

Agricola Wind Project

Permit Application No. 23-00064

1100-2.21 Exhibit 20

Effect on Communications

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EXHIBIT 20 EFFECT ON COMMUNICATIONS

(a) Proposed Telecommunications Interconnection

It is anticipated that the generating Facility's operational data will be transmitted to the New York Independent System Operator (NYISO), and the transmission-owning utility, in this case New York State Electric and Gas (NYSEG). This data will include generation data (megawatt output, megavar, and any curtailment) and meteorological data (wind speed, wind direction, barometric pressure, ambient temperature, dew point, and humidity). The Facility's meter is anticipated to be located at the point of interconnection (POI) switchyard. At the POI substation, an internet protocol (IP)-based network connection will be enabled. Once the POI substation and operations and maintenance (O&M) facility have internet service, a secure encrypted link will be established between the collection substation and the O&M facility to allow for secure communication between the two.

(b) Existing Broadcast Communication Sources

This Exhibit identifies existing broadcast communication sources within a minimum 2-mile radius of the Facility and the electric interconnection between the Facility and the POI, unless otherwise noted.

(1) AM Radio

Comsearch, a telecommunications consulting firm, conducted a review of Federal Communications Commission (FCC) license data and compiled a list of AM radio stations within approximately 30 kilometers (18.6 miles) of the proposed Facility (Appendix 20-A). A total of six stations were identified; however, none were identified within 2 miles of the Facility Site. The nearest AM radio station, WAUB out of Auburn, New York, is located north of the Project, and is approximately 9.5 miles from the nearest turbine.

(2) FM Radio

Comsearch also conducted a review of FCC license data and compiled a list of FM radio stations within approximately 30 kilometers (18.6 miles) of the proposed Facility (see Appendix 20-A). A total of 18 stations were identified within the survey area, 16 of which are currently licensed and operating. The nearest FM radio station, WTMI out of Fleming, New York, is located to the east of the Project, and is approximately 4.4 miles from the nearest turbine. No FM radio stations were identified within 2 miles of the Facility Site.

(3) Television

"Off-air" television stations broadcast signals from terrestrial-based facilities directly to television receivers (i.e., without using a cable or satellite connection). Television stations within 150 kilometers

(93.2 miles) are the most likely to provide off-air coverage to the communities near the Facility. Comsearch examined the coverage of television stations and communities in the area that could potentially have degraded television reception because of Facility operation (see Appendix 20-B). There are 72 television stations within 93.2 miles of the proposed facility, 65 of which are currently licensed and operating. A total of 28 licensed and operating stations are low-power stations or translators which serve local audiences and have limited ranges. No off-air television stations were identified within 2 miles of the Facility Site.

(4) Telephone

Wireless operators are granted area-wide licenses from the FCC to deploy their cellular networks, which often include handsets with Emergency 911 capabilities (i.e., phones that automatically provide the location of the phone to emergency services). As mobile phone market boundaries differ from service to service, Comsearch disaggregated the carriers' licensed areas down to the county level (see Appendix 20-C). The type of service (e.g., cellular service at 800 MHz [CELL], advanced wireless service [AWS], personal communication service at 1.9 GHz [PCS], wireless communications service at 2.3 GHz [WCS], and commercial mobile phone at 700 MHz service [700 MHz]) for each mobile phone carrier in Cayuga County is provided below:

- AT&T: 700 MHz, AWS, Cellular, PCS, WCS
- DISH Network: 700 MHz
- T-Mobile: 700 MHz, AWS, PCS
- Verizon: 700 MHz, AWS, Cellular, PCS.

No FCC-licensed cellular sites were found within approximately 2 miles of the Facility Site.

(5) Microwave Transmission

Microwave bands that may be affected by the installation of wind turbine facilities operate over a wide frequency range (900 megahertz [MHz] – 23 gigahertz [GHz]). These systems are the telecommunication backbone of the country, providing long-distance and local telephone service, backhaul for cellular and personal communication service, data interconnects for mainframe computers and the internet, network controls for utilities and railroads, and various video services. Comsearch prepared a study evaluating the location of the Facility relative to licensed, proposed, and applied for non-federal government microwave systems in the area (see Appendix 20-D). The study identified 10 microwave paths within approximately 2 miles of the Facility Site. Table 20-1 provides the call sign, band, and licensee for these paths. Two microwave paths (KDD97, and WNTZ201) intersect the Facility Site. A map showing the location of the microwave paths is provided in Appendix 20-D and Figure 20-1.

Table 20-1. Microwave Paths within Approximately 2 Miles of the Facility

Callsign 1	Callsign 2	Band	Licensee
KDT82	KDD97	6.7 GHz	Eastern Gas Transmission and Storage, In
WPJA611	WNTZ201	940-960 MHz	Pfeiffer, Terry L
WPOV470	WQUL772	6.1 GHz	Pfeiffer, Terry L
WPOV473	WPOV470	940-960 MHz	Pfeiffer, Terry L
WQQU634	WQQU640	6.1 GHz	New Cingular Wireless PCS, LLC (NY)
WQTQ474	WQWY200	11 GHz	Clarity Connect, Inc.
WQWX654	WQWX655	18 GHz	Clarity Connect, Inc.
WQWX767	WQWX598	18 GHz	Clarity Connect, Inc.
WQYU906	WQYU905	6.1 GHz	Transwave Communication Systems, Inc.
WRED472	WRED471	11 GHz	Sprintcom, Inc

(6) Emergency Services

Comsearch assessed the emergency services communication systems in place near the Facility to identify potential impacts from the planned turbines (Appendix 20-E). Registered frequencies for the following types of first responder entities were evaluated: police, fire, emergency medical services, emergency management, hospitals, public works, transportation, and other state, county, and municipal agencies. Land mobile and emergency services data were derived from the FCC's Universal Licensing System and the FCC's Public Safety & Homeland Security Bureau. Comsearch identified six site-based licenses within approximately 2 miles of the Facility Site and 30 regional area-wide licenses designated for public safety use. The licensee, call sign, frequency bands, antenna height, and distance to nearest proposed turbine for the site-based licenses are provided in Table 20-2. The licensee, area of operation, and frequency band for area-wide licenses are provided in Table 20-3.

Table 20-2. Site-Based Licensed Communication Sources

Licensee	Call Sign	Frequency Bands (MHz)	Antenna Height (meters)	Distance to Nearest Turbine (miles)
Mobiletech Communications	WNIH658	450-470	49.0	0.50
Mobiletech Communications	WNNW214	450-470	55.0	0.50
CAYUGA COUNTY 911 COMMUNICATIONS	WPWB814	150-174	35.0	0.50
CAYUGA COUNTY 911 COMMUNICATIONS	WQAW396	150-174	35.1	0.50
SCPIO VENICE LEDYARD FIRE DISTRICT	WPLS893	150-174	9.1	0.78
DELUXE CAB CO	WPEQ702	450-470	15.0	1.87

Table 20-3. Area-Wide Licensed Communication Sources

Licensee	Area of Operation	Frequency Band (MHz)
AMERICAN NATIONAL RED CROSS	Statewide: NY	25-50, 450-470
AUBURN COMMUNITY HOSPITAL	Countywide: CAYUGA, NY	150-174
CAYUGA COUNTY 911 COMMUNICATIONS	Countywide: CAYUGA, NY	150-174, 450-470
CAYUGA, COUNTY OF	Countywide: CAYUGA, NY	25-50
CENTRAL ISLIP HAUPPAUGE VOLUNTEER AMBULANCE INC	Statewide: NY	150-174
CITY OF NEW YORK	Statewide: NY	4940-4990
ERIE, COUNTY OF	Statewide: NY	450-470
MASSASAUGA SEARCH AND RESCUE INC	Statewide: NY	150-174
NATIONAL SKI PATROL SYSTEM INC	Statewide: NY	150-174
NEW YORK CITY POLICE DEPARTMENT	Statewide: NY	150-174
NEW YORK STATE DEPARTMENT OF CORRECTIONS AND COMMUNITY SUPERVISION	Statewide: NY	150-174, 450-470, 4940-4990
New York State Department of Environmental Conservation	Statewide: NY	450-470
New York State Department of Labor	Statewide: NY	150-174
New York State Department of Transportation	Statewide: NY	0-10, 4940-4990
New York State Dept of Environmental Conservation	Statewide: NY	25-50, 150-174
New York State Office of Parks, Recreation & Historic Preservation (OPRHP) – Long Island Region	Statewide: NY	150-174
New York State Office of Parks, Recreation and Historic Preservation	Statewide: NY	450-470
New York State Office of Parks, Recreation and Historic Preservation (OPRHP) – Niagara Region	Statewide: NY	150-174
New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) - Albany	Statewide: NY	150-174
NEW YORK STATE POLICE	Statewide: NY	150-174, 450-470, 800/900, 2450-2500, 4940-4990
New York, State of	Statewide: NY	0-10, 25-50, 150-174, 406-413, 4940-4990
NEW YORK, STATE OF-OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION (OPRHP) – ALBANY	Statewide: NY	150-174
NIAGARA FRONTIER SEARCH AND RESCUE	Statewide: NY	150-174
NORTHEAST MOBILE SEARCH AND RESCUE INC	Statewide: NY	150-174
NORTHEASTERN FOREST FIRE PROTECTION COMPACT	Statewide: NY	25-50
NYS DEPARTMENT OF HEALTH BUREAU OF EMS	Statewide: NY	25-50, 150-174, 450-470
ORLEANS, COUNTY OF	Statewide: NY	150-174, 450-470
OSSINING, VILLAGE OF	Statewide: NY	25-50
Triborough Bridge and Tunnel Authority	Statewide: NY	4940-4990
WESTERN NEW YORK SEARCH DOGS INC	Statewide: NY	150-174

(7) Municipal/School District Services

Municipal and school district communication sources were included in the assessment of emergency services communication sources described in Exhibit 20(b)(6) and in Appendix 20-E. As indicated above, Comsearch identified numerous communication sources licensed to educational facilities and municipalities, including Cayuga County and local towns and villages. Tables 20-2 and 20-3 in Exhibit 20(b)(6) and Appendix 20-E provide a full listing of site-based and area-wide communication sources in the area, identified by licensee.

(8) Public Utility Services

Public utility communication sources were included in the assessment of emergency services communication sources described in Exhibit 20(b)(6). No licenses issued to public utilities were identified by Comsearch.

(9) Doppler/Weather Radar

Comsearch conducted a search for commercial interest and television station doppler radar systems within 250 kilometers of the proposed Facility's center point. This search radius was chosen by Comsearch based on terrain in the vicinity of the Facility and the location and elevation of individual turbines. Five doppler/weather radar systems were identified, with the closest being located approximately 27.4 miles (44.07 km) from the nearest proposed turbine (see Appendix 20-F).

The New York State Mesonet System is a statewide network of weather stations developed and run by the State University of New York at Albany (University at Albany). This system collects data on mesoscale meteorological phenomena and is used to supplement data gathered by traditional automated surface observing systems in support of decision-making in agriculture, emergency management, energy, ground transportation, and aviation. To ensure the highest quality of data, each station in the New York State Mesonet must be located at least 300 feet (91.44 meters) from any tall obstacles, such as wind turbines. According to Comsearch, the closest Mesonet station to the Facility, "Scipio Center," is approximately 0.2 miles (nearly 1,200 feet) from the nearest proposed turbine, well outside range of impact (see Appendix 20-F).

On May 10, 2024, the Applicant also submitted each turbine and MET tower data to the Federal Aviation Administration (FAA) to review long-range radar systems for any impacts. Via the FAA submission, the Department of Defense (DoD) Siting Clearinghouse obtains the data to conduct a department review of surveillance radar systems and weather radar systems. In addition, the federal government conducts its own assessment of the impacts of wind projects on government radar systems, including NEXRAD, as part of reviews conducted under the auspices of the National Telecommunications and Information Administration (NTIA). The Applicant sent an initial written notification of the proposed Facility to the NTIA on June 13, 2024. The NTIA provided plans for the proposed Facility to the federal agencies represented in the Interdepartmental Radio Advisory Committee (IRAC), which include the National Oceanic and Atmospheric Administration, among other agencies. The NTIA's response, dated August

8, 2024, has been appended to this Application (see Appendix 20-G). Further consultation with the FAA is discussed in Exhibit 20(b)(10).

(10) Air Traffic Control

The closest air traffic control tower is located approximately 16 miles southeast of the Facility Site at the Ithaca Tompkins International Airport (AirNav.com, 2024). The FAA is the organization in the United States government responsible for air traffic control and for evaluating and issuing determinations on petitions for objects that penetrate the nation's airspace. Under 14 CFR Part 77.9, any person proposing to undertake any construction that is more than 200 feet above ground level (AGL) must provide notice to the FAA. As part of the required review process, the FAA will reach out both internally and to other agencies, including the DoD Siting Clearinghouse, to determine whether such construction will adversely affect air safety, including navigational and surveillance systems such as radar.

Any object, such as a wind turbine, that is higher than 499 feet AGL at the site of the object is automatically issued a Notice of Preliminary Findings (NPF). Issuance of an NPF triggers a requirement for the FAA to conduct an aeronautical study of the locations of each proposed turbine. The FAA can issue two types of determinations – a Hazard Determination or a Determination of No Hazard (DNH). The Applicant submitted the proposed Facility layout to the FAA on May 10, 2024, so that aeronautical studies of locations of each proposed turbine can be conducted under the provisions of 14 CFR Part 77. The Applicant received a Notice of Presumed Risk from the DoD Siting Clearinghouse, in coordination with the FAA, in a letter dated August 13, 2024, which included a request for the Applicant to enter into discussions with the Department of the Air Force to identify any feasible and affordable mitigation actions. Correspondence between the Applicant and the FAA to date is documented in Appendix 2-A. The Applicant will continue to coordinate with the FAA and associated parties and will provide copies of any determinations to the Office of Renewable Energy Siting and Electric Transmission (ORES) upon receipt.

(11) Armed Forces

According to the Military Installations, Ranges, and Training Areas GIS dataset maintained by the DoD, the Armed Forces installation nearest to the proposed Facility is the Syracuse MCRC, located approximately 31 miles northeast of the proposed Facility Site (data.gov, 2024). As discussed in Exhibit 20(b)(9), the Applicant supplied written notice of the proposed Facility to the NTIA on June 13, 2024. The NTIA, in turn, distributed the information to the federal agencies represented in the IRAC, which include the Department of Homeland Security, U.S. Air Force, U.S. Army, U.S. Navy, U.S. Coast Guard, and Department of Veteran Affairs.

Also, as part of its hazard determination process, the FAA must reach out to the DoD Siting Clearinghouse, which is responsible for assessing the impact of possible airspace obstructions on military operations and readiness. The DoD Siting Clearinghouse, in turn, is required to reach out to any military organizations or facilities potentially impacted by an airspace obstruction to obtain their comments/recommendations concerning a project. The Siting Clearinghouse then evaluates the

comments received, determines whether that project will have an adverse impact on military operations and readiness, and reports that information on to the FAA. Receipt of an FAA DNH following the DoD Siting Clearinghouse review process is evidence that the Facility will not impact military operations or readiness.

As discussed in Exhibit 20(b)(10), the Applicant has submitted the proposed Facility layout to the FAA so that aeronautical studies of locations of each proposed turbine can be conducted under the provisions of 14 CFR Part 77. The Applicant will continue to coordinate with the FAA and will provide copies of any determinations to ORES upon receipt.

(12) Global Positioning Systems

Global Positioning System (GPS) is a U.S.-owned utility that provides users with positioning, navigation, and timing services. This system consists of three segments: the space segment, the control segment, and the user segment. The U.S. Air Force develops, maintains, and operates the space and control segments. The GPS control segment consists of a global network of ground facilities that track the GPS satellites, monitor their transmissions, perform analyses, and send commands and data to the constellation of satellites. The GPS ground facility located closest to the proposed Facility is the Air Force Satellite Control Network remote tracking station located in New Hampshire. The National Executive Committee coordinates GPS-related matters across multiple federal agencies to ensure the system addresses national priorities as well as military requirements. The National Executive Committee is chaired jointly by the Deputy Secretaries of Defense and Transportation, and membership includes top leaders from the Departments of State, the Interior, Agriculture, Commerce, and Homeland Security, the Joint Chiefs of Staff, and National Aeronautic and Space Administration (National Coordination Office, 2023).

Each of the agencies represented in the National Executive Committee are also represented in the IRAC. See Exhibit 20(b)(9) for a discussion of the IRAC review process.

(13) Amateur Radio Licenses

Comsearch conducted a search of the FCC's database record by geocoding the street address of each amateur licensee within a 2-mile survey area. Comsearch identified seven active amateur radio licenses registered to addresses within a 2-mile radius of the proposed Facility, with the closest located 0.54 miles from the nearest proposed turbine (see Appendix 20-H).

The call sign and operator class for each amateur radio license within approximately 2 miles of the Facility Site is provided in Table 20-4.

Table 20-4. Amateur Radio Licenses within Approximately 2 Miles of the Facility Site

Call Sign	Operator Name	Distance to Closest Turbine (miles)
WB2NYP	Clark, Marilyn L	0.73
KA2LIQ	CLARK, CELESTIA A	0.60
K2RSY	WIETHUECHTER, FRANK G	4.43
KC2RXO	WIETHUECHTER, ADAM T	4.43
W3FSD	KELLER, CHRISTOPHER	1.21
WB2MVX	HAMILL Mr, THOMAS W	1.35
K2FEO	ELLISON, ROBERT R	0.54

(c) Existing Underground Cable and Fiberoptic Lines within One Mile

The Applicant has consulted with Charter, Spectrum, and Windstream to identify overhead and underground cable and fiber optic lines located within 1 mile of the Facility Site. A number of fiber optic lines owned by Spectrum and Windstream were identified within the Facility Site. Some of these lines cross Facility infrastructure (see Figure 20-1). Correspondence between the Applicant and communications service providers is located in Appendix 02-A.

(d) Anticipated Effects on Communication Systems

The following subsections discuss the anticipated effects of the proposed Facility and electric interconnection on the communication systems identified in Exhibit 20(b) and (c) above:

(1) Potential Structure Interference with Broadcast Patterns

Interference with radio broadcast coverage is not anticipated. Facility wind turbines are sited outside the 3-kilometer exclusion distance recommended for AM frequencies and outside the far field region of radiating FM antennae (i.e., the area within approximately 1,500 feet of the antenna) near the Facility (see Appendix 20-A). In addition, according to Comsearch, amateur radio stations such as those located in the vicinity of the Facility Site are typically unaffected by the presence of wind turbines (see Appendix 20-H). The proposed Facility is not anticipated to cause any significant harmful effects to the services of any amateur radio stations identified in Exhibit 20(b)(13).

Interference with emergency responder services, municipal/school district services, industrial/business land mobile sites, area-wide public safety, and mobile telephone communications are not anticipated (Appendix 20-E). Although these sources operate in different frequency ranges and provide different types of service (e.g., voice, video, and/or data), wind turbines are not likely to impact any of these services. Each of these networks is designed to operate reliably in a non-line-of-sight environment. The frequencies of operation for these communication sources allow the signal to propagate through wind turbines. Moreover, land mobile systems are designed with overlap between base transmitter stations to maintain reception if the signal to one station is impeded. If a connection cannot be made to one base station, the signal will automatically shift to an adjacent base station to make the connection. In

addition, the beam widths of the radiated signal from the base stations and mobile units are wide and the wavelength of the signal is long enough to wrap around objects such as wind turbine towers and blades. This allows wireless networks to provide coverage even in areas that are congested with physical obstructions (e.g., downtown urban areas). As a result, little, if any, change in coverage should occur when the wind turbines are installed. In the unlikely event that interference does occur, it can be mitigated using the methods outlined in Exhibit 20(g).

The potential for wind turbines to interfere with cellular base stations or land mobile units has been considered from an electromagnetic interference standpoint. Comsearch's calculations indicate that the proposed turbines are not expected to interfere with cellular signals if the cellular tower base stations are located 77.5 meters (254 feet) or more from the nearest turbine (see Appendices 20-C and 20-E). Since no turbines are proposed within this distance of a cellular tower, no impact is anticipated.

To ensure the highest quality of data, each station in the New York State Mesonet must be located at least 300 feet from any tall obstacles, such as wind turbines. The closest Mesonet station to the Facility is located approximately 0.2 miles from the closest turbine, well outside the range of impact. In addition, the data from each station is transmitted via the Internet to a central ingest system located at the University at Albany. Therefore, for the reasons outlined in this section, interference from the proposed Facility is unlikely (see Appendix 20-F).

No potential impacts to the GPS system have been identified. This communication source is typically unaffected by wind energy generating facilities.

Sixteen licensed full-power television stations and three low-power digital stations could have their off-air reception disrupted in and around the Facility. This disruption would primarily occur in locations within 10 kilometers of the Facility that do not have a clear line-of-sight to the television station antennae but do have clear line-of-sight to a wind turbine located between the television station antennae and the television receiving the signal (Appendix 20-B). Two of the licensed stations identified as potentially having their service disrupted (WNYI, and WDSS-LD) are located within 10 kilometers of proposed wind turbines. A discussion of potential mitigation measures to address disruptions in broadcast of off-air television signals is included at Exhibit 20(g).

(2) Potential for Structures to Block Lines-of-Sight

Microwave telecommunication systems are wireless point-to-point links that require clear line-of-sight conditions between each microwave dish. To assure an uninterrupted line of communication, a microwave link should be clear, not only along the axis between the center point of each microwave dish, but also within a formulaically calculated distance around the center axis of the radio beam, known as the Fresnel Zone. The potential impacts to microwave paths whose Fresnel zone is impacted by a wind turbine blade could include a reduction in signal level, lower path reliability, and/or intermittent signal drops caused by the wind turbine blade or tower scattering, diffracting, or reflecting the signal. The primary method to avoid issues with microwave paths is to design wind projects in locations that do not infringe on the Fresnel zones. Other mitigation for these impacts would be to redesign the path

so that the signal blockage is removed. A redesign may include changing centerlines, locations, or frequency bands to work around the wind turbine.

Comsearch calculated the Fresnel Zone for the 10 microwave paths identified near the proposed Facility (see Appendix 20-D). A cross-sectional overlay analysis was conducted using these Fresnel Zones and the Facility layout, and conservative turbine dimension assumptions that included a maximum blade diameter of 162 meters and a maximum turbine hub height of 120 meters. Based on the cross-sectional analysis provided in Appendix 20-D, no turbines in the proposed Facility layout intersect any Fresnel Zones.¹ Consequently, there will be no impact to microwave systems in the area.

Wind turbines in the line-of-sight of the transmitted signal of radar systems also have the potential to impact Doppler radar coverage and produce false targets. Comsearch's analysis found that one Doppler radar antenna, WPPY879, has line-of-sight conditions to the turbines in the wind project area (see Appendix 20-D). However, the height and angle of the turbine with regard to call sign WPPY879 falls well below the lowest radar elevation, meaning the Project will not be visible to this Doppler radar. No notification or project modifications are required as the WPPY879 Doppler radar will not be impacted (see Appendix 20-D).

(3) Physical Disturbance by Construction Activities

Physical disturbance to communication infrastructure (e.g., towers, buried cables, etc.) during construction is not anticipated. The location of any such infrastructure within and adjacent to the proposed Facility will be indicated on construction drawings and reviewed by the contractor prior to construction. The Applicant will also coordinate with Dig Safely New York prior to commencing any construction activities. All Facility construction and maintenance work that requires excavation will follow the One Call process with Dig Safely New York. This process helps prevent damage by alerting the excavator to the locations of underground utilities, including electric, gas, oil, steam, water, sewer, and communications lines. The excavator identifies the area to be excavated and then provides information to Dig Safely New York about the company performing the excavation, the duration of the job, the locations of digging, the depth of the excavation, and other information. Dig Safely New York members, who are utility operators, respond to the request either by noting that the area is clear, or by providing the locations of their facilities. These facilities are then marked above ground, and either avoided or protected during the excavation. If an underground facility cannot be avoided and needs to be exposed, the excavator will provide proper support and protection so that the facility is not damaged. Upon completion of work, the excavator backfills around any exposed utilities.

¹ See Appendix 20-D for more specific information on the clearance between microwave beam paths intersecting the Facility and the nearest turbines (Wind Turbines #3 and #4)

(4) Adverse Impacts to Co-Located Lines Due to Unintended Bonding

Underground fiber optic lines are located within and adjacent to the Facility Site, and Facility infrastructure crosses these lines in several locations. Some of these lines are located within the Facility's limits of disturbance. The Applicant will coordinate with the owners of these fiber optic lines and any other identified co-located lines to ensure appropriate separate and protection measures are being implemented and, where necessary, execute crossing agreements to ensure the Facility avoids interference with all existing utility systems. The Applicant does not believe that there is significant potential for the proposed Facility and electrical interconnection to adversely impact co-located lines due to unintended bonding.

(5) Other Potential for Interference

The Applicant sent an initial written notification of the proposed Facility to the NTIA on June 13, 2024. The NTIA's response, dated August 8, 2024, indicates: "No reviewing agencies had issues with turbine placement in this area. Commerce has completed our review of the subject wind project and found it is over 73 km NW of the Binghamton, NY NEXRAD. Based upon distance and terrain, this Project appears to be radar neutral. No further contact with the developer is requested at this time." The NTIA's response has been appended to this Application (see Appendix 20-G).

(e) Capacity Analysis

High speed internet connection will be established at the minimum point of entry. At that point, a secure encrypted link will be established over that line with the Facility's central operations center to provide real-time telemetry and other information to the appropriate parties for monitoring and reporting purposes.

At the O&M facility, a similar setup will be established for high-speed data communications. A Voice Over Internet Protocol telecommunications network will be set up that will also allow for internal communications as well as telecommunications to the public and emergency responders, if necessary. There will be secure encrypted links at both the O&M facility and the minimum point of entry that will be tied back to the Applicant's corporate offices for monitoring and access to the Facility.

(f) Evaluation of Design Configuration

A map illustrating relevant communication system constraints within the Facility Site and 2-mile study area (e.g., Fresnel zones, radio station exclusion zones, etc.) is provided in Figure 20-1. The Facility has been designed to avoid impacts to communication systems to the extent practicable. In the unlikely event that the Facility has impacts on communications systems, the Applicant will take appropriate steps to review and respond to the complaint as set forth in Exhibit 20(g).

(g) Post-construction Activities to Identify and Mitigate Adverse Effects on Communication Systems

The Applicant takes seriously any complaints that it receives from members of the public concerning the impact of the Facility. Residents that experience degraded off-air television service after installation of the Facility can file a formal complaint with the Applicant. If it is determined that Facility operation has impacted existing off-air television coverage, the Applicant will analyze each individual problem on a case-by-case basis to determine the extent of the impact. After this analysis, the Applicant may offer cable television hookups or direct broadcast satellite reception systems (in areas where cable service is not available/practical) or investigate methods for improving the television reception system. It is important to note that both cable service and direct broadcast satellite service will be unaffected by the presence of the Facility (see Appendix 20-B).

In the unlikely event that a public safety entity believes their coverage has been compromised by the Facility, the Applicant will work with the public safety entity to remedy any interference related to the Facility. Possible solutions include optimizing nearby base transmitters, adding a repeater site, and/or using utility towers, meteorological towers, or even the turbine towers within the Facility as base station or repeater sites.

(h) Communication Interconnection Negotiations and Agreements

In compliance with Section 1100-2.21(h), the Applicant notes that business grade broadband internet service is available on Burns Road to any customer with a property interest at that location. No upgrades to the system are required to provide this service. As of yet, the Applicant has not requested service as the lead time for installation is relatively short, the service will not be required for more than a year from the present time, and service requires a 911 address that is yet to be established. Such negotiations have not yet been initiated for the Facility because the agreements have not been identified at the time of Application filing.

Section 1100-2.21(h), requires a description of the status of negotiations, or a copy of agreements that have been executed, with companies or individuals for providing the communications interconnection, including any restrictions or conditions of approval placed on the Facility imposed by the provider, if applicable. The Applicant is in the process of securing a Large Generator Interconnection Agreement for the Facility. The requirements of NYSEG (the transmission owner), the NYISO, and the Applicant, will form the basis of specifications to be negotiated between parties. Following the execution of the Large Generator Interconnection Agreement, the Applicant will negotiate with local service providers for communication services.

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