

3.4.3 Mitigation Measures

The proposed Project transportation routes have been selected to minimize impacts to roads and surrounding communities. The number of roads used for material and equipment transportation has been limited to the minimum needed for construction. Material delivery routes would, in most cases, follow the routes established for turbine component delivery. Aside from the oversized vehicles that would deliver turbine and tower components, construction vehicles would be similar in nature to vehicles currently traveling over the road network and therefore would likely not require special mitigation measures.

Construction equipment and workforce vehicles would not be parked along public roadways, but rather in designated parking areas, so as to preserve safety along local roadways. In consultation with appropriate local officials, a Project speed limit would be established. SLW would work with local officials to enforce all traffic safety requirements, including the Project speed limit. Construction vehicles may create dust plumes on gravel roads. The Project would develop a dust control plan to ensure that visibility along roadways is maintained. See Section 3.9 for further detail on the dust control plan.

SLW would obtain all necessary permits from the New York State Department of Transportation (NYSDOT) and respective local highway department(s) in order to make necessary road improvements and to operate oversize vehicles. Construction related wear and tear to county and local roads would be discussed with the entities that manage the transportation system and an appropriate strategy for road restoration would be developed. SLW would continually assess work areas approximately two weeks ahead of construction and would provide schools (during the school-year), police, fire, and emergency service agencies with advance notice of lane or road closures.

3.5 Land Use and Zoning

Land use and zoning in the Project area was determined through review of local town laws and aerial photographs. Land use and zoning are discussed in terms of regional land use patterns, Project area land use and zoning, agricultural land use, and future land use.

3.5.1 Affected Environment

Existing land use, potential impacts, and proposed mitigation measures are discussed in the following sections.

3.5.1.1 Regional Land Use Patterns

The Project area is located in the western portion of Jefferson County in the Towns of Cape Vincent and Lyme. Jefferson County is located in northwestern New York and is bordered by the St. Lawrence River and Lake Ontario on the north and west, St. Lawrence County to the northeast, Lewis County to the southeast, and Oswego County to the south. Jefferson County is primarily rural and dominated by agricultural land, scattered rural homes, and farms. The major population center of the County is the City of Watertown, which is about 25 miles southeast of the Project area. This city, including other villages and hamlets in the County are primarily residential.

In terms of land use, Jefferson County is characterized by 1,028 farms consisting of 330,561 acres (Census of Agriculture, 2006) of active agricultural land, and residential land uses concentrated in and around villages and hamlets. Pockets of commercial and industrial development are scattered throughout the County along major transportation corridors. The highest percentage of land use by number of parcels for the County is residential properties (62.8 percent), followed by vacant land (21.8 percent), and agricultural properties at 5.1 percent (New York State Office of Real Property Services, 2006).

Agriculture is a significant contributor to the County's overall economy. It is one of the major dairy-producing counties (12th) in the State. Other important agricultural products in the County include: raising chickens for egg production, honey production, beef production, and sugar bushes for maple syrup production. Main crops in the County include: hay, corn, and small grains (Yarnall, 2002). Despite the importance of agriculture, employment in the agricultural sector has declined over the years and only accounts for 3.4 percent of total employment in the County in 2000. Meanwhile, the educational, health, and social services (24.4 percent); retail trade (14.2 percent); and public administration (10.4 percent) sectors have grown in importance (U.S. Census Bureau, 2006).

3.5.1.2 Project Area Land Use and Zoning

The Towns of Cape Vincent and Lyme are predominantly rural with dairy farming leading the agricultural industry in the area. The highest percentage of land use by number of parcels for both towns is residential properties in Cape Vincent (60.1 percent) and Lyme (62 percent), followed by vacant land in Cape Vincent (25.3 percent) and Lyme (28.4 percent). The third highest percentage of land use by number of parcels was agricultural properties in Cape Vincent (7.4 percent) and 4.2 percent in Lyme (New York State Office of Real Property Services, 2006).

Both towns have zoning ordinances, and review of the proposed Project would be covered under New York’s State Environmental Quality Review Act. In addition to town regulations for both Cape Vincent and Lyme, a building permit would be required through Jefferson County.

3.5.1.3 Towns of Cape Vincent and Lyme

Town of Cape Vincent: The Town of Cape Vincent Zoning Ordinance does not have specific regulations placed on wind energy facilities or turbines; however, the proposed Project would require Site Plan Approval by the Planning Board. Following approval and any additional reasonable conditions that may apply, a Zoning Permit and Certificate of Compliance is required through the Code Enforcement Office. Once all town permits are finalized, a Building Permit through Jefferson County is required prior to construction. The proposed Project is located solely within the Agricultural Residential District.

Town of Lyme: At this time, the Town of Lyme Zoning Ordinance does not have specific regulations placed on wind energy facilities or turbines, but the proposed Project would require a Special Use Permit, followed by a Zoning Permit and Certificate of Compliance. The purpose of the special permit procedure is to allow the Zoning Board of Appeals to attach reasonable safeguards and conditions to special uses (Town of Lyme, 1989).

A portion of the proposed overhead transmission line would cross the Chaumont River in the Town of Lyme, which is within the coastal zone delineated by the New York Department of State’s Division of Coastal Resources in its Coastal Management Program (CMP). The inland coastal boundary is variable by region (the Town of Lyme is in the Great Lakes Region) but generally is 1,000 feet from the shoreline in non-urbanized areas, and 500 feet or less from the shoreline in urbanized areas. In some areas, the boundary may extend inland up to 10,000 feet to encompass significant coastal resources. The proposed overhead transmission line would cross a portion of the Chaumont River, which lies within a significant coastal resources area and is thus in the state-designated coastal zone.

The applicant of a permit for development in the coastal zone must submit to the lead federal agency for that permit a “Statement of Consistency” that the project is consistent with New York’s federally approved coastal zone management program and policies. The New York Department of State’s Division of Coastal Resources must agree with this Statement and issue a “Consistency Determination” before any federal permit may be issued for the Project (15 CFR 930.60).

SLW will submit an application to cross the Chaumont River to the U.S. Army Corp of Engineers under Section 404 of the Clean Water Act. The NYS Division of Coastal Resources Consistency Determination must be issued before the Corps may issue a notice to proceed with construction of the overhead transmission line over the Chaumont River.

The proposed Project would follow the State's applicable coastal policies. Specifically, the Project would be consistent with the following policies: 11-17 (flooding and erosion hazards policies), 27 (energy policy), 30-35, 41 (water and air resources policies), and 44 (wetlands policy). All of the State's policies are derived from existing laws and regulations administered by various State agencies. The NYSDEC administers many of the programs found in the State's policies (e.g., the Department operates regulatory programs, which provide protection to tidal and freshwater wetlands [Policy 44], restrict development and other activities in flood and erosion hazard areas [policies 11-17], and protect air and water resources [policies 30-35 and policies 40-43]). Other agencies, such as the Public Service Commission and the State Board on Electric Generation Siting and the Environment administer programs that regulate the siting of energy transmission facilities and regulate the location of electric power plants.

3.5.1.4 Agricultural Land Use

Approximately 1,028 working farms occupy 330,561 acres in Jefferson County according to the 2002 U.S. Department of Agricultural National Agricultural Statistics Service (Census of Agriculture, 2006). The leading agricultural products in Jefferson County include: dairy products (78.1 percent), cattle and calve products (9.3 percent), hay and silage products (5.3 percent), colonies of bees and honey products (1.6 percent), and 1.6 percent as corn used for grain (Yarnall, 2002). According to U.S. Census Bureau (2006) statistics, 3.4 percent of the population was engaged in farming in 2000.

The Project area affects one agricultural district (Jefferson County Agricultural District #2 North) and the entire Project area is located in this district. Agricultural land use is a significant component of the Project area with about 7,400 acres of the Project area (82 percent) in row crops, field crops, or pastureland. The Project area includes approximately 102 working farms, most of which are dairy farms. The patchwork of fields and farms located in the many valleys edged by ridge tops with steep slopes is what defines the landscape/community character of the majority of the Project area. Within the Project area, approximately 75 percent of the area is designated as prime farmland or farmland of statewide importance (Table 3-9).

Table 3-9
Summary of Prime Farmland¹ in the Project Area

Farmland Class	Total Acres by Farmland Class	Total Percent by Farmland Class
Prime Farmland	1173	13
Prime Farmland if Drained	1852	20
Not Prime Farmland	2230	25
Farmland of Statewide Importance	3789	42
N/A ²	21	< 1

¹ Source: Soil Survey Staff, Natural Resource Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database for *Survey Area, State* [Online].

² Soil data were not provided for this component.

3.5.1.5 Future Land Use

Other than the proposed Project, future land use patterns in the area are anticipated to remain largely unchanged for the foreseeable future. Communication with the Town of Cape Vincent (Edsall, 2006) found one proposed industrial development (1 acre of land bought by the Town for water storage) outside of the Project Area. Various residential developments, including a proposed seasonal trailer park development would be dispersed throughout the Town. Communication with the Town of Lyme (Staudenmayer, 2006) found no commercial or industrial proposed or planned future developments. Several residential developments have been proposed in the Village of Chaumont and on the outskirts of town.

3.5.2 Potential Impacts

The Project would have impacts on land use. These would include temporary, construction-related impacts, as well as permanent, long-term impacts. These impacts are described below.

3.5.2.1 Towns of Cape Vincent and Lyme

The proposed Project was designed to meet or exceed all of the requirements in the Towns of Cape Vincent and Lyme land use and zoning ordinances. The proposed Project is compliant with local zoning and land use regulations in Cape Vincent and Lyme.

3.5.2.2 Agricultural Land Use

Most of the proposed Project would be built on or adjacent to agricultural lands. Construction of the Project would result in the temporary disturbance of approximately 191 acres of agricultural land and the permanent conversion of approximately 98 acres of agricultural land to wind turbines, a substation, and access roads.

Two types of impacts may result from wind facility construction on agricultural lands. The first is the permanent loss of productive agricultural land because it would be used for Project facilities such as access roads and turbine foundations. The second potential impact is reduced agricultural productivity of the soils disturbed during construction. Both types of impacts can be minimized or completely avoided with proper planning.

3.5.2.3 Future Land Use

The proposed Project would not interfere with alternative future plans to develop the land to be occupied by the wind energy facility or its ancillary facilities. Minimum buffers from wind turbines place a slight constraint on development that can be co-located on parcels that have wind turbines or are adjacent to wind turbines. However, capturing the wind asset provides an individual benefit to landowners, an economic benefit to the local community, and energy security, as well as environmental and human health benefits to the state. The buffers are not a significant impact on other equally desirable uses. There appears to be no conflict between the proposed Project and future residential developments.

3.5.3 Mitigation Measures

3.5.3.1 Towns of Cape Vincent and Lyme

The proposed Project is compliant with local zoning and land use regulations in Cape Vincent and Lyme.

3.5.3.2 Agricultural Land Use

To minimize impacts to agricultural resources, the Project has been sited and would be built in accordance with guidelines provided by the New York State Department of Agriculture and Markets (Appendix A). The agricultural protection measures provide guidance for siting wind power facilities, constructing access roads, staging and storage areas, vegetation clearing and disposal, excavation and backfilling, turbine erection, and restoration.

3.5.3.3 Future Land Use

Construction and operation of the proposed Project would not have a significant impact on future land uses. Consequently, no mitigation is necessary to address these impacts.

3.6 Utilities and Community Services

The Towns of Cape Vincent and Lyme are served by several community facilities and services including: public utilities, police protection, fire protection and emergency response, health facilities, education facilities, and parks and recreation facilities.