NORTH SIDE ENERGY CENTER

Case No. 17-F-0598

1001.26 Exhibit 26

Effect on Communications

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Exhibit 26: Effects on Communications

This Exhibit will track the requirements of Stipulation 26, dated February 10, 2021, and therefore, the requirements of 16 New York Codes, Rules and Regulations (NYCRR) § 1001.26.

26(a) Existing Broadcast Communications Sources

The Applicant conducted a review of the Project's potential impact on multiple forms of communications technology. This analysis included a review of the Federal Communications Commission (FCC) license data and other appropriate databases to review Television, Radio, Cellular, Microwave radio communications, as well as Doppler radar as described below. The Applicant is in consultation with the St. Lawrence County Office of Emergency Services, the St. Lawrence County Sheriff's Department, the New York State Division of Homeland Security and Emergency Services, and the St. Lawrence County Planning Department 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. Based on these statements, the Project is not anticipated to interfere with any existing communications systems.

(1) Amplitude Modulation (AM) Radio

One Amplitude Modulation (AM) radio transmitter station was identified within a two-mile radius of the Project. Station WMSA broadcasts on frequency 1,340 KHz. The transmitter is located at coordinates 44 54 11 North Latitude, 74 53 02 West Longitude. The tower has an FCC antenna Structure Registration of 1006969. The installation and operation of solar facilities is not anticipated to interfere with, or cause adverse impacts to, AM radio stations and will not be addressed further in this application.

(2) Frequency Modulation (FM) Radio

One Frequency Modulation (FM) radio transmitter station was identified within the two-mile radius of the Project. Station WVLF broadcasts on frequency 96.1 MHz. The transmitter is located at coordinates 44 54 11 North Latitude, 74 53 02 West Longitude. The tower has an FCC antenna

Structure Registration of 1006969. The installation and operation of solar facilities is not anticipated to interfere with, or cause adverse impacts to, FM radio stations and will not be addressed further in this application.

(3) Television

A search of the FCC database determined there were no over-the-air television broadcast or translator transmitters within two miles of the Project area. The closet television signal transmission facility is translator station WWNY. This facility is located at coordinates 44 29 29 North Latitude, 74 51 26 West Longitude and utilizes tower ASR 1004169, which is 28 miles from the Project area.

Over-the-air television stations, which do not include satellite or cable receptors, broadcast signals from terrestrially-based facilities directly to television receivers. Neither satellite TV nor cable TV reception is affected by the presence of solar facilities.

If residents within the Project Area experience adverse impacts to their television reception and/or service after installation of the proposed solar panels they can submit 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 telephone services utilize several transmitters, with overlapping coverages, so signal blockage as a result of the Project operation is not anticipated. Wireless operators are granted area-wide licenses from the FCC to deploy their cellular networks, which often include handsets with E911 capabilities.

The Applicant identified 36 wireless licenses within two miles of the Project area. Table 26-1 below 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 Two Miles of the Project Area

#	Call Sign	Name	FRN	Radio Service*
1	KNLB204	New Cingular Wireless PCS, LLC	3291192	WS
2	KNLB312	New Cingular Wireless PCS, LLC	3291192	WS
3	KNLF202	T-Mobile License LLC	1565449	CW
4	KNLF204	Sprint Spectrum Realty Company, LLC	8157679	CW
5	KNLG576	T-Mobile License LLC	1565449	CW
6	KNLG577	New Cingular Wireless PCS, LLC	3291192	CW
7	KNLH455	New Cingular Wireless PCS, LLC	3291192	CW
8	L000039984	St. Lawrence Seaway RSA Cellular Partnership	3477916	WU
9	T060430006	Gamma Acquisition L.L.C	21004817	AD
10	T070272006	DBSD Corporation	26092031	AD
11	WPQL636	New Cingular Wireless PCS, LLC	3291192	WS
12	WPSJ989	Cellco Partnership	3290673	CW
13	WPSL626	New Cingular Wireless PCS, LLC	3291192	CW
14	WPTF728	MCG PCS II, Inc.	5556576	CW
15	WPUH409	Space Data Spectrum Holdings, LLC	4983664	CN
16	WPUH410	Sensus Spectrum LLC	15015019	CN
17	WPUH510	AMS Spectrum Holdings, LLC	19131390	CN
18	WPXI881	Space Data Spectrum Holdings, LLC	4983664	CN
19	WPXI890	Space Data Spectrum Holdings, LLC	4983664	CN
20	WPXI976	Space Data Spectrum Holdings, LLC	4983664	CN
21	WPXI977	Space Data Spectrum Holdings, LLC	4983664	CN
22	WQEI575	Space Data Radio LLC	14655930	CN
23	WQEM398	Space Data Spectrum Holdings, LLC	4983664	CN
24	WQGV418	New Cingular Wireless PCS, LLC	3291192	WZ
25	WQIQ488	Space Data Radio LLC	14655930	CN
26	WQIZ389	T-Mobile License LLC	1565449	WY
27	WQJY948	Manifest Wireless L.L.C.	17173121	WY
28	WQKS996	NEXTEL of New York, INC .	3293537	CY
29	WQLE765	King Street Wireless, LP	17169327	WY
30	WQTX205	American H Block Wireless L.L.C.	23125057	AH
31	WQVN679	Cellco Partnership	3290673	AT
32	WQVN925	AT&T Wireless Services 3 LLC	23910920	AT
33	WQVN926	AT&T Wireless Services 3 LLC	23910920	AT
34	WQWQ824	SNR Wireless License Co, LLC	23907074	AT
35	WQWQ825	SNR Wireless License Co, LLC	23907074	AT

Table 26-1. Wireless Telephone Service Licenses within Two Miles of the Project Area

#	Call Sign	Name	FRN	Radio Service*
1	KNLB204	New Cingular Wireless PCS, LLC	3291192	WS
36	WRAB209	New Cingular Wireless PCS LLC	3291192	CW

*AD: Mobile/Fixed Broadband, AWS-4 (2000-2020 MHz and 2180-2200 MHz)
AH: Mobile/Fixed Broadband, AWS-H Block (1915-1920 MHz and 1995-2000 MHz)
AT: Mobile/Fixed Broadband, AWS-3 (1695--1780 MHz, and 2155-2180 MHz)
CL: Mobile/Fixed Broadband, Cellular
CN: Paging and Messaging, PCS Narrowband
CW: Mobile/Fixed Broadband, PCS Broadband
CX: Mobile/Fixed Broadband, Cellular, Auctioned
CY: Mobile/Fixed Broadband, 1910-1915/1990-1995 MHz Bands, Market Area
WS: Mobile/Fixed Broadband, Wireless Communications Service
WU: Mobile/Fixed Broadband, 700 MHz Upper Band (Block C)
WY: Mobile/Fixed Broadband, 700 MHz Lower Band (Blocks A, B, E)
WZ: Mobile/Fixed Broadband ,700 MHz Lower Band (Blocks C, D)

The Project will lack tall structures, therefore the frequencies of operation for these wireless services will not be affected. Therefore, no change in coverage should occur due to the Project installation and operation.

(5) Microwave Radio Transmission

Microwave radio transmissions provide long-distance and local telephone services, backhaul for cellular and personal communications services, as well as interconnects data for mainframe computers and the internet. These transmissions also provide network controls for utilities and railroads across the country, as well as various video services.

Per the FCC's Universal Licensing System, there are 13 licensed microwave radio paths that are in operation within two miles of the Project area, including four paths to New York Power Authority's Massena Substation. Given that microwave radio equipment utilizes equipment to filter out of band frequencies, no impacts to microwave communications are expected as a result of the Project.

Table 26-2. Microwave Radio Licenses within Two Miles of the Project Area

#	Call Sign	Name	FRN	Radio Service*
1	KA86237	Metrosat Communications Inc.	20550505	CT
2	WNEK636	New York Power Authority	3482791	MG

Table 26-2. Microwave Radio Licenses within Two Miles of the Project Area

#	Call Sign	Name	FRN	Radio Service*
3	WNEK637	New York Power Authority	3482791	MG
4	WNEK638	New York Power Authority	3482791	MG
5	WNEV804	New York Power Authority	3482791	MW
6	WPNG321	St Lawrence Gas Company Inc	6702500	MG
7	WQIJ433	National Grid USA Service Company Inc.	5196530	MG
8	WQQK541	New Cingular Wireless PCS, LLC	3291192	CF
9	WQQK737	New Cingular Wireless PCS, LLC	3291192	CF
10	WQTS295	Uniti Fiber LLC	20169025	CF
11	WQTS296	Uniti Fiber LLC	20169025	CF
12	WQWG788	Saint Regis Mohawk Tribe	23765662	MW
13	WQWG789	Saint Regis Mohawk Tribe	23765662	MW

*AI: Broadcast Support, Aural Intercity Relay
AS: Broadcast Support, Aural Studio Transmitter Link (STL)
AW: Mobile/Fixed Broadband, AWS (1710-1755 and 2110-2155 MHz)
CF: Fixed Wireless, Common Carrier Fixed Point to Point Microwave
CT: Broadcast Support, Local Television Transmission
MG: Fixed Wireless, Microwave Industrial/Business Pool
MW: Safety of Life, Microwave Public Safety Pool

(6) Emergency Services

Registered frequencies used for public safety that are licensed to operate within two miles of the Project location were identified. These licenses include emergency medical services (EMS), emergency management, hospitals, public works, transportation and other state, county, and municipal agencies. The Applicant identified 36 active licenses designated for public safety utilizing the FCC's Universal Licensing System (see Table 26-3). It was determined that one transmitter (WPMW418), for the County of St. Lawrence, is located within two miles of the Project area at 49 Dump Road, Massena, NY. The Applicant will coordinate with the St. Lawrence County Emergency Services to ensure that there are no adverse impacts to the County's communications system.

Table 26-3. Public Safety Licenses within Two Miles of the Project Area

#	Call Sign	Name	FRN	Radio Service
1	KD48009	Ogdensburg Volunteer Rescue Squad Inc.	11356227	PW
2	KEB363	Ogdensburg, City of	3419686	PW

Table 26-3. Public Safety Licenses within Two Miles of the Project Area

#	Call Sign	Name	FRN	Radio Service
3	KEC310	Massena, Village of	3416401	PW
4	KLG417	New York, State DOT	5813506	PW
5	KLK557	New York, State DOT	5813506	PW
6	KNGE569	Malone, Village of	3458809	PW
7	KNIT774	St Lawrence, County of	3419231	PW
8	KNNU873	Massena, City of	4479374	PW
9	KSL357	SUNY Potsdam	4484416	PW
10	KXQ688	SLHS Massena, Inc	29071172	PW
11	KXQ701	Potsdam, Town of	5122536	PW
12	WNAH869	Madrid Rescue Squad	11215332	PW
13	WNFF822	State University of New York at Potsdam	4484465	PW
14	WNKG573	St Lawrence, County of	3419231	PW
15	WNRP737	New York State Corrections & Community Supervision	8398745	PW
16	WPBY573	Massena, Village of	3416401	PW
17	WPCA490	Massena, Town of	3399342	PW
18	WPKJ707	Bombay, Town of	6066674	PW
19	WPMW418	St Lawrence, County of	3419231	PW
20	WPNT996	New York, Division of State Police	3438595	PW
21	WPQY900	Moira, Town of	13420534	PW
22	WPRG947	New York Division of State Police	3438595	PW
23	WPSK734	Saint Regis Mohawk Tribal Police	5048293	PW
24	WQCR304	New York, State of-Office of Parks	10969756	PW
25	WQCR307	New York, State of-Office of Parks	10969756	PW
26	WQHN300	Colton, Town of	9905308	PW
27	WQLL437	TRI Town Volunteer Rescue Squad	14888028	PW
28	WQSD864	Brasher Winthrop Volunteer Fire Department	21804547	PW
29	WQUC421	Saint Regis Mohawk Tribal Police	5048293	PW
30	WQUE753	Salmon River Central School	22417620	PW
31	WQWA349	St Lawrence, County of	3419231	PW
32	WRAW398	St Lawrence, County of	4485934	PW
33	WRCD336	St Lawrence, County of	4485934	PW
34	WRCE592	Brasher, Town of	27339274	PW
35	WRDM232	St Lawrence, County of	4485934	PW
36	WXT826	Massena Volunteer Emergency Unit Inc	3399342	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 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 has consulted with the St. Lawrence County Office of Emergency Services, the St. Lawrence County Sheriff's Office, and the NYS Division of Homeland Security & Emergency Services (NYSDHSES) to address any concerns related to communications. A response from the St. Lawrence County Office of Emergency Services on October 26, 2020 indicated that a communication site exists in proximity to the Project, at 49 Dump Road, Massena, New York. It is anticipated that there will be a setback of at least several hundred feet from the repeater to any proposed solar arrays. Given the low profile of the solar arrays, no interference with this facility is anticipated as a result of the Project. In the case that interference occurs as a result of the Project, the Applicant would work with the County.

Correspondence was sent to the St. Lawrence County Sheriff's Office and the NYSDHSES on October 22, 2020. To date, no response from either agency has been received.

(7) Municipal/School District Services

The Applicant identified all licensed municipal and school district communications sources within the vicinity of the Project. There are two site-based Educational broadcast licenses issued within the Project area, however no transmitter stations are located within two miles of the Project area. A full listing of sources is identified in Table 26-4.

Typically, mobile sites, broadcast, 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 the Project operation.

Table 26-4. Educational Broadband Service Licenses within Two Miles of the Project Area

#	Call Sign	Name	FRN	Radio Service*
1	L000005815	Clearwire Spectrum Holdings II, LLC	15316904	ED
2	WHR700	BOCES District of St Lawrence and Lewis Counties	3414646	ED
* ED: Mobile/Fixed Broadband, Educational Broadband Service				

(8) Public Utility Services

The Applicant has identified that the following public utilities/companies provide communication service within a two-mile radius of the Project Area:

- Spectrum
- ViaSat, Inc.
- Hughes Network Systems, LLC
- NYSYS Wireless, LLC
- Verizon Communications Inc.
- VSAT Systems, LLC

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, the publicly recorded location of all utilities' facilities adjacent to the Project Facilities have been documented and the utility owners are being identified, including both underground and overhead utilities. Prior to the commencement of 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 two transmission lines owned by NYPA. Project impacts to the above-listed utilities will be avoided.

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. Their goal is to prevent damages to underground facilities and to protect the public through education and quality communication with excavators, underground facility operators, and designers in an efficient, courteous, and cost-effective manner, while complying with governing regulations.

(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 Applicant identified two NEXRAD facilities within 100 miles of the Project: KCXX is located in Burlington, Vermont and is 86 miles from the Project area, and KTYX, located in Lowville, New York is 88 miles distant. Given the distance and that the solar panels will have a low profile, no interference with NEXRAD operations is anticipated.

(10) Air Traffic Control

The Massena International Airport (MSS) is located within two miles of the Project area but does not have Air Traffic Control (ATC) operations. The closest ATC center is located at the Syracuse Hancock International Airport, 137 miles from the Project area. The Federal Aviation Administration (FAA) is the organization in the United States government responsible for air traffic control. Air traffic control is not anticipated to be affected by the construction and operation of the Project.

(11) Armed Forces

The nearest armed forces facilities are two Army Reserve Centers, one located at 111 Finney Road in Malone, New York and the second at 45 West Main Street in Canton, New York. Each Center is 23 miles from the Project area. The Applicant does not anticipate any communications interference issues with these facilities. The Applicant sent written notification of the proposed Project to the National Telecommunications and Information Administration (NTIA) on November 24, 2020. No response has yet been received regarding potential impacts the Project may have on federal communications services.

(12) Global Positioning Systems (GPS)

The Applicant examined GPS antennas registered with the National Oceanic and Atmospheric Administration (NOAA) Continuously Operating Reference Station (CORS) database to determine if a radio line-of-sight (RLOS) existed with the Project. The nearest GPS ground facility to the Project is a Coast Guard station located in Hudson Falls, New York. This location is 133

miles from the Project area. There is not RLOS visibility between the Project area and the Hudson Falls GPS site.

Due to the low EMFs emitted by solar facilities and the distance between the proposed Project area and the closest GPS antenna, the Project is not expected to cause interference to the operation of GPS antennas.

(13) Long Range Navigation (LORAN)

Long Rage Navigation (LORAN) is a system developed during World War II. Radio signals were sent across long distances through radio towers to guide ships and aircraft. 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 database for all amateur radio licenses (HA & HV service codes) registered to users within a two-mile radius of the Project. No licensed 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 Telecommunication Lines

The Applicant reviewed publicly available information to determine if major fiber optic lines are located within a two-mile radius of the Project. Based on information obtained from https://www.shovelready.com/maproom.asp, the Development Authority of the North Country has a fiber optic route that runs through Massena and connects to New York Power Authority's Massena substation, which is within two miles of the Project Area.

The Applicant and/or EPC Contractor will submit, prior to construction, a request for information with Dig Safely New York to receive all documented 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 the use of directional boring instead or trenching, relocation of Project

components (i.e. relocating collection line to avoid interference), and crossing of existing utilities at 90-degree angles.

The Project will avoid any impacts to underground cables or fiber optic lines. On October 22, 2020, the Applicant contacted St. Lawrence County to confirm identification of any fiber potentially connecting radio towers. St. Lawrence County responded on October 26, 2020 and stated that a repeater site is present in proximity to the Project Area at 49 Dump Road, Massena, New York, including fiber connections. As discussed in Section 26(a)(6) above, it is anticipated that there will be a setback of at least several hundred feet from the repeater to any proposed solar arrays. Given the low profile of the solar arrays, no interference with this facility is anticipated as a result of the Project. In the case that interference occurs as a result of the Project, the Applicant would work with the County.

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 all existing broadcast communication sources and existing telecommunications line as described above. 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

Due to the low profile of the Project components, it has been determined that there are no structures that will create major interference with broadcast patterns.

(2) Structures to Block Necessary Lines-of-Sight

The average height of the solar arrays will not exceed 20 feet. As a result, it was determined that this Project will not increase signal attenuation for microwave radio signal transmission.

(3) Physical Disturbance by Construction Activities

Prior to construction, the Applicant will submit a "design ticket" to Dig Safely New York, which will initiate a process in which utilities provide relevant mapping to the Applicant. The Project will avoid any impacts to underground cables or fiber optic lines. The Applicant has conducted surveys

throughout the Project Area to determine that there is not expected to be any physical disturbance to communications systems infrastructure by construction activities.

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

The Applicant has no intention of co-locating any buried lines related to the Interconnection or Transmission Facilities. This section does not apply.

(5) Other Interference Potential

Based on the Applicant's analysis, there is not expected to be any adverse interference to communications systems as a result of the Project.

26(d) Adverse Effects on Communications Systems

Due to the low profile of the Project components, it has been determined that the design configuration will not adversely affect the communications systems identified by the Applicant in this Exhibit.

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

The Project is not expected to adversely impact the communications systems identified by the Applicant in this Exhibit. In the event that there is a significant adverse effect to communications systems post-construction, this will be resolved through the complaint resolution process which can be found in all document repositories, online, and within Appendix 12-3 of this Application. After proper analysis, measures will be taken to resolve the issues presented. I

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.

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