, along with the comments on them and the responses in the FEIS, and finds that it has an adequate base upon which to evaluate the potential impacts to cultural and historic resources. The Board finds the Project will not result in any direct impact to historic structures or architectural resources from construction or operation activities, but that indirect visual impacts may result from the Project to NRHP listed or eligible structures or sites within the APE. However, based on

the analysis in the FEIS, the Board does not find that 1.1% increase within the 7 miles viewshed resulting from the changed layout is significantly different from the impacts proposed in the DEIS. The Board further finds that as there are no known archeological resources in the areas of construction impact, the Project construction is not expected to impact known archaeological resources.

Primary mitigation was the avoidance of sensitive archeological sites in the Project layout. Additional mitigation is the implementation of a human remains discovery protocol that, in the event a previously unknown archeological resource is discovered during construction, work in the area will cease until representatives from SHPO and a cultural resources expert can be consulted and a determination is made as to the appropriate action. Mitigation from visual impacts is, as previously noted, difficult to implement. Therefore, as outlined in the Visual Impacts section, the Board will require that Stony Creek provide an offset for unavoidable impacts to these properties by providing funds for improving historic properties.

The Board finds that the mitigation proposed mitigates the potential impacts, some of which are unavoidable, to the maximum extent necessary.

20.0 CUMULATIVE IMPACTS

The Stony Creek Project is a standalone Project unconnected to or reliant on any other project. There are, however, a number of similar projects in the area. SEQRA requires a discussion of cumulative impacts where such impacts are "applicable and significant" (6NYCRR § 617.99(b)(5)(iii)(a)). Cumulative impacts are two or more individual environmental effects that when combined may be significant. Therefore, the Board has evaluated the cumulative impacts that could occur when one considers similar projects in the region. Cumulative impacts to specific resources due to all wind projects in the area are described in the following sections.

20.1 Wetlands and Other Water Resources

WECD have been sited outside of wetlands, however, some impacts as a result of necessary Project interconnections (i.e., roads and power lines) were unavoidable. Cumulatively, construction of the Project will result in disturbances of some wetlands. Disturbances to wetlands and buffers have been kept to a minimum, and wherever possible impacted areas will be restored. Project facilities at other wind power projects will also have minimal individual impacts on wetlands. Since NYSDEC and the USACOE will require function and value compensatory projects to be undertaken, at the watershed level, cumulative impacts have been avoided. Accordingly, the Town Board finds no potential significant adverse impacts to wetlands in the region.

20.2 Wildlife (Other than Birds and Bats)

Impacts due to the Project on wildlife are not expected to be significant. The Town Board finds that construction and operation of the Project is expected to result in minimal loss of habitat as compared with available habitat in the Project Area. As to the regional area, cumulative impacts to wildlife are not expected to be significant. Cumulatively, the multiple wind power projects in the region will result in

minimal loss of habitat as compared with the habitat available within the region. Therefore, the Town Board finds that there will be no significant cumulative wildlife impacts.

20.3 Birds and Bats

The Board has reviewed the potential for cumulative impacts to bird and bat populations in all of Wyoming County. Wyoming County is already host to four operating wind projects, and Stony Creek would be the fifth commercial wind project in the county. No other projects are considered foreseeable in Wyoming County, as the Dairy Hills Wind Farm, proposed for the Wyoming County Towns of Perry and Covington, is not being actively developed and is not considered foreseeable for purposes of this analysis. Similarly, projects previously under development by Noble Environmental Power in Cattaraugus and Allegany counties are no longer being actively developed and are not considered foreseeable.

The evaluation shows cumulative impacts of all existing Wyoming county projects to birds is estimated to range from approximately 560 to 970 birds per year, and the cumulative impacts to bats is estimated to range from approximately 1,600 to 2,900 bats per year. Using the per WECD statistic, the statistic most commonly used to express bird and bat fatality rates, Stony Creek can be expected to have similar levels of bird and bat fatalities as for other wind farms in the county. At those levels, the Board notes no significant adverse impacts to migratory birds, including raptors, passerines and water birds, breeding birds and bats are expected as a result of construction or operation. As to bats, it is recognized that there is uncertainty in bat populations due to the impacts of white nose syndrome (WNS). WNS is a fungus recently discovered in caves in New York that is now causing significant mortality to the U.S. cave bat population. Cave bats, which are most risk from WNS, are typically not the bats most at risk from WECD. Post-construction studies have found the majority (often as many as 75%) of bat fatalities occur to migrating tree bats, not from cave bats, and thus far, migrating tree bats have not been heavily affected by WNS. Stony Creek will perform post-construction bird and bat monitoring in accordance with guidelines of the NYSDEC. After the first two years of studies, additional studies or protocol modifications may be implemented to better understand impacts or to develop mitigation methods to reduce impacts at Stony Creek and other projects in Wyoming County. Such losses are not expected to be biologically significant, and the Town Board agrees with the findings of the Avian and Bat Risk Assessment that concluded the cumulative risk to avian and bat populations from the Project will not be significant.

Additionally, impacts associated with habitat alteration or loss as a result of construction are determined to be minimal and indirect impacts on birds and bats are not expected to be significant as species will avoid the construction area and the loss of forest habitat has been minimized by the changed layout as compared to the DEIS habitat is minimal compared to the overall available habitat.

20.4 Visual

When evaluating wind farms, cumulative visual impacts are concerned with the combined visibility that can occur if a viewer is able to see two or more developments from one viewpoint. There are multiple

farms in the region, although the Dairy Hills project originally included in the analysis has been withdrawn. Cumulative effects are the total impacts on the resource, here the visual resources of the community. The mere increase in the number of WECD visible does not create a significant negative impact, and the "additive effect" here does not present harm to the community. There are no critical or specially designated scenic vistas within the Project viewshed, which largely consists of farmland and forests. The public's enjoyment of particular resources will not be diminished by the increase in visible WECDs. The design of Stony Creek is compatible with the existing wind farms; its addition will not create a jarring change to the vistas currently presented. Wind farms are accepted elements in the landscape of the Town; the Town of Orangeville Comprehensive Plan specifically calls for introduction of renewable energy facilities including wind.

The Stony Creek Wind Farm, in combination with other such projects, does not present such a change in the viewshed character that it would be significantly diminished.

20.5 Noise

The noise study evaluated the cumulative effect of all WECD in the Project operating and found no significant impacts would occur. Because of the separation between facilities, the separation distance will cause any such noise to attenuate so as to not result in a significant cumulative impact, thus there is no anticipated cumulative impact from all of the wind farms in the area taken together

20.6 Socioeconomic Impacts

As the Project is not expected to have a long-term impact on housing and population in the Town, and the existence of other wind farm has not diminished real property values in the area, no cumulative socioeconomic impacts are expected.

20.7 Cultural Resources

The construction of the Stony Creek Project will not have any direct impacts on archaeological resources in the Project area and therefore, there is no potential for cumulative impacts to archaeological resources which would be partially attributable to the Project. The Project has the potential to alter viewsheds from historic properties, and this impact will be additive to the extent that additional WECD are visible from a listed property or property eligible for listing. The impact will vary depending on the number of WECD which may be visible and dependent upon topography and the proximity of viewed WECDs. As WECD in the foreground and within 1.5 miles of the viewer generally have the most significant visual impact, the separation distances of the project should generally ensure that foreground view impacts are not cumulative. To the extent the change to the regional landscape does have a visual impact, the offset mitigation that has been proposed for this Project -which has also been implemented at other projects -is sufficient.

20.8 Environmental Benefits

The Stony Creek Orangeville Project is expected to reduce power plant air pollution and have significant long-term beneficial effects on the use and conservation of energy resources, as will the other area wind farms. Increased use of renewable energy sources may slow down the negative impacts of air emissions on people and wildlife and the overall environment.

The Town Board finds that the cumulative impacts of the Project do not offset the positive aspects of the Project. Rather, the construction and operation of the Project will result in positive environmental, economic, and energy benefits, including the generation of power, using no fossil fuels or water and with zero emissions or waste discharge, that will be provided to the NYISO grid, through existing lines with adequate capacity for the Project.

CERTIFICATION

The members of the Town Board of Orangeville and its legal and technical consultants collectively have spent hundreds of hours in the review of the Draft and Final Environmental Impact Statements and accompanying permit applications. During the application review, the Town Board has reviewed numerous written submissions, including those submitted by the public. They have carefully reviewed, questioned and analyzed with the Town's environmental and legal consultants, the various impacts of, alternatives to, and potential mitigation measures for the respective Projects.

While the Town Board has relied upon numerous experts and State agencies in its review, the decisions herein are the Town Board's alone, and no decision has been deferred to another agency. The Board acknowledges that qualified experts may disagree in their methodology and conclusions, but the Board notes that every expert opinion opposing the Project was evaluated and responded to, and the Town Board has relied on facts and expert opinions grounded in the record. The Town Board also recognizes that subjective opinions may vary, particularly on aesthetic impacts and the suitability of wind farms in the Orangeville community. The Town Board has considered these opinions in its determinations. In addition, the Board has based its decision on the Town Plan and Zoning Law, the physical and socioeconomic setting of the community, and documented facts, benefits, and impacts. Furthermore, the Town Board has acknowledged and considered cumulative and region-wide impacts.

Based on its review and the record before it, the Town Board finds that the potential significant adverse environmental impacts have been either avoided or mitigated to the maximum extent practicable as outlined in this Statement of Findings. Stony Creek, the Project Sponsor, has been flexible in its design, resulting in the improved FEIS Preferred Alternative, seeking to avoid impacts wherever possible, and will implement mitigating conditions that affect both construction and operation identified by the Town, their consultants, as well as other agencies and members of the public.

The Town also finds that while the public benefits from the Project achieve important State and federal policies promoting clean, renewable energy sources, there are very real local benefits in the form of increased revenues for both the municipalities, schools, and local farmers, as more fully outlined in the

Public Benefits section of these Findings. The children of the community will especially benefit from the Town's negotiation of benefits in the form of PILOT payments to the school districts.

The Town Board fully acknowledges that some impacts of the wind generating facilities are unavoidable adverse impacts associated with the siting of any large-scale commercial wind farm. The DEIS and FEIS fully evaluate the extent of these impacts, including the cumulative effects of not only the Stony Creek Project, but other Projects in the area. The members of the Town Board has reviewed the various visual simulations with a keen understanding of the local setting and the largely agricultural uses affected by the presence of 59 WECD spread across several thousand acres.

On balance, and after careful consideration of all relevant documentation and comments, the Town Board believes that they have more than adequate information to evaluate all of the benefits and potential impacts of the Project, individually, and cumulatively, as a basis for considering the pending Application and associated agreements necessary to bring the Project to fruition. Therefore, in accordance with 6 NYCRR § 617.11, SEQRA's required balancing of potential for significant adverse environmental impacts against social, economic and other essential considerations, the Town Board hereby certifies:

- They have fully considered the relevant environmental impacts, facts and conclusions disclosed in the Final Environmental Impact Statement (which incorporates the Draft Environmental Impact Statement by reference) prepared for the Project;
- They have weighed and balanced the relevant environmental impacts with social, economic and other essential considerations;
- They have provided in these Findings the rationale for the Town Board's decision;
- That the requirements of 6 NYCRR Part 617 have been met, including the preparation and adoption of the DEIS and FEIS and this Statement of Findings and Rationale for Decision; and
- That consistent with social, economic and other essential considerations from among the
 reasonable alternatives available, the action is the one that avoids or minimizes adverse
 environmental impacts to the maximum extent practicable, and that adverse environmental
 impacts will be avoided or minimized to the maximum extent practicable by incorporation as
 conditions to the permits or agreements those mitigating measures which were identified as
 practicable.