#### BEFORE THE OHIO POWER SITING BOARD

In the Matter of the Application of **Powell** ) Creek Solar, LLC for a Certificate of ) Environmental Compatibility and Public Need ) Case No. 20-1084-EL-BGN for a Solar Facility Located in Putnam County, ) Ohio. )

# POWELL CREEK SOLAR, LLC'S RESPONSES TO STAFF'S THIRD SET OF DATA REQUESTS

#### 1. What standards were used in conducting the ambient noise determination?

## **RESPONSE:**

Ambient sound levels were collected utilizing equipment that complies with the following standards: IEC 61672-1:2013 Class 1, Group X; IEC 60651 Ed 1.2 (2001) plus Amendment 1(1993-02) and Amendment 2 (2000-10) Type 1, Group X; IEC 60804 (2000-10) Type 1, Group X; ANSI S1.4-2014 Class 1; ANSI S1.4-1983 (R2006) plus Amendment; ANSI S1.4A-1985 (R2006) Type 1; ANSI S1.43-1997 (R2007) Type 1. In addition, the field calibrator satisfies the Class 1 requirements of IEC 60942:2018 and ANSI/ASA S1.40-2006 (R2016) standards. Periods of precipitation or microphone height wind speeds greater than 5 m/s were excluded consistent with ANSI S12.18 (R2019). Microphones were located away from reflective surfaces, and the microphone was oriented such that it was pointing straight up consistent with ANSI S12.9 Part 3 (R2019) and ANSI S1.13 (2020).

#### 2. Were high frequency natural sounds filtered out of the resulting ambient levels?

## **RESPONSE:**

The oversized windscreens used in this survey (ACO 7-inch, treated) were selected because they limit the rise in measured sound levels from high winds, and reduce high-frequency sounds. Natural high frequencies (e.g., insect noise), if present, tends to dominate measured sound level during the nighttime hours. As the nighttime hours do not coincide with the primary sound output of a solar facility, they were not the focus of the analysis. Nonetheless, sound data were reprocessed to remove the high frequencies.

The Applicant has revised the project layout and a revised Sound Assessment will be submitted. This revised assessment will present the measured data both with and without the high frequencies removed.

3. Why were the nighttime average ambient sound levels for monitoring locations M1 and M4 higher than the daytime levels?

## **RESPONSE**:

The nighttime sound levels are influenced by insects and day/night distribution of trains may also play a role. There may be more trains at night than during the day and/or the train horn is used more at night.

4. Please provide a table showing Leq, L90, L50, and L10 for each monitoring locations including day/night levels, day levels and night levels.

# **<u>RESPONSE</u>**:

The Applicant has revised the project layout and a revised Sound Assessment will be submitted. This revised Sound Assessment will present the measured  $L_{eq}$ ,  $L_{90}$ ,  $L_{50}$ , and  $L_{10}$ , as well as the overall day levels (Ld), night levels (Ln), and day/night level (Ldn) in addition to the arithmetic average daylight hours and the Ld and Ln with the high frequencies removed.

5. Please provide temperature and precipitation data for the location and time and date of the measurements.

## **RESPONSE:**

The Applicant has revised the project layout and a revised Sound Assessment will be submitted that presents the meteorological data recorded at Location M4 during the ambient sound survey.

6. Were any precipitation or high wind gust events filtered out of the results?

## **RESPONSE**:

The Applicant has revised the project layout, and a revised Sound Assessment will be submitted. Periods of precipitation, 10-minute average windspeeds greater than 5 meters per second (11 miles per hour), or wind gusts greater than 7 meters per second (16 miles per hour) were excluded from the analysis.

7. For sound operation model, what model transformer and inverter were used and what are the sound power levels of the transformers and inverters?

## **<u>RESPONSE</u>**:

The sound power levels were presented in Table 3-1 of the Sound Assessment. However, the Applicant has revised the project layout, and a revised Sound Assessment will be submitted that will include the requested information.

# 8. For sound operation model, what is the voltage/wattage of the model transformer and inverter used?

# **RESPONSE**:

The Applicant has revised the project layout, and a revised Sound Assessment will be submitted that will include the requested information.

# 9. What is the Octave band center frequency for transformer and inverters?

# **RESPONSE**:

The Applicant has revised the project layout, and a revised Sound Assessment will be submitted that will include the requested information.

10. In November 2020, it was mentioned in a data request response, that the Applicant would have archaeology 1B survey results/report completed in December 2020. Please update the status of the Phase IB archaeological report and if an MOU with the Ohio Historic Preservation Office is being considered? (if so, please provide the status)

# **<u>RESPONSE</u>**:

The Applicant delivered its Phase 1B survey results/report directly to Staff via email and marked as "Confidential" on February 8, 2021.

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Case No(s). 20-1084-EL-BGN

Summary: Response of Powell Creek Solar, LLC to OPSB Staff's Third Data Request electronically filed by Teresa Orahood on behalf of Dylan F. Borchers