Sebree Solar II, LLC

Case No. 2022-00131

Application – Exhibit 12
Attachment A
Exhibit 4

Noise Impact Assessment
(44 Pages)

DNV

SEBREE SOLAR II PROJECT

Sound Assessment

Environmental Consulting & Technology, Inc.

Document No.: 10375087-HOU-R-01
Issue: F, **Status:** FINAL
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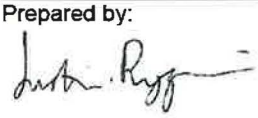
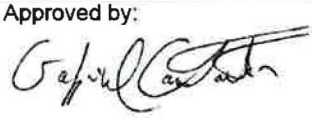
This report presents the results of a sound assessment conducted by DNV on behalf of Environmental Consulting & Technology, Inc..

Prepared by:	Verified by:	Approved by:
		
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EXECUTIVE SUMMARY

DNV Energy USA Inc. ("DNV") has conducted a sound impact assessment for the construction and operation of the Sebree Solar II Project (the "Project") located approximately six miles south of the City of Henderson, directly west of the Town of Robards, west of U.S. Highway 41 ("US-41"), north of State Road 56 ("HWY-56"), and east of US-41A. The entire project consists of two phases. The first phase was submitted separately to the Kentucky Public Service Commission, Electric Generation and Transmission Siting Board under case number 2021-00072 Sebree Solar, LLC. This project is referenced as the Sebree Solar Project. The second phase is the focus of this assessment and is referenced as the Sebree Solar II Project or "Project" as previously stated.

The Project layout consists of a total of 51 inverters, which does not include inverters related to the Sebree Solar Project. The Project connects to the same substation as the Sebree Solar Project. Three step-up transformers are located within the substation, one of which is associated with the Project. The Project has a nameplate capacity of 150 MW and is located adjacent to the Sebree Solar Project that has a nameplate capacity of 250 MW. Both the first phase (Sebree Solar Project) and the second phase (Project) are considered in the assessment of operational sound based on the assumption that both phases will be in operation concurrently after the second phase is constructed.

Construction activities were calculated for the Project by logarithmically adding the sound pressure level (SPL) of the construction equipment and using the geometric divergence equation to calculate the sound level at each receptor. The closest non-participating receptor was at a distance of 131 ft from the Project construction activities. As a result, sound pressure levels at nearby receptors are expected to be less than 86.6 dBA in the A-weighting scale and 93.3 dB unweighted at all non-participating residences.

Typical farming equipment such as a tractor can emit sound levels at approximately 80 dBA at 50 ft. The calculated construction sound pressure levels are expected to be similar or lower than typical farming equipment at all receptors. Sound emitted from construction equipment is expected to be comparable in character to internal combustion engine sound associated with farming equipment. Considering farming activity occurs during the day when construction is scheduled, sound emitted by construction equipment should be familiar to what the community currently experiences in the existing sound environment.

DNV has included a total of 232 total receptors (including 14 participants) within 1 mile of the project boundary in this analysis. The SPLs at each receptor resulting from the operation of the Sebree Solar Project and Sebree II Solar Project for the aggregate of all solar inverters and the transformer were calculated based on the ISO 9613-2 method. Modeled cumulative SPLs range from 32.3 dBA to 51.1 dBA at the receptors calculated in the A-weighting scale and from 65.8 dB to 82.3 dB unweighted.

1 INTRODUCTION

Environmental Consulting & Technology, Inc. ("ECT" or the "Customer") requested that DNV Energy USA Inc. ("DNV") perform a sound assessment for construction and operation of the Sebree Solar II Project (the "Project") located approximately six miles south of the City of Henderson, directly west of the Town of Robards, west of U.S. Highway 41 ("US-41"), north of State Road 56 ("HWY-56"), and east of US-41A. The total nameplate capacity of the Project is 150 MW.

The duration of the construction period is scheduled to last for at least 1.5 years and includes pile driving for the solar array foundations.

The layout considered for the noise impact operational assessment consists of 51 solar inverters and one step-up transformer at the Project substation.

The objective of this assessment is to calculate the expected sound levels generated by machinery during the construction of the Project and to predict the sound levels from the Project's solar inverters and substation transformer during operation. Both the first phase (Sebree Solar Project) and the second phase (Project) are considered in the assessment of operational sound based on the assumption that both phases will be in operation concurrently after the second phase is constructed.

The construction sound levels were calculated at specified distances using the geometrical divergence equation. The sound levels during operation of the Project were calculated at all receptors within 1 mile of the Project boundary using the ISO 9613-2 sound propagation model [1].

2 ENVIRONMENTAL SOUND BACKGROUND

Sound levels are expressed in the decibel unit and are quantified on a logarithmic scale to account for the large range of acoustic pressures to which the human ear is exposed. A decibel (dB) is used to quantify sound levels relative to a 0 dB reference. The reference level of 0 dB is defined as a sound pressure level of 20 micropascals (μPa), which is the typical lower threshold of hearing for humans.

Sound levels can be presented both in broadband (sound energy summed across the entire audible frequency spectrum) and in octave band spectra (audible frequency spectrum divided into bands). Frequency is expressed in the Hertz unit (Hz), measuring the cycles per second of the sound pressure waves. The audible range of humans spans from 20 to 20,000 Hz. Since the human ear does not perceive every frequency with equal loudness, spectrally varying sounds are often adjusted with a weighting filter. The A-weighting filter is applied to closely approximate the human ear's response to sound. This scale is commonly used in environmental and industrial sound. Sound expressed in the A-weighted scale is denoted dBA. Comparative sound pressure levels are shown in Table 2-1 [2] and are based on comparable examples rather than specific measurements or calculations.

Table 2-1 Examples of Common A-weighted Sound Levels

Sound Pressure Level [dBA]	Sound Source Example
0-10	Threshold of hearing
10-20	Recording studio background sound
20-40	Quiet bedroom background sound
40-50	Quiet rural
50-60	Quiet urban
60-70	Commercial area, normal conversation at 3 ft
70-80	Tractor at 50 ft
80-90	Diesel truck at 150 ft
90-100	Gas lawn mower at 3 ft
100-110	Car horn at 3 ft

A sound source has a certain sound power level rating which describes the amount of sound energy per unit of time. This is a basic measure of how much acoustical energy it can produce and is independent of its surroundings. Sound pressure is created as sound energy flows away from the source. The measured sound pressure level (SPL) at a given point depends not only on the power rating of the source and the distance between the source and the measurement point (geometric divergence), but also on the amount of sound energy absorbed by environmental elements between the source and the measurement point (attenuation). Sound attenuation factors include meteorological conditions such as wind direction, temperature, and humidity, sound interaction with the ground, atmospheric absorption, terrain effects, diffraction of sound around objects and topographical features, and foliage.

3 APPLICABLE REGULATIONS

The Project is located in Henderson County, Kentucky. No applicable sound regulations relating to solar energy projects were found for this county or in the state of Kentucky. Although there are no specific noise regulations, some nearby projects have been subject to unweighted decibels limits [3], as requested by the Kentucky Electric Generation and Transmission Siting Board (KYSB). Therefore, the results of this assessment are presented in both the more commonly used A-weighting scale (dBA) as well as unweighted decibels (dB).

4 DESCRIPTION OF THE PROJECT SITE

4.1 Site description

The Project is to be located on a site encompassing approximately 1,000 acres located in Henderson County, Kentucky, approximately seven miles south of the City of Henderson and directly north of the Town of Robards.

The Project is situated in relatively simple terrain, consisting of flat and occasionally elevated farmland, with project equipment base elevations ranging from approximately 400 feet to 480 feet above sea level. The ground cover on and near the site is primarily composed of farmland or open fields. Dwellings are interspersed throughout the Project site.

A map of the approximate Project area is shown in Figure 4-1.

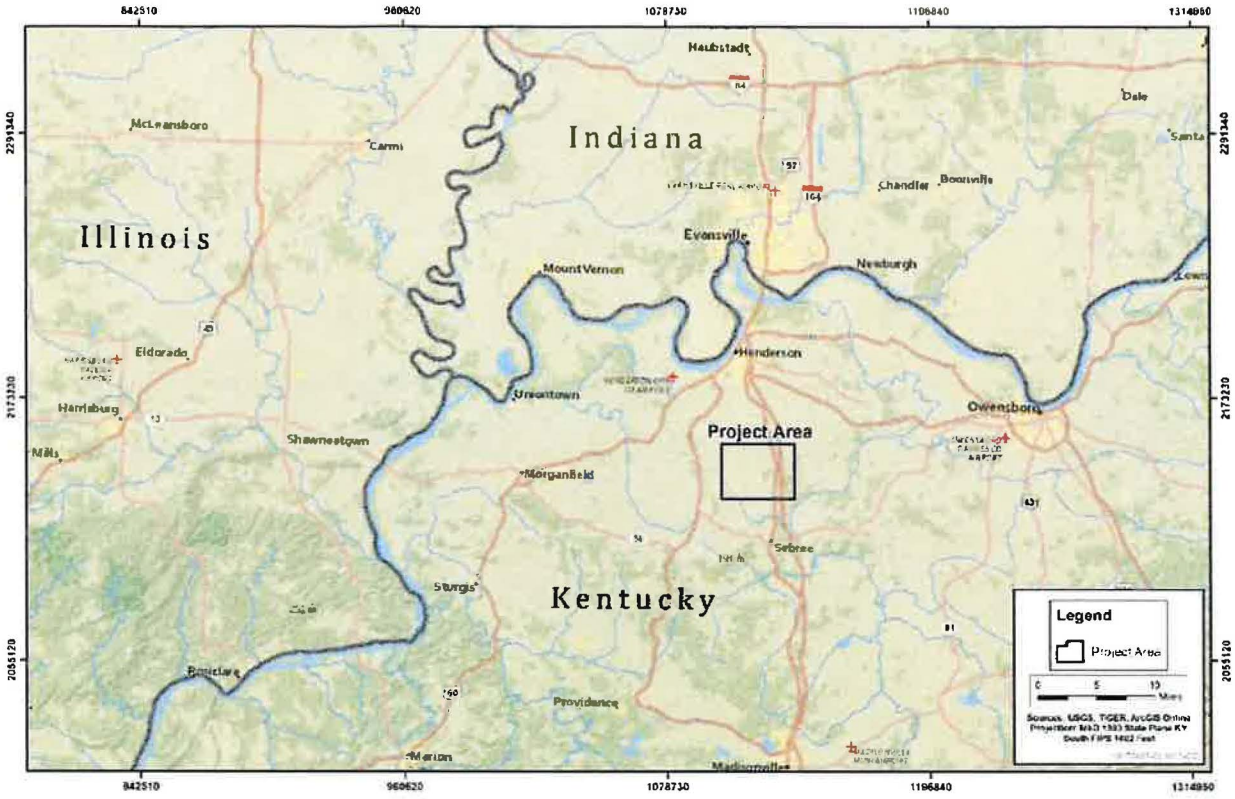

Figure 4-1 Approximate Project area

4.2 Project layout

The Project layout used in this analysis consists of 51 solar inverters located throughout the Project site, as well as one 170 MVA - 161 kV step-up transformer at the substation. These will be the primary sound sources during operation.

The coordinates of the Project equipment are presented in Appendix A. The solar inverter locations and substation transformer location were provided by the Customer [4].

4.3 Neighboring projects

The Project is an addition to the neighboring solar project Sebree Solar Project. Both phases are included in the assessment of operational sound. However, it is assumed that construction schedules will not overlap therefore construction noise was only considered for the Project.

4.4 Receptor locations

A list of 232 receptors located within 1 mile of the Project boundary was provided by the Customer [5]. Coordinates of each receptor point are presented in Appendix B.

All receptors have been modeled at a height of 5 ft (1.5 m) above ground level and represent one story residential structures.

5 SOUND ASSESSMENT OF PROJECT CONSTRUCTION

5.1 Description of the sound sources

The sources of sound considered in this analysis include the construction equipment specified by phase. The construction equipment list was provided by the Customer [6] and source noise levels were referenced from the Federal Highway Administration Construction Noise Handbook [7].

The source noise levels were specified as maximum sound pressure levels at 50 feet. A usage factor has been applied to calculate the equivalent energy average sound levels (L_{eq}) using the maximum sound pressure levels (L_{max}). The L_{eq} is a commonly used metric to specify energy averaged sound levels over time whereas the L_{max} is an instantaneous sound level. Usage factor is defined as the time-averaging equipment usage factor, expressed in percent [7]. It is intended to reflect the percentage of time during a construction activity where the specified equipment is operating at full capacity. The frequency spectra assumed for the equipment were referenced from the U.K. Department for Environment construction noise prediction document [8] and are shown in Appendix C. A summary of the source levels of the construction equipment for the loudest identified construction phases are shown in Table 5-1.

Table 5-1 Construction equipment sound sources

Phase	Equipment	Quantity	L_{max} at 50 ft [dBA]		Usage	Calculated L_{eq} at 50 ft	
			Individual	Total	Factor [%]	dBA	dB
Demolition/Site Preparation	Grader	2	85.0	88.0	40	84.0	90.0
	Dump Truck	4	84.0	90.0	40	86.0	93.8
	Water Truck	1	85.0	85.0	50	82.0	87.1
	Generator	4	82.0	88.0	50	85.0	90.3
	Semi-trailer	1	84.0	84.0	40	80.0	84.1
	TOTAL					90.9	97.2
Pile Driving	Pile Driver	4	95.0	101.0	20	94.0	101.1
	Water Truck	1	85.0	85.0	50	82.0	87.1
	Generator	4	82.0	88.0	50	85.0	90.3
	Semi-trailer	1	84.0	84.0	40	80.0	84.1
	TOTAL					94.9	101.7
Foundation Installation	Concrete Truck	2	85.0	88.0	40	84.0	89.0
	Water Truck	1	85.0	85.0	50	82.0	87.1
	Generator	4	82.0	88.0	50	85.0	90.3
	Semi-trailer	1	84.0	84.0	40	80.0	84.1
	TOTAL					89.2	94.2

5.2 Assessment methodology

Sound pressure levels were calculated using the source sound levels and usage factors in Table 5-1 for varying distances using the geometrical divergence equation below.

$$SPL_{d1} = SPL_{ref} - 20\log_{10}\frac{d_1}{d_{ref}}$$

Where:

SPL_{equip} is the equipment sound pressure level at the distance d_1

SPL_{ref} is the reference sound pressure level at the reference distance, d_{ref} equal to 50 feet

The resulting sound levels were calculated at each receptor based on the distance to the loudest applicable construction activity which was pile driving. The distance was assumed to be the distance from the nearest equipment structurally supported by foundations requiring pile driving provided by the Customer [9].

This approach is conservative in nature as it assumes all equipment is operating at the same time and from the same source location. Practically, construction equipment will be spread out around the Project site and not likely to be operating simultaneously. As a result, on-site measurements are expected to be lower than the calculation results presented in Section 5.3.

Sound pressure levels were calculated in decibels using the A-weighting scale (dBA) as this scale is commonly utilized to represent the frequency sensitivities of a healthy human ear. The A-weighting scale discounts low and high frequencies and results in lower broadband sound levels than the unweighted scale during measurement of construction noise sources. In addition to the A-weighting scale, sound pressure levels were calculated in the unweighted decibel scale (dB) to allow for comparison of any sound levels presented in this weighting scale.

5.3 Results

The resulting sound pressure levels at each receptor based on distances from the Project equipment are shown in Appendix B.

The loudest construction sound level calculated for the pile driving phase is 86.6 dBA and 93.3 dB at Receptor 497 located 131 ft from the nearest PV panel. It is important to note that this analysis assumes the construction equipment associated with each phase is operating simultaneously at the specified distance. This assumption is conservative as the equipment will likely be more spread out around the site and not likely to be operating at the same time. Other noise attenuation effects such as atmospheric absorption, ground effect, reflection and shielding by topographical features or objects were not considered in the analysis. Measured sound pressure levels during construction activities are expected to be lower than shown in Appendix B.

Typical farming equipment such as a tractor can emit sound levels at approximately 80 dBA at 50 ft as shown in Table 2-1. The calculated construction sound pressure levels are expected to be similar or lower than typical farming equipment at most receptors. Sound emitted from construction equipment is expected to be comparable in character to internal combustion engine sound associated with farming equipment. Considering farming activity occurs during the day when construction is scheduled, sound emitted by construction equipment should be familiar to what the community currently experiences in the existing sound environment. Due to the conservative nature of the assessment, it is expected that sound levels may be less than the referenced tractor sound level at 50 ft for most of the day during a given day of construction.

5.4 Additional recommendations

To ensure that the noise impact during construction activities is minimized, the following best practice recommendations may be followed to the extent practicable:

1. Keep all equipment in good repair with all worn, loose and unbalanced machine parts to be replaced. Machine parts should be kept well lubricated to reduce friction.
2. Unnecessary idling of internal combustion engines should be avoided when practicable.
3. Utilize newer models of construction equipment where possible to provide the quietest performance.
4. Internal combustion engines are to be fitted with a suitable muffler in good repair.
5. Locate stationary noise-generating equipment such as air compressors or portable power generators as far as practicable from neighboring houses.
6. Develop a construction and traffic management plan which includes informing the local community of the construction schedule and activities to minimize impacts.
7. Construction to be scheduled during daytime hours as defined by local regulations.
8. Provide and make available contact information for concerns regarding construction activities prior to and during construction.
9. All vehicular movements to and from the site must only be made during the scheduled normal working hours. This includes off-site noise that is associated with a specific project such as staging of concrete trucks.
10. Vehicle speeds on access roads should be limited to 25 mph (40 km/hr).

6 SOUND ASSESSMENT OF PROJECT OPERATION

6.1 Description of the sound sources

The sources of sound considered for the operations phase are the solar inverters and substation transformer. Sound associated with other sources in the vicinity of the Project, such as construction activities, have not been considered in this section. The smaller transformers associated with each inverter were not included in the analysis as the sound source data showed their contribution to have a negligible impact on overall sound pressure levels.

6.1.1 Solar Inverters

The solar inverter for the Project is a Power Electronics HEM FS4105M with a maximum permissible voltage of 1500 Vdc. Sound power levels were calculated according to ISO standard 3744:2010 [10], based on a rated sound pressure level of 82.5 dBA at 1 meter [11]. The spectrum used for the solar inverter was based on octave band sound levels of similar equipment from DNV's internal database. The octave band sound power levels used for the solar inverter are shown in Table 6-1.

Table 6-1 Solar Inverter equipment sound power levels [dBA]

Equipment	Frequency [Hz]									Total
	31.5	63	125	250	500	1000	2000	4000	8000	
Power Electronics HEM FS4105M	89.4	89.4	90.8	98.7	98.6	93.2	88.8	76.0	76.0	103.1

6.1.2 Substation transformer

There are three transformers planned at the Project substation. While the final equipment has not been procured for the Project, the Customer has provided transformer ratings for use in this report. Two of the three transformers were planned as part of the Sebree Solar project and the third transformer is part of the Sebree Solar II Project, as specified below. The proposed transformers are:

- Two 140 MVA - 161 kV for Sebree Solar Project.
- One 170 MVA - 161 kV for Sebree Solar II Project

A total broadband sound power level of 101.0 dBA and 102.0 dBA was estimated for the 140 MVA transformers and 170 MVA transformer respectively, according to IEEE standard C57.12.90-2015 [12], and representative transformer dimensions. A tonality penalty of 5 dB is included in this estimate in accordance with ISO-1996-2 [13].

A typical transformer octave band distribution [14] was used. The octave band sound power levels of the Project transformer are shown in Table 6-2.

Table 6-2 Transformer sound power levels [dBA]

Equipment	Frequency [Hz]									Total
	31.5	63	125	250	500	1000	2000	4000	8000	
170 MVA transf.	59.2	78.4	90.5	93.0	98.4	95.6	91.8	86.6	77.5	102.0

140 MVA transf.	58.2	77.4	89.5	92.0	97.4	94.6	90.8	85.6	76.5	101.0

6.2 Assessment methodology

The sound pressure level at each receptor for the aggregate of all solar inverters and the main transformers associated with the Project were calculated using CadnaA acoustic modeling software based on the ISO 9613-2 method [1]. The simulation was performed using the maximum sound power level of the solar inverters and transformers. Based on the physical dimensions provided, the solar inverters were modeled at a height of 2.2 m (7.2 ft) above ground level (agl) and the substation transformers were modeled at a height of 5.5 m (18.0 ft) agl.

The receptors were modeled at a height of 1.5 m (5 ft) agl.

The ISO 9613-2 standard provides a prediction of the equivalent continuous SPL at a distance from one or more point sources. The method consists of octave-band algorithms (i.e., with nominal mid band frequencies from 31.5 Hz to 8 kHz) for calculating the attenuation of the emitted sound. The algorithm takes into account the following physical effects:

- Geometrical divergence – attenuation due to spherical spreading from the sound source
- Atmospheric absorption – attenuation due to absorption by the atmosphere
- Ground absorption – attenuation due to the acoustical properties of the ground

The ISO 9613-2 standard calculates attenuation "under meteorological conditions favorable to propagation from sources of sound emission." These meteorological conditions are for "downwind propagation or, equivalently, propagation under a well-developed moderate ground-based temperature inversion, such as commonly occurs at night". In other words, though a physical impracticality, the ISO 9613-2 standard treats every receptor as being downwind from every source of sound emission (in this case, inverters and the transformer).

The ISO 9613-2 standard accounts for ground absorption by assigning a numerical coefficient (G) with a value ranging from 0 to 1. A value of G = 0 represents hard ground (paving, water, ice, concrete, tamped ground, and other ground surfaces with a low porosity), while a G = 1 value represents porous ground (ground covered by grass, trees, or other vegetation, and other ground surfaces suitable for the growth of vegetation such as farming land). Though the ground use on and around the site is farming, a mixed (semi-reflective) global ground factor of G = 0.5 was used in this assessment.

Additionally, temperature, barometric pressure, and humidity parameters were selected to represent typical local annual averages, and topographical information to accurately represent terrain in three-dimensions was included in this assessment.

Specifically, the ISO 9613-2 parameters were set as follows:

- Ambient air temperature: 50° F (10° C)[1]
- Ambient barometric pressure: 101.32 kPa
- Humidity: 70%
- Overall ground factor: 0.5
- Topography included (5 m elevation intervals)

Additional attenuation from foliage was not considered in this assessment, implying that lower sound levels are expected in areas where there is foliage present in the line of sight between the project facilities and a sound receptor. Similarly, because the model assumes every receptor is downwind of every sound source at all times, lower sound levels are expected at times when a receptor is upwind of any sound source.

[1] Average temperatures are expected to be higher than 50° F however, this temperature was used conservatively to represent the project area.

6.3 Results

Detailed maps illustrating predicted sound pressure levels at receptors located in the vicinity of the Project are presented in Figure 6-1 to Figure 6-3.

The predicted sound levels at each of the receptors are presented in Appendix B.

For each receptor, the following information is provided:

- ID
- Coordinates in Kentucky state plane projection and NAD 1983 Datum
- Closest noise generating equipment
- Distance to the closest noise generating equipment
- Sound pressure levels (SPL) in dBA and dB at the receptor location

The highest modelled results throughout the Project area for A-weighted sound pressure levels and unweighted sound pressure levels respectively are 51.1 dBA and 82.3 dB at receptor 310 (participant). The A-weighted (dBA) sound level can be considered similar to sound levels in a quiet rural environment (see Table 2-1).

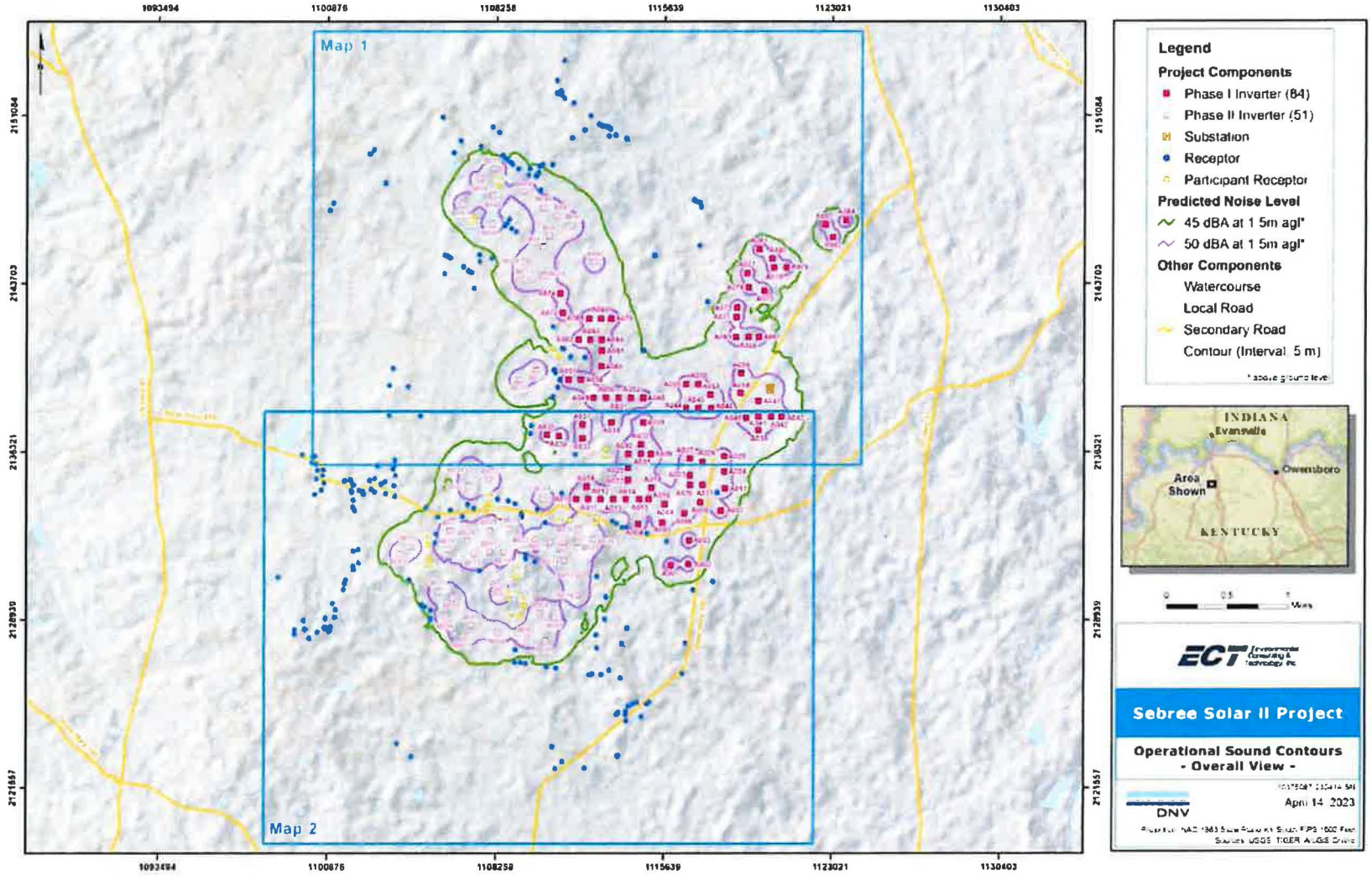

Figure 6-1 Modeled sound pressure levels within the Project area – Overall view

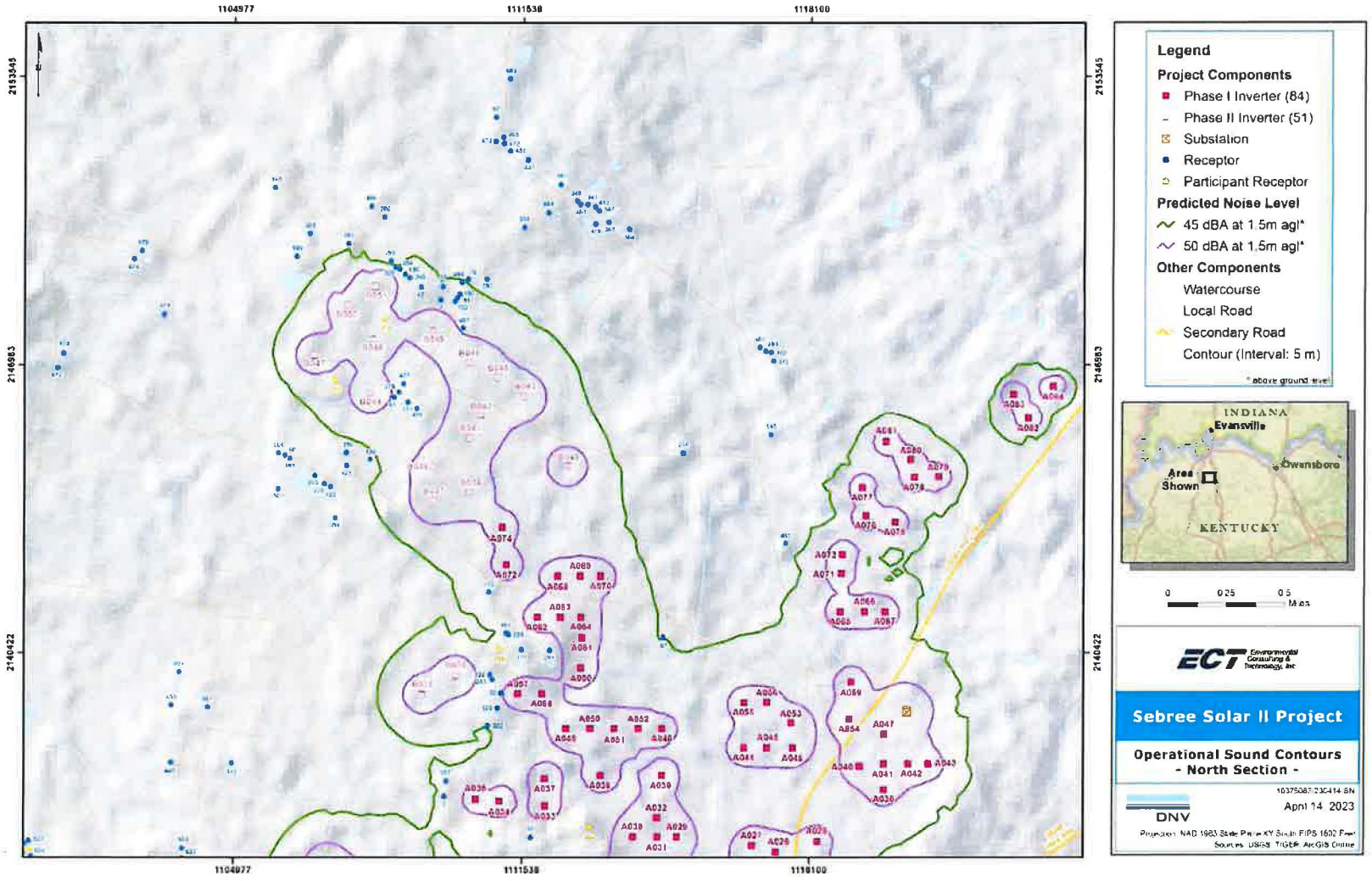

Figure 6-2 Modeled sound pressure levels within the Project area (1 of 2)

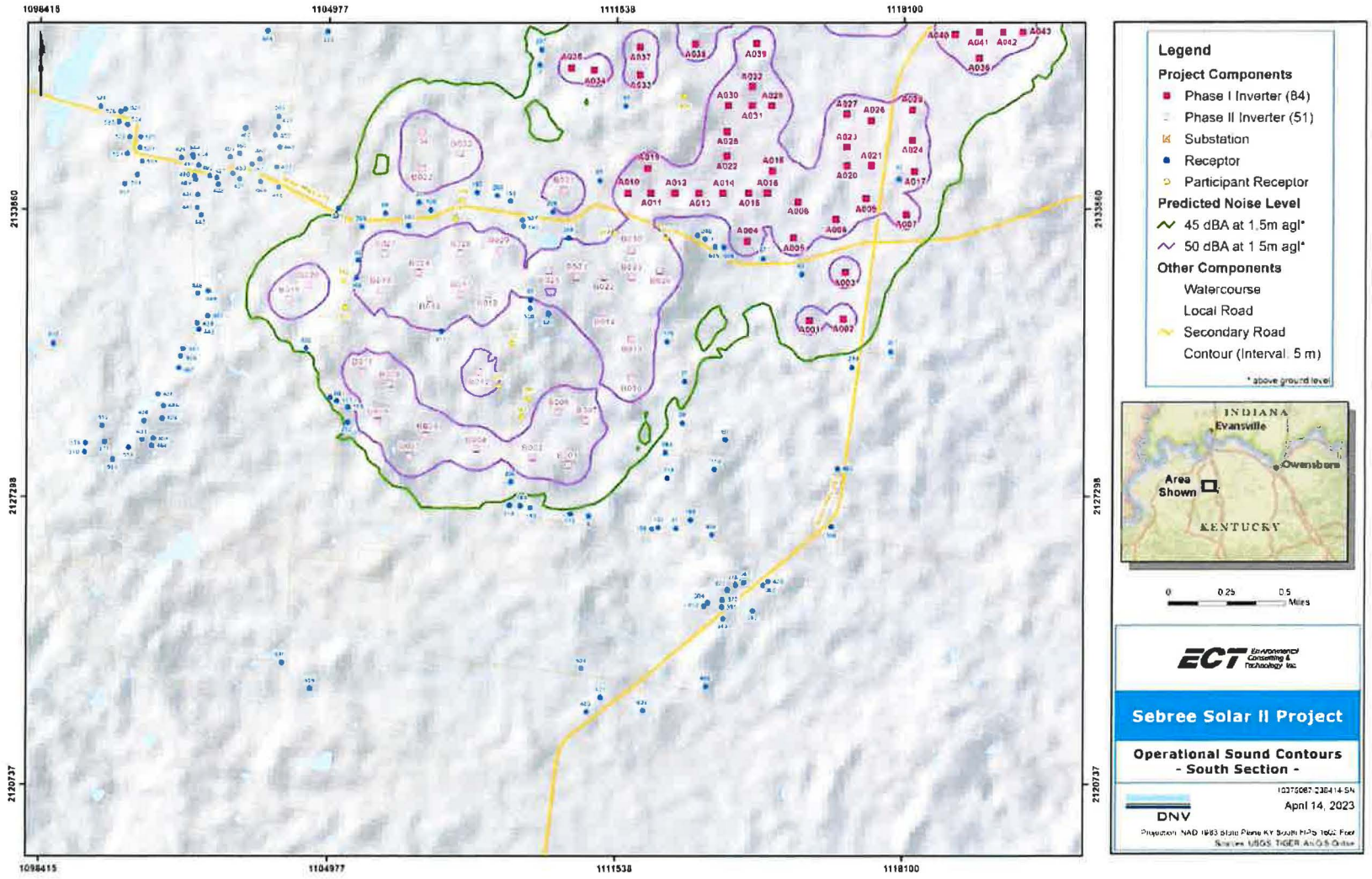

Figure 6-3 Modeled sound pressure levels within the Project area (2 of 2)

7 CONCLUSION

DNV has conducted a sound assessment to determine the maximum predicted sound levels at receptors in the vicinity of Sebree Solar II Project located in Henderson County, Kentucky. The Project equipment considered in the analysis of the operational phase were 51 solar inverters and one step-up transformer within the Project substation. For the construction phase, typical construction equipment including graders, dump trucks, water trucks, generators, semi-trailers, pile drivers and concrete trucks were considered in the analysis.

As a result of construction activities, sound pressure levels at non-participating receptors are expected to be less than 86.6 dBA in the A-weighting scale and 93.3 dB unweighted.

Typical farming equipment such as a tractor can emit sound levels at approximately 80 dBA at 50 ft as shown in Table 2-1. The calculated construction sound pressure levels are expected to be similar or less than typical farming equipment at most receptors. Sound emitted from construction equipment is expected to be comparable in character to internal combustion engine sound associated with farming equipment. Considering farming activity occurs during the day when construction is scheduled, sound emitted by construction equipment should be familiar to what the community currently experiences in the existing sound environment.

Modeled cumulative SPLs for the operational phase range from 32.3 dBA to 51.1 dBA at the receptors calculated in the A-weighting scale and from 65.8 dB to 82.3 dB unweighted. This range is approximately equivalent to sound levels ranging from a quiet bedroom to a quiet rural outdoor area.

The assumptions made in both the construction and operation assessment methodology can be considered conservative as actual measured sound levels from the Project's activities are expected to be generally lower.

8 REFERENCES

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[3] Information regarding regulations for similar projects sent by email, by ECT to DNV on 23 December 2020.

[4] Site layout sent via email, by ECT to DNV on 30 March 2023, "*SebreeII_inverters.shp*"

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[7] U.S. Department of Transportation Federal Highway Administration. *Construction Noise Handbook. August 2006.*

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[10] International Organization for Standardization. *ISO 3744:2010: Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane*. October 2010.

[11] Inverter sound pressure level sent via email, by ECT to DNV on 15 September 2022, "*TMEIC Noise Measuremnet ECS-RH-D626.pdf*"

[12] C57.12.90-2015 IEEE Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers. 11 March 2016.

[13] International Organization for Standardization. *ISO 1996-2: Acoustics – Description, measurement and assessment of environmental noise -Part 2: Determination of sound pressure levels*. July 2017

[14] *Handbook of Acoustics*. Edited by Malcolm J. Crocker. John Wiley & Sons. 1998.

DNV

APPENDIX A – SEBREE SOLAR II SOUND SOURCE LOCATIONS

ID	Description	NAD 1983 State Plane KY South FIPS 1602 Feet	
		Easting [ft]	Northing [ft]
A001	Power Electronics HEM FS4105M	1115960	2131318
A002		1116730	2131361
A003		1116775	2132422
A004		1114523	2133131
A005		1115585	2133207
A006		1116552	2133624
A007		1118160	2133735
A008		1115691	2134020
A009		1117245	2134100
A010		1111795	2134228
A011		1112313	2134228
A012		1112865	2134228
A013		1113418	2134228
A014		1113970	2134228
A015		1114558	2134228
A016		1114985	2134228
A017		1118340	2134710
A018		1115096	2134728
A019		1112243	2134780
A020		1116802	2134850
A021		1117359	2134850
A022		1114058	2135071
A023		1116794	2135273
A024		1118296	2135436
A025		1114058	2135624
A026		1117347	2135871
A027		1116794	2136022
A028		1118296	2136114
A029		1115074	2136217
A030		1114077	2136217
A031		1114635	2136217
A032		1114631	2136649
A033		1112062	2136920
A034		1111019	2137023
A035		1110489	2137073
A036		1119809	2137293
A037		1112058	2137545
A038		1113329	2137623

ID	Description	NAD 1983 State Plane KY South FIPS 1602 Feet	
		Easting [ft]	Northing [ft]
A039	Power Electronics HEM FS4105M	1114726	2137625
A040		1119254	2137827
A041		1119807	2137884
A042		1120363	2137884
A043		1120818	2137884
A044		1116611	2138246
A045		1117139	2138249
A046		1117721	2138249
A047		1119809	2138548
A048		1114732	2138683
A049		1112540	2138683
A050		1113092	2138683
A051		1113645	2138683
A052		1114197	2138683
A053		1117692	2138817
A054		1119020	2138897
A055		1116611	2139282
A056		1117139	2139285
A057		1111435	2139484
A058		1111987	2139484
A059		1119058	2139757
A060		1112877	2140075
A061		1112899	2140755
A062		1111884	2141226
A063		1112401	2141226
A064		1112881	2141226
A065		1118812	2141352
A066		1119365	2141352
A067		1119830	2141352
A068		1112346	2142155
A069		1112863	2142155
A070		1113323	2142155
A071		1118828	2142214
A072		1111176	2142417
A073		1118856	2142640
A074		1111077	2143261
A075		1120051	2143380
A076		1119381	2143521

ID	Description	NAD 1983 State Plane KY South FIPS 1602 Feet	
		Easting [ft]	Northing [ft]
A077	Power Electronics HEM FS4105M	1119300	2144157
A078		1120485	2144394
A079		1121039	2144400
A080		1120405	2144796
A081		1119846	2145217
A082		1123070	2145744
A083		1122729	2146304
A084		1123635	2146492
B001	Power Electronics HEM FS4105M	1110454	2128017
B002		1109626	2128183
B003		1106817	2128218
B004		1108340	2128382
B005		1107197	2128690
B006		1106081	2129013
B007		1110847	2129036
B008		1110454	2128017
B009		1109626	2128183
B010		1106817	2128218
B011		1108340	2128382
B012		1107197	2128690
B013		1106081	2129013
B014		1110847	2129036
B015		1110217	2129230
B016		1106358	2129894
B017		1111874	2130019
B018		1105749	2130160
B019		1108391	2130163
B020		1111874	2130906
B021		1111254	2131516
B022		1104052	2131812

ID	Description	NAD 1983 State Plane KY South FIPS 1602 Feet	
		Easting [ft]	Northing [ft]
B023	Power Electronics HEM FS4105M	1107280	2131818
B024		1107968	2131909
B025		1108598	2131909
B026		1106138	2132017
B027		1104505	2132139
B028		1110624	2132320
B029		1111254	2132320
B030		1111883	2132320
B031		1107015	2132409
B032		1109994	2132459
B033		1112513	2132459
B034		1106239	2132848
B035		1107968	2132852
B036		1108853	2132926
B037		1111883	2132930
B038		1110320	2134283
B039		1107089	2134790
B040		1107949	2135130
B041		1107089	2135622
B042		1109255	2139472
B043		1110019	2139908
B044		1109496	2143864
B045		1110320	2144048
B046		1109496	2144641
B047		1112576	2144648
B048		1110323	2145293
B049		1110576	2145809
B050		1111577	2146248
B051		1108047	2146328
Sub	Substation	1120333	2139076

Inverters with the A prefix are associated with Sebree Phase I. Inverters with the B prefix are associated with Sebree Phase II.

APPENDIX B – RECEPTOR LOCATIONS AND ASSOCIATED SOUND LEVELS

PARTICIPATING RESIDENCES AND DISTANCE TO CLOSEST SOLAR PANEL

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Solar Panel (feet) from edge of building	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]					
270	1107859	2133649	61-29	9798 HWY 416 W	135	86.3	93.0	49.5	81.3
275	1108850	2129835	61-58	8501 & 8491 W N ROYSTER RD	137	86.2	93.0	49.9	81.5
225	1107279	2146641	59-21	6635 HWY 1299	153	85.2	92.0	48.1	79.6
12	1109167	2130794	61-58	8501 & 8491 W N ROYSTER RD	155	85.1	91.9	47.3	79.1
274	1111498	2133329	61-31	9260 HWY 416 W	169	84.4	91.1	50.3	81.3
203	1112675	2133203	61-34	9056 HWY 416 W	199	82.9	89.7	50.5	82.1
176	1108004	2134069	60-54	9801 HWY 416 W	200	82.9	89.7	48.8	80.7
142	1105312	2132236	61-8.1	8619 THOMASON RD	220	82.1	88.8	48.0	79.4
310	1108385	2148017	59-20	6507 HWY 1299	222	82.0	88.7	51.1	82.3
282	1109536	2129550	61-53	8524 WN ROYSTER RD	330	78.5	85.3	48.6	80.1
232	1105351	2131630	61-8	8653 THOMASON RD	387	77.1	83.9	47.3	78.7
143	1109387	2129116	61-53	8524 WN ROYSTER RD # 42452	421	76.4	83.2	49.0	80.6
156	1111022	2140506	60-38	7155 HWY 1299	447	75.9	82.7	46.2	78.3
504	1113077	2136437			3,041	59.2	66.0	48.5	80.7

[1] Calculated using NAD_1983_StatePlane_Kentucky_South_FIPS_1602_Feet

[2] Parcel number and property address information provided for receptors within 1,000 feet of PV Panel (as previously requested for the Sebree Solar, LLC application during the post-hearing data request)

NON-PARTICIPATING RESIDENCES WITHIN ONE MILE OF THE PROJECT AND DISTANCE TO CLOSEST SOLAR PANEL

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Solar Panel (feet) from edge of building	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]					
497	1110173	2147827	59-32	6430 HWY 1299	131	86.6	93.3	49.4	81.0
180	1109403	2133477	61.29.1	8221 WN ROYSTER RD	131	86.5	93.3	48.9	80.6
507	1109373	2133616	61.29.1	8221 WN ROYSTER RD	138	86.1	92.9	48.4	80.1
115	1105411	2129358	61-22	8832 THOMASON RD	148	85.5	92.3	48.0	79.5
62	1109576	2131789	61-56	8340 WN ROYSTER RD	159	84.9	91.6	49.4	81.0
229	1108626	2149199	59-63	8115 MEAHL CATES RD	165	84.5	91.3	47.0	78.0
245	1108947	2148953	59-60	8147 MEAHL CATES RD	169	84.3	91.1	47.3	79.1
61	1108600	2146243	59-21.2	6589 HWY 1299	170	84.3	91.1	49.3	80.7
106	1108847	2149037	59-61	8135 MEAHL CATES RD	171	84.2	91.0	47.6	79.2
226	1110081	2133801	60-47	9475 STATE ROUTE 416 W	177	83.9	90.7	49.3	80.9
309	1108725	2149152	59-63	8115 MEAHL CATES RD	191	83.3	90.1	47.7	79.3
166	1105602	2132316	61-24	8592 THOMASON RD	203	82.7	89.5	50.1	81.4
279	1108714	2146356	59-21.1	6581 1299 HWY	204	82.7	89.5	48.6	80.1
88	1105632	2132707	61-24	8592 THOMASON RD	216	82.2	89.0	49.4	80.7
42	1109210	2148749	59-58	8175 MEAHL CATES RD	217	82.2	89.0	47.1	79.0
295	1108523	2149332	59-64	8103 MEAHL CATES RD	219	82.1	88.9	44.2	74.8
109	1107288	2133841	60-53	9881 STATE ROUTE 416 W	224	81.9	88.7	48.4	80.2
312	1105410	2128998	61-23	8844 THOMASON RD	230	81.6	88.4	47.6	79.0
236	1109134	2127636	61-51	8648 WN ROYSTER RD	234	81.5	88.3	48.0	79.6
477	1108818	2146542	59-20.1	6565 HWY 1299	234	81.5	88.3	48.4	80.0
117	1105153	2129497	61-11	8825 THOMASON RD	238	81.4	88.1	47.0	78.6
248	1113383	2133263	71-46.3	8893 STATE ROUTE 416 W	251	80.9	87.7	48.4	80.2
211	1107540	2131078	61-57	8660 THOMASON RD	251	80.9	87.7	49.9	81.5
31	1107015	2134016	60-54.3	9948 STATE ROUTE 416 W	269	80.3	87.1	49.0	80.8
193	1108339	2134242	60-51	9635 STATE ROUTE 416 W	282	79.9	86.7	48.6	80.5
179	1112700	2130835	61-36	8317 SPENCER THORNSBERRY RD	309	79.1	85.9	48.2	79.9
153	1109103	2134046	60-49	9611 STATE ROUTE 416 W	342	78.2	85.0	47.9	79.9
102	1110800	2139926	60-40.1	7227 1299 HWY	348	78.1	84.8	47.8	79.4
7	1109656	2148468	59-55	8201 MEAHL CATES RD	359	77.8	84.6	47.7	79.4
508	1109565	2131602	61-55.1	8362 W.N. ROYSTER RD. 42452	359	77.8	84.6	48.9	80.6
98	1105006	2129583	61-10	8823 THOMASON RD	369	77.6	84.3	46.4	78.0
163	1106783	2133489	61-26	9933 STATE ROUTE 416 W	372	77.5	84.3	48.8	80.4
85	1111147	2134509	60-46	7885 STATE ROUTE 1299	374	77.4	84.2	48.2	79.5
269	1105722	2133473	61-7.1	8511 THOMASON RD	386	77.2	83.9	47.6	79.3
3	1113557	2133183	71-46.3	8893 HWY 416 W	405	76.8	83.5	48.3	80.1
208	1110438	2133206	61-30	9260 HWY 416 W	414	76.6	83.3	49.9	81.6
268	1108805	2134174	60-50	9629 STATE ROUTE 416 W	426	76.3	83.1	47.8	79.8
320	1109975	2131490	61-55	8368 WN ROYSTER RD	460	75.7	82.4	49.5	81.2
261	1107556	2149738	59-19	8050 MEAHL CATES RD.	467	75.5	82.3	44.0	75.8
57	1109706	2148755	59-56	8189 MEAHL CATES RD	472	75.4	82.2	46.1	78.1
171	1108917	2146127	59-29	6590 1299 HWY	474	75.4	82.2	48.2	80.1
243	1110853	2139816	60-40.2	7235 HWY 1299 ROBARDS 42452	480	75.3	82.0	47.8	79.3
152	1109983	2148427	59-54	6399 HWY 1299	480	75.3	82.0	47.2	79.1
51	1110039	2148506	59-53	6391 HWY 1299	592	73.5	80.2	46.7	78.7
89	1106257	2133770	60-54.1	10029 HWY 416 W	601	73.3	80.1	47.5	79.3

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Solar Panel (feet) from edge of building	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]					
27	1113106	2129943	61-38	8245 SPENCER-THORNBERRY RD	627	73.0	79.7	45.9	78.2
502	1110749	2138744	60-44	7640 HUNTER LN	629	72.9	79.7	45.1	76.9
505	1113797	2133004	71-46.1	8877 HWY 416 W	654	72.6	79.4	48.1	79.9
476	1109120	2145984	59-29	6590 1299 HWY	680	72.3	79.0	48.6	80.6
160	1110095	2148591	59-52	6383 HWY 1299	691	72.1	78.9	46.2	78.2
191	1111165	2140865	60-61	7134 HWY 1299	719	71.8	78.5	46.7	78.7
298	1111225	2140831	60-61	7134 HWY 1299	751	71.4	78.2	46.9	78.9
103	1109359	2127085	61-50.1	W N ROYSTER RD (ADJ TO 8756)	754	71.4	78.1	43.9	75.8
183	1109575	2127042	61-50	8756 WN ROYSTER RD	763	71.2	78.0	43.6	75.4
172	1110768	2141801	60-37	7059 HWY 1299	781	71.1	77.8	46.7	78.7
313	1109101	2127096	61-51.1	8730 WN ROYSTER RD	794	70.9	77.7	43.7	75.6
173	1110502	2126900	61-48	8892 WN ROYSTER RD	810	70.7	77.5	44.4	76.3
29	1113053	2128974	61-41.1	8135 SPENCER-THORNBERRY RD	820	70.6	77.4	44.4	76.8
123	1110972	2139159	60-40	7263 HWY 1299	822	70.6	77.4	48.2	80.0
322	1104461	2130698	61-9	8795 THOMASON RD	825	70.6	77.3	45.6	77.5
9	1110916	2126851	61-47	8900 WN ROYSTER RD	826	70.6	77.3	43.7	75.8
52	1111050	2139506	60-40.3	7251 HWY 1299 ROBARDS 42452	838	70.4	77.2	48.9	79.8
506	1113993	2132998	71-47	8875 HWY 416 W	851	70.3	77.1	48.6	80.3
498	1110139	2148856	59-50	HWY 1299 6367	912	69.7	76.5	45.2	77.5
311	1111519	2140490	60-60	7160 1299 HWY	970	69.2	75.9	47.1	79.0
286	1108379	2150335	59-65	8077 MEAHL CATES RD	972	69.2	75.9	40.7	72.7
256	1107520	2144966			1,040	68.6	75.3	43.8	76.0
321	1105182	2133885			1,043	68.5	75.3	45.0	77.3
190	1108060	2144812			1,065	68.4	75.1	44.6	76.5
75	1110277	2148926			1,065	68.4	75.1	44.6	77.0
496	1108078	2150587			1,125	67.9	74.6	39.7	71.8
283	1112670	2128291			1,188	67.4	74.2	44.0	76.6
290	1110705	2148929			1,213	67.2	74.0	43.8	76.3
499	1106385	2149445			1,228	67.1	73.9	41.9	74.1
449	1102236	2132006			1,274	66.8	73.6	41.3	74.0
308	1106680	2149971			1,289	66.7	73.5	41.0	73.1
487	1102230	2131429			1,305	66.6	73.4	38.6	70.9
425	1107527	2144669			1,313	66.5	73.3	43.5	75.8
314	1112713	2127719			1,422	65.8	72.6	42.9	75.5
257	1109805	2137490			1,430	65.8	72.6	45.8	78.0
230	1115202	2144957			1,498	65.4	72.2	41.8	75.1
446	1102008	2131945			1,501	65.4	72.1	38.1	70.6
158	1112367	2126556			1,575	65.0	71.7	41.2	74.1
439	1101991	2131267			1,578	64.9	71.7	38.0	70.4
291	1112157	2140477			1,592	64.9	71.6	47.9	79.6
442	1102033	2131125			1,598	64.8	71.6	38.0	70.4
133	1112507	2126582			1,641	64.6	71.4	41.2	74.1
358	1107273	2143485			1,665	64.5	71.2	41.7	74.6
466	1103819	2134365			1,706	64.3	71.0	41.9	74.6
67	1114895	2132740			1,751	64.0	70.8	48.5	80.1
182	1107165	2144183			1,774	63.9	70.7	42.6	75.4

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Solar Panel (feet) from edge of building	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]					
2	1109760	2137148			1,787	63.9	70.6	46.1	78.2
60	1114037	2128597			1,867	63.5	70.2	42.3	75.3
255	1106806	2144438			1,897	63.3	70.1	42.5	75.4
96	1106126	2144911			1,915	63.3	70.0	41.7	74.6
235	1107022	2144252			1,916	63.3	70.0	42.5	75.3
464	1103413	2134487			1,917	63.2	70.0	41.0	73.9
169	1106242	2144835			1,935	63.2	69.9	42.0	74.9
500	1105977	2144957			1,950	63.1	69.9	41.5	74.4
21	1112915	2126561			1,989	62.9	69.7	39.1	71.8
443	1102068	2133732			2,037	62.7	69.5	39.6	72.7
110	1113794	2127914			2,073	62.6	69.3	41.7	74.8
43	1111735	2136208			2,083	62.5	69.3	47.0	78.9
441	1101668	2130685			2,115	62.4	69.2	37.0	69.6
432	1103773	2134827			2,160	62.2	69.0	41.2	74.1
437	1102940	2134554			2,175	62.2	68.9	38.9	71.7
188	1113256	2126760			2,191	62.1	68.9	40.8	74.0
465	1101983	2133898			2,216	62.0	68.8	39.1	72.2
435	1101613	2130519			2,245	61.9	68.6	36.8	69.5
488	1102455	2134432			2,333	61.5	68.3	38.9	71.9
453	1102786	2134675			2,358	61.4	68.2	39.0	71.9
460	1103216	2134899			2,359	61.4	68.2	40.1	73.1
438	1101998	2134196			2,411	61.3	68.0	38.8	72.0
463	1103383	2135006			2,416	61.2	68.0	40.2	73.2
467	1101576	2130259			2,419	61.2	68.0	36.9	69.7
457	1102418	2134580			2,487	61.0	67.8	38.7	71.7
495	1105884	2151007			2,546	60.8	67.6	35.2	67.8
492	1102252	2134625			2,605	60.6	67.4	38.5	71.6
440	1103847	2135276			2,607	60.6	67.3	40.4	73.4
355	1111561	2150103			2,618	60.5	67.3	40.6	73.9
63	1115775	2132378			2,642	60.5	67.2	47.8	79.9
501	1105973	2144141			2,647	60.4	67.2	41.0	74.2
462	1102940	2135137			2,699	60.3	67.0	38.6	71.6
493	1102721	2135052			2,710	60.2	67.0	38.4	71.4
490	1101936	2134537			2,717	60.2	67.0	38.4	71.7
404	1113737	2126417			2,770	60.1	66.8	39.8	73.1
489	1101917	2134617			2,791	60.0	66.8	38.3	71.6
332	1104931	2137908			2,820	59.9	66.7	39.1	72.4
452	1103739	2135555			2,890	59.7	66.5	39.7	72.7
503	1103819	2135968			2,917	59.6	66.4	39.1	72.2
433	1103812	2135733			2,919	59.6	66.4	39.7	72.8
491	1102011	2134869			2,932	59.6	66.3	38.2	71.5
475	1103387	2148128			3,126	59.0	65.8	37.2	70.7
456	1101106	2129651			3,168	58.9	65.7	35.9	69.0
484	1112112	2150438			3,170	58.9	65.6	39.4	72.9
434	1101888	2135058			3,176	58.9	65.6	37.9	71.2
427	1103069	2135718			3,207	58.8	65.5	38.7	71.8

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Solar Panel (feet) from edge of building	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]					
444	1101867	2135097			3,227	58.7	65.5	37.8	71.2
486	1101230	2129387			3,265	58.6	65.4	36.0	69.1
426	1101614	2135034			3,300	58.5	65.3	37.5	71.0
145	1117207	2145372			3,488	58.0	64.8	40.3	73.7
429	1101197	2129076			3,522	58.0	64.7	35.8	68.9
409	1113184	2150182			3,623	57.7	64.5	38.6	72.2
384	1113652	2124879			3,677	57.6	64.4	37.7	71.4
412	1113562	2124801			3,696	57.5	64.3	37.8	71.6
518	1100617	2134649			3,750	57.4	64.2	34.9	68.3
480	1112842	2150631			3,762	57.4	64.2	38.3	72.0
349	1112762	2150700			3,771	57.4	64.1	38.2	71.9
327	1114095	2125169			3,789	57.3	64.1	37.5	71.1
473	1110902	2152065			3,812	57.3	64.0	35.2	68.2
365	1113487	2150224			3,830	57.2	64.0	38.4	72.1
87	1114751	2140777			3,833	57.2	64.0	44.9	77.5
436	1100787	2129028			3,836	57.2	64.0	35.1	68.3
343	1113000	2150624			3,846	57.2	64.0	38.2	71.9
519	1100722	2134954			3,850	57.2	64.0	34.9	68.3
376	1114282	2125280			3,854	57.2	64.0	37.4	71.1
458	1111235	2151843			3,860	57.2	63.9	35.3	68.3
517	1100330	2134441			3,861	57.2	63.9	34.6	68.0
375	1113983	2124938			3,864	57.2	63.9	35.1	68.3
481	1116955	2147380			3,867	57.2	63.9	37.5	70.9
341	1112385	2151078			3,889	57.1	63.9	38.4	72.1
445	1103563	2137927			3,892	57.1	63.9	38.7	72.5
347	1113261	2150477			3,893	57.1	63.9	38.2	72.0
472	1111090	2152012			3,904	57.1	63.8	35.1	68.2
413	1113179	2150567			3,914	57.0	63.8	38.2	71.9
393	1117081	2147298			3,923	57.0	63.8	38.1	71.6
447	1111640	2151635			3,927	57.0	63.8	34.5	67.3
372	1117262	2147073			3,956	57.0	63.7	38.1	71.4
395	1113977	2124777			3,966	56.9	63.7	34.9	68.2
367	1114475	2125330			3,978	56.9	63.7	36.1	69.5
454	1101001	2128632			3,986	56.9	63.7	35.6	69.0
469	1111072	2152161			3,998	56.9	63.6	34.9	68.0
342	1117206	2147275			4,021	56.8	63.6	37.6	70.9
461	1104396	2139184			4,036	56.8	63.6	37.8	71.4
364	1113952	2150069			4,061	56.7	63.5	37.6	71.3
520	1100671	2135268			4,103	56.6	63.4	35.6	69.4
479	1102878	2149577			4,159	56.5	63.3	35.0	68.7
468	1100959	2128456			4,164	56.5	63.3	35.7	69.2
451	1100742	2128605			4,167	56.5	63.3	35.6	69.1
344	1113998	2124519			4,175	56.5	63.3	34.6	67.9
219	1116934	2130260			4,192	56.5	63.2	43.3	75.9
474	1102703	2149390			4,216	56.4	63.2	34.9	68.6
521	1100390	2135126			4,224	56.4	63.2	34.5	68.1

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Solar Panel (feet) from edge of building	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]					
471	1110908	2152613			4,264	56.3	63.1	34.3	67.5
523	1100692	2135518			4,264	56.3	63.1	35.6	69.3
509	1110752	2123390			4,279	56.3	63.0	35.9	69.5
362	1114911	2125275			4,371	56.1	62.9	35.5	69.0
420	1115033	2125360			4,425	56.0	62.8	34.9	68.2
522	1100440	2135513			4,439	56.0	62.7	34.7	68.4
485	1117547	2142901			4,445	55.9	62.7	44.1	76.7
514	1100440	2128421			4,490	55.9	62.6	35.2	68.9
482	1116607	2127928			4,490	55.9	62.6	37.9	71.3
382	1114675	2124698			4,523	55.8	62.6	36.4	70.2
512	1099835	2128919			4,628	55.6	62.4	34.3	68.1
430	1103930	2123520			4,639	55.6	62.3	35.0	68.8
524	1100388	2135787			4,673	55.5	62.3	34.5	68.3
450	1103568	2139234			4,708	55.4	62.2	36.9	70.7
511	1099893	2128546			4,771	55.3	62.1	34.5	68.3
525	1100201	2135857			4,854	55.2	61.9	34.4	68.2
515	1098723	2130805			4,876	55.1	61.9	32.3	65.8
307	1117812	2130615			4,913	55.1	61.8	41.1	73.8
431	1111199	2122735			4,922	55.1	61.8	34.1	67.7
513	1100082	2128142			4,955	55.0	61.8	34.6	68.4
527	1100338	2136136			4,970	55.0	61.7	34.9	68.8
359	1116463	2126613			4,971	55.0	61.7	35.7	69.2
526	1100236	2136081			5,001	54.9	61.7	34.8	68.7
32	1117990	2134545			5,042	54.8	61.6	50.8	82.0
459	1104565	2122932			5,064	54.8	61.6	33.2	66.8
494	1103742	2139992			5,077	54.8	61.6	37.1	71.0
483	1111231	2153492			5,147	54.7	61.4	32.5	65.9
516	1099458	2128515			5,179	54.6	61.4	34.0	68.0
448	1113611	2122979			5,232	54.5	61.3	34.7	68.6
455	1110879	2122403			5,263	54.5	61.2	33.4	66.9
478	1101105	2147253			5,300	54.4	61.2	34.5	68.7
510	1099440	2128315			5,309	54.4	61.2	33.9	67.9
428	1112174	2122431			5,317	54.4	61.2	34.9	68.8
528	1099779	2136199			5,393	54.3	61.0	34.5	68.6
470	1100971	2146925			5,461	54.2	60.9	34.4	68.7

[1] Calculated using NAD_1983_StatePlane_Kentucky_South_FIPS_1602_Feet

[2] Parcel number and property address information provided for receptors within 1,000 feet of PV Panel (as previously requested for the Sebree Solar, LLC application during the post-hearing data request)

PARTICIPATING RESIDENCES AND DISTANCE TO CLOSEST INVERTER

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Inverter (feet) from edge of building	Closest Inverter ID	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]						
310	1108385	2148017	59-20	6507 HWY 1299	489	48	75.1	81.9	51.1	82.3
274	1111498	2133329	61-31	9260 HWY 416 W	509	30	74.8	81.5	50.3	81.3
275	1108850	2129835	61-58	8501 & 8491 W N ROYSTER RD	540	12	74.3	81.0	49.9	81.5
225	1107279	2146641	59-21	6635 HWY 1299	720	47	71.8	78.5	48.1	79.6
282	1109536	2129550	61-53	8524 WN ROYSTER RD	729	8	71.7	78.4	48.6	80.1
203	1112675	2133203	61-34	9056 HWY 416 W	742	26	71.5	78.3	50.5	82.1
270	1107859	2133649	61-29	9798 HWY 416 W	746	28	71.5	78.2	49.5	81.3
142	1105312	2132236	61-8.1	8619 THOMASON RD	787	20	71.0	77.8	48.0	79.4
143	1109387	2129116	61-53	8524 WN ROYSTER RD # 42452	802	8	70.8	77.6	49.0	80.6
232	1105351	2131630	61-8	8653 THOMASON RD	830	19	70.5	77.3	47.3	78.7
12	1109167	2130794	61-58	8501 & 8491 W N ROYSTER RD	956	12	69.3	76.1	47.3	79.1
176	1108004	2134069			1,038	33	68.6	75.3	48.8	80.7
156	1111022	2140506			1,122	36	67.9	74.7	46.2	78.3
504	1113077	2136437			3,470	31	58.1	64.9	48.5	80.7

[1] Calculated using NAD_1983_StatePlane_Kentucky_South_FIPS_1602_Feet

[2] Parcel number and property address information provided for receptors within 1,000 feet of inverter (as previously requested for the Sebree Solar, LLC application during the post-hearing data request)

NON-PARTICIPATING RESIDENCES WITHIN ONE MILE OF THE PROJECT AND DISTANCE TO CLOSEST INVERTER

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Inverter (feet) from edge of building	Closest Inverter ID	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]						
226	1110081	2133801	60-47	9475 STATE ROUTE 416 W	506	31	74.8	81.6	49.3	80.9
61	1108600	2146243	59-21.2	6589 HWY 1299	532	44	74.4	81.2	49.3	80.7
166	1105602	2132316	61-24	8592 THOMASON RD	587	19	73.5	80.3	50.1	81.4
88	1105632	2132707	61-24	8592 THOMASON RD	593	27	73.4	80.2	49.4	80.7
229	1108626	2149199	59-63	8115 MEAHL CATES RD	621	51	73.0	79.8	47.0	78.0
312	1105410	2128998	61-23	8844 THOMASON RD	622	6	73.0	79.8	47.6	79.0
279	1108714	2146356	59-21.1	6581 1299 HWY	637	44	72.8	79.6	48.6	80.1
497	1110173	2147827	59-32	6430 HWY 1299	660	49	72.5	79.3	49.4	81.0
309	1108725	2149152	59-63	8115 MEAHL CATES RD	665	51	72.4	79.2	47.7	79.3
295	1108523	2149332	59-64	8103 MEAHL CATES RD	666	51	72.4	79.2	44.2	74.8
106	1108847	2149037	59-61	8135 MEAHL CATES RD	686	51	72.2	78.9	47.6	79.2
236	1109134	2127636	61-51	8648 WN ROYSTER RD	690	2	72.1	78.9	48.0	79.6
7	1109656	2148468	59-55	8201 MEAHL CATES RD	698	49	72.0	78.8	47.7	79.4
115	1105411	2129358	61-22	8832 THOMASON RD	726	6	71.7	78.4	48.0	79.5
62	1109576	2131789	61-56	8340 WN ROYSTER RD	737	25	71.5	78.3	49.4	81.0
180	1109403	2133477	61.29.1	8221 WN ROYSTER RD	742	29	71.5	78.3	48.9	80.6
211	1107540	2131078	61-57	8660 THOMASON RD	742	16	71.5	78.3	49.9	81.5
102	1110800	2139926	60-40.1	7227 1299 HWY	743	36	71.5	78.3	47.8	79.4
31	1107015	2134016	60-54.3	9948 STATE ROUTE 416 W	756	32	71.3	78.1	49.0	80.8
477	1108818	2146542	59-20.1	6565 HWY 1299	768	44	71.2	78.0	48.4	80.0
269	1105722	2133473	61-7.1	8511 THOMASON RD	780	27	71.1	77.8	47.6	79.3
245	1108947	2148953	59-60	8147 MEAHL CATES RD	780	51	71.1	77.8	47.3	79.1
152	1109983	2148427	59-54	6399 HWY 1299	794	49	70.9	77.7	47.2	79.1
179	1112700	2130835	61-36	8317 SPENCER THORNSBERRY RD	799	13	70.8	77.6	48.2	79.9
163	1106783	2133489	61-26	9933 STATE ROUTE 416 W	802	27	70.8	77.6	48.8	80.4
85	1111147	2134509	60-46	7885 STATE ROUTE 1299	815	31	70.7	77.5	48.2	79.5
243	1110853	2139816	60-40.2	7235 HWY 1299 ROBARDS 42452	816	36	70.7	77.4	47.8	79.3
507	1109373	2133616	61.29.1	8221 WN ROYSTER RD	834	29	70.5	77.2	48.4	80.1
208	1110438	2133206	61-30	9260 HWY 416 W	851	25	70.3	77.1	49.9	81.6
117	1105153	2129497	61-11	8825 THOMASON RD	857	11	70.2	77.0	47.0	78.6
171	1108917	2146127	59-29	6590 1299 HWY	859	44	70.2	77.0	48.2	80.1
89	1106257	2133770	60-54.1	10029 HWY 416 W	901	27	69.8	76.6	47.5	79.3
51	1110039	2148506	59-53	6391 HWY 1299	906	49	69.8	76.5	46.7	78.7
320	1109975	2131490	61-55	8368 WN ROYSTER RD	912	25	69.7	76.5	49.5	81.2
98	1105006	2129583	61-10	8823 THOMASON RD	921	11	69.6	76.4	46.4	78.0
508	1109565	2131602	61-55.1	8362 W.N. ROYSTER RD. 42452	927	25	69.6	76.3	48.9	80.6
193	1108339	2134242	60-51	9635 STATE ROUTE 416 W	934	33	69.5	76.3	48.6	80.5
109	1107288	2133841	60-53	9881 STATE ROUTE 416 W	943	32	69.4	76.2	48.4	80.2
57	1109706	2148755	59-56	8189 MEAHL CATES RD	993	49	69.0	75.7	46.1	78.1
42	1109210	2148749	59-58	8175 MEAHL CATES RD	995	49	68.9	75.7	47.1	79.0
160	1110095	2148591			1,007	49	68.8	75.6	46.2	78.2
52	1111050	2139506			1,087	36	68.2	74.9	48.9	79.8
476	1109120	2145984			1,096	44	68.1	74.9	48.6	80.6
173	1110502	2126900			1,097	1	68.1	74.9	44.4	76.3
103	1109359	2127085			1,099	2	68.1	74.8	43.9	75.8
183	1109575	2127042			1,106	2	68.0	74.8	43.6	75.4
261	1107556	2149738			1,125	51	67.9	74.6	44.0	75.8
153	1109103	2134046			1,128	29	67.9	74.6	47.9	79.9
322	1104461	2130698			1,154	15	67.7	74.4	45.6	77.5
248	1113383	2133263			1,155	26	67.6	74.4	48.4	80.2

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Inverter (feet) from edge of building	Closest Inverter ID	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]						
123	1110972	2139159			1,178	36	67.5	74.2	48.2	80.0
313	1109101	2127096			1,183	2	67.4	74.2	43.7	75.6
268	1108805	2134174			1,213	29	67.2	74.0	47.8	79.8
27	1113106	2129943			1,219	10	67.2	74.0	45.9	78.2
9	1110916	2126851			1,230	1	67.1	73.9	43.7	75.8
3	1113557	2133183			1,239	26	67.0	73.8	48.3	80.1
498	1110139	2148856			1,245	49	67.0	73.8	45.2	77.5
502	1110749	2138744			1,338	36	66.4	73.1	45.1	76.9
505	1113797	2133004			1,364	26	66.2	73.0	48.1	79.9
75	1110277	2148926			1,383	49	66.1	72.9	44.6	77.0
190	1108060	2144812			1,417	39	65.9	72.6	44.6	76.5
256	1107520	2144966			1,423	44	65.8	72.6	43.8	76.0
321	1105182	2133885			1,452	27	65.7	72.4	45.0	77.3
191	1111165	2140865			1,464	36	65.6	72.4	46.7	78.7
298	1111225	2140831			1,485	36	65.5	72.2	46.9	78.9
506	1113993	2132998			1,543	26	65.1	71.9	48.6	80.3
29	1113053	2128974			1,544	10	65.1	71.9	44.4	76.8
499	1106385	2149445			1,563	50	65.0	71.8	41.9	74.1
286	1108379	2150335			1,570	51	65.0	71.8	40.7	72.7
311	1111519	2140490			1,581	36	64.9	71.7	47.1	79.0
290	1110705	2148929			1,652	49	64.5	71.3	43.8	76.3
425	1107527	2144669			1,704	44	64.3	71.0	43.5	75.8
496	1108078	2150587			1,785	51	63.9	70.6	39.7	71.8
308	1106680	2149971			1,798	50	63.8	70.6	41.0	73.1
449	1102236	2132006			1,807	15	63.8	70.5	41.3	74.0
487	1102230	2131429			1,836	15	63.6	70.4	38.6	70.9
283	1112670	2128291			1,871	10	63.5	70.2	44.0	76.6
172	1110768	2141801			2,004	36	62.9	69.6	46.7	78.7
257	1109805	2137490			2,016	35	62.8	69.6	45.8	78.0
446	1102008	2131945			2,034	15	62.7	69.5	38.1	70.6
439	1101991	2131267			2,103	15	62.4	69.2	38.0	70.4
442	1102033	2131125			2,114	15	62.4	69.2	38.0	70.4
291	1112157	2140477			2,181	36	62.1	68.9	47.9	79.6
314	1112713	2127719			2,217	7	62.0	68.8	42.9	75.5
358	1107273	2143485			2,229	37	61.9	68.7	41.7	74.6
255	1106806	2144438			2,247	44	61.9	68.6	42.5	75.4
235	1107022	2144252			2,288	44	61.7	68.5	42.5	75.3
466	1103819	2134365			2,298	20	61.7	68.4	41.9	74.6
182	1107165	2144183			2,303	44	61.7	68.4	42.6	75.4
169	1106242	2144835			2,309	44	61.6	68.4	42.0	74.9
2	1109760	2137148			2,347	35	61.5	68.3	46.1	78.2
43	1111735	2136208			2,350	31	61.5	68.3	47.0	78.9
96	1106126	2144911			2,356	44	61.5	68.2	41.7	74.6
67	1114895	2132740			2,368	26	61.4	68.2	48.5	80.1
500	1105977	2144957			2,370	47	61.4	68.2	41.5	74.4
158	1112367	2126556			2,383	1	61.4	68.1	41.2	74.1
133	1112507	2126582			2,463	1	61.1	67.8	41.2	74.1
464	1103413	2134487			2,560	20	60.7	67.5	41.0	73.9
60	1114037	2128597			2,570	10	60.7	67.5	42.3	75.3
441	1101668	2130685			2,610	15	60.6	67.3	37.0	69.6
230	1115202	2144957			2,620	40	60.5	67.3	41.8	75.1

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Inverter (feet) from edge of building	Closest Inverter ID	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]						
443	1102068	2133732			2,728	15	60.2	67.0	39.6	72.7
435	1101613	2130519			2,728	15	60.2	67.0	36.8	69.5
432	1103773	2134827			2,743	20	60.1	66.9	41.2	74.1
110	1113794	2127914			2,807	10	59.9	66.7	41.7	74.8
21	1112915	2126561			2,828	1	59.9	66.6	39.1	71.8
437	1102940	2134554			2,849	20	59.8	66.6	38.9	71.7
467	1101576	2130259			2,885	15	59.7	66.5	36.9	69.7
465	1101983	2133898			2,910	15	59.6	66.4	39.1	72.2
501	1105973	2144141			2,979	44	59.4	66.2	41.0	74.2
460	1103216	2134899			3,003	20	59.3	66.1	40.1	73.1
488	1102455	2134432			3,027	15	59.3	66.1	38.9	71.9
453	1102786	2134675			3,036	20	59.3	66.0	39.0	71.9
463	1103383	2135006			3,042	20	59.2	66.0	40.2	73.2
188	1113256	2126760			3,042	1	59.2	66.0	40.8	74.0
495	1105884	2151007			3,088	50	59.1	65.9	35.2	67.8
355	1111561	2150103			3,093	49	59.1	65.9	40.6	73.9
438	1101998	2134196			3,110	15	59.0	65.8	38.8	72.0
332	1104931	2137908			3,113	34	59.0	65.8	39.1	72.4
440	1103847	2135276			3,172	20	58.9	65.6	40.4	73.4
457	1102418	2134580			3,175	20	58.9	65.6	38.7	71.7
63	1115775	2132378			3,240	26	58.7	65.5	47.8	79.9
503	1103819	2135968			3,256	34	58.6	65.4	39.1	72.2
433	1103812	2135733			3,258	34	58.6	65.4	39.7	72.8
492	1102252	2134625			3,300	15	58.5	65.3	38.5	71.6
452	1103739	2135555			3,321	34	58.5	65.2	39.7	72.7
462	1102940	2135137			3,357	20	58.4	65.2	38.6	71.6
493	1102721	2135052			3,382	20	58.3	65.1	38.4	71.4
490	1101936	2134537			3,417	15	58.2	65.0	38.4	71.7
489	1101917	2134617			3,491	15	58.0	64.8	38.3	71.6
475	1103387	2148128			3,499	47	58.0	64.8	37.2	70.7
456	1101106	2129651			3,613	15	57.7	64.5	35.9	69.0
404	1113737	2126417			3,619	1	57.7	64.5	39.8	73.1
491	1102011	2134869			3,630	15	57.7	64.5	38.2	71.5
486	1101230	2129387			3,684	15	57.6	64.3	36.0	69.1
484	1112112	2150438			3,713	49	57.5	64.3	39.4	72.9
427	1103069	2135718			3,840	20	57.2	64.0	38.7	71.8
434	1101888	2135058			3,874	15	57.1	63.9	37.9	71.2
444	1101867	2135097			3,924	15	57.0	63.8	37.8	71.2
429	1101197	2129076			3,924	15	57.0	63.8	35.8	68.9
426	1101614	2135034			4,000	15	56.9	63.6	37.5	71.0
409	1113184	2150182			4,136	45	56.6	63.3	38.6	72.2
445	1103563	2137927			4,184	34	56.5	63.2	38.7	72.5
436	1100787	2129028			4,259	15	56.3	63.1	35.1	68.3
473	1110902	2152065			4,267	51	56.3	63.1	35.2	68.2
365	1113487	2150224			4,313	45	56.2	63.0	38.4	72.1
458	1111235	2151843			4,343	51	56.1	62.9	35.3	68.3
480	1112842	2150631			4,354	45	56.1	62.9	38.3	72.0
472	1111090	2152012			4,365	51	56.1	62.9	35.1	68.2
454	1101001	2128632			4,374	15	56.1	62.9	35.6	69.0
349	1112762	2150700			4,378	45	56.1	62.8	38.2	71.9
341	1112385	2151078			4,392	49	56.0	62.8	38.4	72.1

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Inverter (feet) from edge of building	Closest Inverter ID	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]						
87	1114751	2140777			4,403	40	56.0	62.8	44.9	77.5
447	1111640	2151635			4,415	49	56.0	62.8	34.5	67.3
347	1113261	2150477			4,417	45	56.0	62.8	38.2	72.0
343	1113000	2150624			4,419	45	56.0	62.8	38.2	71.9
461	1104396	2139184			4,432	34	56.0	62.7	37.8	71.4
518	1100617	2134649			4,432	15	56.0	62.7	34.9	68.3
384	1113652	2124879			4,452	1	55.9	62.7	37.7	71.4
469	1111072	2152161			4,456	51	55.9	62.7	34.9	68.0
413	1113179	2150567			4,458	45	55.9	62.7	38.2	71.9
412	1113562	2124801			4,459	1	55.9	62.7	37.8	71.6
364	1113952	2150069			4,474	43	55.9	62.7	37.6	71.3
517	1100330	2134441			4,526	15	55.8	62.6	34.6	68.0
519	1100722	2134954			4,542	15	55.8	62.5	34.9	68.3
468	1100959	2128456			4,545	15	55.8	62.5	35.7	69.2
479	1102878	2149577			4,546	47	55.7	62.5	35.0	68.7
451	1100742	2128605			4,570	15	55.7	62.5	35.6	69.1
327	1114095	2125169			4,600	1	55.6	62.4	37.5	71.1
474	1102703	2149390			4,603	47	55.6	62.4	34.9	68.6
509	1110752	2123390			4,605	1	55.6	62.4	35.9	69.5
145	1117207	2145372			4,662	40	55.5	62.3	40.3	73.7
375	1113983	2124938			4,662	1	55.5	62.3	35.1	68.3
376	1114282	2125280			4,676	1	55.5	62.3	37.4	71.1
471	1110908	2152613			4,716	51	55.4	62.2	34.3	67.5
395	1113977	2124777			4,754	1	55.4	62.1	34.9	68.2
520	1100671	2135268			4,798	15	55.3	62.0	35.6	69.4
367	1114475	2125330			4,809	1	55.3	62.0	36.1	69.5
514	1100440	2128421			4,898	15	55.1	61.9	35.2	68.9
219	1116934	2130260			4,908	26	55.1	61.9	43.3	75.9
521	1100390	2135126			4,912	15	55.1	61.8	34.5	68.1
344	1113998	2124519			4,951	1	55.0	61.8	34.6	67.9
523	1100692	2135518			4,962	15	55.0	61.8	35.6	69.3
450	1103568	2139234			5,015	34	54.9	61.7	36.9	70.7
512	1099835	2128919			5,088	15	54.8	61.5	34.3	68.1
481	1116955	2147380			5,133	40	54.7	61.5	37.5	70.9
522	1100440	2135513			5,135	15	54.7	61.5	34.7	68.4
482	1116607	2127928			5,148	10	54.7	61.4	37.9	71.3
393	1117081	2147298			5,192	40	54.6	61.4	38.1	71.6
362	1114911	2125275			5,209	1	54.6	61.3	35.5	69.0
511	1099893	2128546			5,211	15	54.6	61.3	34.5	68.3
372	1117262	2147073			5,226	40	54.5	61.3	38.1	71.4
485	1117547	2142901			5,240	40	54.5	61.3	44.1	76.7
420	1115093	2125360			5,267	1	54.5	61.2	34.9	68.2
342	1117206	2147275			5,291	40	54.4	61.2	37.6	70.9
431	1111199	2122735			5,295	1	54.4	61.2	34.1	67.7
382	1114675	2124698			5,337	1	54.4	61.1	36.4	70.2
513	1100082	2128142			5,366	15	54.3	61.1	34.6	68.4
524	1100388	2135787			5,371	15	54.3	61.1	34.5	68.3
515	1098723	2130805			5,407	15	54.2	61.0	32.3	65.8
430	1103930	2123520			5,478	3	54.1	60.9	35.0	68.8
494	1103742	2139992			5,482	34	54.1	60.9	37.1	71.0
525	1100201	2135857			5,551	15	54.0	60.8	34.4	68.2

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Closest Inverter (feet) from edge of building	Closest Inverter ID	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]						
307	1117812	2130615			5,578	26	54.0	60.7	41.1	73.8
455	1110879	2122403			5,602	1	53.9	60.7	33.4	66.9
483	1111231	2153492			5,618	51	53.9	60.7	32.5	65.9
516	1099458	2128515			5,632	15	53.9	60.7	34.0	68.0
478	1101105	2147253			5,639	47	53.9	60.6	34.5	68.7
527	1100338	2136136			5,669	15	53.8	60.6	34.9	68.8
359	1116463	2126613			5,689	10	53.8	60.6	35.7	69.2
526	1100236	2136081			5,700	15	53.8	60.6	34.8	68.7
459	1104565	2122932			5,713	3	53.8	60.5	33.2	66.8
510	1099440	2128315			5,753	15	53.7	60.5	33.9	67.9
470	1100971	2146925			5,801	47	53.6	60.4	34.4	68.7
428	1112174	2122431			5,817	1	53.6	60.4	34.9	68.8
32	1117990	2134545			5,835	26	53.6	60.4	50.8	82.0
448	1113611	2122979			5,901	1	53.5	60.3	34.7	68.6
528	1099779	2136199			6,089	15	53.2	60.0	34.5	68.6

[1] Calculated using NAD_1983_StatePlane_Kentucky_South_FIPS_1602_Feet

[2] Parcel number and property address information provided for receptors within 1,000 feet of inverter (as previously requested for the Salbree Solar, LLC application during the post-hearing data request)

PARTICIPATING RESIDENCES AND DISTANCE TO SUBSTATION TRANSFORMER

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Transformer (feet) from edge of building	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]					
504	1113077	2136437			7,681	51.2	58.0	48.5	80.7
156	1111022	2140506			9,381	49.5	56.2	46.2	78.3
203	1112675	2133203			9,613	49.2	56.0	50.5	82.1
274	1111498	2133329			10,494	48.5	55.3	50.3	81.3
176	1108004	2134069			13,275	46.4	53.2	48.8	80.7
270	1107859	2133649			13,557	46.3	53.0	49.5	81.3
12	1109167	2130794			13,858	46.1	52.8	47.3	79.1
282	1109536	2129550			14,369	45.8	52.5	48.6	80.1
275	1108850	2129835			14,717	45.5	52.3	49.9	81.5
143	1109387	2129116			14,764	45.5	52.3	49.0	80.6
310	1108385	2148017			14,907	45.4	52.2	51.1	82.3
225	1107279	2146641			15,057	45.3	52.1	48.1	79.6
142	1105312	2132236			16,489	44.6	51.3	48.0	79.4
232	1105351	2131630			16,683	44.5	51.2	47.3	78.7

[1] Calculated using NAD_1983_StatePlane_Kentucky_South_FIPS_1602_Feet

[2] Parcel number and property address information provided for receptors within 1,000 feet of transformer (as previously requested for the Sebree Solar, LLC application during the post-hearing data request)

NON-PARTICIPATING RESIDENCES WITHIN ONE MILE OF THE PROJECT AND DISTANCE TO SUBSTATION TRANSFORMER

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Transformer (feet) from edge of building	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]					
485	1117547	2142901			4,701	55.5	62.2	44.1	76.7
32	1117990	2134545			5,073	54.8	61.6	50.8	82.0
87	1114751	2140777			5,799	53.6	60.4	44.9	77.5
145	1117207	2145372			7,000	52.0	58.8	40.3	73.7
230	1115202	2144957			7,767	51.1	57.9	41.8	75.1
63	1115775	2132378			8,066	50.8	57.5	47.8	79.9
291	1112157	2140477			8,260	50.6	57.3	47.9	79.6
67	1114895	2132740			8,317	50.5	57.3	48.5	80.1
372	1117262	2147073			8,528	50.3	57.1	38.1	71.4
506	1113993	2132998			8,748	50.1	56.8	48.6	80.3
342	1117206	2147275			8,750	50.1	56.8	37.6	70.9
307	1117812	2130615			8,797	50.0	56.8	41.1	73.8
393	1117081	2147298			8,805	50.0	56.8	38.1	71.6
505	1113797	2133004			8,893	49.9	56.7	48.1	79.9
311	1111519	2140490			8,907	49.9	56.7	47.1	79.0
481	1116955	2147380			8,932	49.9	56.7	37.5	70.9
3	1113557	2133183			8,949	49.9	56.6	48.3	80.1
43	1111735	2136208			9,022	49.8	56.6	47.0	78.9
248	1113383	2133263			9,026	49.8	56.6	48.4	80.2
298	1111225	2140831			9,254	49.6	56.3	46.9	78.9
52	1111050	2139506			9,284	49.5	56.3	48.9	79.8
191	1111165	2140865			9,320	49.5	56.3	46.7	78.7
123	1110972	2139159			9,330	49.5	56.3	48.2	80.0
219	1116934	2130260			9,405	49.4	56.2	43.3	75.9
243	1110853	2139816			9,484	49.4	56.1	47.8	79.3
102	1110800	2139926			9,534	49.3	56.1	47.8	79.4
502	1110749	2138744			9,565	49.3	56.1	45.1	76.9
172	1110768	2141801			9,923	49.0	55.7	46.7	78.7
85	1111147	2134509			10,214	48.7	55.5	48.2	79.5
257	1109805	2137490			10,614	48.4	55.2	45.8	78.0
2	1109760	2137148			10,716	48.3	55.1	46.1	78.2
179	1112700	2130835			11,194	47.9	54.7	48.2	79.9
208	1110438	2133206			11,465	47.7	54.5	49.9	81.6
226	1110081	2133801			11,494	47.7	54.5	49.3	80.9
27	1113106	2129943			11,612	47.6	54.4	45.9	78.2
482	1116607	2127928			11,726	47.5	54.3	37.9	71.3
60	1114037	2128597			12,182	47.2	54.0	42.3	75.3
507	1109373	2133616			12,219	47.2	53.9	48.4	80.1
180	1109403	2133477			12,250	47.1	53.9	48.9	80.6
153	1109103	2134046			12,264	47.1	53.9	47.9	79.9
29	1113053	2128974			12,418	47.0	53.8	44.4	76.8
268	1108805	2134174			12,477	47.0	53.7	47.8	79.8
364	1113952	2150069			12,666	46.8	53.6	37.6	71.3
320	1109975	2131490			12,771	46.8	53.5	49.5	81.2
193	1108339	2134242			12,891	46.7	53.5	48.6	80.5

Receptor ID	COORDINATES OF OCCUPIED STRUCTURE		PARCEL INFORMATION		Distance to Transformer (feet) from edge of building	Sound Pressure Level from Pile Driving (dBA)	Sound Pressure Level from Pile Driving (dB)	Sound Pressure Level from Operations (dBA)	Sound Pressure Level from Operations (dB)
	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]					
110	1113794	2127914			12,897	46.7	53.5	41.7	74.8
62	1109576	2131789			12,943	46.7	53.4	49.4	81.0
359	1116463	2126613			13,021	46.6	53.4	35.7	69.2
365	1113487	2150224			13,054	46.6	53.4	38.4	72.1
508	1109565	2131602			13,084	46.6	53.3	48.9	80.6
476	1109120	2145984			13,143	46.5	53.3	48.6	80.6
409	1113184	2150182			13,179	46.5	53.3	38.6	72.2
283	1112670	2128291			13,199	46.5	53.3	44.0	76.6
497	1110173	2147827			13,381	46.4	53.1	49.4	81.0
171	1108917	2146127			13,389	46.4	53.1	48.2	80.1
347	1113261	2150477			13,389	46.4	53.1	38.2	72.0
413	1113179	2150567			13,499	46.3	53.1	38.2	71.9
190	1108060	2144812			13,529	46.3	53.0	44.6	76.5
314	1112713	2127719			13,634	46.2	53.0	42.9	75.5
343	1113000	2150624			13,642	46.2	53.0	38.2	71.9
279	1108714	2146356			13,694	46.2	52.9	48.6	80.1
477	1108818	2146542			13,709	46.2	52.9	48.4	80.0
61	1108600	2146243			13,730	46.1	52.9	49.3	80.7
480	1112842	2150631			13,741	46.1	52.9	38.3	72.0
290	1110705	2148929			13,750	46.1	52.9	43.8	76.3
358	1107273	2143485			13,763	46.1	52.9	41.7	74.6
349	1112762	2150700			13,840	46.1	52.8	38.2	71.9
152	1109983	2148427			13,926	46.0	52.8	47.2	79.1
51	1110039	2148506			13,940	46.0	52.8	46.7	78.7
160	1110095	2148591			13,950	46.0	52.8	46.2	78.2
425	1107527	2144669			13,953	46.0	52.8	43.5	75.8
484	1112112	2150438			13,988	46.0	52.8	39.4	72.9
109	1107288	2133841			14,029	46.0	52.7	48.4	80.2
75	1110277	2148926			14,047	45.9	52.7	44.6	77.0
355	1111561	2150103			14,062	45.9	52.7	40.6	73.9
256	1107520	2144966			14,071	45.9	52.7	43.8	76.0
182	1107165	2144183			14,094	45.9	52.7	42.6	75.4
498	1110139	2148856			14,104	45.9	52.7	45.2	77.5
188	1113256	2126760			14,161	45.9	52.6	40.8	74.0
7	1109656	2148468			14,193	45.9	52.6	47.7	79.4
31	1107015	2134016			14,204	45.9	52.6	49.0	80.8
404	1113737	2126417			14,248	45.8	52.6	39.8	73.1
235	1107022	2144252			14,256	45.8	52.6	42.5	75.3
57	1109706	2148755			14,328	45.8	52.5	46.1	78.1
341	1112385	2151078			14,356	45.8	52.5	38.4	72.1
255	1106806	2144438			14,514	45.7	52.4	42.5	75.4
21	1112915	2126561			14,535	45.7	52.4	39.1	71.8
163	1106783	2133489			14,620	45.6	52.4	48.8	80.4
420	1115033	2125360			14,686	45.6	52.3	34.9	68.2
133	1112507	2126582			14,707	45.6	52.3	41.2	74.1
42	1109210	2148749			14,714	45.5	52.3	47.1	79.0

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	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]					
362	1114911	2125275			14,798	45.5	52.3	35.5	69.0
158	1112367	2126556			14,816	45.5	52.3	41.2	74.1
367	1114475	2125330			14,910	45.4	52.2	36.1	69.5
89	1106257	2133770			14,982	45.4	52.2	47.5	79.3
376	1114282	2125280			15,015	45.4	52.1	37.4	71.1
211	1107540	2131078			15,039	45.4	52.1	49.9	81.5
245	1108947	2148953			15,048	45.4	52.1	47.3	79.1
106	1108847	2149037			15,145	45.3	52.1	47.6	79.2
501	1105973	2144141			15,186	45.3	52.0	41.0	74.2
169	1106242	2144835			15,194	45.3	52.0	42.0	74.9
327	1114095	2125169			15,208	45.3	52.0	37.5	71.1
447	1111640	2151635			15,235	45.2	52.0	34.5	67.3
96	1106126	2144911			15,339	45.2	52.0	41.7	74.6
309	1108725	2149152			15,351	45.2	51.9	47.7	79.3
9	1110916	2126851			15,403	45.1	51.9	43.7	75.8
382	1114675	2124698			15,417	45.1	51.9	36.4	70.2
332	1104931	2137908			15,421	45.1	51.9	39.1	72.4
229	1108626	2149199			15,431	45.1	51.9	47.0	78.0
375	1113983	2124938			15,477	45.1	51.9	35.1	68.3
500	1105977	2144957			15,490	45.1	51.9	41.5	74.4
269	1105722	2133473			15,600	45.0	51.8	47.6	79.3
295	1108523	2149332			15,604	45.0	51.8	44.2	74.8
173	1110502	2126900			15,619	45.0	51.8	44.4	76.3
395	1113977	2124777			15,623	45.0	51.8	34.9	68.2
458	1111235	2151843			15,649	45.0	51.8	35.3	68.3
384	1113652	2124879			15,661	45.0	51.8	37.7	71.4
412	1113562	2124801			15,776	44.9	51.7	37.8	71.6
344	1113998	2124519			15,848	44.9	51.7	34.6	67.9
472	1111090	2152012			15,874	44.9	51.7	35.1	68.2
461	1104396	2139184			15,916	44.9	51.6	37.8	71.4
236	1109134	2127636			15,964	44.8	51.6	48.0	79.6
88	1105632	2132707			15,983	44.8	51.6	49.4	80.7
321	1105182	2133885			15,987	44.8	51.6	45.0	77.3
469	1111072	2152161			16,006	44.8	51.6	34.9	68.0
473	1110902	2152065			16,022	44.8	51.6	35.2	68.2
183	1109575	2127042			16,105	44.8	51.5	43.6	75.4
166	1105602	2132316			16,181	44.7	51.5	50.1	81.4
103	1109359	2127085			16,217	44.7	51.5	43.9	75.8
286	1108379	2150335			16,378	44.6	51.4	40.7	72.7
313	1109101	2127096			16,388	44.6	51.4	43.7	75.6
471	1110908	2152613			16,462	44.6	51.3	34.3	67.5
494	1103742	2139992			16,603	44.5	51.3	37.1	71.0
261	1107556	2149738			16,619	44.5	51.3	44.0	75.8
450	1103568	2139234			16,739	44.4	51.2	36.9	70.7
496	1108078	2150587			16,762	44.4	51.2	39.7	71.8
503	1103819	2135968			16,768	44.4	51.2	39.1	72.2

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	Easting[1] of centroid of building	Northing[1] of centroid of building	Parcel Number[2]	Property Address[2]					
445	1103563	2137927			16,779	44.4	51.2	38.7	72.5
433	1103812	2135733			16,829	44.4	51.2	39.7	72.8
440	1103847	2135276			16,892	44.3	51.1	40.4	73.4
452	1103739	2135555			16,930	44.3	51.1	39.7	72.7
483	1111231	2153492			17,021	44.3	51.1	32.5	65.9
432	1103773	2134827			17,052	44.3	51.0	41.2	74.1
466	1103819	2134365			17,139	44.2	51.0	41.9	74.6
499	1106385	2149445			17,352	44.1	50.9	41.9	74.1
463	1103383	2135006			17,394	44.1	50.9	40.2	73.2
448	1113611	2122979			17,415	44.1	50.9	34.7	68.6
308	1106680	2149971			17,428	44.1	50.8	41.0	73.1
464	1103413	2134487			17,501	44.0	50.8	41.0	73.9
427	1103069	2135718			17,571	44.0	50.8	38.7	71.8
460	1103216	2134899			17,580	44.0	50.8	40.1	73.1
115	1105411	2129358			17,766	43.9	50.7	48.0	79.5
462	1102940	2135137			17,813	43.9	50.7	38.6	71.6
117	1105153	2129497			17,919	43.8	50.6	47.0	78.6
322	1104461	2130698			17,922	43.8	50.6	45.6	77.5
437	1102940	2134554			17,943	43.8	50.6	38.9	71.7
312	1105410	2128998			17,970	43.8	50.6	47.6	79.0
98	1105006	2129583			18,005	43.8	50.6	46.4	78.0
493	1102721	2135052			18,012	43.8	50.6	38.4	71.4
453	1102786	2134675			18,063	43.8	50.5	39.0	71.9
509	1110752	2123390			18,340	43.6	50.4	35.9	69.5
457	1102418	2134580			18,433	43.6	50.4	38.7	71.7
488	1102455	2134432			18,439	43.6	50.4	38.9	71.9
428	1112174	2122431			18,508	43.6	50.3	34.9	68.8
492	1102252	2134625			18,574	43.5	50.3	38.5	71.6
431	1111199	2122735			18,687	43.5	50.2	34.1	67.7
495	1105884	2151007			18,697	43.5	50.2	35.2	67.8
491	1102011	2134869			18,773	43.4	50.2	38.2	71.5
434	1101888	2135058			18,845	43.4	50.2	37.9	71.2
444	1101867	2135097			18,874	43.4	50.2	37.8	71.2
489	1101917	2134617			18,900	43.4	50.1	38.3	71.6
490	1101936	2134537			18,906	43.4	50.1	38.4	71.7
438	1101998	2134196			18,946	43.4	50.1	38.8	72.0
443	1102068	2133732			19,008	43.3	50.1	39.6	72.7
465	1101983	2133898			19,044	43.3	50.1	39.1	72.2
426	1101614	2135034			19,110	43.3	50.0	37.5	71.0
455	1110879	2122403			19,137	43.3	50.0	33.4	66.9
475	1103387	2148128			19,184	43.2	50.0	37.2	70.7
449	1102236	2132006			19,412	43.1	49.9	41.3	74.0
487	1102230	2131429			19,620	43.0	49.8	38.6	70.9
446	1102008	2131945			19,639	43.0	49.8	38.1	70.6
439	1101991	2131267			19,905	42.9	49.7	38.0	70.4
442	1102033	2131125			19,932	42.9	49.7	38.0	70.4

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523	1100692	2135518			19,936	42.9	49.7	35.6	69.3
520	1100671	2135268			19,998	42.9	49.7	35.6	69.4
519	1100722	2134954			20,016	42.9	49.6	34.9	68.3
518	1100617	2134649			20,165	42.8	49.6	34.9	68.3
527	1100338	2136136			20,177	42.8	49.6	34.9	68.8
524	1100388	2135787			20,178	42.8	49.6	34.5	68.3
522	1100440	2135513			20,182	42.8	49.6	34.7	68.4
526	1100236	2136081			20,297	42.8	49.5	34.8	68.7
521	1100390	2135126			20,313	42.7	49.5	34.5	68.1
479	1102878	2149577			20,345	42.7	49.5	35.0	68.7
525	1100201	2135857			20,350	42.7	49.5	34.4	68.2
474	1102703	2149390			20,396	42.7	49.5	34.9	68.6
441	1101668	2130685			20,437	42.7	49.5	37.0	69.6
517	1100330	2134441			20,505	42.7	49.4	34.6	68.0
435	1101613	2130519			20,550	42.6	49.4	36.8	69.5
467	1101576	2130259			20,689	42.6	49.4	36.9	69.7
528	1099779	2136199			20,718	42.6	49.3	34.5	68.6
478	1101105	2147253			20,861	42.5	49.3	34.5	68.7
470	1100971	2146925			20,867	42.5	49.3	34.4	68.7
456	1101106	2129651			21,371	42.3	49.1	35.9	69.0
486	1101230	2129387			21,384	42.3	49.1	36.0	69.1
429	1101197	2129076			21,566	42.2	49.0	35.8	68.9
454	1101001	2128632			21,944	42.1	48.8	35.6	69.0
436	1100787	2129028			21,945	42.1	48.8	35.1	68.3
468	1100959	2128456			22,066	42.0	48.8	35.7	69.2
451	1100742	2128605			22,180	42.0	48.8	35.6	69.1
514	1100440	2128421			22,511	41.9	48.6	35.2	68.9
459	1104565	2122932			22,535	41.8	48.6	33.2	66.8
430	1103930	2123520			22,570	41.8	48.6	35.0	68.8
512	1099835	2128919			22,855	41.7	48.5	34.3	68.1
511	1099893	2128546			22,920	41.7	48.5	34.5	68.3
513	1100082	2128142			22,971	41.7	48.4	34.6	68.4
515	1098723	2130805			23,126	41.6	48.4	32.3	65.8
516	1099458	2128515			23,372	41.5	48.3	34.0	68.0
510	1099440	2128315			23,464	41.5	48.3	33.9	67.9

[1] Calculated using NAD_1983_StatePlane_Kentucky_South_FIPS_1602_Feet

[2] Parcel number and property address information provided for receptors within 1,000 feet of transformer (as previously requested for the Sebree Solar, LLC application during the post-hearing data request)

APPENDIX C – SOUND SPECTRA OF CONSTRUCTION EQUIPMENT

Equipment	Frequency [Hz]								Total [dB]	Total [dBA]
	63	125	250	500	1000	2000	4000	8000		
Grader	88	87	83	79	84	78	74	65	92	87
Dump Truck	85	74	78	73	73	74	67	63	87	79
Water Truck	70	65	66	64	64	63	56	46	74	69
Generator	75	72	67	68	70	66	62	60	79	73
Flat Bed	73	78	78	78	74	73	68	66	84	80
Impact Pile Driver	87	93	85	87	83	80	75	72	96	89

Sound Spectra referenced from DEFRA [8] and adjusted to match overall FHWA [7] construction sound levels at 50 ft.

APPENDIX D – DNV QUALIFICATIONS

Name and Title	Brief Biography
Senior Siting and Acoustics Engineer Justin Puggioni	Mr. Puggioni has over 13 years of consulting experience working in acoustic engineering acquiring an in-depth understanding of the discipline. His project history covers the modeling, measurement and analysis of acoustic impacts. He has conducted acoustic field measurements across the country and defended his work in public forums. His project portfolio includes offshore wind, onshore wind, IEC measurements, construction noise assessment, traffic noise assessments, horizontal directional drilling and compressor stations. He has a B.S degree in Mechanical Engineering from The University of Melbourne, Australia.
Project Siting Engineer Aren Nercessian	Mr. Nercessian has over 14 years of experience running acoustic models for renewable energy projects, has prepared over 60 reports on noise modelling of wind and solar farms and has analyzed measured acoustic noise levels at more than 15 sites. Mr. Nercessian has also performed layout optimizations, shadow flicker assessments, visual simulations and electromagnetic interference risk assessments on over 150 different projects under development. He is very familiar with the noise regulations in jurisdictions including Illinois, Michigan, Minnesota, Alberta, Ontario, and Quebec. Mr. Nercessian has a bachelor's degree in mechanical engineering from McGill University in Montreal, Canada.
Director of Environmental and Permitting Services Gabriel Constantin	Since joining DNV GL, in mid-2012, Gabriel Constantin has been involved in more than a dozen renewable energy mandates in the U.S., Canada, and abroad. He has quickly focused his field of expertise around the environmental and permitting aspect of renewable energy projects as well as the relevant regulations and energy policies in different jurisdictions. More precisely, Gabriel has significantly contributed in the procurement of Renewable Energy Approvals for multiple wind and solar projects in Ontario by coordinating with agencies at all levels and stakeholders, participating in public open house, managing subcontractors, and writing the mandatory EIA reports. His experiences also include project management, environmental impact assessments, due diligence, permitting at different government levels and an array of consultation activities. Gabriel holds a B.Sc. in Geomatics applied to the Environment and an M. Sc. in Geographical Sciences.

About DNV

We are the independent expert in assurance and risk management. Driven by our purpose, to safeguard life, property and the environment, we empower our customers and their stakeholders with facts and reliable insights so that critical decisions can be made with confidence. As a trusted voice for many of the world's most successful organizations, we use our knowledge to advance safety and performance, set industry benchmarks, and inspire and invent solutions to tackle global transformations.