

4.0 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

The proposed project will result in significant long-term economic benefit to participating landowners, as well as the Towns of Clinton and Ellenburg and Clinton County. When fully operational, the Project will provide approximately 550,000 MWhr of electric power generation each year with no emissions of pollutants or greenhouse gases to the atmosphere. The development is consistent with surrounding land uses and will help maintain the area in agricultural use.

Notwithstanding the positive effects anticipated as a result of the Project, its construction and operation will result in certain unavoidable adverse impacts to the environment. The majority of the adverse environmental impacts associated with the Project will be temporary, and will result from construction activities. Site preparation (e.g., clearing, grading), and the installation of roads, turbines, interconnect cables, operations and maintenance building and the substation will have short-term and localized adverse impacts on the soil, water, wetlands and ecological resources of the site. This construction will also have short-term impacts on the local transportation system, air quality, and noise levels. These impacts will largely result from the movement and operation of construction equipment and vehicles. The level of impact to each of these resources has been described/quantified within Section 3.0 of the DEIS and will generally be localized and/or of short duration.

Long-term unavoidable impacts associated with operation and maintenance of the Project includes changes in community character due to the visibility of the Project, a potential minor increase in noise levels at some receptor locations (residences) within the study area, a minor loss of agricultural land, wildlife habitat changes, wetland impacts and some level of avian mortality associated with bird collisions with the turbines. Impacts to these resources are described more fully in Section 3.0.

Although adverse environmental impacts will occur, they will be minimized through the use of various general and site-specific mitigation measures. With the incorporation of these mitigation measures, the Project is expected to result in positive, long-term overall impacts that will offset the adverse effects that cannot otherwise be avoided.

The following subsections summarize general mitigation measures that have been incorporated into the Project design, and specific mitigation measures proposed to minimize adverse impacts to specific resources.

4.1 General Mitigation Measures

General mitigation measures include compliance with the conditions of various local, state, and federal ordinances and regulations that govern project development, as well as the inherent characteristics of the Project. The primary government review/approval processes that apply to the Project were listed in Section 2.

SEQRA regulations require environmental review of proposed development projects so that potential adverse impacts and public concerns can be identified prior to project implementation and avoided or mitigated, to the extent practicable. This DEIS was prepared in accordance with these regulations, and provides a primary means by which the potential costs and benefits of the Project are described and weighed in a public forum. Compliance with SEQRA regulations will assure that public and agency comments are solicited and appropriately addressed, project alternatives are evaluated, and potential adverse impacts are identified and mitigated to the extent practicable. Response to comments and preparation of a Final Environmental Impact Statement (FEIS) will provide the information necessary for lead agency and other involved agencies to draw conclusions (Findings Statement) regarding the Project's overall environmental impacts and impose conditions on its approval, if necessary.

Compliance with the other various federal, state, and local regulations governing the construction and design of the proposed project also will serve to minimize adverse impacts. Construction activities and building designs will be in compliance with state and local building codes and federal OSHA guidelines to protect the safety of workers and the public. State permitting required by the NYSDEC will serve to protect water resources, while state and county highway permitting will assure that safety, congestion, and damage to highways in the area is avoided or minimized. Compliance with Town ordinances that require building and highway permits will further serve to minimize impacts of the Project.

Along with regulatory compliance, the Project has been designed in accordance with various siting criteria, guidelines, and design standards that serve to avoid or minimize adverse environmental impacts. These include:

- Siting turbines in compliance with all local set-back requirements to minimize noise, shadow flicker, and public safety concerns.
- Following New York State Department of Agriculture & Markets Agricultural Protection Guidelines.
- Utilizing existing disturbed areas for stream and wetland crossings.
- Siting turbines in open field areas to the extent possible to minimize forest clearing. Turbines will be located in recently logged forests.
- Using existing roads for turbine access whenever possible, to minimize impact to soil, ecological, and agricultural resources.
- Project design, engineering, and construction will be in compliance with industry standards and codes to assure safety and reliability.
- Limiting turbine lighting to the minimum allowed by the FAA to reduce nighttime visual impacts, and following lighting guidelines to reduce the potential for bird collisions.
- Construction procedures will follow Best Management Practices for sediment and erosion control.
- Turbines will include grounding and automatic shutdown/braking capabilities to minimize public safety concerns.

4.2 Specific Mitigation Measures

Project development and operation will also include specific measures to mitigate potential impacts to specific resources. These were described in detail in Section 3.0, but generally include the following:

- Developing and implementing a complaint resolution procedure to address landowner concerns throughout project construction and operation.
- Developing and implementing a wetland mitigation plan.
- Developing and implementing various plans to minimize adverse impacts to air, soil, and water resources, including a dust control plan, sediment and erosion control plan, and Spill Prevention, Control, and Countermeasure (SPCC) plan.
- Undertaking a pre-construction breeding bird survey to avoid impacting any nesting listed species during construction.
- Video documentation of existing road conditions, development of a road improvement plan, and undertaking public road improvement/repair at no cost to the Town or County.
- Post-construction avian and bat monitoring studies are proposed for a one year period to document project impacts on birds and bats.
- Entering into a Memorandum of Agreement (MOA) with the SHPO to fund a historic preservation/restoration program as mitigation for unavoidable visual impacts on historic resources.
- Entering into a PILOT agreement with the local taxing jurisdictions to provide a significant predictable level of funding for the town, county, and school districts.
- Development of an emergency response plan with local first responders.

4.3 Environmental Compliance and Monitoring Program

In addition to the mitigation measures described above, the Applicant will develop an environmental compliance program and employ environmental monitors to ensure compliance with all environmental commitments and permit requirements. The environmental compliance program will include the following components:

1. Planning – Prior to the start of construction, the environmental monitors will review all environmental permits and, based upon the conditions/requirements of the permits, prepare an environmental management document that will be utilized for the duration of the Project. This document will outline all environmental requirements for construction and restoration included in project permits and approvals.
2. Training – The environmental monitors will hold environmental training sessions that will be mandatory for all contractors and subcontractors. The purpose of the training sessions will be to explain the environmental compliance program in detail prior to the start of construction.
3. Preconstruction Coordination – Prior to construction, the contractor(s) and the environmental monitors will conduct a walkover of areas to be affected by construction activities. This walkover will identify landowner restrictions, sensitive resources, limits of clearing, proposed stream or wetland crossings, and layout of sediment and erosion control features. The limits of work areas, especially in sensitive resource areas, will be defined by flagging, staking or fencing prior to construction, as needed.

4. Construction and Restoration Inspection – The monitoring program will include the daily inspection of construction work sites by the environmental monitor. The monitor will be present during construction at environmentally sensitive locations, will keep a log of daily construction activities, and will issue periodic/regular reporting and compliance audits. Additionally, the monitor will work with the contractors to create a punch list of areas for restoration in accordance with issued permits. Following construction, the Applicant or an environmental monitor will maintain a monitoring presence for two year following completion of site restoration (in accordance with NYS&M requirements) to evaluate areas disturbed during construction and assure that agricultural and ecological functions and values are restored and maintained over the long term.