EAST POINT ENERGY CENTER

Case No. 17-F-0599

1001.26 Exhibit 26

Effect on Communications

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Exhibit 26: Effect on Communications

This Exhibit will track the requirements of proposed Stipulation 26, dated August 20, 2019, and therefore, the requirements of 16 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. The Applicant reviewed Federal Communications Commission (FCC) license data and other appropriate databases to evaluate TV, Radio, Cellular, Microwave Radio communications as well as Doppler radar as described below. Additionally, the Applicant is consulting with the Schoharie County Office of Emergency Services, the Schoharie County Sheriff's office, and the New York State Division of Homeland Security & Emergency Services to inform these agencies about the Project and assess effects and concerns regarding potential impacts to emergency services or emergency communications systems. No concerns or impacts have been identified.

The Project will lack tall structures and exposed moving parts. The photovoltaic arrays involved in this Project emit a weak electromagnetic field (EMF) in the same low frequency as household electric appliances (MDER, 2015). The Applicant is not aware of any current research documenting any negative effects of solar arrays on communications technology. Based on these statements, the Project is not anticipated to interfere with existing communications systems.

(1) Amplitude Modulation Radio

No records of Amplitude Modulation (AM) stations were identified within a two-mile radius of the Project. The closest station, WSDE (1190 AM, operated out of Cobleskill, NY), is located 6.6 miles from the Town of Sharon (FCC(a), 2019). The Project 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 Radio

No records of Frequency Modulation (FM) stations were identified within the two-mile radius of the Project (FCC(c), 2019). The closest station, WOPG (89.9 FM, operated out of Esperance, NY) is located 7.6 miles from the Town of Sharon. The Project 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

Off-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. The Applicant examined coverage of off-air television stations in the area to identify any potentially impacted or degraded reception that would be associated with Project operation (FCC(b), 2019). There were no television stations identified within a two-mile radius of the Project Area.

(4) Telephone

Wireless telephone services utilize several transmitters, with overlapping coverages, so signal blockage as a result of 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 22 active wireless service licenses within Schoharie County (FCC(d), 2019). The license holder and type of service are listed below:

Table 26-1. Wireless Telephone Service Licenses Within Schoharie County

Call Sign	Name	FCC License Number	Radio Service Type
KNKN633	New Cingular Wireless PCS, LLC	0003291192	CL
KNKN999	Cellco Partnership	0003290673	CL
KNLB204	New Cingular Wireless PCS, LLC	0003291192	WS
KNLB297	New Cingular Wireless PCS, LLC	0003291192	WS
KNLB312	New Cingular Wireless PCS, LLC	0003291192	WS
KNLF204	Sprint Spectrum Realty Company, LLC	0008157679	CW
KNLF880	New Cingular Wireless PCS, LLC	0003291192	CW
KNLG243	New Cingular Wireless PCS, LLC	0003291192	CW
KNLG368	T-Mobile License LLC	0001565449	CW
WPQL636	New Cingular Wireless PCS, LLC	0003291192	WS

Call Sign	Name	FCC License Number	Radio Service Type
WPSL626	New Cingular Wireless PCS, LLC	0003291192	CW
WQCS418	Cellco Partnership	0003290673	CW
WQCX667	New Cingular Wireless PCS, LLC	0003291192	CW
WQEM928	Cellco Partnership	0003290673	CW
WQGA715	Cellco Partnership	0003290673	AW
WQGA731	T-Mobile License LLC	0001565449	AW
WQGA834	New Cingular Wireless PCS, LLC	0003291192	AW
WQGD585	T-Mobile License LLC	0001565449	AW
WQPZ962	Cellco Partnership	0003290673	AW
WQPZ974	T-Mobile License LLC	0001565449	AW
WQVG235	New Cingular Wireless PCS, LLC	0003291192	CW
WQVG239	T-Mobile License LLC	0001565449	CW

Because the Project lacks tall structures, the frequencies of operation for these wireless services will not be affected. Therefore, no change in coverage should occur as a result of 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, and interconnects data for mainframe computers and the internet. These transmissions also provide network controls for utilities and railroads across the county, as well as various video services. There are no microwave radio paths that intersect the Project or within two miles of the Project Area (FCC(e), 2019). No impacts to microwave radio communications are expected as a result of the Project.

(6) Emergency Services

Registered frequencies for the following first responder entities were evaluated in the vicinity of the proposed 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 (FCC(d), 2019). The Applicant identified 70 active site-based licenses and regional area-wide licenses designated for public safety utilization. The license holder and type of service are listed below:

Table 26-2. Public Safety Licenses within Schoharie County

Call Sign	Name	FCC License Number	Radio Service Type
KCA524	Mohawk, Town of	0004484804	PW
KDG815	Summit Fire Dept No 1	0005138276	PW
KEB277	Fulton County	0003439205	PW
KEF699	Schoharie, County of	0003439247	PW
KEF700	Schoharie, County of	0003439247	PW
KEG767	Carlisle Fire District 1	0004130936	PW
KEG817	Sharon Springs Joint Fire District	0003396496	PW
KFT247	Fulton County	0003439205	PW
KLG392	New York, State of D O T	0005813506	PW
KLG424	New York, State of	0005813506	PW
KLX279	Rome, City of, Fire Dept	0004486064	PW
KNAI404	Oneonta City of	0003419645	PW
KNBP858	Albany, County of	0005133558	PW
KNBP859	Albany, County of	0005133558	PW

Call Sign	Name	FCC License Number	Radio Service Type
KNGG559	Bronco Bus Corp.	0009075946	PW
KNHT824	Herkimer, Village of	0009431321	PW
KNJE210	Fulton County	0003439205	PW
KNJZ573	Ichabod Crane Central School District	0007573090	PW
KQY880	Bethlehem, Town of	0004484994	PW
KRX387	New York State Thruway Authority	0004129540	PW
KSO959	Bassett Hospital of Schoharie County	0012435707	PW
KUI579	Johnstown Area Volunteer Ambulance Corps Inc	0012509303	PW
KZG275	Hagaman Vol Fire Department	0003453222	PW
WNIX706	National Ski Patrol System Inc	0004254397	PW
WNMG823	Ellis Hospital	0009140518	PW
WNMT457	Schoharie, County of	0003439247	PW
WNUQ211	Cobleskill Richmondville Central School District	0014206841	PW
WNVG263	Springfield, Town of	0003417433	PW
WNWW696	New York, State of	0005133293	PW
WNYD721	Rotterdam, Town of	0005804075	PW
WNYN690	Cobleskill, Village of	0003442092	PW
WNZI320	Fulton, County of	0003439205	PW
WNZV617	Massachusetts, Commonwealth of	0003606993	YE
WPAI849	Richmondville, Village of	0003440161	PW
WPBM622	Cherry Valley, Town of	0003418712	PW

Call Sign	Name	FCC License Number	Radio Service Type
WPCG911	Hartwick, Town of	0003418258	PW
WPFE597	Summit, Town of	0003439809	PW
WPGU932	New York, State of	0003438611	PW
WPIT737	Rome, City Of, Police Department	0003419603	GP
WPLH248	Schoharie, Village of	0006350425	PW
WPMZ646	Town of Root	0009669177	PW
WPMZ715	State of New York Division of State Police	0003438595	PW
WPNV597	Town of Canajoharie	0010892750	PW
WPQB439	Otsego County Sheriff's Office	0004125928	PW
WPQJ504	Herkimer, County of	0004125951	PW
WPTW669	County of Schoharie	0003439247	PW
WPUB630	Montgomery County Sheriff	0003439304	PW
WPUN267	New York, State of D O T	0005813506	PW
WPUN270	New York, State of D O T	0005813506	PW
WPUP327	New York, State of D O T	0005813506	PW
WPUT571	County of Schoharie	0003439247	PW
WPYZ393	Schoharie, County of	0003439247	PW
WQAC757	Massachusetts, Commonwealth of	0003606993	YE
WQAP755	American Medical Response, Inc.	0004896650	PW
WQAU497	New York State Corrections and Community Supervision	0008398745	PW
WQCE556	New York, State of	0003438595	PW

Call Sign	Name	FCC License Number	Radio Service Type
WQEJ928	Jefferson Fire District	0012762332	PW
WQFM811	Guilderland Central School District	0003439049	PW
WQOS479	Dolgeville, Village of	0003416708	PW
WQOV687	Air Methods	0009230640	PW
WQQV358	Massachusetts, Commonwealth of	0003606993	YE
WQTV859	City of Johnstown Fire Department	0023410947	PW
WQUK307	State University Of New York	0009529041	PW
WQUV865	New York, State of D O T	0005813506	PW
WQYX781	Glen, Town of Vol Fire Dept.	0026203422	PW
WQZZ297	Canajoharie Central School District	0026766188	PW
WRG412	Johnstown, Town of	0004129649	PW
WYR584	Schoharie County Sheriff's Department	0003439247	PW
WZY288	Owego, Village of	0003416203	PW
WZY309	Mary Imogene Bassett Hospital	0003466802	PW

First responder, industrial/business land mobile sites, area-wide public safety, and E-911 communications are typically unaffected by the presence of solar arrays. 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.

Solar arrays should 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 interference 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 in the Town

of Sharon, New York. It was therefore concluded there are no land mobile base stations within 254 feet of the Project.

There will be no significant impact to emergency services communications coverage upon installation of the Project. The Applicant consulted with Schoharie County Emergency Services on June 14, 2019 to address any concerns related to communications and no concerns have been identified.

(7) Municipal/School District Services

The Applicant identified Educational Broadband Services licenses granted by the FCC within a five-mile radius of the Project. There are 16 site-based licenses issued by the FCC, but only one to a municipal school (Gloversville School District).

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 that the following public utilities provide service within a 2-mile radius of the Project Area (In My Area, 2019):

- Spectrum
- HughesNet
- Frontier Communications Corporation
- DIRECTV
- NYSEG
- National Fuel
- Verizon
- AmeriGas

Impacts to any of the above listed public utilities are not anticipated as a result of the Project. Prior to the commencement construction, the Applicant and/or the EPC contractor will contact Dig Safely New York and request a mark out of all existing utilities. Dig Safely New York is a one-call center that facilities the coordination of construction contractors and underground utility operators. Their goal is to prevent damages to underground facilities and 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 NEXRAD, are 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 four NEXRAD/Doppler Weather Radar systems that are owned and operated by television stations and commercial interests in the vicinity of the Project. The closest site is located approximately 28 miles from the Project. Due to the substantial distance of these facilities from the Project Area and the low profile of the proposed solar arrays, no impacts to these systems are anticipated.

(10) Air Traffic Control

The closest air traffic control tower is located approximately 27 miles northeast of the Project at the Schenectady County Airport. One airport was identified within the Study Area. The Sharon Airport is located approximately 0.7 miles north of the southwest portion of the Project Area but does not have an air traffic control tower. Five other airports were identified within proximity of the Project. These included: Blue Heron Airport approximately 15 miles to the southeast; Fulton County Airport approximately 17 miles to the northeast; Duanesburg Airport approximately 17 miles to the east; Cooperstown-Westville Airport approximately 18 miles to the southwest; Schenectady Airport approximately 27 miles to the northeast; and Oneonta Municipal Airport approximately 27 miles to the southwest (AirNav.com, 2019). 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. Air traffic control will not be affected by the construction and operation of the Project, as the structures are below the 200 foot criteria requiring an FAA determination. FAA consultation, therefore, was not determined to be required.

(11) Armed Forces

The Applicant does not anticipate any issues with any armed forces facilities. The nearest armed forces facility is the US Army Department in Schenectady, approximately 32 miles east of the

Project. The Applicant sent written notification of the Project to the NTIA on June 14, 2019. No response has yet been received 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 System

The Applicant examined GPS antennas registered with the NOAA Continuously Operating Reference Station (CORS) database to determine if a radio LOS existed with the Project. The closest GPS ground facilities to the proposed solar energy Project are United States Coast Guard GPS antennas located in Fort Edwards, NY, 61 miles away. Due to the low EMFs emitted by solar facilities and distance between the proposed Project and the closest antennas, the Project is not expected to cause interference to the operation of GPS antennas.

(13) Long Range Navigation (LORAN)

Long Range 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 for all active registered HA (Amateur) and HV (Vanity) Radio Licenses within a two-mile radius of the Project. No active licensed Amateur Radio user 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 Telecommunications Lines Locations

A review of existing utility databases and publicly available information confirmed that there are no underground cable or fiber optic major transmission telecommunication lines within the Study Area. Accordingly, the Project will not impact and underground cables or fiber optic lines.

26(c) Electric Interconnection Effects

The Applicant conducted the review for the transmission and interconnection facilities and has determined that there will be no major impacts to communications technologies. The Applicant

reviewed FCC license data and other appropriate databases to review TV, Radio, Cellular, Microwave communications as well as Doppler radar.

(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 fifteen 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 and DSNY provide relevant mapping to the Applicant and conduct a mark out of existing utilities in the field. As noted above, a review of existing utility databases and publicly available information showed that no underground cable or fiber optic lines are in within 2 miles of the Project Area and, therefore, 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

As stated above, the Applicant does not expect any adverse effect on communications systems due to the Project. The Applicant has conducted many studies to determine the impact, if any, on communications systems due to the Project. This extensive analysis in combination with surveys within the Project Area and the numerous consultations with New York State and Federal

Agencies provides the Applicant confidence that no adverse impacts on affect communications are predicted.

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

After consultations with the appropriate agencies and extensive analyses were conducted, the Applicant used best design practices to mitigate potential impact risks prior to finalizing preliminary designs and plans for construction. This assures that all modeled impact risks have been mitigated in the engineering phase of the Project. Because these precautions have been taken, it is not expected for there to be adverse impacts to communications systems.

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 and is located in Appendix 12-3 of this Application. After proper analysis, measures will be taken to resolve the issues presented.

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 the Exhibit 26 regulation is not applicable.

References

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