



# **WATKINS GLEN SOLAR ENERGY CENTER**

**Case No. 17-F-0595**

**1001.26 Exhibit 26**

**Effect on Communications**

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## **Exhibit 26: Effect on Communications**

This Exhibit will track the requirements of Stipulation 26, dated February 21, 2020, and therefore, the requirements of 16 New York Codes, Rules and Regulations (NYCRR) § 1001.26.

### **26(a) Existing Broadcast Communications Sources**

A review of the potential impact on communications technology, as a result of the Watkins Glen Solar Energy Center (the Watkins Glen Solar Energy Center or the Project), was conducted by the Watkins Glen Solar Energy Center, LLC (the Applicant). The review included an analysis of the Federal Communications Commission (FCC) license data and other similar databases for television, radio, cellular, microwave, and doppler radar communications. The Applicant is in consultation with the Schuyler County Emergency Management Office, the Schuyler County Sheriff's Office, and the New York State Division of Homeland Security and Emergency Services to inform the agencies about the Project and to evaluate the potential for effects to and concerns regarding emergency services and emergency communications systems as a result of the Project.

The Project consists of solar arrays and lacks tall structures and exposed moving parts. The photovoltaic arrays involved in this Project emit a weak electric and magnetic field (EMF) in the same low frequency as household electric appliances (see Exhibit 35 for details on EMF in relation to the Project). The Applicant is not aware of any current research documenting negative effects of solar arrays on communications technology; therefore, the Project is not anticipated to interfere with any existing communications systems.

#### ***(1) Amplitude Modulation (AM) Radio***

AM transmitter stations were not identified within a 2-mile radius of the Project Area. The closest transmitter, WRCE, 1490 AM, operates out of Watkins Glen, New York (42° 23' 30" N, 76° 53' 26" W) and is located 4.3 miles from the proposed arrays. The operation of solar facilities is not anticipated to interfere with or cause adverse impacts to AM radio stations and is not be addressed further in this Application.

#### ***(2) Frequency Modulation (FM) Radio***

FM stations were not identified within a 2-mile radius of the Project Area. The closest transmitter, WRFI, 91.9 FM, operates out of Watkins Glen, New York (42° 21' 08" N, 76° 52' 05" W) and is located 3.9 miles from the proposed arrays. The installation and operation of solar facilities is not

anticipated to interfere with or cause adverse impacts to FM radio stations and is not be addressed further in this application.

### **(3) Television**

Over-the-air television stations broadcast content in the VHF and UHF spectrum, from terrestrially based facilities directly to television antennas. Satellite TV and Community Area Television reception are not affected by the presence of solar facilities. The Applicant examined coverage of over-the-air television stations in the area to identify any potential impacts or degraded reception that would be associated with the Project. There were no television transmitter stations identified within a 2-mile radius of the Project Area; therefore, television broadcast interference is not anticipated.

If residents within the Project Area experience adverse impacts to their television reception and/or service after installation of the proposed solar arrays, the residents may issue a formal complaint with the Applicant. The Applicant will consider any complaints received and seek resolution in accordance with the Complaint Resolution Plan (see Appendix 12-3).

### **(4) Telephone**

Wireless operators are granted area-wide licenses from the FCC to deploy their cellular networks, which often include handsets with E911 capabilities. Cellular licenses are granted for specific frequency bands. Transmission equipment transmits within licensed frequencies. Likewise, equipment receivers filter frequencies outside licensed bands. Therefore, no change in coverage should occur due to the Project installation and operation.

The Applicant identified 124 active wireless service licenses within Schuyler County. The license holder and type of service are listed below in Table 26-1. The table includes information regarding the call sign, provider, registration number (FRN), and the type of service (e.g., cellular [CL], advanced wireless service [AW], personal [PCS], and wireless communications service [WS]).

**Table 26-1. Wireless Telephone Service Licenses Within Schuyler County**

#	Call Sign	Name	FRN	Radio Service
1	KAG553	CORNING HOSPITAL	9131012	PW
2	KAN371	STEUBEN COUNTY	4474540	PW
3	KEB322	WYOMING, COUNTY OF	3397593	PW

**Table 26-1. Wireless Telephone Service Licenses Within Schuyler County**

#	Call Sign	Name	FRN	Radio Service
4	KEB394	STEUBEN COUNTY	4474540	PW
5	KED234	COUNTY OF ONTARIO	3397650	PW
6	KED548	STEUBEN COUNTY	4474540	PW
7	KED992	WATKINS GLEN, VILLAGE OF	6888804	PW
8	KFF265	TOWN AND COUNTRY FIRE DEPARTMENT INC	3411899	PW
9	KFR476	STEUBEN COUNTY	4474540	PW
10	KKV461	Allegany, County of	3397833	PW
11	KLK395	New York State Department of Transportation	5813506	PW
12	KLK411	NEW YORK, STATE OF DOT	5813506	PW
13	KLK412	NEW YORK, STATE OF	5813506	PW
14	KLK413	NEW YORK, STATE OF DOT	5813506	PW
15	KLK733	NEW YORK, STATE OF DOT	5813506	PW
16	KLK734	NEW YORK, STATE OF DOT	5813506	PW
17	KNCC420	VOLUNTEER AMBULANCE CORPS OF BATH NY INC	8654808	PW
18	KNCE438	ONONDAGA, COUNTY OF	4009734	PW
19	KNEP998	NEW YORK, STATE OF	5813506	PW
20	KNET265	FIRST STUDENT INC	1738046	PW
21	KNGL594	New York State Office of Parks, Recreation	10969756	PW
22	KNID319	RadioMax Communications, Inc.	26986232	YG
23	KNIL311	PLUNKETTS CREEK FIRE DEPARTMENT	8214066	PW
24	KNJM272	HECTOR, TOWN OF	3418233	PW
25	KQM645	New York State Office of Parks, Recreation	10969756	PW
26	KTZ226	ROBERT PACKER HOSPITAL	3220803	PW
27	KWE646	STEUBEN COUNTY	4474540	PW
28	KYW987	ONTARIO, COUNTY OF	5084603	PW
29	WNDS871	T&K COMMUNICATIONS SYS INC	3408317	YG
30	WNFW318	New York State Department of Environmental Conservation	3438579	PW
31	WNID355	OWEGO, VILLAGE OF	3416203	PW

**Table 26-1. Wireless Telephone Service Licenses Within Schuyler County**

#	Call Sign	Name	FRN	Radio Service
32	WNJE469	SOUTH SENECA CENTRAL SCHOOL	3411568	PW
33	WNKK969	PFEIFFER, TERRY	3589173	YG
34	WNKN556	CONWAY, ROBERT J: CONWAY, THOMAS J	3249695	YG
35	WNKQ584	WATKINS GLEN, VILLAGE OF	3413259	PW
36	WNKY200	T&K Communications, Inc	3408317	YG
37	WNLQ509	T & K COMMUNICATIONS INC	3408317	YG
38	WNME920	Steuben County	4474540	PW
39	WNPQ619	T & K COMMUNICATIONS	3408317	YG
40	WNQG288	GROVE, TOWN OF	3394038	PW
41	WNQJ625	TULLY, VILLAGE OF	3415973	PW
42	WNWD548	TYRONE, TOWN OF	3417334	PW
43	WNXZ587	CHEMUNG, COUNTY OF	22014732	PW
44	WPCX817	CORNING INCORPORATED	8692139	YG
45	WPDD384	CORNING, CITY OF	3392107	PW
46	WPDU476	CHEMUNG, COUNTY OF	7133937	PW
47	WPEC327	T & K COMMUNICATIONS INC	3408317	YG
48	WPEN751	ALLEGANY, COUNTY OF	3397833	PW
49	WPEN755	ALLEGANY, COUNTY OF	3397833	PW
50	WPEZ237	T&K COMMUNICATIONS INC	3408317	YG
51	WPIW875	STEUBEN COUNTY	4474540	PW
52	WPJV268	T&K COMMUNICATIONS SYS INC	3408317	YG
53	WPJY843	ERWIN, TOWN OF	5802590	PW
54	WPKH403	STEUBEN COUNTY	4474540	PW
55	WPLX269	COUNTY OF ONTARIO	3397650	PW
56	WPMG258	PFEIFFER, TERRY L	3589173	YG
57	WPMJ333	PFEIFFER, TERRY L	4895025	YG
58	WPMJ811	PFEIFFER, TERRY L	3589173	YG
59	WPMP497	PFEIFFER, TERRY	3589173	YG
60	WPMR830	PFEIFFER, TERRY	3589173	YG
61	WPMU474	T & K COMMUNICATIONS SYS INC	3408317	YG
62	WPNQ850	SCHUYLER, COUNTY	3419215	PW

**Table 26-1. Wireless Telephone Service Licenses Within Schuyler County**

#	Call Sign	Name	FRN	Radio Service
63	WPNQ953	NEWFIELD, TOWN OF	8672347	PW
64	WPNS441	BRICO TECHNOLOGIES INC	6000954	YG
65	WPNY451	T & K COMMUNICATIONS SYSTEMS INC	3408317	YG
66	WPNY716	T & K COMMUNICATIONS SYS INC	3408317	YG
67	WPNZ968	PFEIFFER, TERRY L	3589173	YG
68	WPOY208	PFEIFFER, TERRY L.	3589173	YG
69	WPPA724	SCHUYLER, COUNTY OF	3419199	PW
70	WPPX331	BRICO TECHNOLOGIES INC	6000954	YG
71	WPQI650	STEUBEN COUNTY	4474540	PW
72	WPRF946	CHEMUNG, COUNTY OF	22014732	PW
73	WPRU503	SAIA COMMUNICATIONS INC.	5007141	YG
74	WPUF392	THE PFEIFFER GROUP INC	4477766	YG
75	WPUP499	HORSEHEADS, VILLAGE OF	5846563	PW
76	WPVB730	STEUBEN COUNTY	4474540	PW
77	WPVJ569	VETERAN, TOWN OF	5895313	PW
78	WPVQ949	STEUBEN COUNTY	4474540	PW
79	WPVR729	STEUBEN COUNTY	3397619	PW
80	WPVT801	STEUBEN COUNTY	4474540	PW
81	WPVT809	Steuben County	4474540	PW
82	WPXL933	SCHUYLER, COUNTY OF	3419199	PW
83	WPXY518	CORNING, CITY OF	3392107	PW
84	WPYC262	Steuben County	4474540	PW
85	WPZV693	NEW YORK STATE DEPARTMENT OF CORRECTIONS	8398745	PW
86	WPZV697	NEW YORK STATE DEPARTMENT OF CORRECTIONS	8398745	PW
87	WQAD228	Bradford, County of	7597198	PW
88	WQAN461	CHEMUNG, COUNTY OF	22014732	PW
89	WQAT421	MOBILETECH COMMUNICATIONS CORP.	5123914	YG
90	WQAW532	CHEMUNG, COUNTY OF	22014732	PW
91	WQBP866	PFEIFFER, TERRY L	3589173	YG
92	WQCI257	CORNING INCORPORATED	8692139	YG



**Table 26-1. Wireless Telephone Service Licenses Within Schuyler County**

#	Call Sign	Name	FRN	Radio Service
93	WQEC208	SCHUYLER, COUNTY OF	3419215	PW
94	WQEQ261	New York State Electric & Gas Corporation	4127932	YG
95	WQER995	NEW YORK STATE ELECTRIC & GAS CORPORATION	4127932	YG
96	WQIV305	MOBILETECH COMMUNICATIONS CORP	5123914	YG
97	WQKC335	MOBILETECH COMMUNICATIONS CORP	5123914	YG
98	WQOM480	SCHUYLER, COUNTY OF	3419215	YW
99	WQOU796	CORNING INCORPORATED	8692139	YG
100	WQPC486	VILLAGE OF PAINTED POST	3392388	PW
101	WQPM326	HORSEHEADS, VILLAGE OF	5846563	PW
102	WQQV659	STEUBEN COUNTY	4474540	PW
103	WQRF718	STEUBEN COUNTY	4474540	PW
104	WQRH377	STEUBEN COUNTY	4474540	PW
105	WQRH572	STEUBEN COUNTY	4474540	PW
106	WQSB795	American Medical Response, Inc.	4896650	PW
107	WQTJ381	ADAMS TECHNICAL SERVICES, INC.	14832596	YG
108	WQVK674	East Corning Vol. Fire Department	24238875	PW
109	WQWD584	Forest View Fire District	24631806	PW
110	WQWE370	CONWAY, ROBERT J.:CONWAY, THOMAS J.	3249695	YG
111	WQWQ337	Odessa Hose and Chemical Company	24866857	PW
112	WQXM601	South Corning Volunteer Fire Department	25167230	PW
113	WQYI965	ADAMS TECHNICAL SERVICES, INC	14832596	YG
114	WQYP394	RANK, WILLIAM E	20440830	YG
115	WQYV940	CORNING INCORPORATED	8692139	YG
116	WRAD816	HORSEHEADS, TOWN OF	3393899	PW
117	WRCB715	Steuben County	4474540	PW
118	WRCB926	Steuben County	4474540	PW
119	WRCN204	NEW YORK, STATE OF	3438611	PW
120	WRDV382	STEUBEN COUNTY	4474540	PW

**Table 26-1. Wireless Telephone Service Licenses Within Schuyler County**

#	Call Sign	Name	FRN	Radio Service
121	WRER357	STEUBEN COUNTY	4474540	PW
122	WREW371	STEUBEN COUNTY	4474540	PW
123	WYC674	TOWN OF LINDLEY	3393790	PW
124	WZY288	OWEGO, VILLAGE OF	3416203	PW

Structures taller than tree height are not proposed for the Project; therefore, the frequency of operation for the above-listed wireless services are not anticipated to be affected. Changes to coverages should not occur as a result of the Project construction and operation.

***(5) Microwave Radio Transmission***

Microwave radio transmissions provide long-distance and local telephone services and backhaul for cellular and personal communications services, as well as interconnect data for mainframe computers and the internet. In addition, microwave radio transmission provides network controls for utilities and railroads across the county, as well as various video surveillance services. Per the FCC's Universal Licensing System, 16 licensed microwave radio paths are operating in Schuyler County. One path (Call Sign WQUG272), operated by the County, passes within 2 miles of the Project. Impacts to microwave communications are not expected as a result of the Project because microwave radio systems employ filters to reject frequencies outside the licensed band.

***(6) Emergency Services***

Registered frequencies for the following first responder entities were evaluated in the vicinity of the Project: police, fire, emergency medical services, emergency management, hospitals, public works, transportation, and other state, county, and municipal agencies.

The FCC's Universal Licensing System was utilized to obtain Public Safety Licensing information. The Applicant identified 44 active site-based licenses within Schuyler County designated for public safety use. These Public Safety licensees are listed in Table 26-2 below.

**Table 26-2. Site-Based Public Safety Licenses within Schuyler County**

#	Call Sign	Name	FRN	Radio Service
1	WQUC670	Chemung County Fire/EMO	22014732	PW
2	KNJM272	Hector, Town of	3418233	PW
3	WQKC335	Mobiletech Communications Corp.	5123914	YG
4	KNCP250	New York State Police	3438595	PW
5	WQYK601	New York State Police	3438595	PW
6	KUJ638	NYS Corrections and Community Supervision	8398745	PW
7	KAW516	NYSDEC Office For Public Protection	3438579	PW
8	KJU949	NYSDEC Office For Public Protection	3438579	PW
9	WNFW318	NYSDEC Office For Public Protection	3438579	PW
10	WNGX534	NYSDEC Office For Public Protection	3438579	PW
11	WQC889	NYSDEC Office For Public Protection	3438579	PW
12	KLK734	NYS Department of Transportation	5813506	PW
13	KNGQ799	NYS Department of Transportation	5813506	PW
14	WNQS839	NYS Division of Homeland Security	5133236	PW
15	WQDI395	NYS Division of Homeland Security	3438611	PW
16	KNAE853	NYS OPRHP- Finger Lakes Region	10969756	PW
17	WQWQ337	Odessa Hose and Chemical Company	24866857	PW
18	KTR765	Reading, Town of	3417615	PW
19	KAG407	Schuyler Hospital	5127576	PW
20	WQOM480	Schuyler, County of	3419215	YW
21	KAN370	Schuyler, County of	3419215	PW
22	KDD591	Schuyler, County of	3419199	PW
23	KEG860	Schuyler, County of	3419215	PW
24	KIU882	Schuyler, County of	3419215	PW
25	KIU883	Schuyler, County of	3419215	PW
26	KNIC560	Schuyler, County of	3419199	PW

**Table 26-2. Site-Based Public Safety Licenses within Schuyler County**

#	Call Sign	Name	FRN	Radio Service
27	KNIL487	Schuyler, County of	3419215	PW
28	KNIL488	Schuyler, County of	3419215	PW
29	KNIW580	Schuyler, County of	3419215	PW
30	KNIW581	Schuyler, County of	3419215	PW
31	KNIW582	Schuyler, County of	3419215	PW
32	KNIW583	Schuyler, County of	3419215	PW
33	KNIZ296	Schuyler, County of	3419215	PW
34	KNIZ297	Schuyler, County of	3419215	PW
35	KNIZ298	Schuyler, County of	3419215	PW
36	KNIZ299	Schuyler, County of	3419215	PW
37	KNIZ300	Schuyler, County of	3419215	PW
38	WPNQ850	Schuyler, County of	3419215	PW
39	WPXL933	Schuyler, County of	3419199	PW
40	WNWD548	Tyrone, Town of	3417334	PW
41	KED992	Watkins Glen, Village of	6888804	PW
42	KFM494	Watkins Glen, Village of	3413259	PW
43	WNKQ584	Watkins Glen, Village of	3413259	PW
44	KNAI741	Onondaga, County of	4009734	PW

First responder, industrial/business land mobile sites, area-wide public safety, and E911 communications are typically unaffected by the presence of solar panels. Therefore, no significant adverse impacts are anticipated as a result of Project operation. This is due to the multiple transmitter locations utilized, similar to cellular services, and the ability for these signals to propagate through solar arrays.

The Project's solar arrays will comply with the recommended conservative setback criteria for the FCC interference emissions in the land mobile bands. This distance, approximately 254 feet, is based on FCC inference emissions from electrical devices in the land mobile frequency bands. A

search of the FCC Universal Licensing System did not show any licensed Call Signs within 2 miles of the Project. As a result, there will be no adverse impact to emergency services communications coverage upon installation of the Project. The Applicant is consulting with Schuyler County Emergency Services to address any concerns related to communications. Response from the Schuyler County Sheriff's Office on February 26, 2020, indicated effects on the Office's communications are not anticipated. Consultations with other Schuyler County Emergency Services are ongoing.

#### ***(7) Municipal/School District Services***

The Applicant identified the Educational Broadband Services licenses granted by the FCC within a 2-mile radius of the Project Area. There are two site-based licenses issued by the FCC, but none granted to a municipal school. The two licenses are operated by Sprint Corporation. The transmitters associated with these licenses are located at coordinates: 42 ° 01' 55.3' N, 76 ° 47' 00.8" W, approximately 20 miles from the Project Area.

Typically, mobile sites and area-wide public safety communications, including both municipal and school communications, are unaffected by the presence of solar arrays. No adverse impacts to these services are anticipated as a result of Project operation.

#### ***(8) Public Utility Services***

The Applicant has identified the following land-based public utilities within a 2-mile radius of the Project Area:

- Spectrum,
- New York State Electric and Gas,
- Verizon,
- Empire Pipeline, and
- Columbia Pipeline TransCanada.

In addition to identifying the local utilities, the Applicant has contracted with a local survey company to complete a boundary survey for the Project. As part of that survey, which is ongoing, the actual location of all utilities' facilities adjacent to the Project Facilities are being documented and the utility owners are being identified, including both underground and overhead utilities. Prior to construction, the Applicant will contact any utility in the Project Area that may be impacted by the Project and work with those utilities to eliminate or limit any disruption to service. See Exhibit

12 for details regarding the Empire Pipeline and Columbia Pipeline TransCanada. Therefore, impacts to the above-listed utilities are not anticipated as a result of Project construction or operation.

The Applicant and/or Engineering, Procurement, and Construction (EPC) Contractor shall contact Dig Safely New York prior to commencement of construction activities to request a mark out of all existing utilities. Dig Safely New York facilitates the coordination of construction contractors and underground utility operators to prevent damage to underground facilities and to protect the public.

#### ***(9) Doppler/Weather Radar***

Doppler weather radar, or next-generation radar (NEXRAD), is operated by the National Weather Service. This radar allows for the generation of meteorological and hydrological short-term forecasts based on algorithms with inputs of detected precipitation, winds, temperature, and humidity. The New York State Early Warning Weather Detection System is an advanced, statewide network providing real-time weather information for operational applications.

The Applicant identified three NEXRAD/Doppler Weather Radar systems that are owned and operated by television stations and commercial interests in the vicinity of the Project (KBGM, KBUF, and KTYX). Doppler radars were not identified within 2 miles of the Project Area. The closest site (KBGM) is located in Binghamton, New York, approximately 50 miles from the Project. Based on terrain elevations obtained from the United States Geological Survey, the solar arrays will not negatively affect the radiation pattern and/or block the radio frequency signals for the NEXRAD systems. Impacts to the NEXRAD system are not anticipated as a result of the Project.

#### ***(10) Air Traffic Control***

The closest air traffic control tower is located approximately 12 miles south of the Project at the Elmira Corning Regional Airport. The nearest airport to the Project is Hemlock Run, located 2 miles away, but this airport does not have a control tower. Three other airports have been identified within 8 miles of the Project Area; however, air traffic controls are not present at these airports.

Given that solar arrays emit weak EMF and the nearest air traffic control installation is 12 miles from the Project Area, air traffic control is not anticipated to be affected by the construction and operation of the Project; therefore, FAA consultation was not determined to be required.

#### **(11) *Armed Forces***

The nearest armed forces facilities are the United States Air Force, Army, and Navy Recruitment centers in Horseheads, New York, approximately 12 miles south of the Project Area. The Applicant sent notification of the Project to the National Telecommunications Information Administration on February 18, 2020. No response has been received yet regarding potential impacts the Project may have on federal communications services. No impacts are expected to occur as a result of the Project.

#### **(12) *Global Positioning Systems (GPS)***

The Applicant examined GPS antennas registered with the National Oceanic and Atmospheric Administration Continuously Operating Reference Station database to determine if any installations had a line-of-sight exposure to the Project. The closest GPS ground facility to the Project is at the United States Coast Guard GPS antenna located in Youngstown, New York, 120 miles from the Project Area. Based on a Google Earth Elevation profile between the two locations, it was determined that there is not a line of sight between the two locations. Due to the low EMFs emitted by solar facilities, no line of sight, and the distance between the Project and the closest antennas, the Project is not expected to cause interference to the operation of GPS antennas.

#### **(13) *Long-Range Navigation (LORAN)***

LORAN is a system developed during World War II. Radio signals were sent across long distances through radio towers to guide ships and aircrafts. The United States Coast Guard, in accordance with the 2010 Department of Homeland Security Appropriations Act, terminated the transmission of all United States LORAN signals. Therefore, no further discussion of LORAN is provided in this Application, as there will be no impact.

#### **(14) *Amateur Radio Licenses Registered to Users***

The Applicant searched the FCC's Universal Licensing System for all active registered HA (Amateur) and HV (Vanity) Radio Licenses within a 2-mile radius of the Project Area. No active licensed Amateur Radio users were identified. There are no anticipated impacts to amateur radio licenses registered users as part of the Project.

## **26(b) Existing Underground Cable and Fiber Optic Major Transmission Location Telecommunications Lines**

The Applicant reviewed publicly available information to determine if major fiber optic lines are located within a 2-mile radius of the Project Area. Based on information obtained from <https://www.shovelready.com/maproom.asp>, major fiber optic telecommunications facilities were not identified within 2 miles of the Project and the point of interconnection. The Applicant will contact Schuyler County to confirm the identification of any fiber potentially connecting radio towers. Furthermore, the Applicant and/or EPC Contractor will submit a request for information with Dig Safely New York prior to the commencement of construction activities to verify the location of all buried utilities within the Project Area. The safety of on-site personnel and the prevention of damages to existing/operating utilities is a top priority of the Applicant. Using the information compiled on current fiber optic and/or underground cables, the Applicant will avoid interference or minimize interference where avoidance is not possible through using directional boring instead of trenching, relocating Project Components (i.e., relocating collection line to avoid interference), and crossing existing utilities at 90-degree angles, as applicable.

## **26(c) Electric Interconnection Effects**

The Applicant reviewed the Project and the proposed electric interconnection facilities for impacts to communications technologies. The Applicant reviewed FCC license data and other appropriate databases to review television, radio, cellular, microwave, and doppler radar communications. The Project's solar arrays will comply with the recommended conservative setback criteria for the FCC interference emissions in the land mobile bands. This distance, approximately 254 feet, is based on FCC inference emissions from electrical devices in the land mobile frequency bands. Adverse impacts are not anticipated to occur as a result of the Project.

### ***(1) Structures to Interfere with Broadcast Patterns***

After analyzing broadcast signals within the Project Area, and due to the lack of tall structures included in the Project Components, Project structures are not anticipated to create any interference with broadcast patterns.

### ***(2) Structures to Block Necessary Lines of Sight***

The Project Area was reviewed by the Applicant to identify potential signal degradation and/or obstruction of microwave signals for existing licensed microwave links. The clearance criteria



indicated that degradation and/or obstruction to the microwave signals in the Project Area are not anticipated.

### ***(3) Physical Disturbance by Construction Activities***

Prior to construction, the Applicant will submit a “design ticket” to Dig Safely New York to initiate the process with which utilities and Dig Safely New York provide relevant mapping to the Applicant. Impacts to underground cables and/or fiber optic lines as a result of the Project will be avoided. Surveys conducted by the Applicant throughout the Project Area have indicated that physical disturbance to the communications system infrastructure due to construction activities is not expected.

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

The Applicant does not intend to co-locate buried lines related to the interconnection or transmission facilities; therefore, this section does not apply.

### ***(5) Other Interference Potential***

The Applicant’s analysis indicates significant interference to communications systems as a result of the Project are not expected.

## **26(d) Adverse Effects on Communications Systems**

Adverse effects on communications systems are not expected as a result of the Project. The Applicant has conducted multiple studies and surveys and consulted with New York State and federal agencies to determine if impacts will occur. The Applicant will continue to consult with the FAA and the United States Department of Defense, if required, to confirm impacts associated with the Project under their jurisdiction will not occur.

## **26(e) Plans to Mitigate Impacts on Existing Communications Sources**

Consulting with agencies and conducting surveys and analyses allowed the Applicant to avoid and/or mitigate potential impact risks through the use of best practices prior to finalizing the Preliminary Design Drawings (Appendix 11-1) and construction plans. Adverse impacts to communications are not expected as a result of these precautions.

Should significant adverse impacts to the communications systems occur post-construction, the complaint resolution process will be followed to resolve the issue. Complaint resolution

information will be made available at all document repositories, online, within Appendix 12-3 of this Application. Following analysis of the complaint, corrective actions will be employed to resolve the issue.

**26(f) Wind Power Facilities Interference with Radar or Instrument Systems Used for Air Traffic Control, Guidance, Weather, or Military Operations**

There are no wind power facilities proposed as part of the Project; therefore, this section of Exhibit 26 is not applicable to this Project.

## References

Federal Communications Commission (FCC). *Broadcast Station Search*.

<https://www.fcc.gov/media/radio/fm-query>. Accessed January 2020.

FCC. *Fixed Broadband Deployment*. <https://broadbandmap.fcc.gov/#/>. Accessed January 2020.

FCC. *Universal Licensing System*.

<https://wireless2.fcc.gov/UlsApp/UlsSearch/licenseLocSum.jsp?licKey=1039449>. Accessed January 2020.

United States Department of Commerce National Oceanic and Atmospheric Administration (NOAA). *Continuously Operating Reference Station Map*.

<https://www.ngs.noaa.gov/CORS/>. Accessed January 2020.

United States Department of Commerce NOAA. *Radar Operations Center, NEXRAD Radar Locations Map*. <https://www.roc.noaa.gov/WSR88D/Maps.aspx>. Accessed January 2020.

Shovel Ready. *Map Room*.

<https://www.shovelready.com/index.asp>. Accessed January 2020.