



Cassadaga Wind Project

Case No. 14-F-0490

1001.4 Exhibit 4

Land Use

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EXHIBIT 4 LAND USE

(a) Map of Existing Land Uses

Figure 4-1 illustrates existing land uses within a 5-mile radius of the Facility. This map was prepared using publicly available data from the Chautauqua County GIS Department and the classification codes of the New York Office of Real Property Services (NYSORPS). The following land uses classification codes occur within 5 miles of the Facility: 100 – Agricultural; 200 – Residential; 300 – Vacant Land; 400 – Commercial; 500 – Recreation and Entertainment; 600 – Community Services; 700 – Industrial; 800 – Public Services; and 900 – Wild, Forested, Conservation Lands and Public Parks.

The NYSORPS has classified approximately 3,576 acres within the Facility Site as Vacant Land. Approximately 2,075 acres of this land is currently enrolled in a NYS Certified Agricultural District, which can include land and on-farm buildings that contribute to the production of crops, livestock, and livestock products (e.g., field and row crops, orchards, livestock, poultry, Christmas trees, maple sap, apiary products, timber operation, nursery stock and flowers, commercial horse boarding, aquaculture, fur-bearing animals, and woody biomass). The analysis of vegetative cover types (see Exhibit 22) can also help understand the current uses of this vacant land. Approximately 2,467 acres of the vacant land are forested, 898 acres are active agricultural land, 119 acres are successional shrubland, 68 acres are successional old field, 22 acres are disturbed/developed (i.e., characterized by the presence of buildings, parking lots, paved and unpaved roads, lawns, gravel mines, and gas/oil infrastructure), and 2 acres are open water. For additional information about vegetative communities at the Facility Site, see Exhibit 22.

To determine the location of conservation program lands in the vicinity of the Facility Site, the Applicant reviewed the National Conservation Easement Database (NCED), an initiative of the U.S. Endowment for Forestry and Communities to compile records from land trusts and public agencies throughout the United States. This public-private partnership brings together national conservation groups, local and regional land trusts, and state and federal agencies. Although the NCED contains records of numerous conservation easements in Chautauqua County (see Figure 4-2), there are none within the Facility Site. The closest conservation easements to the proposed Facility are located in the Towns of Stockton and Cherry Creek, approximately 1.5 and 1.9 miles from the nearest proposed turbine site, respectively. Both of these easements are held by the U.S. Natural Resources Conservation Service as part of the Wetlands Reserve Program. There is no public access to either site. There will be some visibility of the Facility from portions of these conservation easement lands. However, there will be no direct impacts to the lands or the wetland functions and values protected by the easements.

In 1974, the State of New York enacted the 480-a forest tax law to encourage the long-term sustainable management of woodlands to produce forest crops and increase the likelihood of a stable forest economy. The 480-a forest tax law provides property tax savings for landowners who enroll in the program. To be eligible, a forest tract must consist of at least 50 contiguous acres. The landowner must commit to follow a management plan prepared by a forester and approved by the New York State Department of Environmental Conservation (NYSDEC) for the next succeeding ten years, beginning each year they receive the tax exemption. The management plan must identify scheduled commercial harvests, noncommercial thinnings, road construction, and other management practices, and include a schedule that shows the work to be done each year. Failure to adhere to the annual commitment in the work schedule of the management plan will result in revocation of the certificate of approval by the NYSDEC, and the imposition of penalty or roll-back taxes by the county (NYSDEC, 2016a). The NYSORPS assigns the classification code 912 to parcels enrolled in the 480-a program. Based on review of the NYSORPS classification codes associated with the parcel data provided by Chautauqua County, there are no Facility parcels enrolled in the 480-a program. However, according to discussions with local landowners, the Applicant understands that four parcels in the Town of Cherry Creek are enrolled in the 480-a program, two owned by Charrington Creek Inc. (236.00-2-31.1 and 253.00-1-12), and two owned by Bauer Family Limited (219.00-1-25 and 219.00-1-34).

Figure 4-2 depicts agricultural district land at the Facility Site. State-certified Agricultural Districts cover a majority of land within the Town of Charlotte, and large portions of the Towns of Cherry Creek and Arkwright. Approximately 5,199 acres within the Facility Site (64%) are enrolled in a NYS Certified Agricultural District, established pursuant to the New York State Agriculture and Markets (NYSDAM) Law. The purpose of agricultural districting is to encourage the continued use of farmland for agricultural production. The program is based on a combination of landowner incentives and protections, all of which are designed to forestall the conversion of farmland to non-agricultural uses. Therefore, although this designation does not wholly restrict substantial changes in land use, it suggests that such changes are unlikely to occur in the near future. Numerous wind farms have been built within Certified Agricultural Districts in New York State, and when appropriately designed and built, such projects are consistent with, and supportive of, agricultural land uses and districts, and allow continued use of farmland for agricultural production. Table 4-1 summarizes impacts to soils within designated agricultural district lands. The majority of these impacts will be temporary, and subject to restoration activities following construction.

Table 4-1. Facility Impacts to Agricultural District Lands

District	Total Soil Impact	Temporary Soil Impact	Permanent Soil Impact
District 8	5.0	2.0	3.0
District 10	84.8	73.7	11.1
District 13	162.0	141.5	20.5
Total	251.8	217.2	34.6

Mitigation measures to protect and restore any agricultural soils within the Facility Site will be undertaken during and after construction, and will include full restoration of temporarily disturbed agricultural land according to the *New York State Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Wind Power Projects* (see NYSDAM Guidelines in Appendix D). For example, topsoil will not be stripped during saturated conditions when such actions would damage agricultural soils. Existing farm roads will be used for temporary access to farmland to the extent practicable. However, if temporary roads in new locations are necessary, topsoil in the work area will be stripped and stockpiled alongside the area of disturbance, (topsoil will be kept separate from subsoil), on the property from which it was removed. All vehicular movements and construction activity will be restricted to areas where topsoil has been removed. All temporarily disturbed agricultural soils will be restored following construction. This process will generally involve the following sequence of activities:

1. Removal of gravel or other temporary fill.
2. Decompaction of compacted subsoils to a depth of 18 inches using a deep ripper or heavy duty chisel plow.
3. Disking and removal of stones (four inches and larger in size) from decompacted subsoil.
4. Spreading of stockpiled topsoil over the decompacted subsoil, and reestablishing pre-construction contours to the extent practicable.
5. Disking and removal of stones (four inches and larger in size) following the spreading of topsoil.
6. Seeding and mulching topsoil. Seed selection in agricultural fields will be based on guidance provided by the landowner and NYSDAM personnel.

In addition, specific to agricultural land impacted by the Facility, the Applicant will provide a monitoring and remediation period of no less than two years immediately following the completion of initial restoration. The two year period will allow for the effects of climatic cycles such as frost action, precipitation, and growing seasons to occur, from which various monitoring determinations can be made. The monitoring and remediation phase will be used to identify any remaining agricultural impacts associated with construction that are in need of mitigation and to implement the follow-up restoration. General conditions to be monitored include topsoil thickness, relative content of rock and large stones, trench settling, crop production, drainage, and repair of severed fences. Impacts will be

identified by the environmental monitor through on site monitoring of all agricultural areas impacted by construction and through contact with respective farmland operators and NYSDAM.

(b) Transmission Facilities Map

Figure 4-3 illustrates existing overhead and underground major facilities for electric, gas, and telecommunications within a 5-mile radius of the Facility. This data was obtained from Platts, a division of McGraw Hill Financial, Inc. for use in the required Article 10 mapping. Also depicted are gas and oil wells, based on data obtained from the NYSDEC Division of Mineral Resources, and gas transmission lines, based on data obtained from the Department of Public Service (DPS).

(c) Tax Parcel Map

Figure 4-4 illustrates existing boundaries of parcels where Facility components will be located, and the boundaries of those parcels within 2,000 feet of such properties. This map shows land use, tax parcel number, and owner of record of each property, and any publically known proposed land use plans for any of these parcels. Parcel and land use data was obtained from the Chautauqua County GIS Department and through consultations with the Towns.

(d) Zoning District Map

Zoning jurisdiction in Chautauqua County is at the town/village level. Figure 4-5 illustrates existing and proposed zoning districts within a 5-mile radius of the Facility, based on data obtained from local governments. The Applicant has reviewed zoning regulations for each of the twelve towns and four villages within 5-miles of the proposed Facility: Arkwright, Cassadaga, Charlotte, Cherry Creek (Town), Cherry Creek (Village), Conewango, Dayton, Ellery, Ellington, Gerry, Leon, Pomfret, Sinclairville, South Dayton, Stockton, and Villenova. A summary of each Town's zoning regulations is presented below, with a focus on the permitted and prohibited uses within each zoning district. Please note that the level of detail in these summaries varies based on the level of detail included in each Town/Village's zoning regulations.

Town of Arkwright

Adopted in January 1988, the Zoning Law of the Town of Arkwright establishes three zoning districts, all of which are located within 5 miles of a Facility component: Agricultural-Residential (AR1), Transition (T), and Flood Plain (FP). AR1 Districts were established to promote maintenance of agricultural lands and to allow large lot residential development. T Districts were established to provide for the maintenance of rural land, primarily for large lot

residential development, as well as agricultural uses. T Districts also allow municipal sewage or water systems and some commercial uses. FP Districts consist of areas identified by the Federal Insurance Administration's Flood Insurance Rate Maps as being susceptible to flooding.

In AR1 Districts, allowable uses by right include single family dwellings, duplexes, mobile homes, accessory structures such as garages and sheds, agriculture, fur farms, commercial sawmills, commercial nurseries/greenhouses, public utilities, private swimming pools and tennis courts, blacksmith shops, municipal offices, and riding academies/stables. Additional uses allowed with special use permit include bed and breakfasts, nursing homes, hospitals, antique shops, bakeries, drug stores, malls, supermarkets, corner groceries, newsstands, hardware stores, feed and seed shops, pet stores, department stores, florists, gas compressors, commercial laboratories, theaters, golf courses, churches, fraternal meeting facilities, daycare centers, public parks, schools, gravel/sand operations, game farms, fish hatcheries, preserves, libraries, museums, galleries, private windmills; solar systems, private camps, airports, cemeteries, communication towers, gun clubs, loading/unloading facilities, and commercial parking lots.

In T Districts, allowable uses by right include single family dwellings, duplexes, mobile homes, accessory structures such as garages and sheds, agriculture, fur farms, commercial sawmills, commercial nurseries/greenhouses, public utilities, private swimming pools and tennis courts, blacksmith shops, municipal offices, commercial laboratories, and riding academies/stables. Additional uses allowed with special use permit include bed and breakfasts, nursing homes, hospitals, antique shops, bakeries, drug stores, malls, supermarkets, corner groceries, newsstands, auto sales, hardware stores, feed and seed shops, pet stores, kennels, animal shelters, business offices, furniture stores, department stores, florists, banks, bars, motels/hotels, gas compressors, theaters, golf courses, churches, fraternal meeting facilities, daycare centers, public parks, schools, gravel/sand operations, junk yards, mills, warehouses, machine shops, game farms, fish hatcheries, preserves, libraries, museums, galleries, private windmills; solar systems, private camps, airports, cemeteries, communication towers, gun clubs, loading/unloading facilities, public tennis courts, and commercial parking lots.

The Zoning Law does not specify any permitted uses for FP Districts.

Facility components proposed within the Town of Arkwright consist of one turbine, and the associated access road and buried collection line, all of which are sited in the AR1 District. Wind energy conversion systems are an allowable use by special use permit in AR1 Districts, in accordance with Section 401(C) of the Town of Arkwright Zoning Law, as amended by Local Law No. 2 of 2007. See Exhibit 31 for a full analysis of the local laws and ordinances in the Town of Arkwright, including zoning regulations.

Village of Cassadaga

The Board of Trustees of the Village of Cassadaga adopted the Zoning Law as Local Law No. 1 of the Year 2002, thereby amending Local Law 1 of 1974 and all amendments to zoning thereafter. The Village of Cassadaga is divided into four zoning districts: Residential (R), Business (B), Conservation (C), and Industrial (I). There are no Facility components located within the Village limits; however, the entire Village and all four zoning districts are located within 5 miles of a Facility component. R Districts were established to primarily provide for new subdivisions, single-family developments, or to protect existing residential neighborhoods from encroachment of other non-compatible uses. R Districts are served by a municipal utility system, and very few other uses are allowed in this District. The purpose of the B District is to promote retail and service uses for the use of Cassadaga residents and visitors, and to encourage aesthetically appealing businesses with safe ingress and egress. The purpose of I Districts is to promote a variety of wholesale and industrial uses not associated with nuisances or large utility systems. Most agricultural and residential uses are allowed in order to provide reasonable alternatives prior to industrial development. C Districts are established to provide protection for the preservation of natural features. Some agricultural uses are allowed.

Uses requiring no permit in all zoning districts include agricultural land use, private parking, and solar energy systems. Small roadside stands, non-commercial farm animals, and gasoline tanks are allowed without permit in all districts except C. Private horticulture is allowed without permit in all districts except B. Ponds require no permit in C Districts. Wildlife habitat and commercial parking lots require no permit in R and C Districts.

The following uses are allowed by right in the districts indicated: single-family dwellings, duplexes, daycare centers, libraries, museums, galleries, boathouses, docks, public piers, private swimming pools and tennis courts (R, B); bed and breakfasts, multiple-family dwellings, private horticulture, liquor stores, animal shelters/hospitals, banks, bars, funeral homes, photography studios, restaurants, golf courses, marinas, tackle shops (B); antique shops, auto sales, bakeries, corner groceries, drug stores, florists, feed and seed shops, furniture/appliance shops, gift shops, newsstands, pet stores, barber/beauty shops, car washes, custom workshops, kennels, dry cleaning, realty/business offices, locksmiths, commercial parking lots (B, I); agricultural buildings (B, I, C); commercial greenhouses/nurseries (B, C); vehicle service stations, auto repair, electronic and small parts manufacturing, cemeteries, crematories (I); and private camps (C).

The following additional uses are allowed by special use permit in the districts indicated: antique shops, corner groceries, gift shops, bars, barber/beauty shops, custom workshops, funeral homes, kennels, photography studios, realty/business offices, locksmiths, restaurants, cemeteries, crematories, golf courses, marinas, tackle shops, ponds

(R); fraternal meeting facilities, schools, commercial camps/cottages, riding academies/stables, ski areas, public swimming pools (R, B); mobile homes, fur farms, wineries, churches (R, B, I); bed and breakfasts, multiple-family dwellings (R, I); supermarkets, vehicle service stations, hotels/motels, electronic and small parts manufacturing, theaters (B); department stores, gravel/sand operation, commercial laboratory, heavy industry, food and general manufacturing, machine shops, loading/unloading facilities (B, I); game farms, fish hatcheries, preserves (B, I, C); single-family dwellings, duplexes, nursing homes, fruit processing plants, commercial greenhouses/nurseries, commercial sawmills, animal shelters/hospitals, warehouses, gas/oil well, daycare centers, libraries, museums, galleries, private windmills (I); and forestry/lumbering/reforestation (C).

Town of Charlotte

The Town of Charlotte Zoning Law was last updated November 2, 2012. The Town is divided into three zoning districts: Agricultural and Residential (AR-1), Commercial-Industrial (C-I), and Flood Plain (FP). Facility components are located within all three zoning districts. AR-1 Districts were established to promote maintenance of agricultural lands as well as to allow large lot residential development. The providing of municipal sewage or water systems is not recommended or encouraged. C-I Districts were established to accommodate general commercial, industrial and related structures and uses. FP Districts consist of areas identified by the Federal Insurance Administration's Flood Insurance Rate Maps as being susceptible to flooding. According to Section 502 of the Zoning Law, all uses shall be assumed to be prohibited unless specifically listed as a "Use by Right," "Use Requiring No Permit," or "Use by Special Use Permit," unless it is determined in a written decision by the Board of Appeals that said use is similar to permitted uses and is not inherently a nuisance in the Town of Charlotte. Permitted uses within each zoning district are summarized below.

In AR-1 Districts, allowable uses by right include agricultural buildings and land use, farm animals, churches, church parsonage/rectory, residences (including single family dwellings, duplexes, manufactured homes, and garages), lumbering/reforestation, gravel and sand operations, ponds, municipal offices and other public buildings, parks, garage/yard sales, home daycare centers, private swimming pools and tennis courts, TV dish antennas, fences/walls, seasonal camps, game farms, fish hatcheries, utility lines and support buildings, and wind energy systems. Additional uses allowed with special use permit include airport/airstrips, bed and breakfasts, blacksmith shops, fur farms, commercial cabins/cottages, campgrounds, cemeteries, communication towers, farm markets, and golf courses. Facility components sited in the AR-1 District include turbines, access roads, buried and overhead collection lines, meteorological towers, generator lead line, collector substation, O&M building, and laydown area. Wind energy conversion systems are an allowable use by special use permit in AR-1 Districts, in accordance with Section 618 of the Zoning Law. See Exhibit 31 for a full analysis of the local laws and ordinances in the Town of Charlotte, including zoning regulations.

In C-I Districts, a permit is required for all uses allowed in the AR-1 District by right. Additional uses allowed by special use permit include restaurants, bars, retail stores/shops, hotels/motels, car washes, daycare centers, banks, apartment buildings/condos/townhouses, amusement parks, animal shelters/hospitals, electronic and small parts manufacturing, fraternal meeting facilities, light and heavy industry, nursing homes, hospitals, gas compressors, business offices, funeral homes, junk/scrap yards, manufacturing, nurseries/greenhouses, commercial parking lots, sawmills, ski areas, public swimming pools and tennis courts, self-storage businesses, tire dumps, and zoos. The generator lead line is the only Facility component located in the C-I District. Utilities, specifically including utility lines, are a use by right in this District.

The Zoning Law does not specify any permitted uses for FP Districts. However, the Town of Charlotte Local Law No. 2 of 1987 entitled Flood Damage Prevention is incorporated by reference into the 2012 Zoning Law, and given full force and effect. The generator lead line and a co-located section of overhead collection line are the only Facility component located in the FP District. With regard to utilities, the Flood Damage Prevention Law aims to minimize flooding damage to utilities (specifically including electric lines) by requiring such facilities be designed to prevent water from entering the component. The transmission line and overhead collection line will be suspended from poles at a height well beyond anticipated flood levels. Only one pole will be located within the FP District; the foundation of this pole will be anchored or otherwise engineered to prevent floatation, collapse, or lateral movement of the structure.

Town of Cherry Creek

The Zoning Ordinance for the Town of Cherry Creek, adopted September 1, 1972, established three zoning districts: Agricultural & Commercial (I); Recreational, Commercial, & Residential (II); and Residential, Recreational, & Agricultural (III). Subsequent amendments to the Zoning Ordinance include Local Law No. 2 of 2011, the Wind Energy Facilities Law, which regulates the placement of wind energy conversion systems (WECS); and Local Law No. 1 of 2012, the Recreational Resort District Law, which established a fourth zoning district: Residential, Recreational, Agricultural, & Recreational Resort (IV).

All land uses of a farming nature are permitted in Districts I, III, and IV. Industrial and commercial uses (including retail businesses, banks, theaters, restaurants, garages, and filling stations) are permitted in Districts I and II. In districts suitable for residential use (i.e., Districts II, III, and IV), allowable uses include dwellings, churches, public schools, parks, playgrounds, hospitals, agricultural operations, and public utility structures. Additional uses allowable upon issuance of special use permit include private recreation facilities, college/universities, libraries, municipal office buildings, private schools, cemeteries, philanthropic institutions, airports, correctional facilities, and

convent/monasteries. In districts suitable for recreational use (i.e., Districts II, III, and IV), allowable uses include country clubs, snowmobile clubs, rod and gun clubs, saddle clubs, swimming pools, and other recreational organizations. Facility components sited in District III include turbines, access roads, buried and overhead collection lines, and laydown area. Wind energy conversion systems are permitted in District III with approval by the Town Board of a zoning change for a Wind Overlay District. See Exhibit 31 for a full analysis of the local laws and ordinances in the Town of Cherry Creek, including zoning regulations.

District IV was established in 2012 to provide a mix of rural uses that will provide opportunities to diversify both the agricultural and recreational economy of the district. Allowable uses by right include small equestrian facilities (10 or fewer horses), campgrounds, ski resorts, golf courses, private wildlife preserves, indoor and outdoor swimming pools and tennis courts, walkways, bike paths, equestrian trails, nature trails, ski trails, snowmobile trails, and multi-family dwellings, condominiums, and cluster developments located on the premises of a recreational resort. Additional uses allowed with special use permit include miniature golf, convention and conference center/retreat facilities, large equestrian facilities (greater than 10 horses), driving ranges, tourist resorts, water recreation facilities, and restaurants, bars, taverns, lodging facilities, multi-family dwellings, condominiums, and cluster developments not located on the premises of a recreational resort.

Village of Cherry Creek

No zoning law or ordinance has been adopted in the Village of Cherry Creek (Gross, 2016).

Town of Conewango

No zoning law or ordinance has been adopted in the Town of Conewango (Cattaragus County, 2016).

Town of Dayton

The Code of the Town of Dayton, which includes zoning regulations, was adopted August 26, 2002. The municipality is divided into four zoning districts: Residential (R-1), Business (B-1), Industrial (I-1), Agricultural-Forestry (A-F), Floodway (F-1), and Floodway Fringe (F-2). There are no Facility components located within the Town of Dayton. However, all zoning districts except B-1 are located within 5 miles of a Facility component.

Permitted uses in R-1 Districts include single-family residences, duplexes, parks, public and semi-public uses, essential services, and agriculture. Additional special uses requiring Board of Appeals approval include multiple family dwellings, mobile homes, seasonal residences, tourist homes, cemeteries, nursing homes, nursery schools, day care centers, and medical centers. Permitted uses in I-1 Districts include general manufacturing, food processing, feed/grain storage, wholesale businesses, offices, agriculture, public uses, public utilities, warehouses,

sand/gravel extraction, mining/quarrying, and essential services. Additional special uses requiring Board of Appeals approval include fuel storage and junkyards. Permitted uses in A-F Districts include agriculture, forestry, public uses, public utilities, essential services, single-family residences, duplexes, mobile homes, and seasonal residences. Additional special uses requiring Board of Appeals approval include airports, golf courses, cemeteries, mobile home courts, sand/gravel extraction, mining/quarrying, parks, commercial recreation facilities, sawmills, communication towers, nursing homes, feed/grain storage, semipublic uses, roadside stands, drive-in theaters, public landfills, and junkyards.

Permitted uses in F-1 Districts include agriculture, forestry, essential services, plant cultivation, and parking lots. Additional special uses requiring Board of Appeals approval include drive-in theaters, public uses, sand/gravel extraction, mining/quarrying, and roadside stands. No permanent structures are permitted in F-1 Districts. F-2 Districts are subject to the regulations in the adjacent zones, plus supplemental regulations to address the increased risk of flooding (e.g., all new constructions shall be anchored to prevent floatation or lateral movement.)

Town of Ellery

The Town of Ellery Zoning Law, adopted July 10, 2014, established eleven zoning districts: Single-Family Residential (R1), Single-Family Residential – Warner Bay (R1-WB), Two-Family Residential (R2), Multiple Residential (R3), Retail Business (B1), Highway Business (B2), Lakeside Business (B3), Ellery Business (B4), Agricultural Residential (AR), Agricultural (A), and Industrial (I1). There are no Facility components located within the Town of Ellery. All areas within 5 miles of a Facility component lie within the A District, which consists primarily of agricultural lands, with scattered large lot residential units.

Uses requiring no permit in A Districts include agricultural land use, fur farms, private horticulture, wildlife habitat, garage/yard sales, municipal offices, public parks, forestry, games farms, fish hatcheries, gas/oil wells, gas/fuel tanks, private parking, portable home storage units, and public utilities. The following uses are allowed by right in A Districts: agricultural buildings, farm animals, commercial nurseries/greenhouses, duplexes, single-family dwellings, libraries, museums, galleries, loading/unloading facilities, private tennis courts, riding academies/stables, and seasonal camps. The following additional uses are allowed by special use permit in A Districts: blacksmith shops, multiple family dwellings, mobile homes, animal shelters, veterinarians, auction businesses, building contractor businesses, cemeteries, crematories, non-commercial towers, farmers markets, artisan shops, portable toilets, fruit processing plants, commercial sawmills, warehouses, airports/airstrips, gas compressors, gravel/sand operations, machinery shops, electronic and small parts manufacturing, wineries, photographic studios, business offices, realty offices, churches, fraternal meeting clubs, kennels, pet stores, tack shops, feed and seed shops, funeral homes, schools, colleges, daycare centers, auto repair shops, locksmiths, amusement parks, movie theaters, nursing homes,

hardware stores, restaurants, bakeries, barber/beauty shops, antique shops, gift shops, bed and breakfasts, commercial camps/cottages, commercial parking lots, dance/music studios, boat storage businesses, communication towers, boathouses, docks, municipal piers, marinas, tackle shops, and commercial research laboratories.

Town of Ellington

No zoning law or ordinance has been adopted in the Town of Ellington (Bifaro, 2016).

Town of Gerry

The Town of Gerry was established in 1979, and has since been amended by various local laws. The municipality is divided into five zoning districts: Agricultural-Residential 1 (AR1), Business (B-1), Flood Plain (FP), Low Density Light Industrial (LDLI), and Groundwater Protection Overlay District (GP). There are no Facility components located within the Town of Gerry. Portions of the AR1, B-1, and GP Districts lie within 5 miles of a Facility component.

Uses permitted by right in AR1 Districts include single family and duplex dwellings and accessory structures (e.g. garages, sheds), agricultural uses, libraries, schools, civic buildings, utility lines and supporting structures, oil and gas wells. Additional uses allowed with special use permit include multiple family dwellings, mobile homes, private camps, commercial campground, gravel/sand extraction, churches, swimming pools, cemeteries, golf courses, and communication towers. Uses permitted by right in B-1 Districts include all uses allowed in AR1 Districts by right, along with farm animals and rodeos. Additional uses allowed with special use permit include retail stores/shops, nursing homes, senior housing, day care centers, restaurants, banks, office buildings, barber shops, beauty parlors, gas stations, multiple family dwellings, swimming pools, and cemeteries. LDLI Districts share the same boundary as B Districts. Light industrial uses are subject to the conditions set out in Article VI Section 620 of the Zoning Law, Sludge and Sewage Operations, while business uses are not. Uses permitted by right in LDLI Districts consist of the same uses allowed in AR1 Districts by right. Additional uses allowed with special use permit include the same uses allowed in AR1 Districts by special use permit, office buildings, research and development, light manufacturing, and warehouses.

The purpose and intent of the GP District is to preserve the quality and quantity of the Town's groundwater resources in order to ensure a safe and healthy drinking water supply. The GPS District has been subdivided into three zones. Zone I is the Primary Protection Zone, or those permeable geologic deposits that allow surface water, either from streams or precipitation, to enter into the aquifer flow system. It will also include those geologic deposits that have an area extent greater than one (1) square mile, are composed of highly permeable material, and can be used as a future source of public and private water supply. Zone II is the Secondary Protection Zone, identified as the watershed areas tributary to the deltas comprising Zone I. These areas include land outside the aquifer area that

may contribute runoff overland and/or through surface streams for groundwater recharge. Zone III is the Tertiary Protection Zone, which consists of all land comprising the floor of the Cassadaga Creek Valley. The GP District overlay the other zoning districts. Any uses permitted in the portions of the districts so overlaid shall be permitted, subject to the provisions of the GP District. In any cases where conflicts arise between these regulations and any other existing regulations, the more restrictive regulations shall apply. Prohibited uses in one or more zones of the GP District include gas stations, solid waste disposal facilities, and junkyards.

The Zoning Law does not specify any permitted uses for FP Districts. The boundaries of the FP District are determined in conjunction with the Chautauqua County Planning Board, on a case by case basis when applications are received.

Town of Leon

No zoning law or ordinance has been adopted in the Town of Leon (Cattaragus County, 2016).

Town of Pomfret

Although the Code of the Town of Pomfret was adopted in 2012, some pages of Chapter 300, Zoning, were updated in 2014. The Town of Pomfret is divided into ten zoning districts: Residential (R1), Large Lot Residential (R2), Lakeside Residential (R3), Agricultural/Residential (AR1), Agricultural/Residential (AR2), Neighborhood Business (B1), Highway Business (B2), Industrial Park (I1), Industrial (I2), and Conservation (C1). There are no Facility components located within the Town of Pomfret. Portions of the AR1, R3, B2, and C1 Districts lie within 5 miles of a Facility component.

Most forms of residential uses are permitted in R3 Districts, in addition to numerous water-oriented, tourism-related uses including boarding houses. Uses by right in R3 Districts include single-family dwellings, duplexes, public and quasi-public utilities, public parks, boathouses, piers, docks, and private swimming pools. Additional uses allowed with special use permit include bed and breakfasts, garage sales, schools, daycare centers, tennis courts, churches, solar systems, farm animals, ponds, and gasoline/fuel tanks.

AR1 Districts were established to provide for a compatible mix of agricultural and residential uses. The intent is to protect agricultural uses and preserve the rural character of the neighborhood, as well as provide for natural buffers. Home occupations and recreational uses are generally permissible. Service and retail businesses are generally permissible in AR1 Districts. Uses by right in AR1 Districts include single-family dwellings, mobile homes, bed and breakfasts, duplexes, agricultural buildings, public and quasi-public utilities, municipal offices, daycare centers, public parks, private swimming pools, and riding academy/stables. Additional uses allowed with special use permit include

nursing homes, multiple-family dwellings, commercial sawmills, wineries, garage sales, antique shops, bakeries, drugstores, florists, corner groceries, gift shops, newsstands, gas stations, feed and seed shops, furniture/appliance stores, offices, banks, photography studios, dry cleaning, locksmiths, barber/beauty shops, kennels, animals hospitals and shelters, gas compressors, machine shops, junkyards, schools, airports/airstrips, libraries, museums, galleries, tennis courts, churches, fraternal meeting facilities, cemeteries, golf courses, public swimming pools, solar systems, gravel/sand operations, gun clubs, fish hatcheries, communication towers, and wind energy facilities.

The purpose of the B2 Districts is to promote vehicle-oriented retail and service uses for residents and visitors. A major goal of B2 Districts is to protect and enhance the community by encouraging aesthetically appealing business with safe ingress and egress and limiting strip development. Uses by right in B2 Districts include single-family dwellings, mobile homes, bed and breakfasts, duplexes, multiple-family dwellings, agricultural buildings, commercial greenhouses/nurseries, antique shops, bakeries, drugstores, florists, corner groceries, gift shops, newsstands, liquor stores, auto sales, feed and seed shops, furniture/appliance stores, pet stores, offices, banks, photography studios, dry cleaning, locksmiths, barber/beauty shops, restaurants, bars, kennels, animals hospitals and shelters, public and quasi-public utilities, car washes, public parks, marinas, tackle shops, and commercial parking lots. Additional uses allowed with special use permit include nursing homes, fur farms, wineries, garage sales, malls, supermarkets, gas stations, department stores, hotels/motels, vehicle repair shops, warehouses, schools, daycare centers, swimming pools, tennis courts, libraries, museums, galleries, churches, fraternal meeting facilities, electronic and small parts manufacturing, theaters, loading/unloading facilities, solar systems, and communication towers.

C1 Districts were established to provide protection for the preservation of natural features, such as gorges, watersheds, wetlands, open space, recreation areas, etc. Large lot residential uses are allowed along with some agricultural uses. Uses by right in C1 Districts include agricultural buildings, commercial greenhouses/nurseries, public and quasi-public utilities, public parks, and private camps. Additional uses allowed with special use permit include single-family dwellings, mobile homes, garage sales, schools, daycare centers, churches, solar systems, gun clubs, forestry, fish hatcheries, private windmills, and communication towers.

Village of Sinclairville

The Village of Sinclairville Zoning Law was last updated November 5, 2012. The municipality is divided into four zoning districts: Residential (R), Commercial (C), Rural Resource (RR), and Flood Plain (FP). There are no Facility components located within the Village limits; however, the entire Village and all four zoning districts are located within 5 miles of a Facility component. R Districts were established to provide for the development of residential neighborhoods occupied primarily by single family residences. C Districts were created to accommodate general retail, service, and related uses. RR Districts were established to provide for the development of residential and

agricultural uses as well as other conservation related uses that are compatible with large rural lots. The FP District consists of areas identified by the Federal Insurance Administration's Flood Insurance Rate Maps as being susceptible to flooding.

In R Districts, allowable uses by right include single family dwellings, duplexes, small boarding homes (maximum four rental rooms), and accessory structures such as garages and shed. Additional uses allowed with special use permit include churches, daycare centers, funeral homes, multiple-family dwellings, public parks/playgrounds, schools, swimming pools, and private tennis courts.

In RR Districts, allowable uses by right include single family dwellings, duplexes, small boarding homes (maximum four rental rooms), accessory structures such as garages and shed, agricultural land use and buildings, farm animals, forestry/lumbering/reforestation, game farms, fish hatcheries, municipal offices, ponds, public parks, libraries, schools, roadside stands, seasonal camps, private swimming pools and tennis courts, utilities, wildlife habitat, and wind energy systems. Additional uses allowed with special use permit include airports/airstrips, fur farms, funeral homes, bed and breakfasts, blacksmith shops, commercial camps/cottages, campgrounds, cemeteries, fraternal meeting facilities, golf courses, kennels, landfills, commercial sawmills, multiple-family dwellings, swimming pools (over 10,000 gallons), and communication towers.

Uses permitted by right in C Districts include all uses allowed in RR Districts by right, along with commercial laboratories and commercial parking lots. Additional uses allowed with special use permit include amusement parks, animal shelters/hospitals, electronic and small parts manufacturing, apartment buildings/condos/townhouses antique shops, restaurants, bars, florists, drug stores, banks, auto repair, daycare centers, car washes, bakeries, barber/beauty shops, corner groceries, department stores, feed and seed shops, fraternal meeting facilities, supermarkets, furniture/appliance stores, gas compressors, light and heavy industry, machine shops, hotels/motels, dry cleaning, hardware stores, nursing homes, hospitals, commercial nurseries/greenhouses, museums, galleries, pet stores, photographic studios, public swimming pools and tennis courts, realty offices, commercial sawmills, riding academies/stables, malls, self-storage businesses, ski areas, tourist accommodations, and zoos.

The Zoning Law does not specify any permitted uses for FP Districts.

Village of South Dayton

No zoning law or ordinance has been adopted in the Village of South Dayton (Cattaragus County, 2016).

Town of Stockton

The Zoning Law of the Town of Stockton was adopted October 27, 1994, and amended numerous times since, including Local Law No. 1 of 2005, which added Article XVI, Wind Energy Conversion Systems. The municipality is divided into six zoning districts: Residential (R), Agricultural Residential (AR), Agricultural (A), Business (B), Industrial (I), and Lakeside (L). Zoning districts located within 5 miles of a Facility component include the R, AR, A, and B Districts. Facility components to be located in the Town of Stockton include the point of interconnect substation and part of the generator lead line, both of which are sited in the A District. These are considered essential services by the Zoning Law of the Town of Stockton, and are allowed by right in the A District.

The R District was established primarily to provide for the protection of existing neighborhoods from other non-compatible uses. AR Districts were established to provide for a compatible mix of agricultural and residential uses, along with a limited number of business uses. The intent is to protect and provide agricultural uses and to preserve the rural character of the neighborhood. A Districts are primarily agricultural lands with scattered large lot residential units. Although recreational facilities and some commercial development is allowed, municipal utilities are discouraged. The purpose of the B District is to promote vehicle-oriented retail and service uses for residents and visitors while encouraging aesthetically appealing businesses with safe ingress and egress and prohibiting chaotic strip development. No permit is required for private horticulture, garage/yard sales, solar energy systems, fences/walls, and private parking. The following uses are allowed by right in all zoning districts: barber shops, beauty parlors, business offices, photography studios, funeral homes, realty offices, fences/walls, private camps, and telecommunication facilities. Telecommunication facilities are allowed in all zoning districts by special use permit. All zoning districts except the I District allow the following uses by right: single family dwellings, duplexes, antique shops, bakeries, florists, gift shops, department stores, daycare centers, libraries, churches, swimming pools, and public parks. All zoning districts except the I District allow nursing homes and multiple-family dwellings by special use permit.

The following additional uses are allowed by right in the districts indicated: schools (R, AR, A, B); double-wide mobile homes (R, AR, A, L); municipal offices (R, AR, A, I, B); private windmills (AR); cemeteries, crematories, riding academies/stables (AR, A); gas/oil well (AR, A, I); feed and seed shops, furniture/appliance shops, hardware stores, banks, dry cleaning, custom workshops, locksmiths, car washes (AR, A, I, B); drug stores, liquor stores, newsstands, corner groceries, museums, galleries (AR, A, B, L); single-wide mobile homes (AR, A, L); blacksmith shops (A); machine shops, public utilities, quasi-public utilities (A, I); auto sales, animal hospitals, electronic and small parts manufacturing, commercial laboratories (A, I, B); hotels/motels, commercial camps/cottages (A, B); marinas, tackle shops (B, L); and heavy industry, food and general manufacturing (I).

The following additional uses are allowed by special use permit in the districts indicated: drug stores, liquor stores, newsstands, dry cleaning, museums, galleries (R); theaters (R, AR, A, B); commercial nurseries/greenhouses (R, AR, B, L); corner groceries, restaurants, custom workshops (R, L); blacksmith shops, animal hospitals, electronic and small parts manufacturing, commercial laboratories, machine shops, public utilities, quasi-public utilities (AR); gravel/sand operations, gun clubs, wind energy conversion systems (AR, A); ski areas (AR, A, B); commercial sawmills (AR, A, I); wineries, kennels, animal shelters, warehouses (AR, A, I, B); bars (AR, A, I, B, L); fraternal meeting facilities (AR, A, B, L); golf courses (AR, A, L); hotels/motels (AR, L); gas compressors, heavy industry, food and general manufacturing (A); amusement parks (A, B); fruit processing plants (A, I); commercial parking lots (I, B, L); boathouses, docks, public piers (B); and schools (L).

Town of Villenova

The 1997 Zoning Law of the Town of Villenova establishes three zoning districts: Agricultural and Residential (ARI), Transitional (T), and Industrial Park "Floating" (IP). According to the Town's Building and Zoning Official, the entire Town is currently designated as ARI. The IP and T Districts are defined in the Zoning Law but were never mapped. The IP District was created to be floating, with the intent that boundaries will be delineated during review of specific proposed developments. Permitted and prohibited uses in hypothetical T Districts are the same as in ARI District, with lot size requirements comprising the difference. The T District may be delineated separately from the ARI District in the future (Crossley, 2016).

In ARI Districts, allowable uses by right include single family dwellings, duplexes, mobile homes, accessory structures such as garages and sheds, agriculture, fur farms, commercial sawmills, commercial nurseries/greenhouses, public utilities, private swimming pools and tennis courts, blacksmith shops, municipal offices, and riding academies/stables. Additional uses allowed with special use permit include bed and breakfasts, nursing homes, hospitals, antique shops, bakeries, drug stores, malls, supermarkets, corner groceries, newsstands, hardware stores, feed and seed shops, pet stores, department stores, florists, gas compressors, commercial laboratories, theaters, golf courses, churches, fraternal meeting facilities, daycare centers, public parks, schools, gravel/sand operations, game farms, fish hatcheries, preserves, libraries, museums, galleries, private windmills; solar systems, private camps, communication towers, gun clubs, loading/unloading facilities, and commercial parking lots.

(e) Comprehensive Plan

The Towns of Cherry Creek, Stockton, and Arkwright do not have comprehensive plans. The Town of Charlotte Comprehensive Plan was adopted in 2007. This document was "structured for a 10-year horizon given the conditions existing in 2006." The Plan favors development that respects the rural nature of the surrounding area,

incorporates appropriate setbacks between different use types, and provides economic benefits to the Town. While the use of small scale windmills to generate electricity for personal consumption is encouraged, the Plan states that “the use of land for industrial generation of electricity by wind power is not recommended, and any use of windmills should be subject to environmental review and a visual environment assessment form review” (Town of Charlotte, 2007). In recognition of the potential benefits associated with properly regulated and sited wind facilities, the Town of Charlotte subsequently added Wind Energy Facility regulations to the Town’s Zoning Law when it was updated in November 2012. Section 618 of the 2012 Zoning Law specifically allows wind energy conversion systems, like those proposed for the Facility, by special use permit.

The Chautauqua County Comprehensive Plan was adopted by the Chautauqua County Board of Legislators in April of 2011 (http://www.planningchautauqua.com/comp_plan/index.htm). The primary purpose of this Plan is to chart a course that can be used by the County’s government and citizens in making decisions that affect the County’s future. Based on a review of the data as well as public input received during the planning process, (i.e., public meetings, surveys, stakeholder interviews, and other means), the Plan provides a summary of current conditions and key issues for each of four focus area: people and demographics, environment, community, and economy. The discussion below evaluates the Facility’s consistency with the key issues identified in the Chautauqua County Comprehensive Plan.

People and Demographics

This subsection of the Plan addresses Chautauqua’s population trends, social capital, and community attitudes. It identifies five key issues: declining population; aging population; income and poverty; social capital; and community attitudes. The Facility will not significantly affect the population, social capital, or community attitudes issues. However, the proposed Facility will have a positive impact on the local economy, which may help alleviate local income and poverty issues. See Exhibit 27 of this Application for additional information about the socioeconomic effects of the proposed Facility.

Environment

This subsection of the Plan describes Chautauqua’s natural beauty, high-quality natural systems and water bodies, productive soils, and history that provide the County with a rich quality of life and economic opportunities. It identifies six key issues: geography, climate, and natural resources; water; recreation; architectural preservation; active living and healthy lifestyles; and history. The Facility will not significantly affect the recreation, active living/healthy lifestyles, or history issues. Careful Facility design has been conducted to help avoid and minimize impacts to geography, natural resources, and water. See Exhibits 22 and 23 of this Application for additional information about natural resources and water, respectively. With respect to climate, the proposed Facility will not contribute to global

temperature increases. The operating Facility will generate up to 126 MW of electricity without emitting pollutants or heat-trapping greenhouse gases. Electricity generated from zero-emission wind energy facilities can displace electricity generated from conventional power plants, thereby reducing the emissions of conventional air pollutants, such as mercury; sulfur and nitrogen oxides (acid rain precursors); and carbon dioxide (linked to global climate change). With respect to architectural preservation, the Plan focuses on preservation and rehabilitation activities in the County's cities, towns, and villages. The Facility will have no physical impacts to historic architectural resources (i.e., no historic structures will be damaged or removed). The Facility's potential effect on a given historic property would be a change in the property's visual setting, resulting from the introduction of wind turbines. Views of the Facility from village areas will generally be fully or partially screened by structures and trees. However, some of the proposed turbines will likely be visible from properties on the outskirts that are not screened by other buildings. See Exhibit 20 of this Application for additional information about impacts to historic architectural resources.

Community

This subsection of the Plan details current trends and issues regarding community infrastructure in the County. It identifies nine key issues: educational attainment; fragmentation of public education; youth; government structure; housing stock; healthcare; arts and culture; transportation; and infrastructure. The proposed Facility will have no direct impact on these community issues. However, as described below, the Facility will have a significant positive impact on the local tax base, including local school districts and other taxing districts that service the area where the proposed Facility is to be located. These payments will provide the County, Towns, and school districts additional resources to dedicate toward addressing community issues as each jurisdiction sees fit.

Economy

This subsection of the Plan focuses on the strengths and weaknesses in the County's economic sector and important issues to consider for future economic development. It identifies five key issues: industry and employment; workforce; tourism and second homes; small business; and tax burden. The Facility will not significantly affect the workforce, tourism/second homes, or small business issues. However, the proposed Facility will have a positive impact on the local economy, including employment and local taxes. In addition to the jobs created and the wages paid to the Facility employees, the Facility will have a direct economic benefit from the first round of buying/selling, which includes the purchase of goods from local sources, the spending of income earned by workers, annual labor revenues, and the income effect of taxes. These direct effects will result in additional induced economic benefits, including jobs, in other sectors. The proposed Facility will also have a significant positive impact on the local tax base, including local school districts and other taxing districts that service the area where the proposed Facility is to be located. Taxing jurisdictions within the Facility Site include Chautauqua County, the Town of Cherry Creek, the Town of Charlotte, the Town of Arkwright, the Town of Stockton, Cassadaga Valley Central School District, and Pine

Valley Central School District. It is important to note that the proposed Facility will make few, if any, demands on local government services. Therefore, payments made to local taxing jurisdictions will be net positive gains and represent an important economic benefit to the local area. See Exhibit 27 of this Application for additional information about the socioeconomic effects of the proposed Facility.

The Plan presents a vision for the future of Chautauqua County, based upon the community's values, from which a framework of goals, strategies, and recommended actions were developed for the focus areas discussed above. Goals, strategies, and recommended actions relevant to the proposed Facility are list below (emphasis added):

- Goal: The County's economy is diversified with new businesses and good job opportunities created in advanced manufacturing, agricultural production, tourism, green technologies, **renewable energy**, and other current industries.
- Strategy: Make sustainable use of local and **green energy resources** to benefit the local environment and economy.
- Strategy: Capitalize on the County's abundant water and **energy resources** for economic development.
- Recommended Action: Advocate for legislation that provides and **promotes local energy production** in order to generate local revenues, reduce economic costs, and lower environmental impacts.
- Recommended Action: Investigate the feasibility of establishing an industrial park for the **sole purpose of creating and promoting green and energy-related industries**.
- Recommended Action: Use a portion of revenues from local energy sources, **including potential fees from wind projects**, natural gas drilling, and timber harvesting, to fund parks and other outdoor recreational development and maintenance.
- Recommended Action: Identify and **reserve key corridors to connect potential renewable energy resource areas to the regional grid**.

These goals, strategies, and recommended actions express a clear desire to foster renewable energy development within Chautauqua County, specifically including wind energy. Construction and operation of the proposed Facility will help the County achieve the objectives articulated in the Chautauqua County Comprehensive Plan. It should be noted that the Chautauqua County Planning Department recently reviewed the proposed Arkwright Wind Farm for potential county-wide impacts pursuant to New York General Municipal Law 239-m and found that the Project was not inconsistent with County Planning objectives and recommended approval of the Project with conditions relating to FAA determinations.

(f) Map of Proposed Land Uses

The Applicant has gathered information about proposed land uses from discussions with local planning officials (including review of pending applications), open houses, the PIP implementation/PSS development process, and other sources. For example, such discussions have resulted in data associated with existing local snowmobile trails, state forest trails, equestrian trails, and potential future uses and plans. The Applicant used a Chautauqua County Parks map to digitize the trails in the vicinity of the Facility Site. The Applicant also contacted the Chautauqua County Snowmobile Club and received a map of all known snowmobile trails. The Applicant used this map, along with information obtained from the NYS Snowmobile Trails and Trip Planner website, to digitize snowmobile trails within the Facility Site. There are no plans for new snowmobile trails to the Applicant's knowledge. Amish and equestrian trails were digitized from a map provided by the Historian of the Town of Cherry Creek. Data on equestrian trails was also obtained from the NYSDEC. These trails are illustrated on Figure 4-7. No other specific proposed land uses were identified. With respect to comprehensive plans and maintaining a rural/agricultural character, the Facility is consistent with goals of these plans.

(g) Map of Specially Designated Areas

Figure 4-6 illustrates designated coastal areas, inland waterways, agricultural districts, special flood hazard areas, Local Waterfront Revitalization Program (LWRP) communities, and other specially designated areas within a 5-mile radius of the Facility. There are no designated Critical Environmental Areas (CEAs) in Chautauqua or Cattaraugus Counties (NYSDEC, 2016b). Table 4-2 summarizes the sources of data used to prepare these maps.

Table 4-2. Sources of Data Used to Prepare Mapping of Specially Designated Areas

Mapping Requirement	Source
Designated coastal areas	NYS GIS Clearinghouse, NYS Department of State
Inland waterways and local waterfront revitalization program areas	NYS GIS Clearinghouse, NYS Department of State
Groundwater management zones	NYS GIS Clearinghouse
Agricultural districts	NYS GIS Clearinghouse
Flood hazard areas	NYS GIS Clearinghouse, FEMA
Critical Environmental Areas	NYSDEC

(h) Map of Recreational Areas and Other Sensitive Land Uses

Figure 4-7 illustrates recreation areas and other sensitive land uses known to the Applicant within a 5-mile radius of the Facility. Table 4-3 summarizes the sources of data used to prepare these maps.

Table 4-3. Sources of Data Used to Prepare Mapping of Recreational and Sensitive Areas

Requirement	Source
Wild, scenic and recreational river corridors	National Wild and Scenic Rivers System
Open space	NYS GIS Clearinghouse and local governments
Wildlife management lands	NYS GIS Clearinghouse, NYSDEC, USFWS
Forest management lands	NYS GIS Clearinghouse, NYSDEC
Conservation easement lands	National Conservation Easement Database; NYS GIS Clearinghouse
State and federal scenic byways	NYS DOT; NYS GIS Clearinghouse
Nature preserves	NYS GIS Clearinghouse
Designated trails	NYS GIS Clearinghouse and local Governments
Public-access fishing areas	NYS GIS Clearinghouse, NYSDEC
Oil and gas production	NYSDEC, Platts
Gas pipelines	Platts
Major communication and utility uses and infrastructure	Comsearch
Institutional, community and municipal uses and facilities	ESRI; TIGER/line files; NYS GIS Clearinghouse

The Facility's Visual Impact Assessment (see Exhibit 24 for additional information) also identifies visually sensitive resources, including recreational and other sensitive land uses that may be affected by potential visibility of the Facility. Specifically, this inventory includes visually sensitive resources of potential statewide significance within 10 miles of the proposed Facility and a more detailed inventory (including potential locally significant resources) within a 5-mile visual study area. Aesthetic resources of statewide significance located within 10 miles of the proposed Facility include: five sites and four districts listed on the National Register of Historic Places (NRHP); three state parks (Midway State Park, Long Point State Park, and Lake Erie State Park); the Concord Grape Belt Heritage Area; five state wildlife management areas; one eligible wild, scenic or recreational river (Conewango Creek); and one regionally significant water body (Chautauqua Lake). Resources located within the 5-mile visual study area that may be regionally or locally significant/sensitive include: four villages (South Dayton, Cassadaga, Cherry Creek, and Sinclairville); 16 hamlets; three local parks/playgrounds; various hiking, biking, equestrian, snowmobile, and water

trails (including the Cassadaga Water Trail); four state forests (including Boutwell Hill State Forest, located within the Facility Site); one state fishing access point; three state highways and one US highway; and three public schools.

The Facility will have no direct impact on the vast majority of recreational resources and other sensitive areas identified in Figure 4-7 (i.e., they will not be removed or physically modified in any way). The only exception is a 1.2-mile section of 34.5 kV overhead collection line that will traverse Boutwell Hill State Forest. In order to mitigate tree cutting and potential visual impacts along this 1.2 mile section, this collection line will be installed immediately adjacent to public roadways, specifically along the north sides of Mill Creek and Boutwell Hill Roads. An equestrian trail and the Cherry Creek Snowmobile Trail currently run north-south through this portion of the State Forest, crossing Mill Creek Road, and the Earl Cardot Eastside Overland Trail also generally runs north-south through this area, with a trailhead/parking lot located at the crossing of Boutwell Hill Road. No poles supporting the collection line will be installed within the trail corridors. However, each of these trails will pass beneath the overhead collection line immediately north of the existing public road crossings.

For the remainder of the recreational resources and other sensitive areas identified in Figure 4-7, the Facility's potential effect on these resources could include a change in the property's visual setting, resulting from the introduction of wind turbines. The VIA includes an analysis of Facility visibility, which identifies those locations within the visual study area where there is potential for the proposed wind turbines to be seen from ground-level vantage points. Topography and vegetation will serve to block daytime views of the Facility from approximately 66.6% of the five-mile study area and approximately 78.3% of the ten-mile study area (i.e., 41.4% and 21.7% of the study areas, respectively, are indicated as having potential Facility visibility). Appendix C of the VIA consists of a visibility analysis of the sensitive sites. The analysis presents the distance to the nearest turbine for each visually sensitive resource, along with results from the topographic and vegetation viewsheds, and identifies photographs taken from recreation sites and other sensitive areas during the field review. For more information about the anticipated visual impacts of the Facility and mitigation measures, see Exhibit 24 of this Application.

(i) Compatibility of the Facility with Existing and Proposed Land Uses

According to the NYSORPS, the Facility Site consists of six distinct land use types. The majority of the Facility Site (approximately 44.4%) is categorized as Vacant Land, which is described as "property that is not in use, is in temporary use, or lacks permanent improvement." Residential, which constitutes approximately 39.1% of the Facility Site, is described as "property used for human habitation." Agriculture, which is defined as "property used for the production of crops or livestock" makes up approximately 10.1% of the Facility Site. Approximately 6.1% of the Facility Site is characterized as Wild, Forested, Conservation Lands and Public Parks, which is described by the

NYSORPS as "reforested lands, preserves, and private hunting and fishing clubs." The remaining 0.3% of the Facility Site is classified in the "Unassigned" land use category. Table 4-4 summarizes land use impacts to each of these categories, based on the typical area of vegetation clearing column presented in Table 22-1 (see Exhibit 22).

Table 4-4. Land Use Impacts

Land Use	Total Disturbance (acres)	Temporary Disturbance (acres)	Permanent Loss (acres)
Agricultural	53.8	47.1	6.7
Residential	229.5	196.6	32.9
Vacant	308.0	260.9	47.1
Wild, Forested, Conservation Lands and Public Parks	13.8	10.7	3.1
Unassigned	1.4	1.2	0.2
Total	606.5	516.5	90.0

Only very minor changes in land use are anticipated within the Facility Site as a result of Facility operation, and no changes are predicted outside the Facility Site. The presence of the turbines bases, access roads, substations, and the O&M building will result in the cumulative conversion of approximately 90 acres of land from its current use to built facilities. During Facility operation, additional impacts on land use (if any) over the years should be infrequent and minimal. Aside from occasional maintenance and repair activities, Facility operation will not interfere with on-going land use (i.e., farming and forestry activities).

As described above, the NYSDAM has promulgated a guidance document that applies to Facility components sited within agricultural lands. The *Guidelines for Agricultural Mitigation for Wind Power Projects* (see Appendix D) include siting goals, construction requirements, restoration requirements, and post-construction monitoring and remediation requirements. To minimize and/or mitigate impacts to active agricultural land and farming operations, Facility siting and construction will comply with NYSDAM agricultural protection guidelines to the maximum extent practicable. Please note that based on recent consultation with NYSDAM personnel, complete adherence to the *Guidelines for Agricultural Mitigation for Windpower Projects* is not necessarily required in all Facility locations. As discussed with NYSDAM personnel, the Applicant and/or Environmental Monitor will consult with NYSDAM during construction when deviation from the *Guidelines* is necessary. Mitigation measures to be implemented include:

- Limiting permanent road widths in agricultural fields, and where possible, following hedgerows and field edges to minimize loss of agricultural land.
- Having roads that must cross agricultural fields stay, where feasible, on ridge tops and other high ground to minimize cut and fill as well as potential drainage problems.

- Avoiding disturbance of surface and subsurface drainage features (ditches, diversions, tile lines, etc.).
- Stripping all topsoil from agricultural areas used for vehicle and equipment traffic and parking. Stockpiling stripped topsoil separately from other excavated material.
- Prohibiting vehicular access to turbine sites until topsoil has been stripped and permanent access roads have been constructed.
- Limiting vehicular access to construction roads only.
- Limiting vehicle and equipment traffic and parking to the access road and/or designated work areas such as tower sites and laydown areas. No vehicles or equipment will be allowed outside the work area without prior approval from the landowner and, when applicable, the Environmental Monitor.
- Prohibiting stripping of topsoil or passage of cranes across agricultural fields during saturated conditions when such actions would damage agricultural soils.
- Avoiding blocking of surface water drainage due to road or installation or stockpiled topsoil.
- Maintaining access roads throughout construction so as to allow continued use/crossing by farmers and farm machinery.
- Temporarily fencing work areas in active pastureland to protect livestock, consistent with landowner agreements.
- Disposing of excess concrete offsite (unless otherwise approved by the Environmental Monitor and the landowner). Under no circumstances shall excess concrete be buried or left on the surface in active agricultural areas.
- Washing of concrete trucks, if necessary, outside of active agricultural areas in locations approved by the Environmental Monitor.
- Restricting crane set-up, erection, and breakdown activities to designated access roads and work pads at the turbine sites.
- Stabilizing restored agricultural areas with seed and/or mulch.
- Removing and disposing of all construction debris offsite at the completion of restoration.
- Removing all excess subsoil and rock from the site. On site disposal of such material may be allowed if approved by the landowner and the Environmental Monitor, with appropriate consideration given to any possible agricultural or environmental impacts.
- Repairing any surface or subsurface drainage structures damaged during construction to as close to preconstruction conditions as possible, unless said structures are to be removed as part of the Project design.
- Re-grading all access roads to allow for farm equipment crossing, and to restore original surface drainage patterns or other drainage pattern incorporated into the design.

- Compensation for damaged/lost crops.

Following construction, all disturbed agricultural areas will be decompacted to a depth of 18 inches with a deep ripper or heavy-duty chisel plow. In areas where the topsoil was stripped, soil decompaction shall be conducted prior to topsoil replacement. Following decompaction, all rocks 4 inches and larger in size will be removed from the surface of the subsoil prior to replacement of the topsoil. The topsoil will be replaced to original depth and the original contours will be reestablished where possible. All rocks 4 inches and larger shall be removed from the surface of the topsoil. Subsoil decompaction and topsoil replacement will be avoided from October 1 to December 31, unless approved on a site-specific basis by the landowner in consultation with the Environmental Monitor and NYSDAM. No Project restoration activities will occur in agricultural fields between the months of October through May unless favorable soil moisture conditions exist.

Except for Charlotte, the local host towns in which the Facility Site is located do not have comprehensive plans. The Town of Charlotte Comprehensive Plan is described above in Exhibit 4(e). There are several regional plans that apply to the Chautauqua County area, including the Chautauqua County Comprehensive Plan, the Western New York Regional Sustainability Plan, and the Southern Tier West Region Comprehensive Economic Development Strategy. The Facility's consistency with these regional plans is summarized in Table 4-5.

Table 4-5. Facility Consistency with Regional Planning Documents

Plan	Relevant Goals	Facility Consistencies	Facility Inconsistencies
Chautauqua County Comprehensive Plan (2011)	<ul style="list-style-type: none"> - Capitalize on the County's abundant water and energy resources for economic development. - Make sustainable use of local and green energy resources to benefit the local environment and economy. - Maintain the County's rural landscape, heritage, and scenic views. 	<ul style="list-style-type: none"> - Utilizing a renewable resources (wind) to generate electric power and provide local and regional economic benefits. - Maintaining agricultural land use patterns (i.e., rural landscape) within the vicinity of the Facility 	<ul style="list-style-type: none"> - Whether or not a wind facility negatively impacts views is subjective, to some extent. Some people may feel the Facility will impact scenic views, which would represent an inconsistency.
Western New York Regional Sustainability Plan (2013)	<p><u>Energy Goals</u></p> <ul style="list-style-type: none"> - Increase renewable energy generation in the region, including technologies listed in the NYS Renewable Portfolio Standard. - Support innovative energy projects that are consistent with the sustainability goals of the region and that encourage economic development. - Preserve, protect, and enhance the viability of agriculture, including agricultural lands and urban agriculture. 	<ul style="list-style-type: none"> - Utilizing a renewable resources (wind) to generate electric power and provide local and regional economic benefits. - Maintaining agricultural land use patterns within the vicinity of the Facility. 	NA
Southern Tier West Region Comprehensive Economic Development Strategy (2014)	<p><u>Goal 3: Quality, Connected Places</u></p> <ul style="list-style-type: none"> - Encouragement of alternative energy utilities and creation of a regional energy purchasing alliance. - Encouragement and enhancement of renewable energy exploration and production in an environmentally sensitive manner. 	<ul style="list-style-type: none"> - Utilizing a renewable resources (wind) to generate electric power and provide local and regional economic benefits. 	NA

The construction and operation of the Facility will result in certain unavoidable impacts that could affect land use. The majority of these impacts will result from construction activities and will be temporary in nature. For example, although the Facility will not generate any unusual odors, there could be brief periods during construction where airborne dust levels could be elevated. Dust control procedures will be implemented to minimize the amount of dust generated by construction activities, in a manner consistent with the Standards and Specifications for Dust Control, as outlined in the *New York State Standards and Specifications for Erosion and Sediment Controls* (NYSDEC, 2005).

See Exhibit 12 for additional information on potential dust-related impacts and control measures. Long-term unavoidable impacts associated with operation and maintenance of the Facility are anticipated to be relatively limited, but will likely include turbine visibility, shadow flicker, and/or an increased level of sound at some receptor locations in the vicinity of the Facility Site, as well as minor increases in traffic. Each of these impacts are discussed briefly below, with reference to the more detailed discussions found elsewhere in this Application.

The presence (i.e., visibility) of the turbines will likely result in a change in perceived land use from some viewpoints. Evaluation by registered landscape architects indicates that the Facility's overall contrast with the visual/aesthetic character of the area will generally be minimal to moderate. However, based on the contrast rating scores and comments, greater levels of contrast can be anticipated where foreground or near-midground views of turbines (i.e., under 1.5 mile) are available from residences or areas of relatively higher overall scenic quality. Conversely, contrast is reduced when turbines are partially screened, viewed at greater distances, seen in the context of a working agricultural landscape, or viewed in a setting with existing visual clutter. Based on experience with currently operating wind power projects elsewhere, public reaction to the Facility is likely to be generally positive, but highly variable based on proximity to the turbines, the affected landscape, and personal attitude of the viewer regarding wind power. Visibility of the proposed turbines is not expected to effect the use and enjoyment of the Facility Site and surrounding areas for the current and planned land uses. See Exhibit 24 of this Application for more detailed information on turbine visibility and visual impacts in the vicinity of the Facility Site.

A shadow flicker analysis has been prepared for the proposed Facility (see Exhibit 24 for additional information). This study indicates that 89% of the receptors are predicted to receive less than 30 hours of shadow flicker per year, with 61% of the receptors predicted to receive less than 10 hours of shadow flicker per year. Viewshed analysis conducted for all receptors predicted to receive more than 30 hours of flicker per year indicates that the majority of non-participating receptors will not have views of the turbines due to screening provided by mapped topography and vegetation (and will therefore not experience shadow flicker effects). The Applicant will pursue neighbor agreements with the remaining potentially affected non-participating property owners. If a neighbor agreement is not signed before construction begins, the Applicant will take measures to ensure the receptor does not receive more than 30 hours of flicker per year (including temporary turbine shutdowns during periods that produce flicker at the receptor or other shielding or blocking measures). The shadow flicker analysis also includes a qualitative review of potential shadow flicker impacts on recreational areas (see Exhibits 15 and 24). Boutwell Hill State Forest and various trails (including the Earl Cardot Eastside Overland Trail, equestrian trail, and snowmobile trails) are located in close proximity to the Facility, and portions of these recreational areas will experience some shadow flicker. However, a large portion of these recreational resources are anticipated to have limited to no views of the turbines due to screening from existing topography and vegetation (and will therefore not experience shadow flicker effects). Also,

users of recreational trails are generally moving, and therefore will not be subject to shadow flicker for extended periods of time. Consequently, shadow flicker impacts are not expected to effect the use and enjoyment of the Facility Site and surrounding areas for the current and planned land uses. See Exhibit 24 of this Application for more detailed information on shadow flicker impacts in the vicinity of the Facility Site.

Background sound monitoring was conducted at six different monitoring sites in the vicinity of the Facility Site for two distinct periods (summer and winter) lasting at least 14 days each. Measured sound levels were variable, depending on the proximity to human activity and industry. The overall equivalent average sound levels ranged from 35 to 49 dBA during the day and 35 to 42 dBA during the night. The sound level limit specified in ordinances for the Towns of Arkwright, Charlotte, and Cherry Creek is 50 dBA L_{10} at all receptors. The Applicant has voluntarily adopted a more conservative design goal of 45 dBA $L_{(a)}$ at non-participating residences (i.e., the outdoor sound level averaged over the night) for the Facility based on World Health Organization guidelines for protection against sleep disturbance and other research on human response to wind turbine noise. Various mitigation measures, such as sound waivers, blade design modifications and operating turbines in noise reduced operations modes, will be incorporated into the Facility to ensure compliance with the Town ordinances and consistency with the Facility design sound goal. See Exhibit 19 of this Application for more detailed information on the existing sound levels in the area, the potential noise impacts from the proposed Facility, and the mitigation measures to be implemented to minimize such impacts.

During construction of the proposed Facility, there will be a temporary increase in truck traffic on area roadways. A Transportation Effect and Route Evaluation Study (see Exhibit 25 for additional information) was prepared to evaluate existing transportation conditions in the vicinity of the Facility Site, and to identify probable local traffic routes, constraints, and proposed improvements. This study determined that local traffic may experience minor delays due to slow moving construction vehicles and increased traffic related to the construction activities. However, local traffic flow should not be significantly impacted because existing traffic volumes are so low. To minimize any delays to local traffic during the construction phase, the Applicant will coordinate with the State, County, and local municipalities to respond to any locations that may experience any traffic flow or capacity issues. Once the Facility is commissioned and construction activities are officially concluded, traffic will be negligible and likely concentrated around the O&M building. None of the potential traffic impacts are expected to effect the use and enjoyment of the Facility Site and surrounding areas for the current and planned land uses. Furthermore, any damage to local, County, or State roads caused by the construction and operation of the Facility will be repaired at the Applicant's expense. See Exhibit 25 of this Application for more detailed information on traffic and transportation impacts from the proposed Facility.

Land uses of particular concern to the community include residential areas, schools, civic facilities, commercial areas, and public lands. The Facility will have no direct impact on schools and civic facilities (i.e., they will not be removed or physically modified in any way). There will also be no impacts to commercial areas. Impacts to areas classified as residential by the NYSORPS will total 229.5 acres, of which 196.6 acres will be temporarily impacted (subject to restoration following construction) and 32.9 acres will be converted to built facilities. Direct impacts to public lands will be limited to a 1.2-mile section of 34.5 kV overhead collection line that will traverse Boutwell Hill State Forest. In order to minimize tree cutting and potential visual impacts along this 1.2 mile section, this collection line will be installed immediately adjacent to public roadways, specifically along the north sides of Mill Creek and Boutwell Hill Roads. An equestrian trail and the Cherry Creek Snowmobile Trail currently run north-south through this portion of the State Forest crossing Mill Creek Road, and the Earl Cardot Eastside Overland Trail also generally runs north-south through this area, with a trailhead/parking lot located at the crossing of Boutwell Hill Road. No poles supporting the collection line will be installed within the trail corridors. However, each of these trails will pass beneath the overhead collection line immediately north of the existing public road crossings. Direct impacts to recreational uses include those trail crossings, along with similar crossings of snowmobile and equestrian trails on private land by linear Facility components such as access roads, collections lines, and the generator lead line.

In addition to the County-wide and region-wide plans discussed above, the NYSDEC adopted a Unit Management Plan (UMP) for the Chautauqua County Unit in 2013. This document was designed to implement the NYSDEC's statewide Strategic Plan for State Forest Management, and supersedes the 1998 Boutwell Hill UMP. UMPs assess the natural and physical resources in the unit, consider the landscape conditions in the surrounding geographic area, and set forth specific management actions to be undertaken by the NYSDEC on individual State Forests. The Chautauqua UMP covers the 14 State Forests in Chautauqua County, including Boutwell Hill State Forest, a portion of which lies within the Facility Site. The UMP outlines five broad goals for the State Forests: (1) provide healthy and biologically diverse ecosystems, (2) maintain man-made State Forest assets, (3) provide recreational opportunities for people of all ages and abilities, (4) provide economic benefits to the people of the State, and (5) provide a legal framework for forest conservation and sustainable management of State Forests. The UMP also includes more specific management objectives and actions for each of the following categories: ecosystem management, resource protection, infrastructure and real property, public/permitted use, and forest management and health.

Although it does not specifically address renewable energy development, the UMP explicitly embraces multiple-use management. The NYSDEC (2013) "will seek to simultaneously provide many resource values on the unit such as, fish and wildlife, wood products, recreation, aesthetics, minerals, watershed protection, and historic or scientific values." Consistent with multiple-use management, there are currently numerous gas wells operating on State Forest lands in the unit, including within Boutwell State Forest. As described above, the proposed Facility includes

an approximately 1.2-mile section of 34.5 kV overhead collection line that will traverse Boutwell Hill State Forest. This collection line will be installed immediately adjacent to public roadways, specifically along the north sides of Mill Creek and Boutwell Hill Roads. This is consistent with management directives for siting pipelines, which states “pipelines will be located immediately adjacent to Public Forest Access Roads.” There are no turbines or other Facility components sited on State Forest lands.

(j) Compatibility of Above-Ground Interconnection with Existing and Proposed Land Uses

The proposed Facility will use above-ground interconnect lines where the usage of underground lines would cause greater environmental impacts, and/or are cost prohibitive, including (but not limited to) along the edges of agricultural fields, and crossing steep terrain, streams, wetlands, and public roads. Facility-wide, these five overhead collection line segments total approximately 10.4 miles, including a 3.7-mile section that will be co-located with the generator lead line. These segments generally run between separate turbine strings, crossing the valleys between ridgelines. Specific information is provided below regarding the location, land cover, and land use for each segment of overhead collection line:

- Between T31 and T37/T12 – This section of overhead lines is 2.7 miles, with approximately 0.7 mile located within an existing cleared right-of-way. It passes through land classified by NYSORPS as residential and vacant. Existing land cover consists of active agricultural land, forestland, successional shrubland, and disturbed/developed. The overhead collection line crosses Boutwell Hill, Sanford, and Erwin Roads.
- Between T48 and Mill Creek Road – The approximately 1.0-mile section of overhead line runs cross-county, passing through land classified by NYSORPS as residential and vacant. Existing land cover consists of active agricultural land and forestland.
- Between collection substation and underground collection line to T39/T44 and – This approximately 3.7-mile section of overhead line is co-located with the generator lead line, and will be underbuilt on the same poles, resulting in no additional impacts. It passes through land classified by NYSORPS as residential, agricultural, and vacant. Existing land cover consists of active agricultural land, successional old field, successional shrubland, forestland, and disturbed/developed. The generator lead line and overhead collection line cross the following public roads: Andrews Road, Nelson Road, Hall Road, Charlotte Center Road, and Harper Road.
- Between T41 and underground collection line to T15 – This section of overhead line is 2.3 miles, with 1.8 miles located adjacent to public roads, specifically Mill Creek Road and Boutwell Hill Road. It passes through land classified by NYSORPS as residential, vacant, and wild, forested, conservation lands, and

public parks. Existing land cover consists of successional old field, successional shrubland, and forestland. The overhead collection line crosses Housington and Arab Hill Roads.

- Running south from T42 – This 0.7-mile section of overhead line traverses the steep slopes of South Hill, crossing Farrington Hollow Road in the valley. It passes through land classified by NYSORPS as residential and vacant. Existing land cover consists of active agricultural land, forestland, and successional shrubland.

There are a total of 783 acres within 300 feet of an overhead collection line, of which approximately 23 acres consists of public road right-of-ways that are no part of any parcel, and as such, have no NYSORPS land use code. Land use for the remaining 760 acres has been classified by the NYSORPS as follows: vacant land, 322 acres (43%); residential, 290 acres (38%); agriculture, 78 acres (10%); wild, forested, conservation lands, and public parks, 61 acres (8%); and unassigned, 9 acres (1%). The 78 acres classified as wild, forested, conservation lands, and public parks and 5 acres of unassigned land use are part of Boutwell Hill State forest. Approximately 413 acres (53%) of the land within 300 feet of an overhead collection line is currently enrolled in a NYS Certified Agricultural District. The Facility's proposed overhead collection lines will not prohibit the continued use of the current adjacent land uses.

Table 4-6 below summarizes the impact the Facility's above-ground interconnect lines will have on agricultural district land, land use, forestland, wetlands, and streams. The soil impacts column represents impacts from the pole bases, while the vegetation impacts column represents right-of-way, which will be cleared initially and then maintained as successional communities. The full impacts from the proposed Facility (i.e., from all Facility components) are presented elsewhere in this Application. See Exhibit 22 for more information about impacts to forestland, streams, and wetlands. Full impacts to agriculture district lands are presented in this Exhibit in Table 4-1, while full land use impacts are presented in Table 4-4.

Table 4-6. Summary of Impacts from Above-Ground Interconnect Lines

	Soil Impacts	Vegetation Impacts	Total Impacts
Agricultural District Lands			
District 10	5.1 acres	17.2 acres	22.3 acres
District 13	2.3 acres	7.7 acres	10.0 acres
Total	7.4 acres	24.9 acres	32.3 acres
Land Use			
Residential	7.6 acres	26.2 acres	33.8 acres
Vacant	7.6 acres	24.6 acres	32.2 acres
Wild, Forested, Conservation Lands, and Public Parks	3.1 acres	10.7 acres	13.8 acres
Total	18.3 acres	61.5 acres	79.8 acres

	Soil Impacts	Vegetation Impacts	Total Impacts
Forestland			
Forest	13.3 acres	45.6 acres	58.9 acres
Successional Shrubland	3.2 acres	9.9 acres	13.1 acres
Total	16.5 acres	55.5 acres	72.0 acres
Wetlands and Streams			
Wetlands	0.1 acres	3.79 acres	3.89 acres
Streams	0 linear feet	3,480 linear feet	3,480 linear feet

(k) Compatibility of Underground Interconnections with Existing and Proposed Land Uses

The Facility includes a total of approximately 32.8 miles of collection line. As described above, approximately 10.4 miles of this collection line will be installed on overhead poles. The remaining 22.4 miles (68%) of the Facility's collection lines will be buried underground. There are a total of 1,633 acres within 300 feet of an underground collection line, of which approximately 14 acres consists of public road right-of-ways that are no part of any parcel, and as such, have no NYSORPS land use code. Land use for the remaining 1,619 acres has been classified by the NYSORPS as follows: vacant land, 851 acres (52%); residential, 644 acres (40%); agriculture, 113 acres (7%); un-assigned, 10 acres (1%); and wild, forested, conservation lands, and public parks, <1 acre (<1%). Approximately 1,047 acres (64%) of the land within 300 feet of an underground collection line is currently enrolled in a NYS Certified Agricultural District. The Facility's proposed underground collection lines will not prohibit the continued use of the current adjacent land uses.

The construction of buried interconnects will result in a temporary disturbance. In agricultural fields, construction will be conducted in accordance with the NYS Department of Agriculture and Markets *Guidelines for Agricultural Mitigation for Wind Power Projects*. Therefore, permanent land use impacts associated with underground interconnects are not anticipated. To minimize impacts in forested land, buried underground interconnect will be placed in areas of existing disturbance (e.g., existing forest logging roads) to the maximum extent practicable.

(l) Conformance with the Coastal Zone Management Act

The Facility Site is not located within a designated coastal area or in direct proximity of a designated inland waterway. Therefore, conformance with the Coastal Zone Management Act is not applicable.

(m) Aerial Photographs

Figure 4-8 depicts aerial photographs within a 1-mile radius of the Facility. This map was prepared using 0.5-meter resolution natural color orthoimagery from the USDA's National Agriculture Imagery Program (NAIP) captured during the 2015 growing season.

(n) Aerial Photograph Overlays

Figure 4-8 illustrates the Facility components overlaid on aerial photographs, along with the proposed limits of vegetation and soils disturbance. These maps were created using ArcGIS software. Line symbols are used to depict the centerlines of proposed access roads, electrical collection lines, and transmission lines; point symbols to depict turbine and permanent meteorological tower locations; and polygon symbols to depict substations, operation and maintenance buildings, and construction laydown areas. Buffers around each Facility component show the limits of clearing and disturbance required (e.g., 20-foot permanent width and 50-foot temporary width for access roads). This mapping was prepared using 0.5-meter resolution natural color orthoimagery from the USDA's NAIP captured during the 2015 growing season.

(o) Source of Aerial Photographs

Figure 4-8 was prepared using 0.5-meter resolution natural color orthoimagery from the USDA's NAIP captured during the 2015 growing season.

(p) Community Character

The Facility is proposed to be located in a rural portion of Chautauqua County, which is characterized by a mix of agricultural and forested land. According to the Chautauqua County website, "Farming continues to contribute to the county's economy, as well as the associated food processing industry. With 1557 commercial farms (1997), 15,500 acres of grapes, and eight wineries, Chautauqua County has more farms and produces more grapes than any other county in New York State." According to the *Chautauqua County Profile 2013* report, obtained from the Chautauqua County Department of Planning & Economic Development website, there are 1,658 farms with an average size of 142 acres, and 1,335 of these farms have been present 10 years or more.

The Facility will introduce new visible elements (i.e., wind turbines) into the existing landscape, which could be considered a change in community character for the primarily rural residential areas that surround the Facility Site. However, the visibility and visual impact of the wind turbines will be highly variable based upon distance, number of turbines in the view, weather conditions, sun angle, extent of visual screening from topography and vegetation, scenic quality, viewer sensitivity and/or existing land uses. It should be noted that the host municipalities have adopted regulations for the purpose of promoting the effective and efficient use of the local wind resource through allowing wind turbines (referred to as WECS in the local laws) as a permitted use with a special use permit. Creation of a special use is a determination by a Town's legislative body that a use is compatible with the community.

Classifying and defining the different landscape types can provide a useful framework for the analysis of available visual resources and viewer circumstances. These landscape types, referred to as Landscape Similarity Zones (LSZs), are defined based on the similarity of features such as land use patterns, vegetation, water, and landform. Six distinct LSZs were defined within a 10-mile study area: forest, rural valleys, rural uplands/ridgelines, villages/hamlets, and transportation corridors. Each of these LSZs is described briefly below:

- Forest – This LSZ is dominated by forest vegetation (mixed deciduous and coniferous tree species), and occurs on hillsides and in narrow ravines throughout the study area, and in larger blocks in the southern portion of the study area. Views in the Forest Land zone are typically limited due to the screening provided by overstory trees. Land use in this zone includes forestry, low-density residential development, and recreational use (hunting, snowmobiling, etc.).
- Rural Valleys – This LSZ is located in the level, broad, low-lying area adjacent to Cassadaga Creek and other small streams in the study area, and contains some large farms with broad, relatively flat fields. The Rural Valley zone includes pastureland for livestock, hay and other feed crops, idle areas, river/stream channels with numerous turns and oxbows, and floodplain wetlands. Views in this zone generally include a relatively level and open foreground backed by hillsides that feature a patchwork of fields and woodlots, and an upward orientation.
- Rural Uplands/Ridgelines – This LSZ is characterized by rolling hills and slopes, with widely dispersed farms and rural residences along a network of county and local roads. Active agricultural fields (corn, hay, pasture, etc.), bordered by hedgerows and scattered deciduous woodlots, dominate the landscape. Topography is generally level or undulating throughout this zone. Views in the Rural Uplands are generally open, at times expansive on hilltops, and include a patchwork of fields, fenced pastures, and woodlots, punctuated by barns and silos. Livestock and working farm equipment are often seen in the fields.
- Villages/Hamlets – This LSZ is characterized by low to moderate-density residential (and limited commercial retail) development, generally oriented along a primary road. Vegetation and landform contribute to visual

character in the village and hamlet areas, but buildings and other man-made features generally dominate the landscape. Activities within this zone are primarily associated with residential use, small commercial businesses, and local travel. Views within this zone are typically focused on the roadways and adjacent structures, although outward views across yards and adjacent fields are also available.

- Waterfront/Open Water – This LSZ is defined by a broad expanse of water that provides open views of the surrounding landscape. Within the study area, this landscape context type includes ponds on small farms and wooded lots and the northern portions of Chautauqua Lake, which have considerable visual importance due to their high public use, recreational value and scenic quality. Public use in this context type is restricted to recreational activities (boating, fishing, swimming) and shoreline residential activities.
- Transportation Corridors – This LSZ includes divided, multilane roads with limited access, specifically Interstate 88 and the New York State Thruway (Interstate 90), which passes through the northern and southern edges of the study area, respectively. Views along these road corridors are dominated by automobiles, pavement, guard rails, and signs. Viewer attention is generally focused on the roadway and associated traffic. Travel is at high speed, and outward peripheral views are fleeting. The surrounding scenery is variable, but within the study area is dominated by agricultural land and low density rural residential development with forested hills/ridges in the background.

For more information about the Landscape Similarity Zones at the Facility Site and the anticipated visual impacts of the Facility, see Exhibit 24 of this Application.

Avoidance or mitigation measures that will minimize adverse impacts on community character include but are not limited to the following:

- Siting the Facility away from population centers and areas of residential development.
- Keeping turbines a minimum of 1,500 feet from off-site (non-participating) residences to minimize noise and visual impacts.
- Locating access roads and turbines to avoid or minimize disturbance of agricultural land, wetlands, and streams.
- Using existing roads for turbine access whenever possible to minimize disturbance to agricultural land, wildlife habitat, wetlands, and streams.
- Burying electrical interconnection lines between turbines to the maximum extent practicable.
- Implementing agricultural protection measures to avoid, minimize, or mitigate impacts on agricultural land and farm operations.
- Working with the New York State historic preservation office to determine and implement, as needed, mitigation measures for historic resources.

- Consulting with various stakeholders to determine visually-sensitive resources and incorporate questions and concerns.
- Substantially complying with the host municipalities' substantive laws regarding the construction and operation of the Facility.

There are also numerous Facility-specific studies attached to this Application, such as a Visual Impact Assessment (see Exhibit 24), Noise Impact Assessment (see Exhibit 19), Cultural Resources Studies (see Exhibit 20), and a Shadow Flicker Assessment (see Exhibits 15 and 24). In addition to evaluating potential effects on their respective resources, these studies can also be used to evaluate the Facility's potential effects on community character. See also Exhibit 25 of this Application for a discussion of Facility impacts on transportation, including any effect the Facility might have on the Chautauqua County Jamestown (JHW) and Dunkirk (DKK) airports, along with the Spaulding Aerodrome (28NY). These exhibits also outline the various mitigation measures that are being implemented to minimize and avoid impacts on the environment and the community where the Project is proposed.

(q) Zoning Regulations

The proposed Facility is located in the Towns of Charlotte, Cherry Creek, Arkwright, and Stockton. The host Towns have each adopted Wind Energy Laws which promote the effective and efficient use of the Towns' wind energy resources through WECS and regulates the placement of such systems so that the public health, safety, and welfare will be protected. With the adoption of these Wind Energy Laws, the Towns recognized the need for balancing wind energy development against any impacts to the communities, including the community character. The Towns also recognize that as wind energy conversion system technology improves, it may be appropriate to reevaluate the wind energy laws. For example, the Town of Arkwright amended its wind energy regulation to allow for a maximum turbine height of 500 feet versus the previous allowable height of 420 feet. The Town of Cherry Creek is considering a similar amendment to their wind law. Taller turbines are more efficient at capturing wind energy, thereby allowing for greater megawatt capacity, which in turn reduces the number of turbines needed for a given project. Reducing the number of turbines helps mitigate any negative impacts to community character.

A summary of the permitted and prohibited uses within each zoning district in these Towns is presented above in Exhibit 4(d), based on the general zoning ordinances. This section presents a summary of the Wind Energy Laws adopted by each host Town. See Exhibit 31 for a full analysis of local Wind Energy Laws, including zoning regulations and allowable turbine height.

Town of Arkwright

There is one proposed turbine site located in the Town of Arkwright. This turbine is subject to the regulations set forth in Local Law No. 2 of 2007 and Local Law No. 1 of 2016. Local Law No. 2 of 2007 amended Sections 401(C) and 402(C) of the Town of Arkwright Zoning Law to indicate that wind energy facilities are allowable uses by special permit in Agricultural-Residential and Transition Districts, respectively, in accordance with Article VI-A. Local Law No. 2 of 2007 also added Article VI-A to the Town of Arkwright Zoning Law. The purpose of this Article is to promote the effective and efficient use of the Town's wind energy resource through WECS and to regulate the placement of such systems so that public health, safety, and welfare will not be jeopardized. No WECS can be constructed or operated in the Town of Arkwright except in a Wind Overlay Zone, pursuant to an application for rezoning and special use permit. Article VI-A provides definitions, describes procedures for creating wind overlay districts, specifies required content for WECS special use permit applications, describes the application review process, and establishes standards and setbacks for WECS.

Article VI-A established a maximum total height for WECS of 420 feet. However, Local Law No. 1 of 2016 subsequently amended Sections 659(13) of Article VI-A of the Town of Arkwright Zoning Law to read as follows, "The maximum total height of any WECS shall be 500 feet." No turbine models under consideration for the proposed Facility exceed 500 feet.

Town of Charlotte

There are 25 proposed turbine sites located in the Town of Charlotte. These turbines are subject to the wind energy facilities regulations set forth in Section 618 of the Town of Charlotte Zoning Law. No WECS can be constructed or operated in the Town of Charlotte except in a Wind Overlay Zone, pursuant to an application for rezoning and special use permit. Section 618 provides definitions, defines applicability, describes wind overlay district rules, specifies required content for WECS special use permit applications, describes the application review process, and establishes standards and setbacks for WECS. Section 618 established a maximum total height for WECS of 500 feet. No turbine models under consideration for the proposed Facility exceed 500 feet.

Town of Cherry Creek

There are 32 proposed turbine site located in the Town of Cherry Creek. These turbines are subject to the regulations set forth in Local Law No. 2 of 2011. The purpose of this Law is to promote the effective and efficient use of the Town's wind energy resource through WECS and to regulate the placement of such systems so that public health, safety, and welfare will not be jeopardized. No WECS can be constructed or operated in the Town of Cherry Creek except in a Wind Overlay Zone, pursuant to an application for rezoning and special use permit.

The Town of Cherry Creek Local Law No. 2 of 2011 provides definitions, describes wind overlay district rules, specifies required content for WECS special use permit applications, describes the application review process, and establishes standards and setbacks for WECS. Local Law No. 2 of 2011 established a maximum total height for WECS of 420 feet.

The Applicant proposes using commercial scale wind turbines with a maximum height of 500 feet. Therefore, the Facility will not conform to height regulations established in the Town of Cherry Creek Local Law No. 2 of 2011. Advances in technology have led to the development and installation of turbines with taller towers and longer blades, in order to improve the efficiency in which the turbines capture wind. This strategy is effective because wind speeds are stronger and more consistent at greater heights. The improved technology allows wind energy facilities to generate the same energy production with fewer taller turbines and a smaller overall footprint than if shorter, less efficient turbines were used. The Applicant intends to request the New York State Siting Board rule the maximum total height provision of 420 feet to be unreasonably burdensome in view of the existing technology and practicable implementation of the Facility.

Town of Stockton

There are no turbines proposed in the Town of Stockton.

The substantive standards that apply to WECS in each host Town are very similar. Generally the substantive standards that apply to WECS, under the Towns' zoning regulations, include the following:

- All power transmission lines from turbine towers to buildings or other structures shall be located underground to the maximum extent practicable;
- No television, radio, or other communication antennas may be attached to any WECS;
- No advertising signs are allowed on any part of the wind energy facility;
- Not towers shall be lit except to comply with Federal Aviation Administration (FAA) requirements;
- Applicants shall use measures to reduce the visual impact of WECS to the extent possible;
- The use of guy wires is prohibited;
- No WECS shall be installed where its proximity to existing antennas or communication systems would cause signal interference;
- Construction shall be limited to daytime hours¹; and

¹ The hours in which construction is allowed are as follows: 8 am to 8 pm in the Town of Arkwright, and 7 am to 8 pm in the Towns of Charlotte and Cherry Creek.

- The respective Town shall be named as an additional insured under the applicant's general liability policy in an amount to be determined by the Town.

The Applicant intends to request that the New York State Siting Board rule the following local laws unreasonably burdensome in view of the existing technology, practicable implementation of the Facility, or the needs of or costs to ratepayers whether located inside or outside of such municipality: the Town of Cherry Creek maximum total height provision of 420 feet; certain specific decommissioning and fencing requirements; and the 8 am to 8 pm limit on construction activities. See Exhibit 31 for a detailed explanation of the Applicant's rationale for requesting the Board not apply these local ordinances.

Throughout Chautauqua County, manufacturing and large industry greatly decreased by the late-twentieth century, and with it the population of the county. Agriculture and maple syrup have remained as major industries in Chautauqua County. Education also plays a large role in the local economy, due to the locations of SUNY Fredonia, Jamestown Community College, the Chautauqua Institution, and BOCES (Kirst, 2005). The host Towns have not received significant development pressure, and land use in the vicinity of the Facility Site has not changed substantially in recent years. The Facility Site features a rural and low-density character, with forests and farms as the most dominant visual aspect of the landscape. Although residential use is the most dominant land use category by percentage of parcels, the low density of residential uses results in a pastoral aesthetic across the countryside.

Oil and gas exploration and extraction are widespread throughout the County (see Figure 4-3). However, these wells are dispersed across the landscape, and are typically small and relatively inconspicuous, so do not comprise a significant perceived land use in the area. There are 63 gas and oil wells located within the Facility Site. The Facility has been designed to comply with Town setback requirements regarding gas wells (see Exhibits 6 and 31 for additional information about setbacks). The Facility has also been sited to avoid any mining operations in the area. Consequently, the proposed Facility will not have any impact on natural gas, oil, mining, or other extraction operations within the Facility Site.

The Facility is compatible with the existing community character and land uses in and around the Facility Site, and is not expected to interfere with future land uses. No existing structures will be physically impacted, and aside from temporary disturbance during construction activities, the Facility is largely compatible with farming practices. The Facility will not result in a significant change in land use, and will promote the long-term economic viability of the affected farms by supplementing the income of participating farmers. In other words, the Facility will help protect the agricultural and rural community character in the region. The presence of wind turbines will help preserve agricultural land and avoid conversion of that land to other developmental land uses, such as seasonal or permanent high-

density residences. Negative effects of the project will be offset by the economic benefits and the Facility's ability to help the region preserve its desired community character well into the future.

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