



PHOTO 3: Looking south from Miller Straub Road toward turbine location A50.



PHOTO 4: Looking north from County Road 62 (Seneca Co. Line Road) toward turbine locations G02 & G03.

 4 Hemisphere Way Bedford, Ohio 44146 ©2017 Hull & Associates, Inc. Phone: (440) 232-9945 Fax: (440) 232-8777 www.hullinc.com	Apex Clean Energy, Inc. Proposed Republic Wind Project Site Photographs Sandusky and Seneca Counties, Ohio	Date: MARCH 2017
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APPENDIX D

General Earthwork Recommendations

APPENDIX D

GENERAL EARTHWORK RECOMMENDATIONS

Earthwork is most efficiently accomplished using large, heavy-duty equipment, unimpeded by obstacles. Consequently, it is preferable to complete as much of this work as is possible prior to initiating other phases of construction, such as footing excavation and installation of underground utilities. The following are general recommendations concerning earthwork construction and may not be applicable to site-specific conditions. Furthermore, the contractor is responsible in selecting and implementing the most appropriate construction techniques (e.g., construction means, methods, sequences or procedures, or for safety precautions or programs) for each site-specific condition(s).

1. Stripping, clearing and grubbing

In areas where fill is to be placed to support structures, drive and parking areas, the following is proposed:

Strip and remove all sod, topsoil, and organic contaminated soils.

Remove all trees and shrubs, designated to be cleared, inclusive of grubbing roots of larger trees.

Remove all trash, debris, rubble, existing random fill, soil softened by standing water, and any other soft soil as determined necessary by the geotechnical engineer. The fill placement should begin on firm, relatively unyielding foundation material.

The fill foundation should be stripped and cleared beyond the limits of the structure by a distance equal to not less than the thickness of the fill below the structure foundation plus 10 feet. For drives and parking areas, the fill foundation should be stripped and cleared for a distance of at least 5 feet beyond the limits of the pavement.

2. Fill Material – Composition

Material satisfactory for use as fill includes clayey silt and silty (lean) clay soils or sand and gravel, free of topsoil, organic or other decomposable matter, rocks having a major dimension greater than 6 inches, or frozen soil.

Soils having a maximum dry density of less than 90 pounds per cubic foot as determined by the moisture-density relationship are not considered suitable for use as fill.

Soils described as SILT (USCS ML, MH or ODOT A-4B) are considered questionably suitable for use as fill material because the stability of these materials is very sensitive to increases in moisture. These soils should not be placed within three feet of the top of the subgrade.

3. Fill Material – Moisture

Predominately fine grained fill materials (lean clayey soils) are recommended to contain moisture contents within 3 percent (above or below) the optimum moisture as determined by the moisture-density relationship (ASTM International D698), or less if found to be needed to obtain stability below the compaction equipment. This provides the best assurance of establishing not only adequate density for ultimate support of construction but also provides stability of the compacted soil under the dynamic loading induced by the heavyweight construction equipment during placement.

Sand and gravel fill material is not as sensitive to moisture content with regards to stability. Therefore, we recommend no specified limitation, as long as specified density and stability can be established.

4. Moisture Adjustment

If the moisture content of the material from the fill source or native subgrade is not appropriate to establish density, moisture adjustment of the material will be required.

If the moisture content of the fill being placed or the native subgrade is too high, appropriate adjustment entails spreading and exposing to the sun and wind for drying and using equipment such as a disc and/or a grader. This may not be feasible during wet seasonal conditions. Wet soils will pump and may cause excessive rutting under heavy equipment traffic. Therefore, improvements to the subgrade may be achieved by undercutting and replacing with suitable fill (possibly in combination with a non-woven geotextile or biaxial geogrid) or stabilization with lime or cement. The most appropriate subgrade improvement technique should be determined at the time of construction.

If the moisture content of the fill is too low, a water truck with a sprinkler bar may be required. After sprinkling, the soil should be thoroughly mixed with a disc and/or a grader.

5. Equipment

Equipment to compact the fill should be heavy duty with a steel drum roller having a minimum effective unit weight of 10 tons. For example:

Fine-grained materials (clayey silts and lean clays) may be efficiently compacted using a sheepfoot roller comparable to a Caterpillar 815 self-propelled roller.

Coarse-grained materials (sand and gravel) having little or no silt and clay sizes may be efficiently compacted using a heavy, self-propelled, vibratory smooth wheel roller.

Coarse-grained materials having about 10% or more silt and clay sizes may be efficiently compacted using a sheepfoot roller comparable to a Caterpillar 815 self-propelled sheepfoot roller.

6. Lift Thickness

Fill should be placed in horizontal layers, 8-inch loose thickness, compacted uniformly to approximately 6-inch thickness.

If equipment is used which is lighter weight than recommended above, lift thickness should be appropriately thinner.

7. Fill Density

In areas to support access roads and within the pad, the fill and backfill should be compacted to the density requirements as recommended in the main body of the report

8. Season of Earthwork

Weather conditions are very important to efficiency in working soils. Generally, earthwork is accomplished most efficiently between May and November. Cold periods may hamper moisture adjustment. If the temperature is below 32 degrees Fahrenheit (°F) for prolonged periods, frozen

material on the fill surface must be removed before subsequent lifts may be placed. Also, densification of fill is more difficult when air temperatures are below freezing. Granular material, such as bank run sand and gravel is somewhat less sensitive to weather conditions but is not immune from difficulties that may be presented by precipitation and low temperatures.

9. Trench Backfill

Trench backfill should be controlled compacted fill, placed in accordance with recommendations presented above and as engineered for thermal properties in collection systems

It is recommended that suitable granular material be used to backfill trenches that traverse beneath buildings, drives, or parking areas.

10. Proof Rolling

Upon completion of stripping, clearing, and grubbing; the areas planned to support pavement or building floor slab shall be proof rolled in accordance with ODOT Item 204 to identify any soft, weak, loose, or excessively wet subgrade conditions. At a minimum, the proof rolling should be completed with a minimum 20-ton loaded tandem axle dump truck. The vehicle should pass in each of two perpendicular directions covering the proposed work area. Any observed unsuitable materials should be undercut and replaced with suitable fill as directed by the geotechnical engineer.

11. General

All fill should be placed and compacted under continuous observation and testing by a soils technician under the general guidance of the geotechnical engineer.

APPENDIX E

Generalized Geotechnical Exploration Work Plan

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GENERALIZED GEOTECHNICAL EXPLORATION WORK PLAN

A geotechnical engineer shall prepare a proposal for a geotechnical site exploration in general accordance with the suggested scope of work provided below. The geotechnical engineer shall be qualified in geotechnical investigations. The geotechnical exploration program suggested below (e.g., boring frequency, location and depth) should be adjusted by the geotechnical engineer based on their experience and to allow for specific geological, topographic, and drainage conditions of the site.

PROJECT DESCRIPTION

A geotechnical exploration will be performed at the proposed Project Boundary in Seneca and Sandusky Counties, Ohio. The project involves planned construction of wind turbine generators at various locations (Sites) for the Republic Wind Farm Project. Upon completion of the geotechnical exploration suitable foundation systems will be reviewed that will work with the Site conditions as determined by the geotechnical exploration and design preferences provided by the Client. The foundation types that will be considered include spread footings, ring foundation, P&H foundations, and pile supported foundations.

The purpose of the geotechnical exploration is to obtain geologic information and to determine relevant engineering properties of the Site soils. A review of generalized geologic references, including ODNR Well Logs and ODNR Groundwater Resource Maps, suggest the Project Boundary is underlain by lacustrine and ground moraine deposits with dolomite, limestone, and shale bedrock depths ranging from less than 10 feet in the eastern portion of the site and approximately 150 feet below existing ground surface in the western portion of the Project Area.

PROPOSED SCOPE OF WORK

Reconnaissance, Planning and Boring Layout

The following will be conducted as part of this task:

1. A review of pertinent, readily available subsurface geotechnical information for the Site that is provided to the Geotechnical Engineer will be performed.
2. A site visit will be performed to lay out the borings and clear underground utilities at the boring locations. The landowner will be consulted to provide the geotechnical engineer with information and the locations of all private utilities at the site. The geotechnical engineer will be responsible for locating the boring, which should be surveyed and staked on the site prior to drilling.
3. The Ohio Utility Protection Service (OUPS) and Ohio Oil & Gas Producers Underground Protection Service (OGPUPS) will be notified a minimum of 48-hours prior to the commencement of drilling services.

Drilling and Sampling

After the geotechnical engineer has reviewed all available desktop information, they will determine the number of borings to be drilled at turbine locations. The borings will extend to the proposed depth or competent bedrock, whichever is encountered first.

For all borings, the following will be performed:

1. Split-barrel sampling of soil will be performed in accordance with ASTM International D 1586 for each boring in increments of 2.5 feet to the depth of 10 feet and at five-foot intervals below 10 feet to the depth of the borings. In all the borings, Standard Penetration Test (SPT) data will be developed and representative samples preserved.
2. It is anticipated that the drilling will be accessible with and performed by a truck-mounted drilling rig. Provisions shall be made by the Geotechnical Engineer based on the time of year the fieldwork will occur in using an ATV drill rig if the borings cannot be accessed with a truck-mounted drilling rig.
3. Water observations in the boreholes will be recorded during and at the completion of drilling.
4. All borings will be backfilled at the completion of drilling with bentonite chips and drill cuttings.

Geotechnical Laboratory Testing

A laboratory testing program will be established by the geotechnical engineer based on the observations made during the drilling activities and experience. The following laboratory tests shall be performed on samples retained during the drilling activities:

1. All samples will be classified in the laboratory based on the visual-manual examination (ASTM International D 2488) Soil Classification System and the laboratory test results. Formal boring logs will be prepared using the field logs and the laboratory classifications.
2. Laboratory testing will include moisture content, particle-size analyses, and Atterberg limits of a limited number of samples considered to be representative of the foundation materials encountered by the borings. Unconfined compression and consolidation tests will be performed if low strength and/or highly compressible cohesive soils are encountered as deemed necessary by the geotechnical engineer.
3. All laboratory testing will be performed in accordance with ASTM International or other specified standards.

Geotechnical Exploration Report

The geotechnical engineer will prepare a Geotechnical Exploration Report that will include the findings, conclusions and recommendations concerning proposed geotechnical related design-construction considerations and foundation design recommendations. The report shall also include an Appendix, which will include a boring location plan, a legend of the boring log terminology, the boring logs, and the results of any laboratory tests. Three (3) copies of the report will be presented by the Geotechnical Engineer.

EXHIBIT G. Socioeconomic Report

Socioeconomic Report

Republic Wind Farm

Adams, Pleasant, Reed, Scipio, and Thompson Townships, Seneca County and
York Township, Sandusky County

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TABLE OF CONTENTS

LIST OF FIGURES	ii
EXECUTIVE SUMMARY	iii
Part I: Introduction.....	1
Part II: Socioeconomic Profile	3
1. Population trends.....	3
2. Employment statistics.....	5
Part III: Regional Development Impacts	11
1. Housing	11
2. Commercial and Industrial Development.....	13
3. Transportation	13
4. Local and Regional Plan Compatibility	14
5. Concurrent or secondary uses	16
Part IV: Assessing Job and Economic Development Impacts	17
1. Jobs and Economic Development Impact (JEDI) Model	17
2. Methodology	19
Part V: Job and Economic Development Impacts on the Statewide Economy	20
1. Statewide Job and Economic Development Impact: Construction	21
2. Statewide Job and Economic Development Impact: Operations and Management	22
3. Land Lease Payments.....	22
Part VI: Local Tax Revenues	23
1. Legislative Context	23
2. Estimated Payments In Lieu Of Taxes	24
Part VII: Conclusion.....	25
Part VIII: References	26

LIST OF TABLES

Table 1: Population Trends	3
Table 2: Population Projections	4
Table 3: Local Labor Force and Unemployment	5
Table 4a: Employment and Payroll by NAICS Sector in the State of Ohio.....	6
Table 4c: Employment and Payroll by NAICS Sector in Huron County.....	8
Table 4d: Employment and Payroll by NAICS Sector in Sandusky County	9
Table 4e: Employment and Payroll by NAICS Sector in Seneca County	10
Table 5: Study Area Housing Characteristics.....	12
Table 6: Adjustments Made to Default JEDI Model Costs	20
Table 7: Summary Results of Job and Economic Impact Analysis	20
Table 8: Service Payment per Megawatt Schedule	24
Table 9: Estimated Total PILOT Revenue	24

LIST OF FIGURES

Figure 1: 5-Mile Study Area

Figure 2: Facility Layout

EXECUTIVE SUMMARY

This socioeconomic report is prepared in support of the proposed Republic Wind Farm (“the Facility”), a wind-powered electric generation facility in Sandusky and Seneca Counties of the State of Ohio (See Figure 1). The Facility will consist of 50 turbines, along with access roads, electric collection cables, a Facility substation, laydown yards for construction staging, an operations and maintenance (O&M) facility, and up to three meteorological towers. The Facility layout is illustrated in Figure 2. The energy generated at the Facility will deliver power to a single point of interconnection (POI) on the existing Fremont Center – Tiffin Center 138 kilovolt (kV) transmission line. The Facility will have an installed capacity of up to 198 megawatts (MW) and will deliver up to 640,000 megawatt-hours (MWh) of electrical power to the regional power grid. Construction is scheduled to begin in 2020.

The focus of this report is to assess the potential socioeconomic impacts of this Facility on local municipalities within a 5-mile radius from the Facility (“the Study Area”; see Figure 1), as well as across the State of Ohio. This involves a review of the past and current demographic and economic characteristics and trends in the Study Area, which includes 23 municipalities, and (where applicable) those of the greater region. The regional economy surrounding the Study Area is shaped in large part by the agricultural industries of Erie, Huron, Sandusky, and Seneca Counties as well as the metropolitan areas in northern Ohio and further afield. Potential impacts including those to employment, earnings, and overall economic output resulting from Facility construction and operation are assessed in light of socioeconomic conditions within the State of Ohio and the Study Area.

In short, the Republic Wind Farm is expected to produce a positive economic impact throughout the state and on the communities within the Study Area. Through lease payments to private landowners, short- and long-term job creation, and tax payments to each participating taxing jurisdiction, the Facility will supply a revenue stream to each of these jurisdictions without requiring significant services or expenditures on their behalf.

Part I: Introduction

This socioeconomic report is prepared in support of the proposed Republic Wind Farm (“the Facility”), a wind-powered electric generation facility in Sandusky and Seneca Counties of the State of Ohio (See Figure 1). The Facility will consist of 50 turbines, along with access roads, electric collection cables, a Facility substation, laydown yards for construction staging, an operations and maintenance (O&M) facility, and up to three meteorological towers. The Facility layout is illustrated in Figure 2. The energy generated at the Facility will deliver power to a single point of interconnection (POI) on the existing Fremont Center – Tiffin Center 138 kilovolt (kV) transmission line. The Facility will have an installed capacity of up to 198 megawatts (MW) and will deliver up to 640,000 megawatt-hours (MWh) of electrical power to the regional power grid. Construction is scheduled to begin in early 2020.

This analysis examines estimated impacts to the state and local economy generated from the construction and operation of the Facility. It includes a review of existing demographic and economic characteristics in the area, as well as several trends affecting both. When such comparison is informative, state and federal demographic and economic data are also included. Unless noted otherwise, the Study Area for this report includes the following 23 municipalities in Erie, Huron, Sandusky, and Seneca Counties; all of which are found wholly or partially within a 5-mile radius of the Facility (the Study Area):

- Village of Green Springs*
- Village of Republic
- City of Bellevue*
- City of Clyde
- City of Tiffin
- Adams Township
- Ballville Township
- Bloom Township
- Clinton Township
- Green Creek Township
- Groton Township
- Hopewell Township
- Jackson Township
- Liberty Township
- Lyme Township
- Norwich Township
- Pleasant Township
- Reed Township
- Scipio Township
- Sherman Township
- Thompson Township
- Townsend Township
- Venice Township
- York Township

*Note: The Village of Green Springs is geographically split between Sandusky and Seneca Counties. The City of Bellevue is geographically split between Erie, Huron, and Sandusky Counties

Part II of this report provides an examination of population trends within the State of Ohio and the Study Area, from 1990 through 2010, including projected population growth through 2030. In addition, Part II provides data regarding the civilian labor force for 2016 by state and county (latest data available). Part III reviews the types of potential impacts that could be experienced throughout the region, including those regarding housing demand, commercial and industrial employment, and transportation networks. Part IV describes the methods of analysis of potential economic benefits provided within this report, including an overview of the Job and Economic Development Impact (JEDI) Wind Model. This model was created by MRG & Associates, under contract with the National Renewable Energy Laboratory and is an industry standard for economic impact investigation. This is followed by the JEDI results (Part V), which describes the jobs created by the construction and operation of the Facility, as well as a summary of payments to landowners as a result of land leases for turbines. Part VI reviews potential impacts of the Facility from the perspective of local taxing jurisdictions. The findings of this report are summarized in Part VII, which is followed by a bibliography of cited sources in Part VIII.

Part II: Socioeconomic Profile

1. Population trends

Census data reveals that these communities have experienced a varied history of small population growth and decline over the past two decades. The 2015 population for the State of Ohio and Erie, Huron, Sandusky, and Seneca Counties is shown in Table 1 below. Ohio showed an increase in population between 2000 and 2015, however, the counties in the study area each experienced an overall decrease of equal or higher magnitude between the same duration. Huron County experienced the smallest annual rate of population decrease (-0.1%) while Erie and Seneca Counties experienced the greatest overall decrease in population, at an annual rate of 0.3%. As indicated in Table 2, many of the local municipalities also demonstrate a general decrease in population from 2000 to 2015. Notable exceptions include more urban settings, such as the Village of Green Springs, which experienced a population increase at an annual rate of 3.0% over the same time span. The City of Tiffin is the largest of the 23 municipalities within a 5-mile radius of the proposed turbines and has experienced only a small decline of growth (-0.1% annual rate) (Table 2).

Table 1: Population Trends

County	2000 Pop.	2010 Pop.	2015 Pop.	Annual Rate of Change (2000-2015)	Est. 2030 Pop.	% Change 2015-2030	2017 Population Density (people per square mile)
Erie County	79,551	77,079	76,141	-0.3%	72,942	-4.2%	297.5
Huron County	59,487	59,626	58,937	-0.1%	58,394	-0.9%	119.4
Sandusky County	61,792	60,944	60,187	-0.2%	58,642	-2.6%	146.6
Seneca County	58,683	56,745	55,929	-0.3%	53,361	-4.6%	101.1
State of Ohio	11,353,140	11,536,504	11,575,977	0.1%	11,805,281	2.0%	285.3

Source: U.S. Census Bureau, 2000 and 2010 Decennial Census and American Community Survey 5-Year Estimates 2011-2015. Population densities from American Community Survey 1- Year Estimates 2017. Projections derived from each jurisdiction's constant annual rate of change between 2000-2015.

For the purposes of this report, the trends experienced by each community from 2000 to 2015 are expected to continue regardless of whether the proposed Facility is built. Over the next decade, the total population within the Study Area is projected to increase by 1.3% from 2015 to 2025, from 70,791 to 71,702; mirroring the projected statewide increase of 1.4% during the same time span. Meanwhile, county population projections are expected to decline between the same time span. Seneca County is projected to experience the greatest decrease in population (-3.4%) from 2010-2025, while Huron County is projected to experience only a -0.7% decline in population during the same time span (see Table 1).

Table 2: Population Projections

Jurisdiction within 5-Miles Radius of Facility	2000 Pop.	2010 Pop.	2015 Pop.	Annual Rate of Change (2000-2015)	Est. 2030 Pop.	% Change 2015-2030	2016 Population Density (people per square mile)
City of Bellevue	8,193	8,282	8,109	-0.1%	8,026	-1.0%	1,335
City of Clyde	6,064	6,325	6,305	0.3%	6,560	4.0%	1,202.2
City of Tiffin	18,135	17,963	17,793	-0.1%	17,460	-1.9%	2,577.7
Adams Township	1,337	1,320	1,435	0.5%	1,544	7.6%	106.9
Ballville Township	6,395	5,985	5,911	-0.5%	5,479	-7.3%	175.1
Bloom Township	1,937	1,799	1,591	-1.2%	1,329	-16.4%	43.3
Clinton Township	4,188	4,109	4,052	-0.2%	3,922	-3.2%	130.6
Green Creek Township ¹	-	3,646	3,520	-0.7%	3,172	-9.9%	116.2
Groton Township	1,384	1,427	1,344	-0.2%	1,306	-2.9%	51.1
Hopewell Township	2,874	2,774	2,725	-0.3%	2,587	-5.1%	79.8
Jackson Township	1,609	1,608	1,702	0.4%	1,803	5.9%	48.0
Liberty Township	2,340	2,035	2,184	-0.4%	2,043	-6.5%	57.0
Lyme Township	968	853	690	-1.9%	516	-25.2%	35.6
Norwich Township	1,072	1,070	1,176	0.6%	1,295	10.2%	35.8
Pleasant Township	1,685	1,635	1,397	-1.1%	1,176	-15.8%	36.3
Reed Township	949	848	820	-0.9%	715	-12.8%	20.7
Scipio Township	1,831	1,729	1,704	-0.5%	1,590	-6.7%	47.2
Sherman Township	501	510	405	-1.3%	334	-17.5%	24.1
Thompson Township	1,422	1,443	1,446	0.1%	1,471	1.7%	37.2
Townsend Township	1,670	1,620	1,327	-1.4%	1,079	-18.7%	40.8
Venice Township	1,871	1,758	1,737	-0.5%	1,617	-6.9%	43.6
York Township	2,512	2,532	2,516	0.0%	2,520	0.2%	76.2
Village of Green Springs	599	738	902	3.4%	1,483	64.5%	1,567.2
Village of Republic	614	549	661	0.5%	713	7.9%	13.1
Total²	69,536	71,927	70,791	0.1%	72,079	1.8%	N/A

Source: U.S. Census Bureau, 2000 and 2010 Decennial Census and American Community Survey 5-Year Estimates 2011-2015. Projections derived from each jurisdiction's constant annual rate of change between 2000-2015. Population densities from American Community Survey 1-Year Estimates 2016.

¹ Denotes that entity did not exist as currently structured as of April 1, 2010, Census Day, % change is calculated from 2010-2015

² Totals calculated by formula, may reflect rounding errors

Although construction employment related to the construction of the Facility will be substantial, this employment is relatively short term and is not expected to result in the permanent relocation of construction workers to the area; therefore, the Facility is not anticipated to generate significant population growth within the Study Area. The number of potential short- and long-term employment opportunities associated with the construction and operation of the Facility is discussed in further detail below.

2. Employment statistics

Table 3 illustrates the size of the local labor force in counties located either wholly or partially within 5 miles of the proposed Facility, as well as the broader State of Ohio. The total annual unemployment rate for Sandusky and Seneca Counties has been relatively consistent with that of the state over the last two years; however, the total annual unemployment rate for Erie and Huron Counties has been slightly higher compared to that of the state. Annual average unemployment rates have decreased both statewide and countywide from 2014 to 2016. Table 4a through Table 4e illustrates employment figures in the State of Ohio and Erie, Huron, Sandusky, and Seneca Counties broken down by sector for 2015.

Table 3: Local Labor Force and Unemployment

Place	Labor Force	Employed	Unemployed	Unemployment rate	Unemployment rate, 2015 (annual)	Unemployment rate, 2014 (annual)
Erie County	37,127	35,100	2,027	5.5%	5.5%	6.4%
Huron County	27,864	26,063	1,801	6.5%	6.6%	8.0%
Sandusky County	30,908	29,465	1,443	4.7%	4.8%	5.7%
Seneca County	27,164	25,855	1,309	4.8%	4.8%	5.7%
State of Ohio	5,713,088	5,430,790	282,298	4.9%	4.9%	5.8%

Note: Not Seasonally Adjusted; Source: U.S. Bureau of Labor Statistics, 2016.

Table 4a: Employment and Payroll by NAICS Sector in the State of Ohio

NAICS code description	Paid employees for pay period including March 12, 2015	First-quarter payroll (\$1,000)	Annual payroll (\$1,000)	Total establishments
Total for all sectors	4,719,985	52,632,423	213,161,303	251,668
Agriculture, forestry, fishing and hunting	1,204	8,631	39,876	269
Mining, quarrying, and oil and gas extraction	12,932	209,203	782,917	743
Utilities	23,839	772,796	2,334,102	667
Construction	179,883	2,139,534	10,690,205	19,731
Manufacturing	663,884	9,079,228	36,324,428	14,139
Wholesale trade	235,573	3,588,415	14,334,142	14,035
Retail trade	565,140	3,521,203	14,591,663	36,339
Transportation and warehousing	171,286	1,902,972	8,103,911	7,448
Information	84,415	1,472,345	5,770,568	3,752
Finance and insurance	241,764	5,486,773	18,452,171	17,247
Real estate and rental and leasing	65,324	839,757	3,144,738	10,075
Professional, scientific, and technical services	250,042	3,924,804	16,715,335	24,087
Management of companies and enterprises	150,099	4,165,339	15,062,999	2,186
Administrative and support and waste management and remediation services	397,326	2,874,844	12,629,484	13,526
Educational services	120,934	820,867	3,369,061	3,089
Health care and social assistance	824,772	8,466,783	35,979,928	28,976
Arts, entertainment, and recreation	67,047	480,459	2,442,370	3,766
Accommodation and food services	461,895	1,580,929	6,927,919	23,697
Other services (except public administration)	202,085	1,295,507	5,456,190	27,493
Industries not classified	541	2,034	9,296	403

Source: U.S. Census Bureau, 2015

Table 4b: Employment and Payroll by NAICS Sector in Erie County

NAICS code description	Paid employees for pay period including March 12, 2015	First-quarter payroll (\$1,000)	Annual payroll (\$1,000)	Total establishments
Total for all sectors	30,596	261,881	1,152,632	1,854
Agriculture, forestry, fishing and hunting	a	D	D	3
Mining, quarrying, and oil and gas extraction	115	522	2,867	5
Utilities	b	D	D	5
Construction	782	8,596	46,306	130
Manufacturing	6,718	81,201	334,553	97
Wholesale trade	1,151	12,840	57,368	67
Retail trade	4,683	24,899	108,351	306
Transportation and warehousing	618	5,963	28,668	44
Information	466	3,877	15,919	20
Finance and insurance	624	9,876	36,739	111
Real estate and rental and leasing	272	2,186	9,774	70
Professional, scientific, and technical services	623	8,602	35,667	112
Management of companies and enterprises	198	2,816	10,935	13
Administrative and support and waste management and remediation services	611	4,248	21,754	80
Educational services	356	2,029	8,349	25
Health care and social assistance	4,886	46,861	201,401	221
Arts, entertainment, and recreation	1,272	20,713	106,854	71
Accommodation and food services	6,017	19,665	97,837	267
Other services (except public administration)	1,134	5,377	23,546	204
Industries not classified	7	19	24	3

a: 0-19 employees

b: 20-99 employees

D: Withheld to avoid disclosing data for individual companies; data are included in higher level totals.

Source: U.S. Census Bureau, 2015

Table 4c: Employment and Payroll by NAICS Sector in Huron County

NAICS code description	Paid employees for pay period including March 12, 2015	First-quarter payroll (\$1,000)	Annual payroll (\$1,000)	Total establishments
Total for all sectors	16,689	145,737	668,873	1,132
Agriculture, forestry, fishing and hunting	a	D	D	2
Mining, quarrying, and oil and gas extraction	-	-	-	-
Utilities	b	D	D	3
Construction	1135	13530	96336	128
Manufacturing	4895	53,647	231,826	86
Wholesale trade	631	6,764	30,745	49
Retail trade	2,157	12,227	52,130	174
Transportation and warehousing	798	8,651	39,183	38
Information	135	1,607	6,731	17
Finance and insurance	428	4,878	18,711	72
Real estate and rental and leasing	143	965	4,127	43
Professional, scientific, and technical services	406	3,306	13,984	80
Management of companies and enterprises	b	D	D	2
Administrative and support and waste management and remediation services	371	1,749	8,354	39
Educational services	85	330	1,455	10
Health care and social assistance	2743	27,162	115,889	98
Arts, entertainment, and recreation	110	717	3,590	16
Accommodation and food services	1,555	4,036	18,370	111
Other services (except public administration)	986	4,750	20,282	163
Industries not classified	a	D	D	1

a: 0-19 employees

b: 20-99 employees

D: Withheld to avoid disclosing data for individual companies; data are included in higher level totals.

Source: U.S. Census Bureau, 2015

Table 4d: Employment and Payroll by NAICS Sector in Sandusky County

NAICS code description	Paid employees for pay period including March 12, 2015	First-quarter payroll (\$1,000)	Annual payroll (\$1,000)	Total establishments
Total for all sectors	23,195	199,723	848,385	1,321
Agriculture, forestry, fishing and hunting	4	36	736	4
Mining, quarrying, and oil and gas extraction	c	D	D	3
Utilities	43	1021	3752	4
Construction	951	8,820	50,951	145
Manufacturing	9,031	98,612	406,383	106
Wholesale trade	699	7,696	31,861	53
Retail trade	2,491	14,558	60,862	197
Transportation and warehousing	915	9,831	42,732	56
Information	144	1,266	5,497	12
Finance and insurance	488	5,581	21,429	79
Real estate and rental and leasing	166	1,063	4,345	37
Professional, scientific, and technical services	404	3,612	15,089	77
Management of companies and enterprises	129	2,197	10,360	5
Administrative and support and waste management and remediation services	736	5,645	23,072	60
Educational services	65	267	1,136	9
Health care and social assistance	3,467	25,906	108,764	176
Arts, entertainment, and recreation	254	887	4,726	24
Accommodation and food services	1,983	5,105	23,744	120
Other services (except public administration)	1,049	4,924	20,948	153
Industries not classified	a	D	D	1

a: 0-19 employees

c: 100-249 employees

D: Withheld to avoid disclosing data for individual companies; data are included in higher level totals.

Source: U.S. Census Bureau, 2015

Table 4e: Employment and Payroll by NAICS Sector in Seneca County

NAICS code description	Paid employees for pay period including March 12, 2015	First-quarter payroll (\$1,000)	Annual payroll (\$1,000)	Total establishments
Total for all sectors	17,109	135,030	571,777	1,128
Agriculture, forestry, fishing and hunting	b	D	D	2
Mining, quarrying, and oil and gas extraction	59	569	3,000	5
Utilities	101	2153	7699	7
Construction	849	7,914	42,559	117
Manufacturing	4,208	49,430	197,917	72
Wholesale trade	821	9,326	39,169	52
Retail trade	2,315	14,305	57,401	168
Transportation and warehousing	559	5,088	22,629	51
Information	137	1,095	4,228	13
Finance and insurance	409	5,251	20,931	66
Real estate and rental and leasing	79	516	2,306	27
Professional, scientific, and technical services	385	2,803	11,889	66
Management of companies and enterprises	81	1,410	6,814	7
Administrative and support and waste management and remediation services	325	2,180	11,018	39
Educational services	1697	9,624	40,030	11
Health care and social assistance	2,680	15,755	69,789	137
Arts, entertainment, and recreation	187	403	2,194	16
Accommodation and food services	1,389	3,546	16,009	106
Other services (except public administration)	805	3,447	15,121	163
Industries not classified	2	16	69	3

b: 20-99 employees

D: Withheld to avoid disclosing data for individual companies; data are included in higher level totals.

Source: U.S. Census Bureau, 2015

Part III: Regional Development Impacts

The regional economy surrounding the Study Area is shaped in large part by the agricultural industries of Erie, Huron, Sandusky, and Seneca Counties. While the Study Area is predominantly rural, the City of Toledo (west of the Study Area) and the City of Cleveland (east of the Study Area), both significant metropolitan regions, are each in relative proximity to the Study Area. Erie, Huron, Sandusky, and Seneca Counties are primarily agricultural in nature. The regional context for the development of this Facility is discussed in further detail below, concentrating on three primary components: housing, commercial and industrial development, and transportation. In addition, the compatibility of the proposed Facility with regional developmental goals and plans is reviewed.

1. Housing

As with all sectors of the economy, the housing market throughout the region has felt the impact of population loss. Owner-occupied vacancy rates in Erie, Huron, Sandusky, and Seneca Counties (ranging from 2.0% to 2.3%) are slightly higher than the statewide average of 1.9%. The rental vacancy rate in Huron County (11.7%), Sandusky County (9.7%), and Seneca County (7.1%) is substantially higher than the statewide average of 6.5%, while the rental vacancy rate in Erie County is only 0.1% higher than the statewide average.

Erie, Huron, Sandusky, and Seneca Counties feature a median monthly gross rent level of \$707, \$630, \$634, \$645, respectively, all of which is below the statewide average of \$730/month. Each county has a lower than statewide percentage of households whose rent accounts for more than 35% of their household income. In addition, the median housing values of Huron, Sandusky, and Seneca Counties are below the statewide average of \$129,900, while Erie County's median housing value (\$131,400) is slightly above the statewide average.

It is estimated that 13,631 housing units within Erie, Huron, Sandusky, and Seneca Counties are currently vacant. Given these figures, in addition to the population projections discussed in Part II of this report, it is not expected that the development of the Facility will have a significant impact on the regional housing market. While the Facility development may not represent a widespread boom for rental property owners, it is worth noting that the availability of vacant rental housing also indicates that the Facility should not have a destabilizing effect on current renters.

Table 5: Study Area Housing Characteristics

Municipality/County/State	Total housing units	Occupied units	Vacant units	Vacancy rate		Median housing value of owner-occupied units	Median gross rent (monthly)	% of households with gross rent > 35% of household income
				Home - owner	Rental			
Village of Green Springs	265	256	9	0.0%	0.0%	\$82,700	\$835	52.9%
Village of Republic	2757	257	18	3.3%	0.0%	\$78,000	\$736	23.7%
City of Bellevue	3,648	3,220	428	3.2%	14.3%	\$96,000	\$637	22.2%
City of Clyde	2,806	2,484	322	5.4%	4.6%	\$94,900	\$630	42.2%
City of Tiffin	7,403	6,593	810	1.6%	9.1%	\$91,600	\$657	36.4%
Adams Township	585	529	56	0.0%	0.0%	\$131,300	\$647	10.8%
Ballville Township	2,898	2,638	260	1.6%	16.8%	\$143,500	\$683	31.9%
Bloom Township	664	630	34	0.0%	9.5%	\$84,800	\$539	38.0%
Clinton Township	1,912	1,812	100	2.2%	3.9%	\$135,400	\$639	34.1%
Green Creek Township	1,478	1,427	51	0.0%	0.0%	\$97,100	\$650	6.9%
Groton Township	570	553	17	0.0%	0.0%	\$145,700	(x)	0.0%
Hopewell Township	1,167	1,017	150	0.0%	0.0%	\$114,800	\$752	19.0%
Jackson Township	651	596	55	0.9%	0.0%	\$126,500	\$621	48.1%
Liberty Township	925	863	62	2.6%	0.0%	\$83,700	\$659	48.2%
Lyme Township	296	288	8	0.0%	0.0%	\$153,500	(x)	0.0%
Norwich Township	439	414	25	0.0%	22.7%	\$126,300	\$821	89.9%
Pleasant Township	622	547	75	3.4%	0.0%	\$125,000	\$784	7.0%
Reed Township	346	310	36	0.0%	0.0%	\$95,000	\$1,043	15.9%
Scipio Township	769	702	67	1.0%	0.0%	\$123,000	\$715	34.5%
Sherman Township	182	167	15	0.0%	0.0%	\$138,300	(x)	0.0%
Thompson Township	522	455	67	7.3%	0.0%	\$131,800	(x)	(x)
Townsend Township	713	480	233	12.6%	21.8%	\$125,700	\$639	0.0%
Venice Township	857	697	160	7.5%	13.3%	\$88,300	\$700	25.8%
York Township	1,013	951	62	0.0%	0.0%	\$138,400	\$695	31.7%
Erie County	37,739	31,767	5,972	2.1%	6.4%	\$131,400	\$707	32.8%
Huron County	25,134	22,527	2,607	2.0%	11.7%	\$116,100	\$630	33.4%
Sandusky County	26,257	23,626	2,631	2.3%	9.7%	\$110,100	\$634	39.4%
Seneca County	23,959	21,538	2,421	2.1%	7.1%	\$96,900	\$645	36.3%
Ohio Statewide	5,140,902	4,585,084	555,818	1.9%	6.5%	\$129,900	\$730	40.3%

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates 2011-2015. (x) = data unavailable

2. Commercial and Industrial Development

The diversification of Ohio's energy portfolio will have significant and positive economic impacts beyond a reduced dependence on coal imported from outside of the state. The Environment Ohio Research & Policy Center estimated that if the State of Ohio increased wind power production to 20% of the state's total energy portfolio by 2020, such development would create 3,100 permanent, full-time positions within the state, and result in cumulative wages totaling \$3.7 billion. This same analysis estimated that such a commitment would result in an increase in gross state product of approximately \$8.2 billion by 2020 (Environment Ohio, 2007).

These impacts are principally due to the impact of wind energy development on the manufacturing sector. The State of Ohio is uniquely positioned to take advantage of advanced manufacturing opportunities for the development and distribution of wind power technology, according to the Renewable Energy Policy Project's (2004) report, "Wind Turbine Development: Location of Manufacturing Activity." This analysis estimates that if the United States were to invest \$50 billion into 50,000 MW of new wind power production, Ohio manufacturers could stand to create 11,688 jobs in wind turbine and related manufacturing, accounting for 1.95% of the total investment; by way of comparison, the American Wind Energy Association estimates that the State of Ohio alone has enough wind resources to generate nearly 359 MW at 80m hub height and 110,439 MW at 110m hub height of onshore wind energy (AWEA, 2015).

The Environmental Law & Policy Center estimated that the State of Ohio is currently home to 106 wind power supply chain businesses, providing 1,000 to 2,000 jobs throughout the state (ELPC, 2011). Wind energy technology manufacturing opportunities include rotors, controls, drive trains, generators, and towers. Several of these manufacturers and other wind power-related businesses are located in the Greater Cleveland Region (AWEA, 2015).

Specific short- and long-term economic impacts of this Facility on commercial and industrial development throughout the region are described in further detail in Part V of this report.

3. Transportation

The region surrounding the Facility features numerous Interstates, U.S., and State highways, as well as county and local roadway networks, in addition to freight rail lines and small airports. These facilities are described in further detail below. The main transportation route to the Facility is I-80/90 (Ohio Turnpike), which runs just north of the 5-mile Study Area. U.S. Route 20 (north) and State Route 4 (east) run adjacent to the Facility. State Routes 53 and 269 provide direct access into the Facility. These and other primary routes facilitate transportation between the Facility and the surrounding metropolitan areas.

Workers coming to and from the site will most likely enter via State Route 4 or 20 from I-80/90. Construction traffic bound for the substations will likely use State Route 53 as the primary route, while traffic bound for the Operations and Maintenance area will most likely use U.S. Route 20 as the primary route. The proposed Facility is not expected to cause any substantial disruption to major transportation corridors serving the Study Area.

Freight rail lines connect several of the municipalities throughout the Study Area. CSX and Norfolk Southern operate the majority of Ohio's freight rail system, although smaller operators such as Ashland Railway, Northern Ohio and Western Railway, and Wheeling and Lake Erie Railway also operate in the area. Study Area municipalities connected to freight rail lines include the Cities of Bellevue, Clyde, and Tiffin, the Townships of Adams, Ballville, Bloom, Clinton, Green Creek, Groton, Hopewell, Jackson, Liberty, Lyme, Norwich, Pleasant, Reed, Scipio, Thompson, Venice, and York, and the Village of Green Springs. The rail system may be used for the transportation of a very small number of turbine component and equipment suppliers, but the Applicant does not anticipate making any modifications to the system.

The Study Area is also in proximity to the Huron County Airport, the Sandusky County Regional Airport, the Seneca County Airport, the Bandit Field Airport, the Fremont Airport, the Fostoria Airport, the Weiker Airport, and the Willard Airport. Construction and operation of the Facility will be designed according to Federal Aviation Administration (FAA) standards and are not expected to result in any adverse impacts to the regional air transportation network. The Applicant will file a notice of proposed construction or alteration (Form 7460-1) with the FAA to confirm the structure will not result in a substantial adverse impact.

4. Local and Regional Plan Compatibility

Several of the municipalities within the five-mile study area have adopted comprehensive land use plans, strategic downtown plans, and/or economic development plans. Each of these are summarized below:

- City of Bellevue Vision 2025 Comprehensive Master Plan: This plan, adopted in 2005 by the Bellevue City Council, identifies the need for a 20-year vision, in which the issues, concerns, goals, and priorities of the community are addressed through civic engagement. High-paying job creation in the manufacturing sector, as well as the retention of existing jobs and the preservation of existing farming operations are goals and issues presented in the plan (City of Bellevue, 2005). In terms of economic development, the Facility offers an opportunity for the use of local goods and services, including but not limited to labor, equipment, and maintenance. In addition, the payments associated with land leases provide additional income for landowners, including agricultural producers, and in doing so, improves the economic conditions for existing farming practices.

- 2016 City of Tiffin Downtown Strategic Growth and Development Plan: This strategic plan complements the previously-created 2010 Strategic Downtown Tiffin Plan, which “creates urban design solutions with policy recommendations to invigorate the urban core and community as a whole, with a revitalized and enhanced downtown” (City of Tiffin, 2010). Guided by revitalization principles for downtown areas and the local economy, the plan recommends that infill development utilize alternative energy when possible and support opportunities to develop local green tech industries (City of Tiffin, 2016). While the Facility does not directly impact the downtown area, it is compatible with the strategic plan through its diversification of the region’s energy resource portfolio, adding resilience and reliability to the supply of energy resources to local businesses. The Facility also offers an opportunity for the use of local goods and services, including those provided by businesses located in the downtown area.
- 1995 Erie County Comprehensive Development Plan: This plan “determines the immediate and future needs of the community and provides ways to allow the County to guide appropriate land uses to the most suited areas for that kind of development” (Erie County, 1995). By analyzing the existing conditions and growth trends of the County, along with issues facing the region, the plan identifies goals for future land use and policy making. The Facility is compatible with the Plan’s goal to “promote community development through the improvement of infrastructure that meets development demands”.
- 2017 Huron County Comprehensive Land Use Plan: Originally developed in 2007 and last revised in 2017, the Huron County Commissioners, the Huron County Comprehensive plan aims to manage future growth within the County to cohesively guide development patterns over the next thirty years. A key goal is to promote Huron County as a development destination and to retain and expand existing businesses (Huron County, 2017). The Facility is compatible with this goal due to the positive impacts it will create for the local economy.
- 2013 Sandusky County Comprehensive Plan: This plan is an update to the 2003 Comprehensive Plan and is intended to be long-range plan used to guide growth and development using current existing condition, along with updated trends and priority project. A major goal of the plan is to facilitate the economic health and growth of the County and its municipalities by expanding on the tax and employment base. Furthermore, the plan “promotes and facilitates the proper placement and provision of energy infrastructure components throughout the County, including but not limited to wind farms and solar arrays” (Sandusky County, 2013). The Facility is compatible with these goals, specifically the placement and provision of alternative energy infrastructure.

- 2011 Seneca County Comprehensive Economic Development Strategy: The plan is intended to position Seneca County as a “redevelopment area,” as defined by the EDA, and thus to make its political subdivisions eligible to apply from the EDA Public Works and other programs. As specified by the plan, “the assumptions, goals, and strategies laid out in the plan create a blueprint for the County’s overall economic development and a summary of what is considered the most effective and proactive, targeted strategy to improve the economic position and climate of Seneca County” (Seneca County, 2011). The plan also specifies that the County recently approved a resolution to make Seneca County an “Alternative Energy Zone”, making it eligible for state tax incentives. The Facility is compatible with the plan’s priority action to improve the local economy and implement alternative energy.

The Facility is located in an area that is largely rural in nature with a majority of impacts from the Facility construction and operation occurring on land used for agriculture. The economic benefits of the turbines for local agriculturalists, as well as their overall compatibility with farming practices, will support and aid in the preservation of local farming operations. Furthermore, the jobs and economic development created by Facility may help to create and retain existing local employment opportunities. Therefore, the development of this Facility is compatible with the goals and strategies of existing local and regional plans.

5. Concurrent or secondary uses

Facility components will be located on portions of leased land with existing rural residential or agricultural uses. These existing uses are expected to continue throughout the lifetime of the Facility.

Part IV: Assessing Job and Economic Development Impacts

1. Jobs and Economic Development Impact (JEDI) Model

The proposed Republic Wind Farm is anticipated to have local and statewide economic benefits. Wind power development, like other commercial development projects, can expand the local, regional, and statewide economies through both direct and indirect means. Income generated from direct employment during the construction and operation phases of the wind farm is used to purchase local goods and services, creating a ripple effect throughout the state. The Job and Economic Development Impact (JEDI) Wind model allows users to estimate exactly that; the jobs and the economic development impacts from wind power generation projects for both the construction and operation phases of the proposed Facility (NREL 2017). These economic development impacts, categorized by the levels of impact and indicators described below, include onsite jobs and earnings, economic output from these onsite earnings, local revenue/supply chain jobs and earnings, economic output from these local revenue/supply chain earnings, induced jobs and earnings, and economic output from these induced jobs and earnings. The JEDI model was created by the National Renewable Energy Laboratory (NREL), a national laboratory of the United States Department of Energy. It then calculates the aforementioned indicators for each level of impact using project-specific data provided by the Applicant and geographically-defined multipliers. These multipliers are produced by IMPLAN Group, LLC using a software/database system called IMPLAN (IMPact analysis for PLANing), a widely-used and widely-accepted general input-output modeling software and data system that tracks unique industry groups in various levels of the regional data (IMPLAN Group, 2018).

Using the JEDI wind model, this report analyzes three levels of impact that the proposed Facility may have on the economy:

On-site labor impacts: These are the direct impacts experienced by the companies/individuals residing in the State of Ohio engaged in the onsite construction and operation of the Facility. These values represent expenditure of dollars on labor (wages, salaries and associated expenses) by Facility onsite construction personnel as well as operation and maintenance (O&M) personnel. On-site labor impacts do not reflect material expenditures. Most other input-output models consider this level as “direct impacts”, referring to changes in jobs, economic activity and earnings associated with the immediate impacts created by the investment, which would include the equipment installed onsite, the concrete used onsite, etc. However, the immediate economic impacts of the physical items used onsite, normally included in direct impacts, typically occur at some geographic distance from the project itself. Because of JEDI's focus on the local impacts of a Facility, only the labor associated with the on-site location of the Facility (Construction and Construction-Related Services) is counted at this level.

Local revenue and supply chain impacts: These impacts measure the estimated increase in demand for goods and services in industry sectors that supply or otherwise support the companies engaged in construction and operation (also known as “backward-linked” industries). These measures account for the demand for goods and services such as turbine components, project analysis, legal services, financing, insurance, etc. Most other input-output models consider this level as “indirect impacts”, referring to economic impacts associated with linked sectors in the economy that are upstream of the direct impacts, such as suppliers of hardware used to make the equipment installed onsite or the concrete used onsite. However, because of JEDI’s focus on the local impacts of the Facility, labor for components of this Facility (e.g. turbine manufacturers) occurring at off-site locations is also counted in this level as a local revenue and supply chain impact.

Induced impacts: Induced impacts measure the estimated effect of increased household income resulting from the project. Induced impacts reflect the reinvestment of earned wages, as measured throughout the first two levels of economic impact. This reinvestment can occur anywhere within the local, regional, or state economy, on household goods, entertainment, food, clothing, transportation, etc.

Each of these three levels of impact can be measured in terms of three indicators: jobs (as expressed through the increase in employment demand), the amount of money earned through those jobs, and the overall economic output associated with each level of economic impact. These indicators are described in further detail:

Jobs: Jobs refer to the increase in employment demand because of facility development. These positions are measured across each level of impact, so that they capture the estimated number of jobs on site, in supporting industries, and in the businesses, that benefit from household spending. For the purposes of this analysis, this term refers to the total number of year-long full-time equivalent (FTE) positions created by the Facility. Persons employed for less than full time or less than a full year are included in this total, each representing a fraction of a FTE position (e.g. a half-time, year-round position is 0.5 FTE).

Earnings: This measures the wages and salary compensation paid to the employees described above.

Output: Output refers to the value of industry production in the state economy, across all appropriate sectors, associated with each level of impact. For the manufacturing sector, output is calculated by total sales plus or minus changes in inventory. For the retail sector, output is equal to gross profit margin. For the service sector, it is equal to sales volume. For example, output would include the profits incurred by those businesses that sell electrical transmission line, concrete, or motor vehicle fuel to the Applicant.

2. Methodology

Calculating the number of jobs and economic output from a proposed facility using the JEDI model is a two-step process. The first step requires a limited amount of facility-specific data inputs (such as year of construction, size of Facility, turbine size and location). For the analysis, the following data were used as facility-specific modeling inputs.

- Location: Ohio
- Year of Construction: 2020
- Total Project Nameplate Capacity: 200 MW
- Number of Turbines: 47
- Average Turbine Capacity: 4.255 MW
- Money Value (Dollar Year): 2018

Note that the Applicant presents a turbine layout of up to 50 turbines for permitting purposes, each with a nameplate capacity rating of 4.2 to 4.5 megawatts (MW). However, the total generating capacity of the Facility will not exceed 200 MW. Therefore, the number of turbines to be constructed will range between 44 and 47, depending on the model of turbine selected. Since no more than 47 turbines will ultimately be constructed, this socioeconomic report analyzes the total number of positive jobs and economic impacts produced by a 47 turbine Facility rather than a 50 turbine Facility, to avoid overestimating the Facility's economic benefits.

Using this Facility-specific data, the JEDI model then creates a list of default values, which includes project cost values, default financial parameter values, default tax values, default lease payment values, and default local share of spending values. These default values are derived from 10 years of research by NREL, and stem from various sources, including interviews and surveys from leading project owners, developers, engineering and design firms, and construction firms active in the wind energy sector. The version of the model (W9.14.18) used for the job and economic impact analysis presented here used the most currently available (2016) multiplier data specific to Ohio to estimate potential impacts on a statewide basis. The second step of the JEDI model methodology requires the review, and if warranted, the customization of default project cost values and financial parameter values to more reasonable estimates. The Applicant reviewed the default project cost values subtotaled by each of the following categories in the JEDI model: Equipment during Construction, Balance of Plant Construction, Labor during Operation & Maintenance, Materials and Services during Operation & Maintenance, Financial Parameters, Tax Parameters, Land Lease Parameters and Payroll Parameters. The Applicant reviewed the default values in November 2018 and determined whether they were appropriate for the project under review. As a result of that review, adjustments were made to specific default values (see Table 6). The remaining JEDI default values were reviewed and determined to be reasonable estimates based on the Applicant's previous experience in wind energy development.

Table 6: Adjustments Made to Default JEDI Model Costs

JEDI Cost Items (Annual Estimates)	Default Value	Adjusted Value	Change
Construction Equipment Costs	\$241,413,521	\$ [REDACTED]	[REDACTED]
Construction Materials Costs	\$50,587,878	\$ [REDACTED]	[REDACTED]
Construction Labor Total Costs	\$20,956,908	\$ [REDACTED]	[REDACTED]
Development Costs	\$9,004,072	\$ [REDACTED]	[REDACTED]
Sales Tax for Construction Materials and Equipment	\$15,304,784	\$ [REDACTED]	[REDACTED]
Equity Financing Repayment Term	10 years	\$ [REDACTED]	[REDACTED]
Taxes Per MW	\$0	\$ [REDACTED]	[REDACTED]
Land Lease (Total Cost)	\$600,000	\$ [REDACTED]	[REDACTED]

Part V: Job and Economic Development Impacts on the Statewide Economy

An economic impact analysis was performed for the Republic Wind Farm (the Facility) to be constructed in 2020 with a rated capacity of 200 MW and an assumed 47 turbines, sized at 4.255 MW. The analysis presented here used the most currently available (2016) multiplier data specific to Ohio to estimate potential impacts on a statewide basis. The results of this analysis, estimated for both the construction and operation phases of the proposed Facility, are illustrated in Table 7 and summarized in the narrative that follows.

Table 7: Summary Results of Job and Economic Impact Analysis

	Jobs	Earnings (Millions)	Output (Millions)
Construction			
Project Development and Onsite Labor Total	181	\$10.5	\$10.6
Construction & Interconnection Labor	180	\$10.3	-
Construction Related Services	1	\$0.1	-
Turbine & Supply Chain Impacts	403	\$22.7	\$75.7
Induced Impacts	169	\$8.3	\$25.9
Total Impacts	753	\$41.4	\$112.2
Annual Operation			
Onsite Labor Impacts	10	\$0.6	\$0.6
Local Revenue and Supply Chain Impacts	22	\$1.2	\$3.8
Induced Impacts	9	\$0.5	\$1.5
Total Impacts	41	\$2.3	\$5.9

Source: NREL JEDI Model (version W9.14.18) (USDOE NREL, 2018)

Notes: Earnings and Output values are millions of dollars in 2018 dollars. Totals may not add up due to independent rounding. Results are based on model default values.

Demand for new jobs associated with the Facility will be created during both the initial construction period and the years following construction, in which the Facility is in operation. The money injected into the statewide economy through the creation of these jobs will have long-term, positive impacts on individuals and businesses in Ohio as it ripples through the economy.

1. Statewide Job and Economic Development Impact: Construction

Based upon JEDI model computations, it is anticipated that construction of the proposed Facility will directly generate employment of an estimated 181 FTE on-site construction and project development positions for Ohio residents, which will be for Construction and Interconnection Labor and Construction Related Services. The JEDI model estimates in a total of \$10.3 million for annual earnings of the 180 on-site construction jobs. Turbine manufacturing and supply chain industries could in turn generate an additional 403 jobs across the State of Ohio over the course of Facility construction. In addition, Facility construction could induce demand for 169 jobs statewide through the spending of additional household income. Based on the results of the model, the total impact of potentially 753 new jobs could result in up to \$41.4 million of earnings, assuming a 2018 construction schedule and wage rates consistent with statewide averages. Facility construction labor wages for similar construction positions within the North Northeastern Ohio Non-Metropolitan Area (which includes Seneca and Sandusky Counties) range from an average of \$18.18 per hour for Construction Laborers, \$24.09 for Electricians, and \$50.14 for Construction Managers (Bureau of Labor Statistics, 2016). Local, regional, and statewide employment during the construction phase will primarily benefit those in the construction trades, including equipment operators, truck drivers, laborers, and electricians. Facility construction will also require workers with specialized skills, such as crane operators, turbine assemblers, specialized excavators, and high voltage electrical workers. It is anticipated that many of the highly-specialized workers will come from outside the area and will remain only for the duration of construction.

In addition to jobs and earnings, the construction of the Facility is expected to have a positive impact on statewide economic output, a measurement of the value of goods and services produced and sold by backward-linked industries. As described in the definition above, output provides a general measurement of the amount of profit earned by manufacturers, retailers, and service providers connected to a given project. Based on the results of the model, the value of economic output associated with Facility construction is estimated to be \$112.2 million. Between workers' additional household income and industries' increased production, the impacts associated with the Facility are likely to be experienced throughout many different sectors of the statewide economy. Pursuant to Section 5727.75 of the Ohio Revised Code (ORC), the Facility may qualify for tax incentives based on the degree to which it employs in-state construction labor (see Part VI). At the time of the publication of this report, it is not yet known what portion of construction labor will be Ohio-domiciled.

2. Statewide Job and Economic Development Impact: Operations and Management

Based upon JEDI model computations, the operation and maintenance of the proposed Facility is estimated to generate 10 full-time equivalent onsite jobs with combined estimated annual earnings of approximately \$0.6 million. These 10 jobs are anticipated to be comprised of Project Management, Technician, and Administrative personnel. Projected wage rates are projected to be consistent with statewide averages which are estimated to be \$17.32 per hour for Payroll and Timekeeping Clerks, \$21.78 per hour for Mechanical Engineering Technicians, and, \$45.66 for General and Operations Managers (Bureau of Labor Statistics, 2016). These 10 full-time local jobs generated by the wind energy facility comprise the Facility's direct long-term employment impact.

Operations and maintenance should also generate new jobs in other sectors of the economy through supply chain impacts and the expenditure of new and/or increased household earnings. Increased employment demand throughout the supply chain is estimated to result in approximately 22 jobs with annual earnings of approximately \$1.2 million. In addition, it is estimated that 9 jobs with associated annual earnings of \$0.5 million will be induced through the increased household spending associated with Facility operations. In total, while in operation, this Facility is estimated to generate demand for 41 jobs per year with annual earnings of approximately \$2.3 million. Total economic output could also increase by an estimated \$5.9 million as a result of Facility operations and maintenance.

3. Land Lease Payments

Operation of the Project will result in payment to local landowners in association with the lease agreements executed to host Project components. These annual lease and easement payments will offer direct benefits to participating landowners, which will be in addition to any income generated from the surrounding land use (e.g. agricultural production). The Applicant estimates that these payments will total approximately \$1,300,000 million on an annual basis each year the Project is in operation, although this value is contingent upon project details still in development (e.g., turbine choice and layout). The Project will also generate lease payments during the construction phase; while the value is currently unknown, the lease payments will have a beneficial impact on the local economy during construction. These lease payments will have a positive impact on the region, to the extent that landowners will spend their revenue locally.

Part VI: Local Tax Revenues

1. Legislative Context

Wind energy projects in the State of Ohio can be exempted from tangible personal property and real property tax payments if they meet certain conditions. These conditions are enumerated in Section 5727.75 of the ORC. Operators of these exempted projects, known as qualified energy projects (QEP), are instead required to make annual payments in lieu of taxes (PILOT). In order to be certified as a QEP by the state, a project must meet all of the following criteria:

- an application for certification of the energy project as a QEP that complies with the requirements under Section 5727.75 of the ORC and Chapter 122:23-1 of the OAC must be submitted to the director of the Ohio Development Services Agency (ODSA) on or before December 31, 2020;
- an application under Section 4906.20 of the ORC must be submitted to the Ohio Power Siting Board (OPSB) on or before December 31, 2020;
- the county commissioners of a county in which property of the project is located must have adopted a resolution approving the application submitted to ODSA or the county commissioners must pass a resolution declaring the county an alternative energy zone (AEZ);
- at least 50% of the full-time equivalent construction and installation employees, as defined in Section 5727.75 of the ORC, must be Ohio-domiciled; and
- construction (defined as either the date the application for a certificate is filed with OPSB or the date the contract for construction or installation is entered into, whichever is earlier) must begin by January 1, 2021.

If an applicant is granted exemption from taxation for any of the tax years 2011 through 2021, the QEP will be exempt from taxation for tax year 2022 and all ensuing years if the property was placed into service before January 1, 2022. The amount of PILOT to be paid annually to the county treasurer, ranging from \$6,000 and \$8,000, is assessed per megawatt (MW) of nameplate capacity, with the rate dependent on the percentage of construction/installation employees who are domiciled in Ohio. The PILOT would be: \$6,000 per MW, if during construction the project employs 75% or more Ohio-domiciled employees; \$7,000 per MW, if during construction the project employs 60% or more Ohio-domiciled employees; and \$8,000 per MW, if during construction the project employs the minimum requirement of 50% or more Ohio-domiciled employees (Table 8). County commissioners may require an additional service payment, as long as the total of the additional payment and the PILOT do not exceed \$9,000 per MW.

Table 8: Service Payment per Megawatt Schedule

Annual Service Payment per Megawatt of Nameplate Capacity	Ratio of Ohio-Domiciled Full-Time Equivalent Employees
\$6,000	75% or More
\$7,000	60% to 74%
\$8,000	50% to 59%

2. Estimated Payments In Lieu Of Taxes

Turbines for the Republic Wind Farm are anticipated to be located in a total of five municipalities (Adams, Pleasant, Reed, Scipio, and Thompson Townships) in Seneca County and one municipality (York Township) in Sandusky County, along with four school districts (Bellevue City School District, Clyde-Green Springs Exempted Village School District, Old Fort Local School District, Seneca East Local School District). Table 9 displays the total estimated PILOT revenues to be distributed throughout all taxing jurisdictions under the four scenarios identified in the payment schedule in Section 5727.75 of the ORC.

Table 9: Estimated Total PILOT Revenue

Total Facility capacity (MW)	PILOT at \$6,000/MW	PILOT at \$7,000/MW	PILOT at \$8,000/MW	PILOT at \$9,000/MW
200	\$1,200,000	\$1,400,000	\$1,600,000	\$1,800,000

Part VII: Conclusion

The socioeconomic effects of the Republic Wind Farm, when assessed in light of regional and local economic trends, will have a positive impact on the communities within the Study Area and across the State of Ohio. Lease payments, short- and long-term job creation, and PILOT revenues will benefit private landowners, businesses, and taxing jurisdictions. The Facility is not expected to generate significant expenditures on behalf of these beneficiaries; therefore, it will have a positive impact on the social and economic conditions of these communities and across Ohio.

1. Total Statewide Economic Benefit

The construction of the Republic Wind Farm is expected to produce \$41.1 million in employment earnings and \$112.2 million in total economic output. Subsequently, each year the Facility is operational it is expected to generate approximately \$2.3 million in earnings and \$5.9 million in total economic output.

2. Statewide Employment Benefits

During the construction period, the Facility is expected to support demand for a total of 753 onsite, supply chain, and induced employment positions. It is expected to support a total of 41 positions during each year of its operation.

3. Land Lease Revenues

The development of the Facility will result in \$[REDACTED] in annual lease payments made to participating landowners.

4. Property Tax Revenues

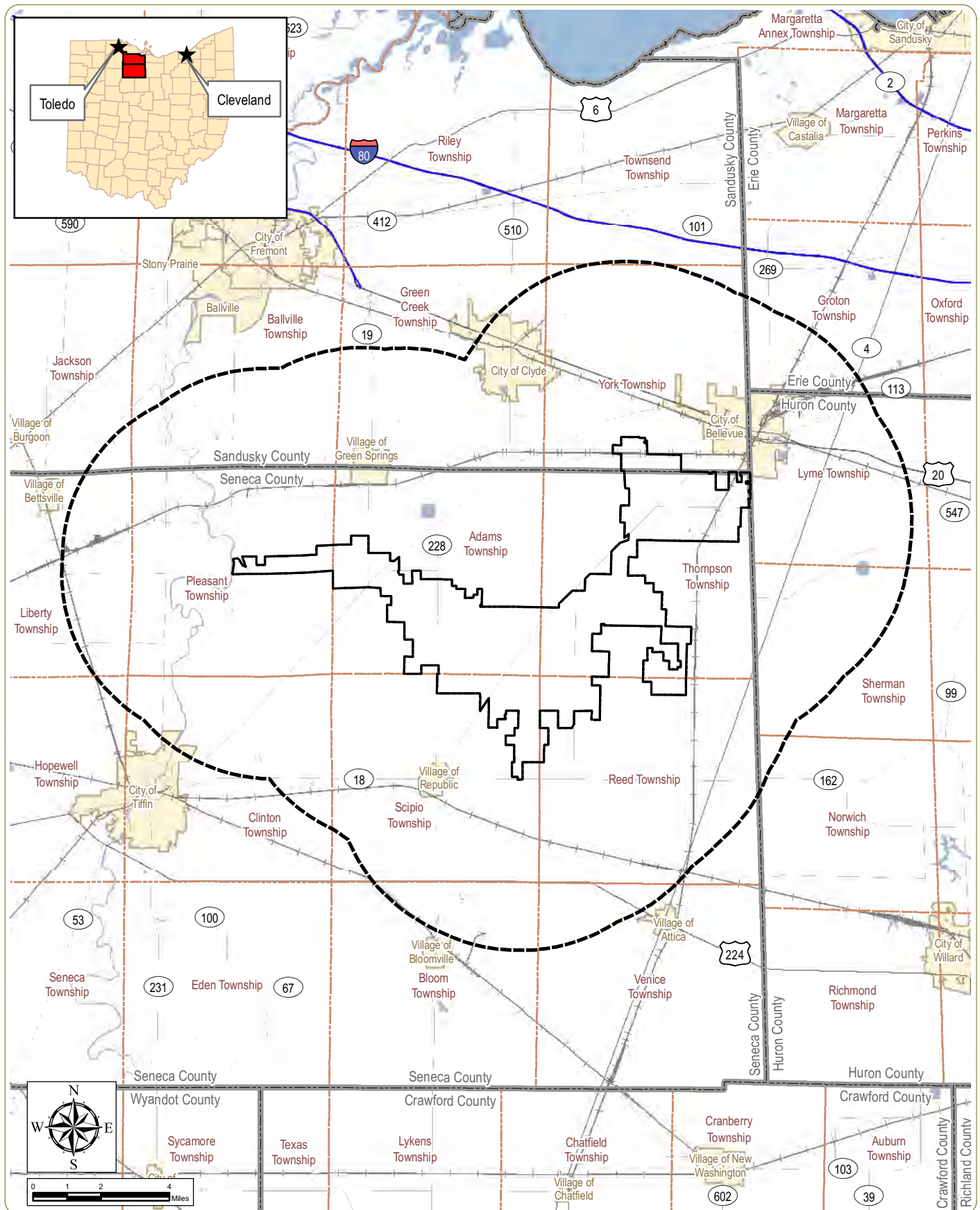
Construction of the proposed Republic Wind Farm will increase local government revenues through payments in lieu of taxes (PILOTs). Though the agreements outlining these payments are not yet finalized, it is estimated that annual PILOT revenues could amount to approximately \$1.2 million to \$1.8 million to be distributed to local taxing jurisdictions.

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Figures



Republic Wind Farm

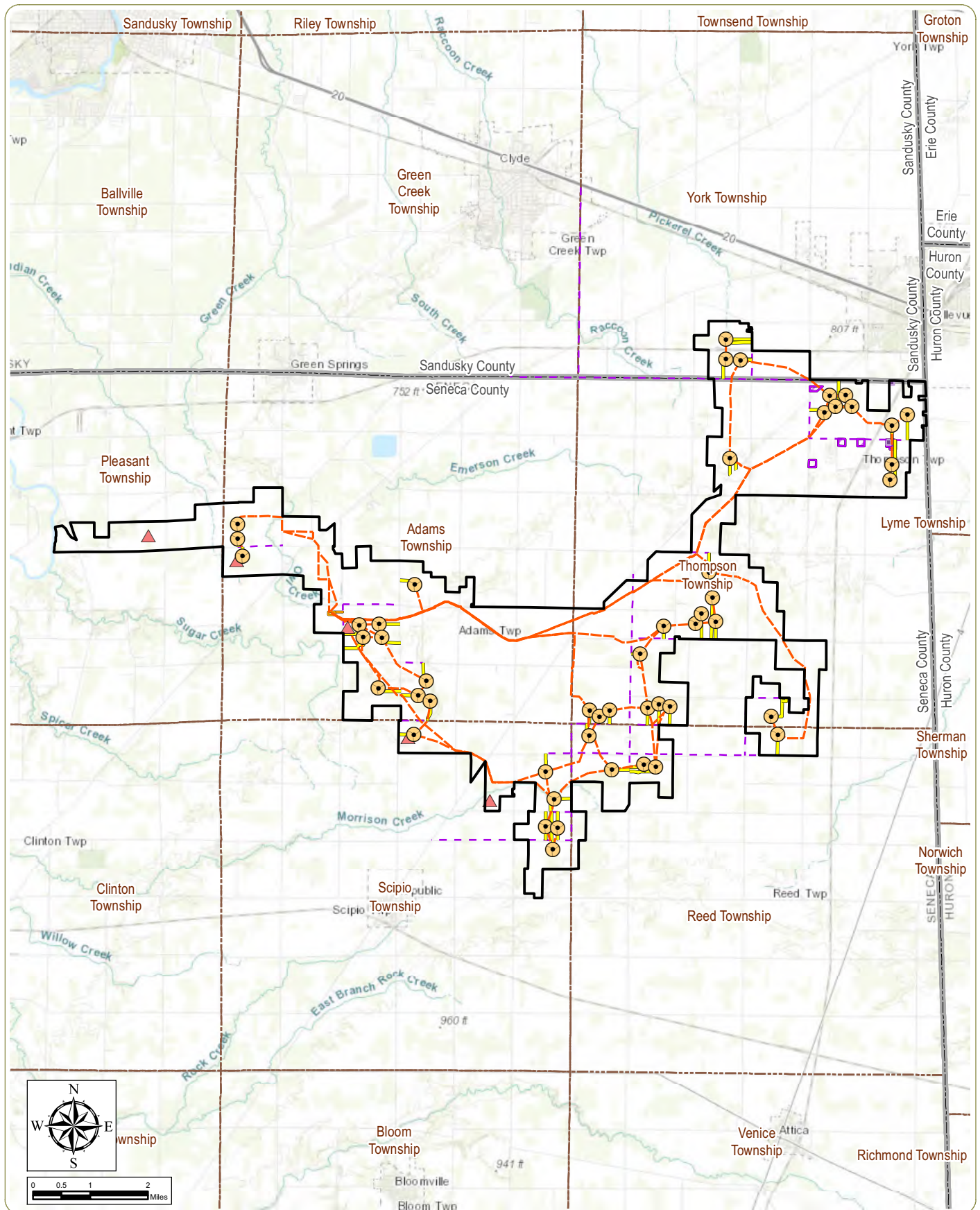
Adams, Reed, Scipio, and Thompson Townships,
Seneca County, and York Township, Sandusky County, Ohio

Figure 1: 5-Mile Study Area

Notes: 1. Basemap: ESRI StreetMap North America, 2012. 2. This map was generated in ArcMap on December 7, 2018. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- Major Highways
- Highways
- Major Roads
- Railroad
- Project Area
- 5-Mile Study Area
- City/Village Boundary
- Township Boundary
- County Boundary





Republic Wind Farm

Adams, Reed, Scipio, and Thompson Townships, Seneca County, and York Township, Sandusky County, Ohio

Figure 2: Facility Layout

Notes: 1. Basemap: ESRI ArcGIS Online "World Topographic Map" map service. 2. This map was generated in ArcMap on November 29, 2018. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- | | |
|-----------------------|-------------------|
| Wind Turbine | Laydown Yard |
| Met Tower | O&M Facility |
| Access Road | Project Boundary |
| Collection Line | Township Boundary |
| Local Delivery Route | County Boundary |
| Collection Substation | |



EXHIBIT H. Noise Impact Assessment



REPORT

NOISE IMPACT ASSESSMENT FOR REPUBLIC WIND – SENECA AND SANDUSKY COUNTY, OHIO

12.11.2018



PREPARED FOR:
APEX CLEAN ENERGY

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NOISE IMPACT ASSESSMENT FOR REPUBLIC WIND – SENECA AND SANDUSKY COUNTY, OHIO

PREPARED FOR:
APEX CLEAN ENERGY

CONTENTS

1.0	INTRODUCTION.....	1
2.0	PROJECT DESCRIPTION.....	2
3.0	SOUND LEVEL LIMITS/GUIDELINES.....	4
3.1	State Standards.....	4
4.0	PRE-CONSTRUCTION BACKGROUND SOUND LEVELS.....	5
4.1	Descriptions of the Monitoring Locations	5
	North Boundary	6
	Mixed Residential.....	7
	Agricultural Operations.....	7
	Busy Roadway	7
	Wooded Area	7
	Remote Rural Area	8
	South Boundary	8
4.2	Monitoring Methodology	17
	Data Acquisition	17
	Data Analysis	17
4.3	Monitoring Results.....	17
	Summary of Meteorological Data.....	17
	Summary of Sound Levels.....	18
	Results at Each Monitoring Location	20
5.0	ISSUES SPECIFIC TO WIND TURBINE SOUND.....	34

5.1 Sound Emissions From Wind Turbines	34
Aerodynamic Noise	34
Mechanical Noise	35
Amplitude Modulation	36
5.2 Effects of Meteorology	37
5.3 Masking of Sound	38
5.4 Infrasound and Low-Frequency Sound	39
6.0 SOUND PROPAGATION MODELING	41
6.1 Procedures	41
6.2 Results of Sound Propagation Modeling	42
Construction Activity Sound Emissions	46
7.0 SUMMARY AND CONCLUSIONS	48
APPENDIX A: A PRIMER ON SOUND AND NOISE	50
A.1 Sound as a Wave	50
A.2 Sound Pressure Level	51
Lmin and Lmax	51
Percentile Sound Level - L_n	51
Equivalent Continuous Sound Level - L_{eq}	52
A.3 Spectral Sound Levels	52
Octave Bands	53
Frequency Weighting	54
A.4 Sound Level Meter Response	55
APPENDIX B: SOUND SOURCE INFORMATION	56
APPENDIX C: RECEIVER INFORMATION	57

List of Figures

FIGURE 1: PROJECT AREA MAP	3
FIGURE 2: LONG-TERM MONITORING LOCATIONS FOR REPUBLIC WIND (PRE-CONSTRUCTION)	6
FIGURE 3: MAP OF THE "NORTH BOUNDARY" MONITOR SITE WITH ORTHO-IMAGERY	9
FIGURE 4: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "NORTH BOUNDARY"	9
FIGURE 5: MAP OF THE "MIXED RESIDENTIAL" MONITOR LOCATION WITH ORTHO-IMAGERY	10
FIGURE 6: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "MIXED RESIDENTIAL"	11
FIGURE 7: MAP OF THE "AGRICULTURAL OPERATIONS" MONITOR LOCATION WITH ORTHO-IMAGERY	11
FIGURE 8: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "AGRICULTURAL OPERATIONS"	12
FIGURE 9: MAP OF THE "BUSY ROADWAY" MONITOR LOCATION WITH ORTHO-IMAGERY	12
FIGURE 10: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "BUSY ROADWAY"	13
FIGURE 11: MAP OF THE "WOODED AREA" MONITOR LOCATION WITH ORTHO-IMAGERY	13
FIGURE 12: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "WOODED AREA"	14
FIGURE 13: MAP OF THE "REMOTE RURAL AREA" MONITOR LOCATION WITH ORTHO-IMAGERY	15
FIGURE 14: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "REMOTE RURAL AREA"	15
FIGURE 15: MAP OF THE "SOUTH BOUNDARY" LOCATION WITH ORTHO-IMAGERY	16
FIGURE 16: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "SOUTH BOUNDARY"	16
FIGURE 17: MONITOR DATA, NORTH BOUNDARY SITE, FEBRUARY 3-7, 2016.....	20
FIGURE 18: MONITOR DATA, NORTH BOUNDARY SITE, FEBRUARY 8-14, 2016.....	21
FIGURE 19: MONITOR DATA, NORTH BOUNDARY SITE, FEBRUARY 15-18, 2016.....	21
FIGURE 20: MONITOR DATA, MIXED RESIDENTIAL SITE, FEBRUARY 3-7, 2016	22
FIGURE 21: MONITOR DATA, MIXED RESIDENTIAL SITE, FEBRUARY 8-14, 2016.....	23
FIGURE 22: MONITOR DATA, MIXED RESIDENTIAL SITE, FEBRUARY 15-18, 2016	23
FIGURE 23: MONITOR DATA, AGRICULTURAL OPERATIONS SITE, FEBRUARY 3-7, 2016	24
FIGURE 24: MONITOR DATA, AGRICULTURAL OPERATIONS SITE, FEBRUARY 8-14, 2016	25
FIGURE 25: MONITOR DATA, AGRICULTURAL OPERATIONS SITE, FEBRUARY 15-18, 2016	25
FIGURE 26: MONITOR DATA, BUSY ROADWAY SITE, FEBRUARY 3-7, 2016	26
FIGURE 27: MONITOR DATA, BUSY ROADWAY SITE, FEBRUARY 8-14, 2016	27
FIGURE 28: MONITOR DATA, BUSY ROADWAY SITE, FEBRUARY 15-18, 2016	27
FIGURE 29: MONITOR DATA, WOODED AREA SITE, FEBRUARY 3-7, 2016	28
FIGURE 30: MONITOR DATA, WOODED AREA SITE, FEBRUARY 8-14, 2016	29
FIGURE 31: MONITOR DATA, WOODED AREA SITE, FEBRUARY 15-18, 2016	29
FIGURE 32: MONITOR DATA, REMOTE RURAL SITE, FEBRUARY 3-7, 2016	30
FIGURE 33: MONITOR DATA, REMOTE RURAL AREA, FEBRUARY 8-14, 2016.....	31
FIGURE 34: MONITOR DATA, REMOTE RURAL AREA, FEBRUARY 15-18, 2016	31
FIGURE 35: MONITOR DATA, SOUTH BOUNDARY SITE, FEBRUARY 3-7, 2016.....	32
FIGURE 36: MONITOR DATA, SOUTH BOUNDARY SITE, FEBRUARY 8-14, 2016	33
FIGURE 37: MONITOR DATA, SOUTH BOUNDARY SITE, FEBRUARY 8-14, 2016	33
FIGURE 38: AIRFLOW AROUND A ROTOR BLADE.....	35
FIGURE 39: SCHEMATIC OF THE REFRACTION OF SOUND DUE TO VERTICAL WIND GRADIENT (WIND SHEAR)	37
FIGURE 40: COMPARISON OF NORMALIZED FREQUENCY SPECTRA MEASURED FROM A 5 M/S WIND EVENT AND THE SOUND POWER SPECTRA FROM VESTAS V150, SIEMENS SG4.5-145, AND NORDEX N149 WIND TURBINES	38

FIGURE 41: MEASURED HUMAN AUDIBILITY THRESHOLD AND THE 90 DBG CURVE (AN ASSUMED HUMAN PERCEPTION THRESHOLD) COMPARED WITH SOUND LEVEL MEASURED 350 METERS (1,150 FEET) FROM A WIND TURBINE	39
FIGURE 42: SOUND PROPAGATION MODELING RESULTS – VESTAS V150 4.2 MW.....	44
FIGURE 43: SOUND PROPAGATION MODELING RESULTS – SIEMENS SG4.5-145	45
FIGURE 44: SOUND PROPAGATION MODELING RESULTS – NORDEX N149 4.5 MW	46
FIGURE 45: SOUND AS A WAVE	50
FIGURE 46: EXAMPLE OF DESCRIPTIVE TERMS OF SOUND MEASUREMENT OVER TIME	52
FIGURE 47: RELATIONSHIP BETWEEN FREQUENCY AND WAVELENGTH	53
FIGURE 48: SOUND WEIGHTING SCHEMES	54
FIGURE 49: SOUND SOURCE MAP	56
FIGURE 50: RECEIVER LOCATIONS - NW QUADRANT	57
FIGURE 51: RECEIVER LOCATIONS - NE QUADRANT	58
FIGURE 52: RECEIVER LOCATIONS - SE QUADRANT	59
FIGURE 53: RECEIVER LOCATIONS - SW QUADRANT	60

List of Tables

TABLE 1: MAXIMUM MEASURED WIND SPEEDS BY SITE.....	18
TABLE 2: SUMMARY SOUND LEVELS FROM PRE-CONSTRUCTION MONITORING	19
TABLE 3: PROJECT TRANSFORMER SOUND POWER LEVELS	42
TABLE 4: NUMBER OF TURBINES IN EACH NOISE MODE	43
TABLE 5: MAXIMUM SOUND LEVELS FROM VARIOUS TYPES OF CONSTRUCTION EQUIPMENT ASSUMING NO ATTENUATION FROM TREES OR TERRAIN	47
TABLE 6: SOUND PROPAGATION MODELING PARAMETERS	56
TABLE 7: DISCRETE RECEIVER RESULTS	61

1.0 INTRODUCTION

Apex Clean Energy is proposing the Republic Wind project in an area straddling the border between Seneca County and Sandusky County, Ohio between the towns of Republic and Bellevue. A previous noise assessment was published for this project by RSG (*Noise Impact Assessment for Republic Wind*, December 22, 2017) with a 58-turbine array. The array summarized in this current report has up to 50 wind turbines, with one spare location, modeled with three turbine model options. The current array is being presented as an alternative and does not replace the previous array.

As part of the Ohio Power Siting Board (OPSB) permitting process, Apex Clean Energy retained RSG to conduct a pre-construction noise assessment. This assessment includes both long-term background sound monitoring and computer sound propagation modeling of the proposed turbines.

This report includes:

- A project description;
- A summary of sound level limits applicable to the project;
- Background sound level monitoring procedures and results;
- Discussion of acoustical concerns particular to wind turbine noise;
- Sound propagation modeling procedures and results;
- Construction noise modeling;
- Discussion; and
- Conclusions.

2.0 PROJECT DESCRIPTION

Republic Wind is proposed to span Seneca and Sandusky Counties in Ohio. The project rights have been acquired by Apex Clean Energy.

The project covers approximately 15,000 acres, with up to 58 wind turbine locations and a total project output of at least 200 MW. A map showing the project area is shown in Figure 1, showing an alternative layout with up to 50 locations, including one spare location.

The project is roughly bounded by U.S. 20, which passes approximately two kilometers north of the project area, Ohio Route 4 on the east, and Ohio Routes 18 and 162 on the South.

Terrain in the area is flat overall with small undulations. Southern parts of the project area generally have more elevation change. The Sandusky river passes just to the west of the project area. Land use is primarily agricultural. Most land is cultivated, with some scattered stands of trees.

A final wind turbine type has not been selected for the project. Currently considered turbine models for this particular array are the Vestas V150 4.2 MW with a hub height of 105 meters; Siemens/Gamesa SG4.5-145 with a 107.5-meter hub height; and Nordex N149 4.5 MW with a 109-meter hub height. The turbine models considered for the previously-modeled turbine array were the GE 3.6-137, Acciona AW132, and Vestas V136 3.6 MW. The project will also include a single 67-90-112 MVA transformer at the collector substation and individual pad-mounted transformers at the base of each turbine.

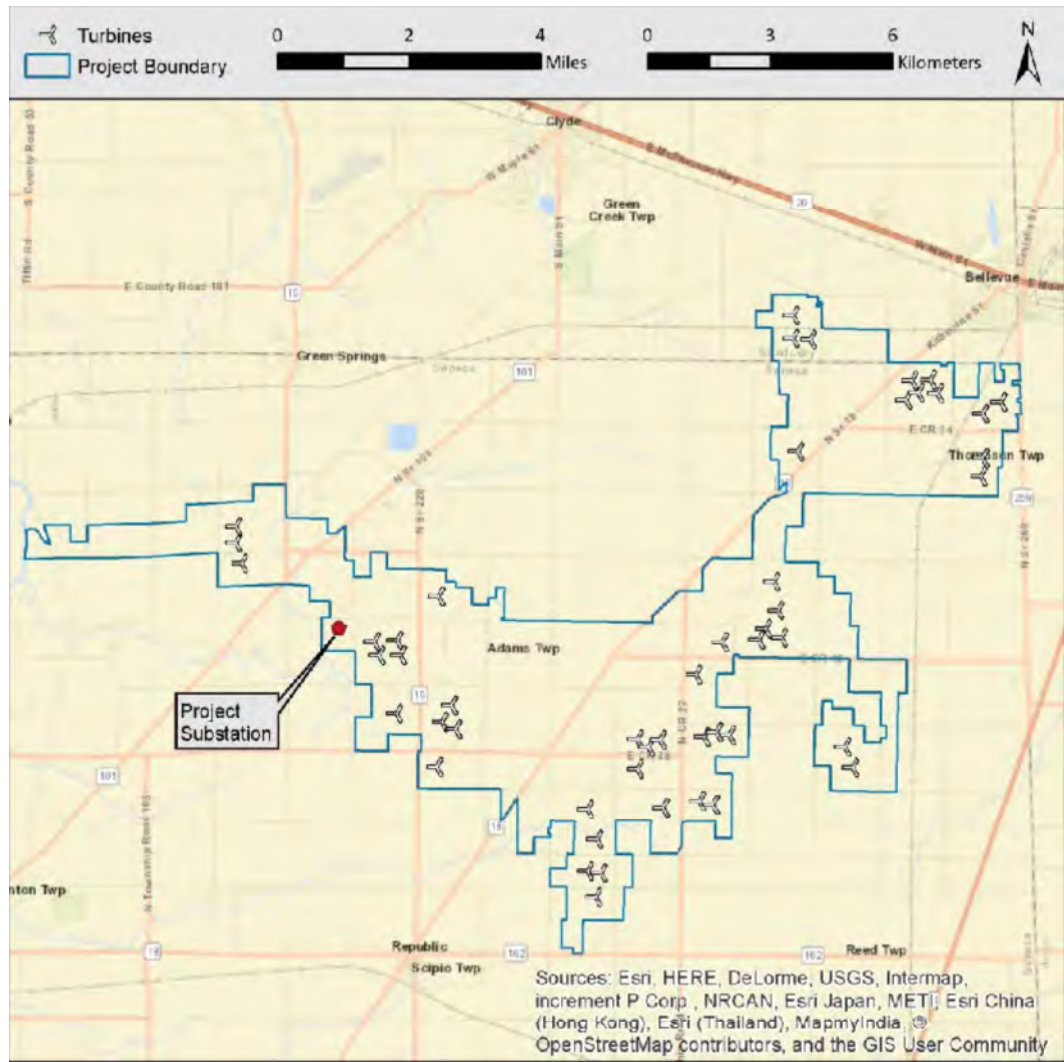


FIGURE 1: PROJECT AREA MAP

3.0 SOUND LEVEL LIMITS/GUIDELINES

3.1 | STATE STANDARDS

Sound levels from wind power projects are regulated under Section 4906-4-09(F) of the Ohio Administrative Code (“OAC”) which states:

(2) The facility shall be operated so that the facility noise contribution does not result in noise levels at any non-participating sensitive receptor within one mile of the project boundary that exceed the project area ambient nighttime average sound level (L_{eq}) by five A-weighted decibels (dBA). During daytime operation only (seven a.m. to ten p.m.), the facility may operate at the greater of: the project area ambient nighttime L_{eq} plus five dBA; or the validly measured ambient L_{eq} plus five dBA at the location of the sensitive receptor. After measured ambient L_{eq} plus five dBA at the location of the sensitive receptor. After commencement of commercial operation, the applicant shall conduct further review of the impact and possible mitigation of all project-related noise complaints through its complaint resolution process. Non-participating, as used in this context, refers to a property for which the owner has not signed a waiver or otherwise agreed to be subject to a higher noise level.

Based on ambient sound monitoring conducted at seven locations throughout the Republic project area (see Section 4), the existing nighttime background L_{eq} in the area is 41 dBA. Applying the OPSB sound level limit results in a nighttime sound level limit of 46 dBA. As discussed in Section 4, the daytime sound levels are generally higher than the nighttime sound levels throughout the project area, so a higher daytime limit may be possible at some sensitive receptors, but for the purposes of this assessment, the nighttime sound level limit of 46 dBA is applied.

Section 4906-4-09(F) also limits the hours of construction activities that increase sound above ambient levels at sensitive receptors to the hours of 7 AM to 7 PM or dusk, whichever is later. Pile driving, blasting, and rock hammering are further restricted to the hours of 10 AM to 5 PM. There are also requirements regarding notification of property owners and tenants related to construction activities.

4.0 PRE-CONSTRUCTION BACKGROUND SOUND LEVELS

Background sound monitoring was conducted to assess representative ambient sound levels in the project area to form the basis for the noise limit. This section of the report describes the monitoring performed and discusses the results obtained. It includes a description of the monitoring procedures, monitoring locations, sound data processing, and the results obtained for each of the monitoring locations. Observations and conclusions regarding the existing soundscapes at each monitoring location are included.

4.1 | DESCRIPTIONS OF THE MONITORING LOCATIONS

Background sound level monitoring was performed from February 3 through February 18, 2016 at seven different locations spread across the proposed project area. Each location was selected as representative of a given landscape or soundscape that would be in proximity of one or more of the proposed wind turbines. In placing monitors, consideration is also given to accessibility in winter weather and to the security of the monitoring equipment.

The seven sites are shown in Figure 2, and the reasons for selecting each are described below:

1. “North Boundary”: This location is near the northern extremity of the proposed project, on the boundary between Seneca and Sandusky Counties. This area represents a lower vehicle traffic agricultural area in the northern part of the project;
2. “Mixed Residential”: Flat Rock is one of the few higher-density residential areas within the proposed project boundary. It is also along a rail line with a crossing;
3. “Agricultural Operations”: Most of the area within the proposed project boundary is taken up with larger-scale agricultural operations and related low-density housing. Note that our monitoring took place in the winter and farming activities were not evident;
4. “Busy Roadway”: Most of the area is crossed with town roads (TR) and county roads (CR) with very light traffic. But the project area is also crossed by a few larger roadways. This site is near State Route 18 (SR18), which bisects the entire project area and where the traffic is significantly higher;
5. “Wooded Area”: The majority of the proposed project area is characterized by open agricultural fields. There are a few forested areas, where the soundscape includes a different mix of biogenic sources. This particular wooded area was selected because it was further from roadways but still accessible in wintertime;
6. “Remote Rural”: As stated above, most the area is open agricultural fields crossed by lightly-traveled roadways. This site represents an effort to find a quiet area that is still subject to agricultural activity; and,

7. “Southern Boundary”: This location is near the southern extremity of the proposed project. This location represents a lower traffic agricultural area in the southern part of the project.

Each monitoring location is described in detail below. Note that some of the installation photos were taken on February 2 or 3 when there had been no recent snowfall, while others were taken on February 11, when a light snow was on the ground.

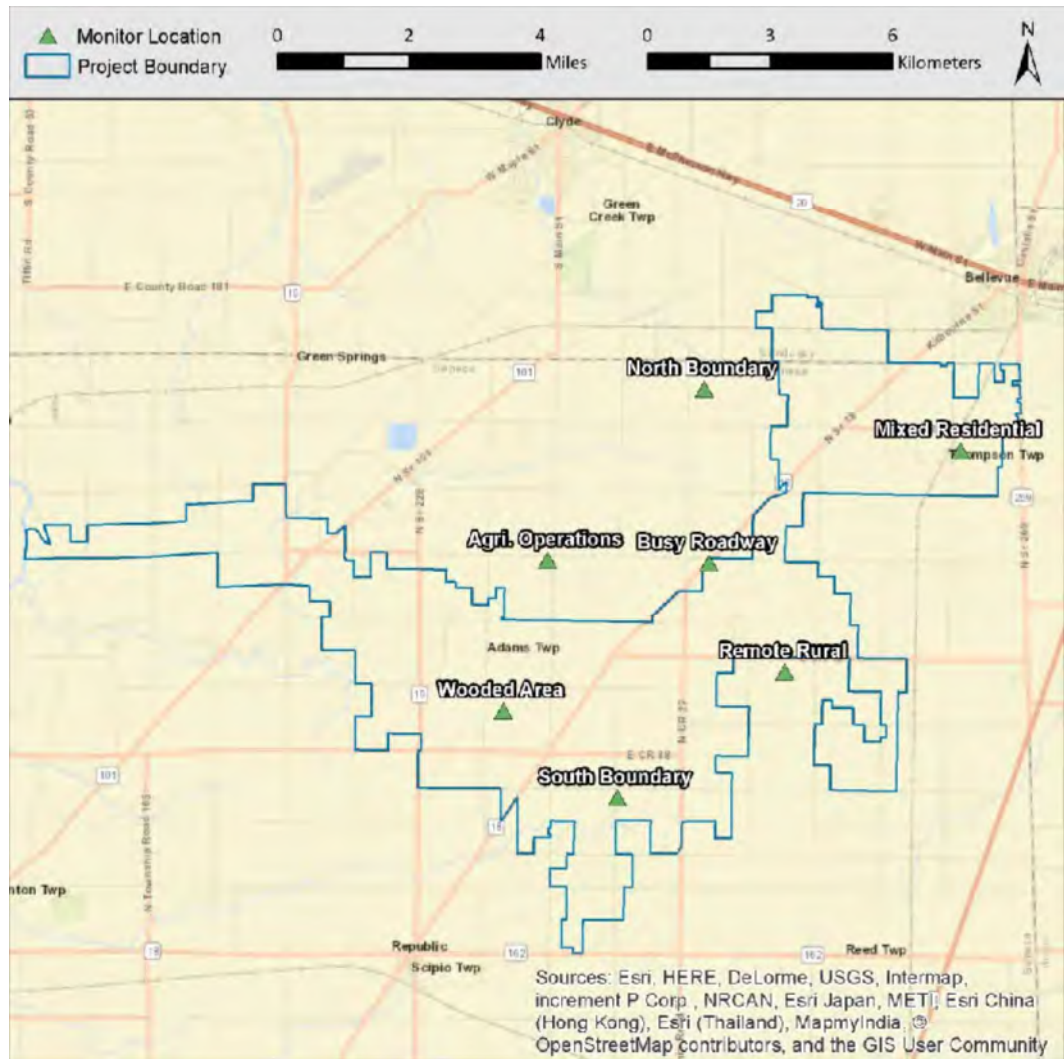


FIGURE 2: LONG-TERM MONITORING LOCATIONS FOR REPUBLIC WIND (PRE-CONSTRUCTION)

NORTH BOUNDARY

The monitor labeled “North Boundary” was located 375 meters (1,230 feet) east of Route TR79. The project boundary is located approximately 1,220 meters (4,000 feet) to the east, along TR80 and the border between Seneca and Sandusky Counties (County Route 62) is located approximately 700 meters (2,300 feet) to the north. The site is shown in Figure 3. A

two-building chicken operation was located about 454 meters (1,490 feet) to the north of the monitor.

The monitoring system and an anemometer were secured along the tree-line separating two parcels, as shown in Figure 4.

MIXED RESIDENTIAL

The monitor labeled “Mixed Residential” was in the village of Flat Rock. It was placed 208 meters (682 feet) east of North County Road 29, 106 meters (348 feet) northeast of the Flat Rock Care Center. The site is shown in Figure 5. To the west of the monitor was the residential area; to the east were agricultural fields. The monitor was 392 meters (1,286 feet) from the closest point of approach of the rail line, and 515 meters (1,690 feet) from the crossing of that rail line with CR29.

The monitoring system, an anemometer, and a thermometer were secured along the tree-line separating the residential parcels from the farm fields, as shown in Figure 6.

AGRICULTURAL OPERATIONS

The monitor labeled “Agricultural Operations” was located near the residence of an agricultural parcel at the corner of County Roads 32 and 21 in Clyde, Ohio as shown in Figure 7. The monitor was placed approximately 90 meters (300 feet) south of Country Road 32, and 120 meters (390 feet) west of Country Road 21. The participating parcel includes the residence, grain storage containers, and two equipment barns, all surrounded by agricultural fields.

The monitoring system and an anemometer were secured on the northern edge of the residential portion of the property, as shown in Figure 8.

BUSY ROADWAY

The monitor labeled “Busy Roadway” was located 85 meters (279 feet) southeast of State Route 18 (SR18) and 149 meters (489 feet) south of County Road 32 (CR32), as shown in Figure 9. The monitor was placed along a small grove of trees in an open, untilled patch bordered by three agricultural fields. A residence was located 210 meters (689 feet) to the northeast, across CR32.

The monitoring system was secured near one of the trees in the grove, as shown in Figure 10.

WOODED AREA

The monitor labeled “Wooded Area” was located 613 meters (2,011 feet) south of Town Road 138 (TR138) and 588 meters (1,929 feet) east of Town Road 179 (TR 179), as shown in Figure 11. The location was near a maple sugaring shack that was in operation for brief periods during monitoring. A large confinement facility was located across TR138, approximately 777 meters (2,550 feet) to the north of the monitor.

The monitoring system was secured within the trees on the northern edge of the woods, as shown in Figure 12.

REMOTE RURAL AREA

The monitor labeled “Remote Rural Area” was located 355 meters (1,165 feet) south of County Road 46 (CR46) and 874 meters (2,867 feet) east of Town Road 80 (TR80), as shown in Figure 13. It was on the edge of a small grove of trees in the center of the adjacent agricultural fields. This location was also 351 meters (1,152 feet) to the west of the boundary line of the proposed project area near CR46. While the location and density of residences is similar in this area to others selected for monitoring, it is further from more heavily-traveled roads. It was 3.22 kilometers (2 miles) due west of the rail line that passes through Flat Rock.

The monitoring system was secured along the edge of the field and tree-line, as shown in Figure 14. The microphone is highlighted in the photograph.

SOUTH BOUNDARY

The monitor labeled “South Boundary” was located 251 meters (823 feet) south of County Road 24 (CR24) and 96 meters (315 feet) east of Town Road 183 (TR183), as shown in Figure 15. This area is near the southern boundary of the proposed project area: the boundary follows CR24 and then jogs south to Town Road 124 (TR124) for just over one mile.

The monitoring system and an anemometer were secured along south edge of a stand of trees in this area, as shown in Figure 16.

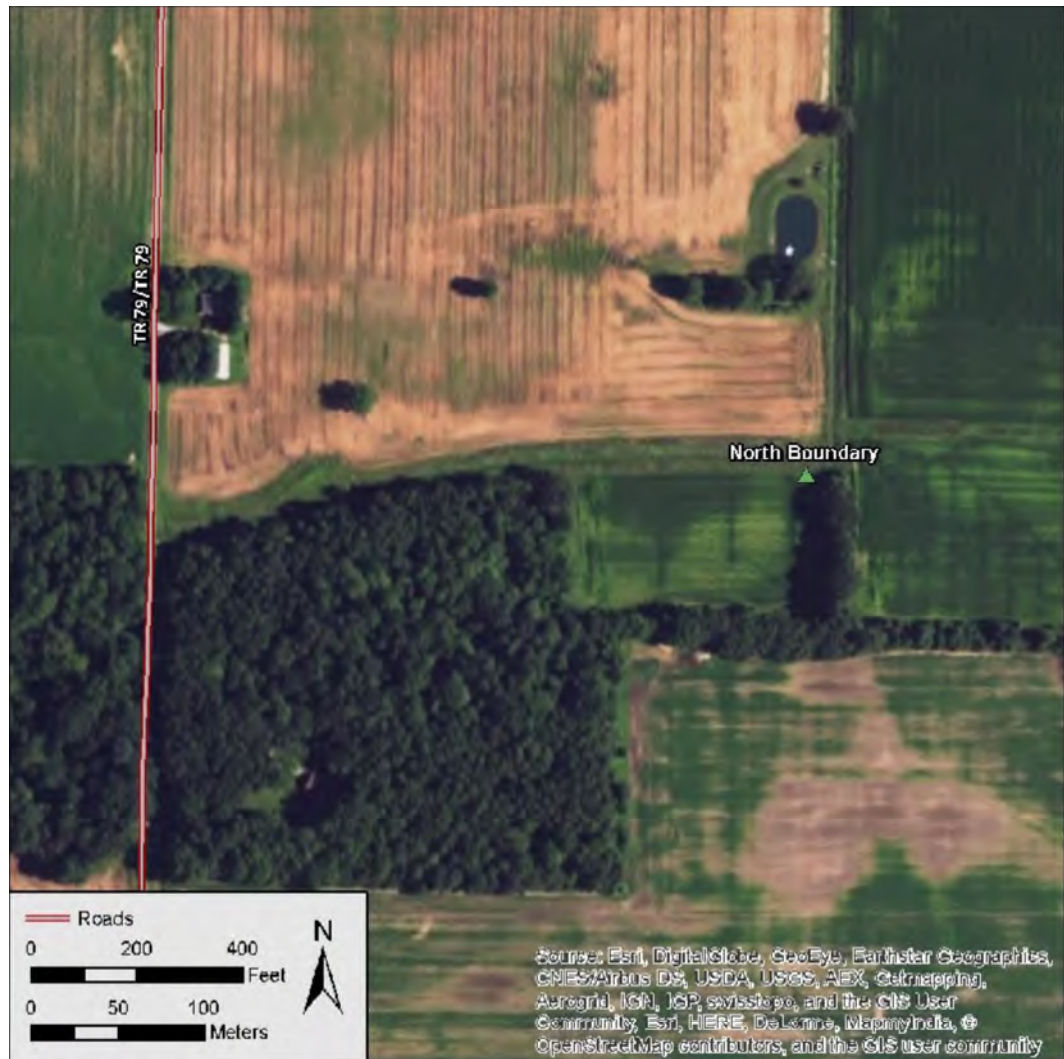


FIGURE 3: MAP OF THE "NORTH BOUNDARY" MONITOR SITE WITH ORTHO-IMAGERY



FIGURE 4: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "NORTH BOUNDARY"



FIGURE 5: MAP OF THE "MIXED RESIDENTIAL" MONITOR LOCATION WITH ORTHO-IMAGERY



FIGURE 6: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "MIXED RESIDENTIAL"



FIGURE 7: MAP OF THE "AGRICULTURAL OPERATIONS" MONITOR LOCATION WITH ORTHO-IMAGERY



FIGURE 8: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "AGRICULTURAL OPERATIONS"

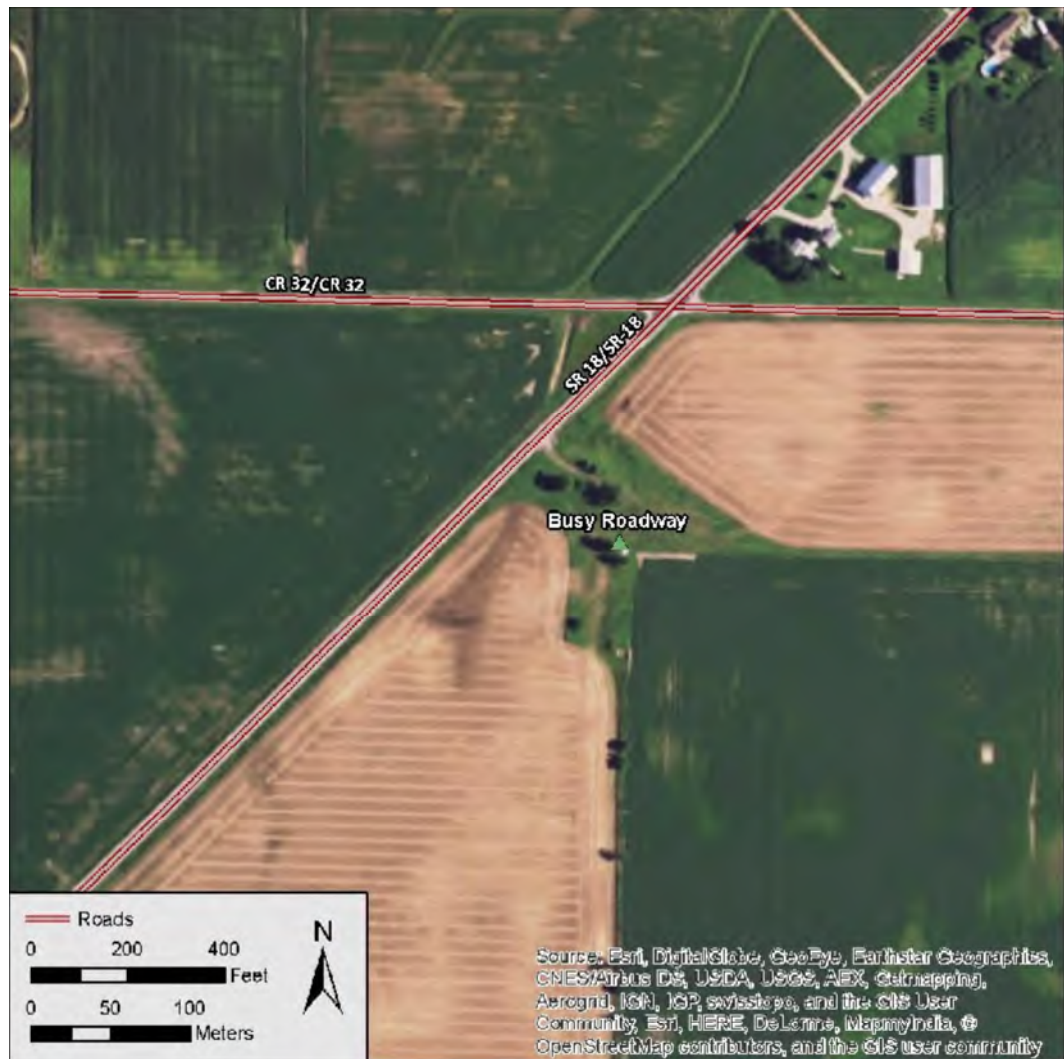


FIGURE 9: MAP OF THE "BUSY ROADWAY" MONITOR LOCATION WITH ORTHO-IMAGERY



FIGURE 10: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "BUSY ROADWAY"



FIGURE 11: MAP OF THE "WOODED AREA" MONITOR LOCATION WITH ORTHO-IMAGERY



FIGURE 12: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "WOODED AREA"



FIGURE 13: MAP OF THE "REMOTE RURAL AREA" MONITOR LOCATION WITH ORTHO-IMAGERY



FIGURE 14: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "REMOTE RURAL AREA"



FIGURE 15: MAP OF THE "SOUTH BOUNDARY" LOCATION WITH ORTHO-IMAGERY



FIGURE 16: PHOTOGRAPH OF THE MONITOR INSTALLATION AT "SOUTH BOUNDARY"

4.2 | MONITORING METHODOLOGY

DATA ACQUISITION

Sound levels at each monitoring location were measured using one of three sound level meters: the Cesva SC-310, Svantek SV979, or Rion NL-22. All sound level meters logged A-weighted equivalent continuous sound levels once each second. The Cesva and Svantek models are ANSI/IEC Type 1 sound level meters, and logged 1/3-octave-band spectral sound levels once each second. The Rion model used at the “Busy Roadway” location is an ANSI/IEC Type 2 sound level meter. It did not log spectral sound levels.

Each sound level meter’s microphone was mounted on a wooden stake at a height of approximately 1.2 meters (4 feet) and covered with a weather-resistant windscreen. The windscreen acts to reduce the influence of wind-induced self-noise on the measurements.

Real time audio was recorded continuously at each location using the signal acquired through the sound level meter microphone. The Svantek SV979 meters recorded WAV audio internally. The analog signals from each of the other meters were input to external digital audio recorders.

Average wind speeds and maximum gust speeds were logged once per minute at four locations throughout the site using ONSET Hoboware anemometers. Air temperature was logged once per minute at the “Mixed Residential” location.

DATA ANALYSIS

After the monitoring period, 1-second logged sound level data were compiled in 10-minute periods. Data from those periods during which weather conditions exceeded the operational ranges of the instrumentation were removed from results. These conditions include maximum gust speeds above 5 m/s (11 mph), temperatures below -10 °C (14 °F), or precipitation in the form of rain. (Snow periods are not excluded.) Other data periods were removed for seasonal sound sources (snow plows, snowmobiles, etc.), anomalous activities in the immediate vicinity of the microphones (such as interaction of people or animals with the equipment), and during station calibration/check-up.

For each monitor site, results are presented as graphs of sound levels and maximum wind (gust) speed as a function of time throughout the monitoring period. Two sound level metrics are plotted in each graph: equivalent continuous sound levels (L_{eq}) and 10th-percentile sound levels (L_{90}). The data which were excluded from summary processing are included in the graphs but shown in lighter colors.

4.3 | MONITORING RESULTS

SUMMARY OF METEOROLOGICAL DATA

Strong winds were common throughout the monitoring period, and temperatures dropped below -10 °C (14 °F) several times. Temperatures during the monitoring period ranged from a low of -19.1° C (-2.4° F) to a high of 15.6° C (60.1° F). The maximum wind speeds and

gusts recorded at the four sites equipped with anemometry are listed in Table 1. Over the 15 days of monitoring, precipitation fell as rain on February 8 and February 15.¹ The exact rain periods at each site were verified from their respective audio recordings.

TABLE 1: MAXIMUM MEASURED WIND SPEEDS BY SITE

Monitoring Location	Max Wind Speed		Max Gust Speed		Average Wind Speed	
	m/s	mph	m/s	mph	m/s	mph
Agricultural Operations	9.1	20.3	12.1	27.0	1.7	3.8
Mixed Residential	7.1	15.8	11.3	25.3	1.4	3.2
North Boundary	6.8	15.2	10.8	24.2	1.3	2.9
Southern Boundary	10.3	23.1	13.6	30.4	1.6	3.5

SUMMARY OF SOUND LEVELS

The equivalent continuous sound level (L_{eq}) and tenth-percentile sound level (L_{90}) data logged at each monitoring location are plotted as time history graphs, along with the maximum 10-minute gust speed and temperature in Figures 17 through 37. (For an explanation of the sound level metrics and their use, see Appendix A, “A Primer on Sound and Noise”.) Each time history graph spans one calendar week for ease of viewing. Periods that have been excluded from the averaging of sound levels due to high wind, low temperature, rain, or anomalous events, are indicated on each graph. However, the original data for those periods are still shown, using lighter colors. Results specific to each monitor location are described in the following sections.

All the monitors were within audible range of freight train passby events (and their horns at crossings). Additionally, aircraft overflights, mostly by commercial jets operating at cruise altitudes, were evident at every site. All the monitors were near dormant farm fields. As the monitoring occurred in the winter, field farming activities were not evident in the data.

Summary sound levels for the monitoring period at all sites are presented in Table 2. They include the equivalent continuous average (L_{eq}), and the 10th-percentile (L_{90}), 50th-percentile (L_{50}) and 90th-percentile (L_{10}) statistical levels for the entire period, for the daytime periods, and for the nighttime periods.²

The Mixed Residential monitor was the closest monitor to a residential area (“in town”). It recorded the highest average levels as a result of frequent use of the nearby Flat Rock Care facility parking lot. The Busy Roadway monitor was exposed to regular high-speed car and truck passbys.

¹ Rain periods were identified from historical meteorology data available online Weather Underground stations KOHMONRO6 and KOHREPUB2, at <http://www.wunderground.com>.

² Daytime is defined here as the period from 7:00 AM to 10:00 PM; nighttime is defined here as the period from 10:00 PM to 7:00 AM the following day.

The quietest sites were the Southern Boundary and the Wooded Area, which were more distant from roads and areas of frequent human activity.

The relatively larger differences between equivalent continuous levels (L_{eq}) and lower tenth-percentile levels (L_{90}) at most of the sites indicate that the soundscapes are dominated by transient events resulting from human activity. Weather patterns (mostly wind) also influenced sound levels. Thus, only some of the data show a typical anthropogenic diurnal pattern, where sound levels are higher during the day and lower at night.

The OPSB level limit is calculated from the arithmetic average of the site-wide nighttime equivalent average sound levels (L_{eq}) plus 5 dB. The site-wide average sound levels are shown in the last row of Table 2. Among all seven sites in the Republic project area, the average nighttime L_{eq} is 41 dB, which results in an OPSB project-only sound level limit of 46 dBA L_{eq} 1-hr.

TABLE 2: SUMMARY SOUND LEVELS FROM PRE-CONSTRUCTION MONITORING

Location	Sound Level (dBA)											
	Overall				Day				Night			
	L_{eq}	L_{90}	L_{50}	L_{10}	L_{eq}	L_{90}	L_{50}	L_{10}	L_{eq}	L_{90}	L_{50}	L_{10}
Agricultural Operations	43	26	35	46	44	29	37	47	40	24	30	41
Busy Roadway	50	27	39	54	52	32	42	55	47	24	33	49
Mixed Residential	51	29	36	47	51	31	37	47	51	27	34	46
North Boundary	47	27	33	42	48	28	34	42	44	25	31	41
Rural	42	24	32	44	43	26	34	45	39	21	30	40
Southern Boundary	37	21	31	39	38	23	32	39	34	17	28	37
Wooded Area	36	23	30	38	37	25	31	39	32	21	27	35
Arithmetic Average	44	25	34	44	45	28	35	45	41	23	30	41

RESULTS AT EACH MONITORING LOCATION

North Boundary

The overall L_{eq} at the North Boundary monitoring location was 47 dBA. The daytime and nighttime L_{eq} were 48 and 44 dBA, respectively. These levels were higher than the L_{10} for the same period, which indicates that the maximum sound levels over the period were brief, but relatively high. This is due to the preponderance of train horn blasts at the crossings of the east-west rail line about 1 mile (1.52 km) north of the site. The overall L_{90} , as an indication of the residual sound level, was lower: 27 dBA overall, 28 dBA daytime, and 25 dBA nighttime.

No sound anomalies were identified and excluded from the data analysis at this location. None of the transient sounds were out of character for the area, and they did not take place abnormally close to the microphone.

The sound level meter was taken out of service for one hour after midnight on February 11, 2016 to download data and replace the system's batteries.

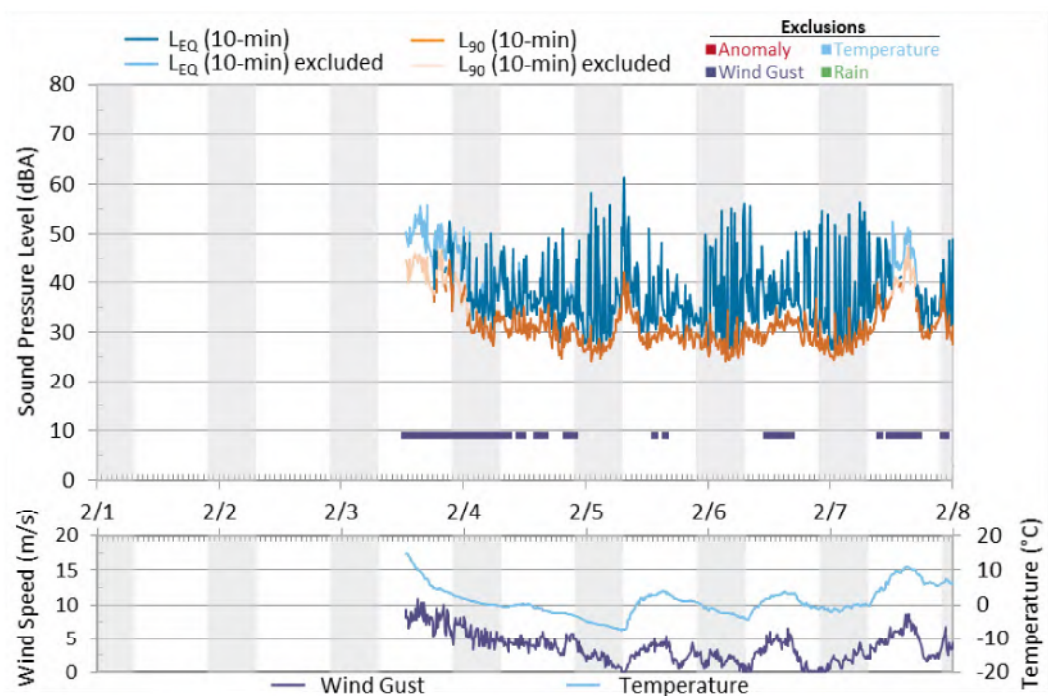


FIGURE 17: MONITOR DATA, NORTH BOUNDARY SITE, FEBRUARY 3-7, 2016

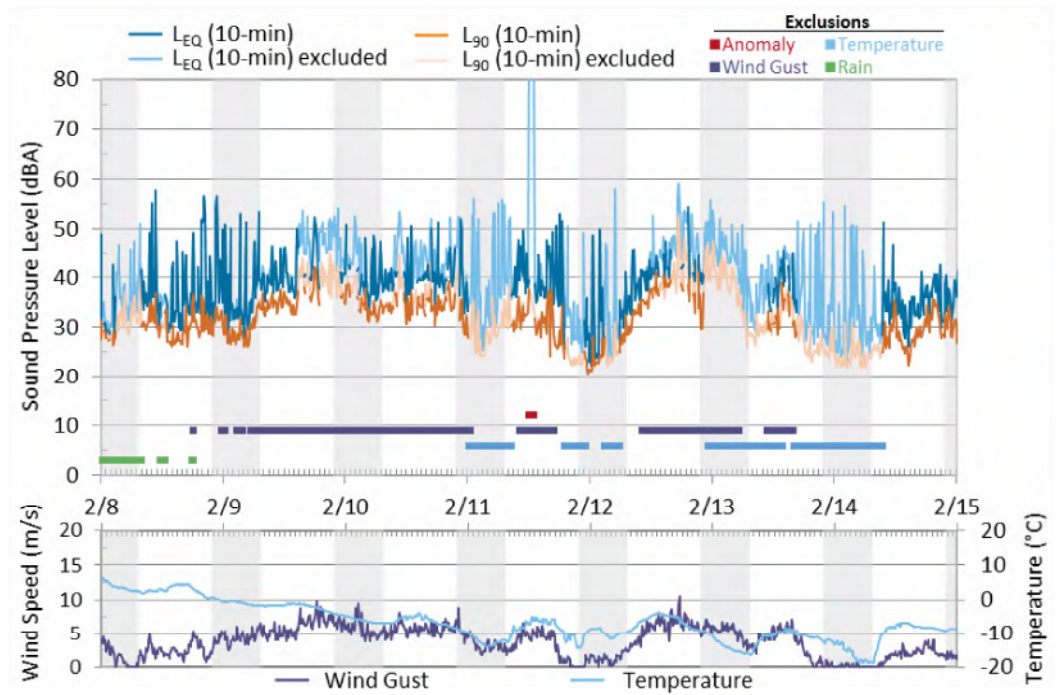


FIGURE 18: MONITOR DATA, NORTH BOUNDARY SITE, FEBRUARY 8-14, 2016

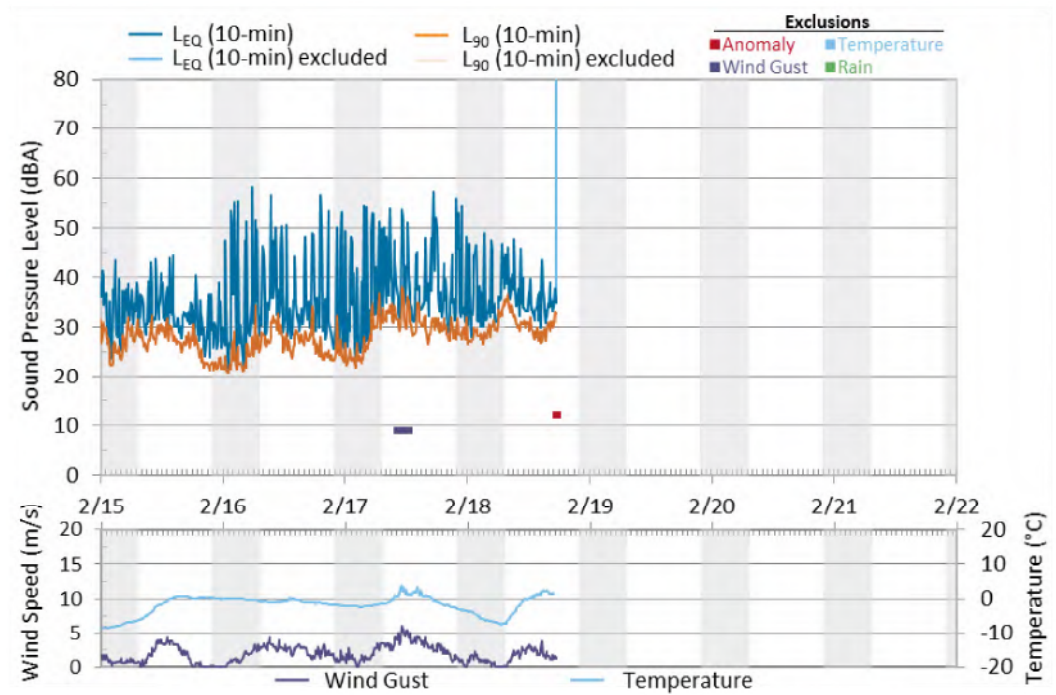


FIGURE 19: MONITOR DATA, NORTH BOUNDARY SITE, FEBRUARY 15-18, 2016

Mixed Residential

The overall L_{eq} at the Mixed Residential monitoring location was 51 dBA, the highest of the seven sites. The daytime and nighttime L_{eq} were the same, at 51 dBA. This indicates a relatively high amount of regular, but transient anthropogenic noise. It also indicates the proximity to the rail line, and the sounding of train horns both day and night. The overall L_{90} , was lower: 29 dBA overall, 31 dBA daytime, and 27 dBA nighttime.

Of the many transient events identified in the sound level data for this site, none were excluded as anomalies. This is because they were not out of character for the area, and they did not take place abnormally close to the microphone.

The sound level meter was taken out of service from 7:00 PM on February 10, 2016 until 11:30 AM on February 11, 2016 to download data and charge the system's batteries.

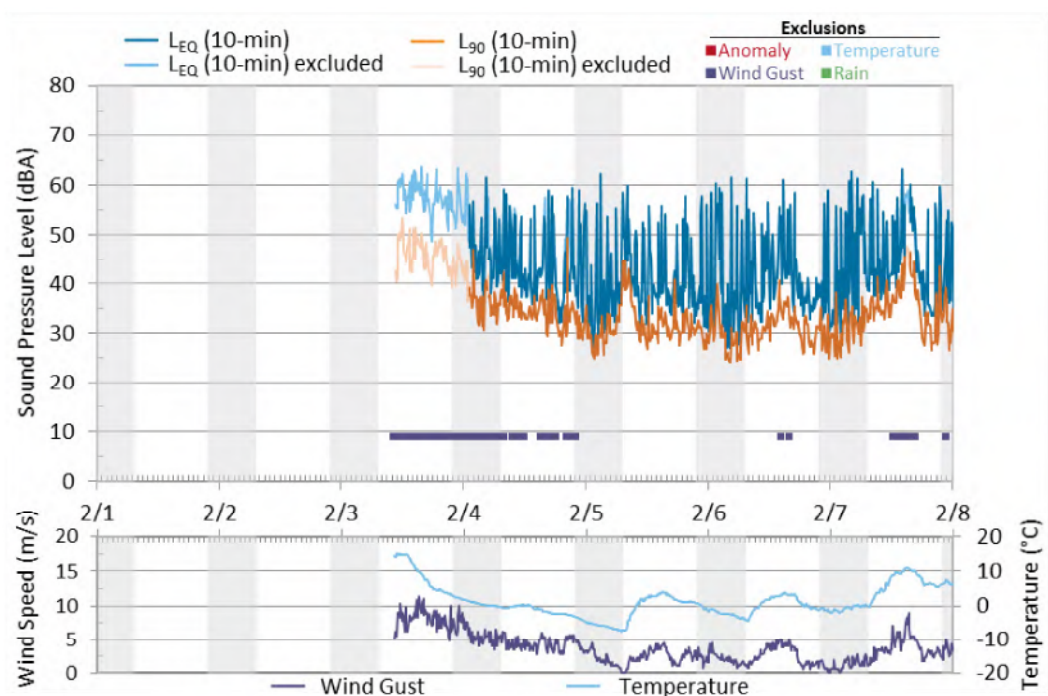


FIGURE 20: MONITOR DATA, MIXED RESIDENTIAL SITE, FEBRUARY 3-7, 2016

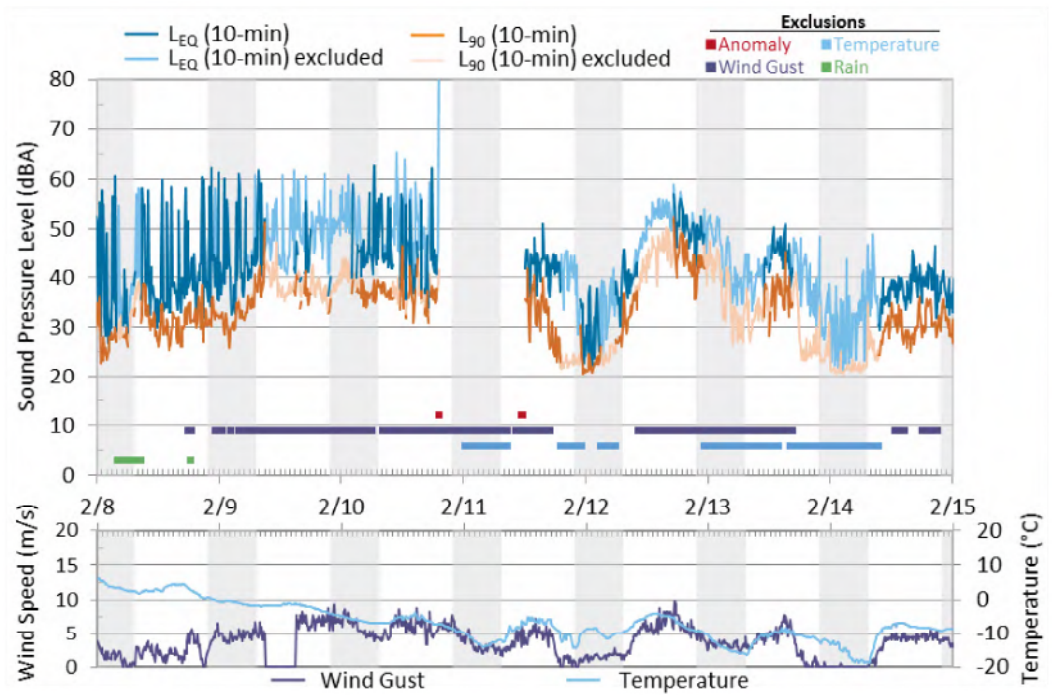


FIGURE 21: MONITOR DATA, MIXED RESIDENTIAL SITE, FEBRUARY 8-14, 2016

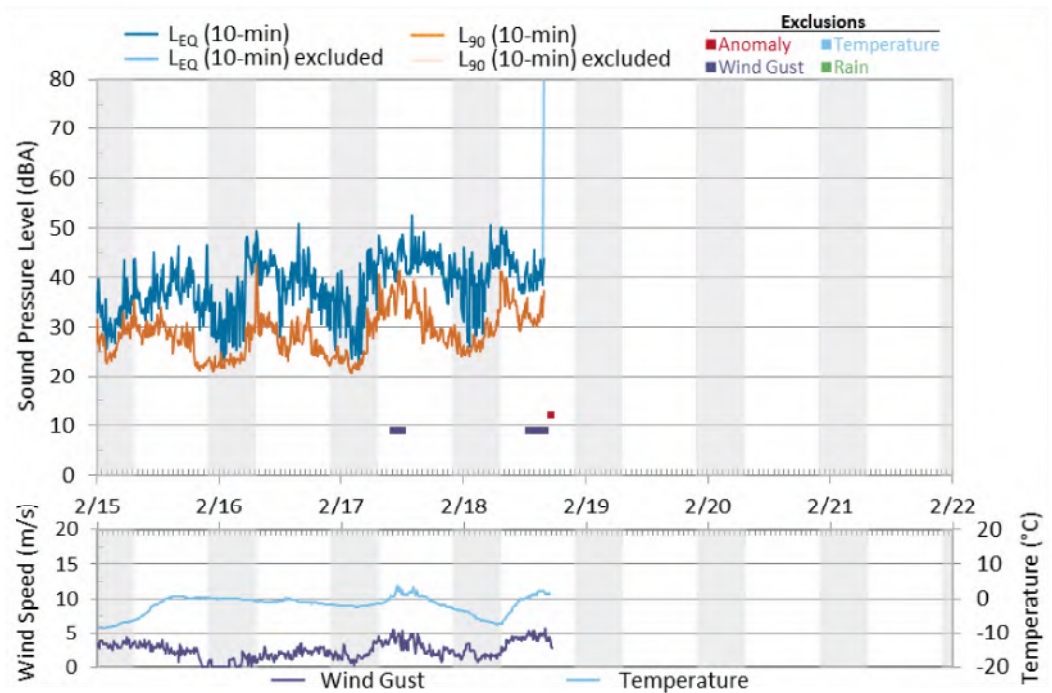


FIGURE 22: MONITOR DATA, MIXED RESIDENTIAL SITE, FEBRUARY 15-18, 2016

Agricultural Operations

The overall L_{eq} at the Agricultural Operations monitoring location was 43 dBA. The daytime and nighttime L_{eq} were 44 and 40 dBA, respectively. These levels were within 3 dB of the L_{10} for the same period. This is indicative of transient anthropogenic events. The overall L_{90} , as an indication of the background sound level, was lower: 26 dBA overall, 29 dBA daytime, and 24 dBA nighttime.

Anomalies at this site that were excluded from data analysis included children playing very near the microphone on February 15 and February 16, 2016, along with car horn and automobile door slams during the same periods.

The sound level meter was taken out of service from 6:00 PM on February 10 until 10:00 AM on February 11 to download data and charge the system's batteries.

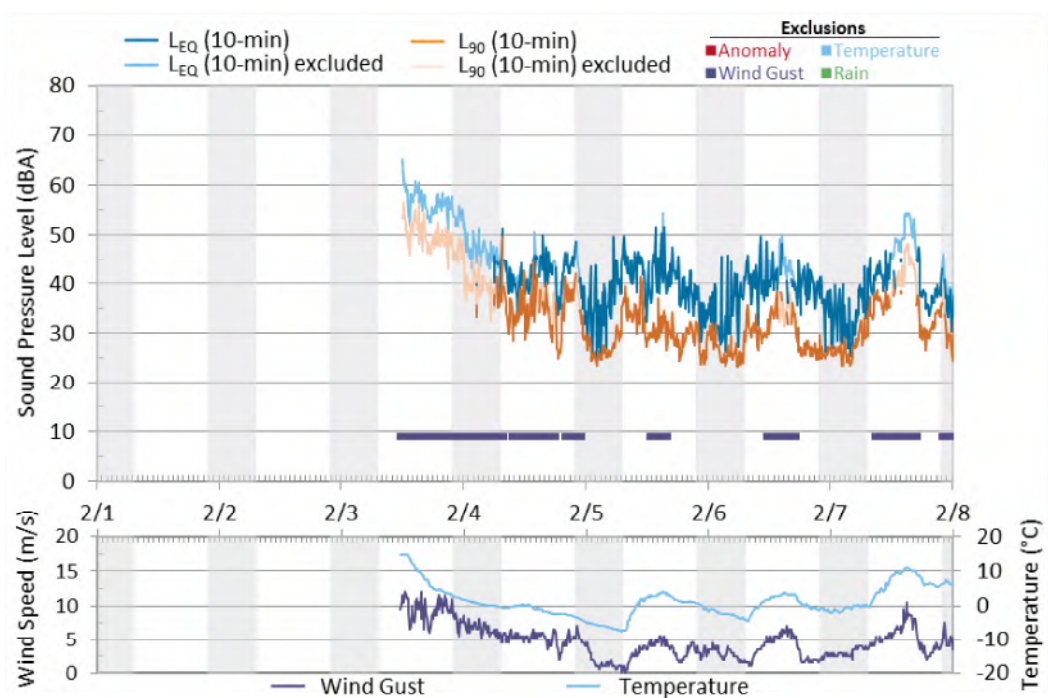


FIGURE 23: MONITOR DATA, AGRICULTURAL OPERATIONS SITE, FEBRUARY 3-7, 2016

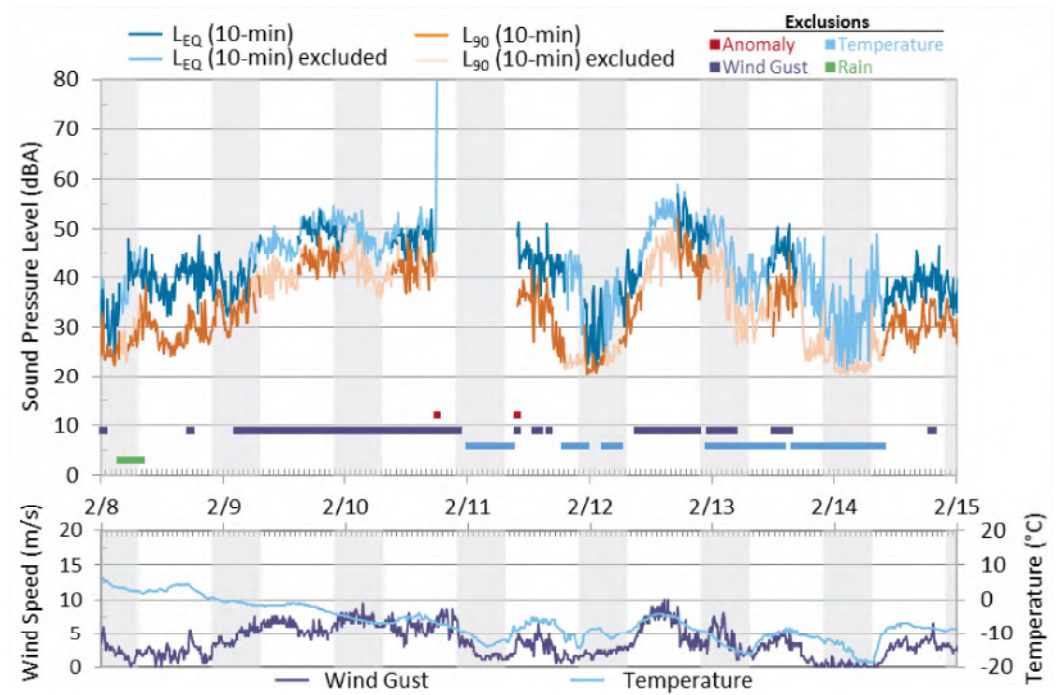


FIGURE 24: MONITOR DATA, AGRICULTURAL OPERATIONS SITE, FEBRUARY 8-14, 2016

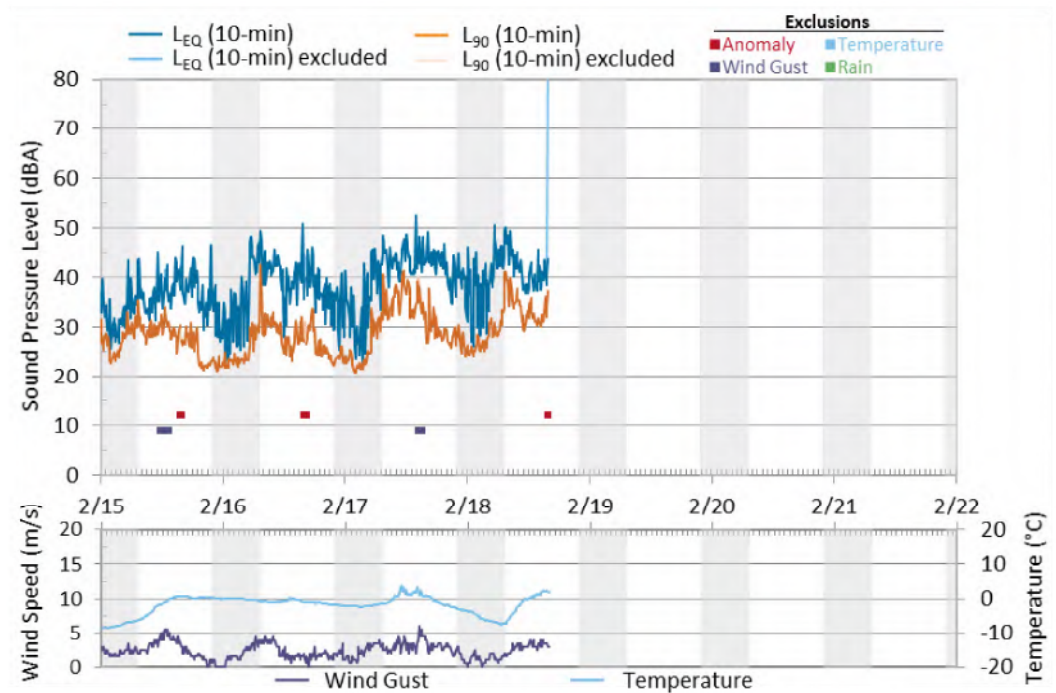


FIGURE 25: MONITOR DATA, AGRICULTURAL OPERATIONS SITE, FEBRUARY 15-18, 2016

Busy Roadway

The overall L_{eq} at the Busy Roadway monitoring location was 50 dBA. The daytime and nighttime L_{eq} were 52 and 47 dBA, respectively. The overall L_{90} was 27 dBA overall, 32 dBA daytime, and 24 dBA nighttime. These patterns are indicative of transient anthropogenic noise. The 8 dB difference between daytime and nighttime L_{90} indicate a diurnal pattern, mostly caused by reduced roadway traffic at night. Confirmation of this can be found by the convergence of the L_{eq} and L_{90} at night, indicating a reduction in transient sounds such as car passbys.

No sound anomalies were identified and excluded from the data analysis at this location. None of the transient sounds out of character for the area, and they did not take place abnormally close to the microphone. A long period of data, from 7:50 PM on February 8 until 2:00 PM on February 10, 2016, was excluded due to wind noise. The exact wind speed was not available, because the anemometer arm froze, but the sound levels (and lack of diurnal pattern) were indicative of very high winds. After comparing to the conditions at the other sites, that entire time period was excluded.

The sound level meter was not taken out of service, but the audio recorder was disconnected from 7:00 PM on February 10 until 11:30 AM on February 11, 2016 to download data.

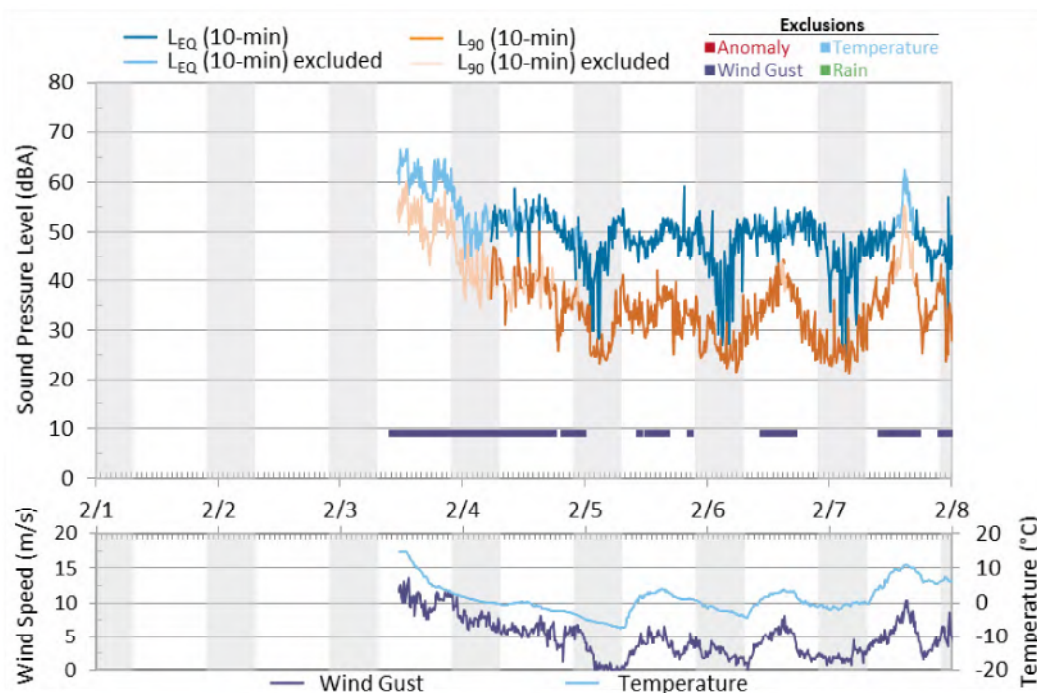


FIGURE 26: MONITOR DATA, BUSY ROADWAY SITE, FEBRUARY 3-7, 2016

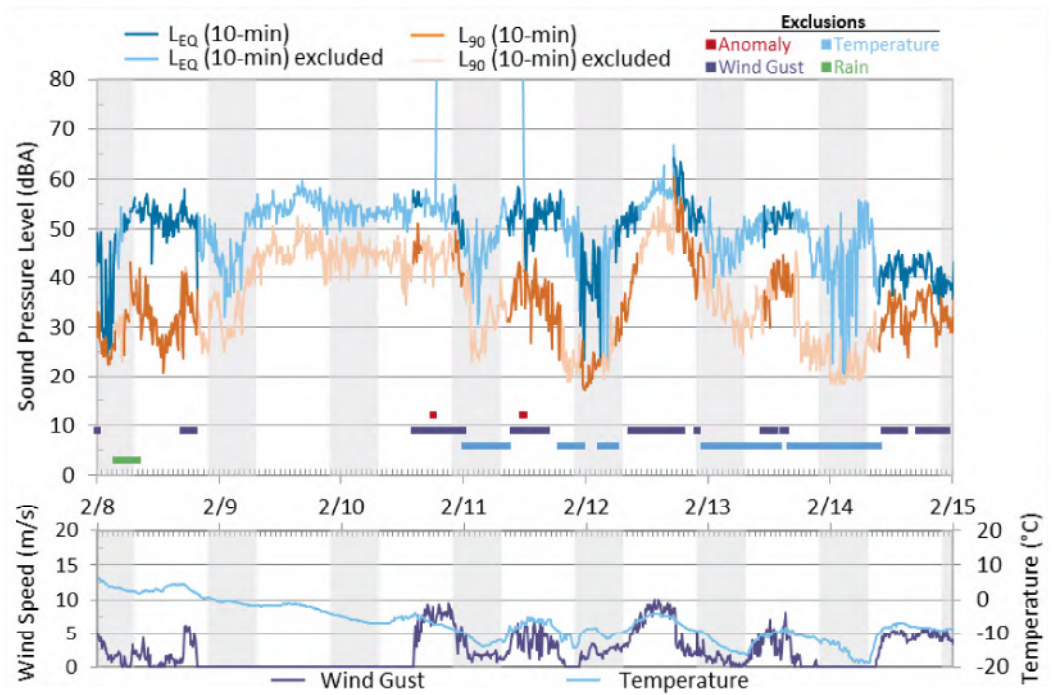


FIGURE 27: MONITOR DATA, BUSY ROADWAY SITE, FEBRUARY 8-14, 2016

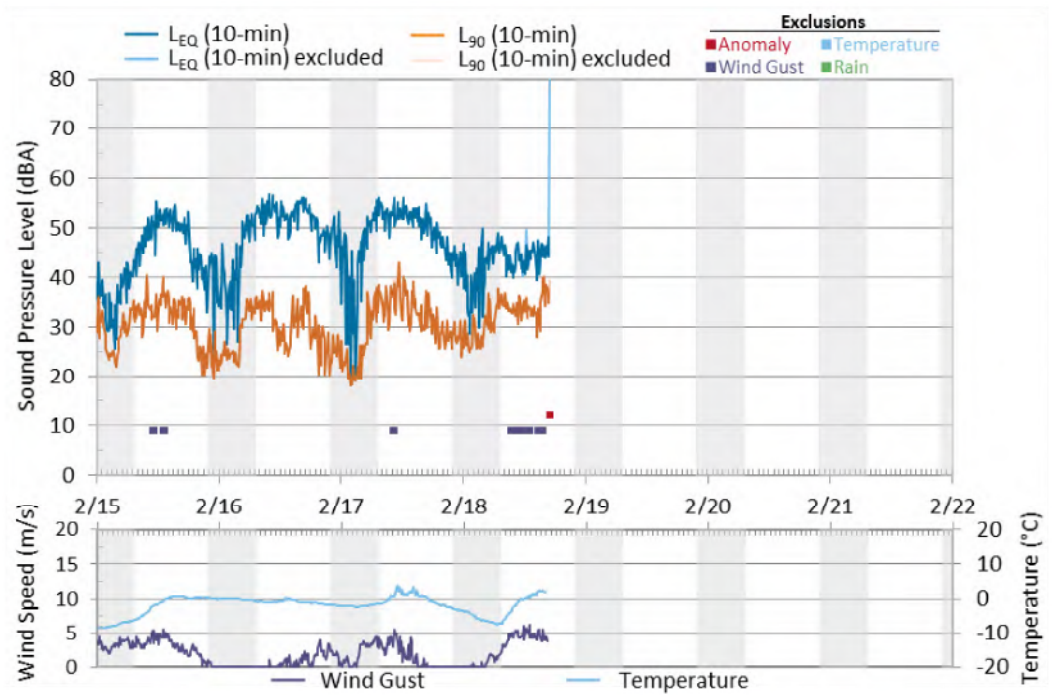


FIGURE 28: MONITOR DATA, BUSY ROADWAY SITE, FEBRUARY 15-18, 2016

Wooded Area

The overall L_{eq} at the Wooded Area monitoring location was 36 dBA, the quietest of monitored locations. The daytime and nighttime L_{eq} were 37 and 34 dBA, respectively. These levels were within 3 dB of the L_{10} for the same period, indicating some amount of transient anthropogenic noise. The overall L_{90} was 23 dBA overall, 25 dBA daytime, and 21 dBA nighttime. The small difference (4 dB) between daytime and nighttime levels indicates that background sound in the area does not follow a strong diurnal pattern.

Anomalies excluded from data analysis at this site included:

- A very low military aircraft flight directly over the microphone on February 4;
- Tractor operations in the woods very near the microphone on February 6;
- A group of people partying in the woods on February 7;
- Gunshots near the microphone on February 7 and February 14; and
- An unmuffled ATV approaching the microphone on February 16 and February 18.

The sound level meter was taken out of service from 6:15 PM on February 10 until 10:00 AM on February 11, 2016 to download data and charge the system's batteries.

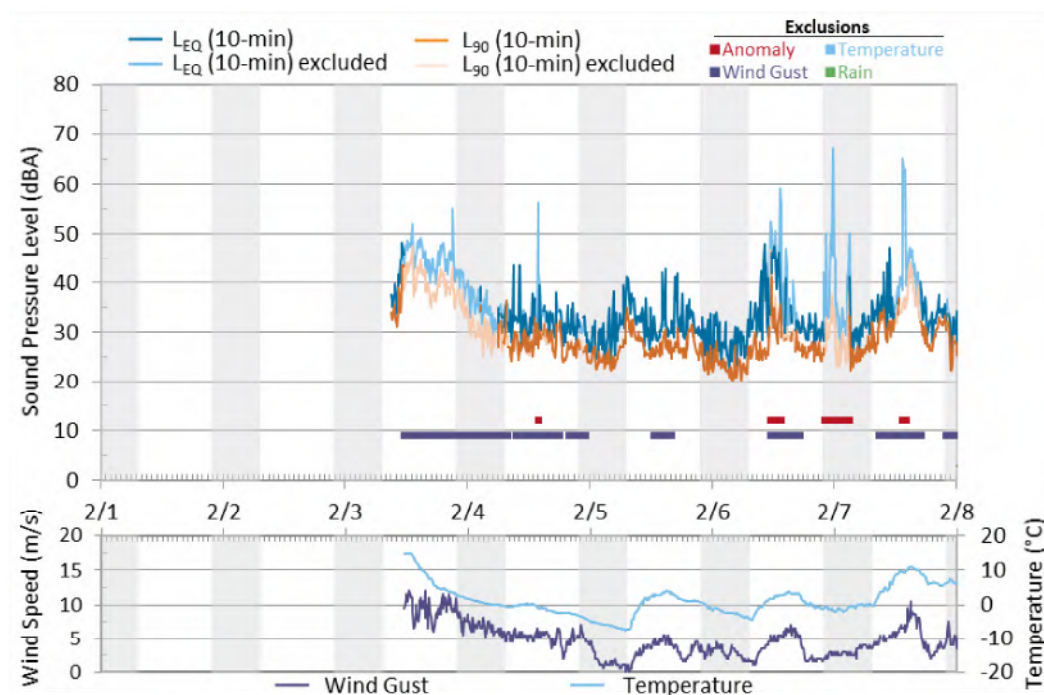


FIGURE 29: MONITOR DATA, WOODED AREA SITE, FEBRUARY 3-7, 2016

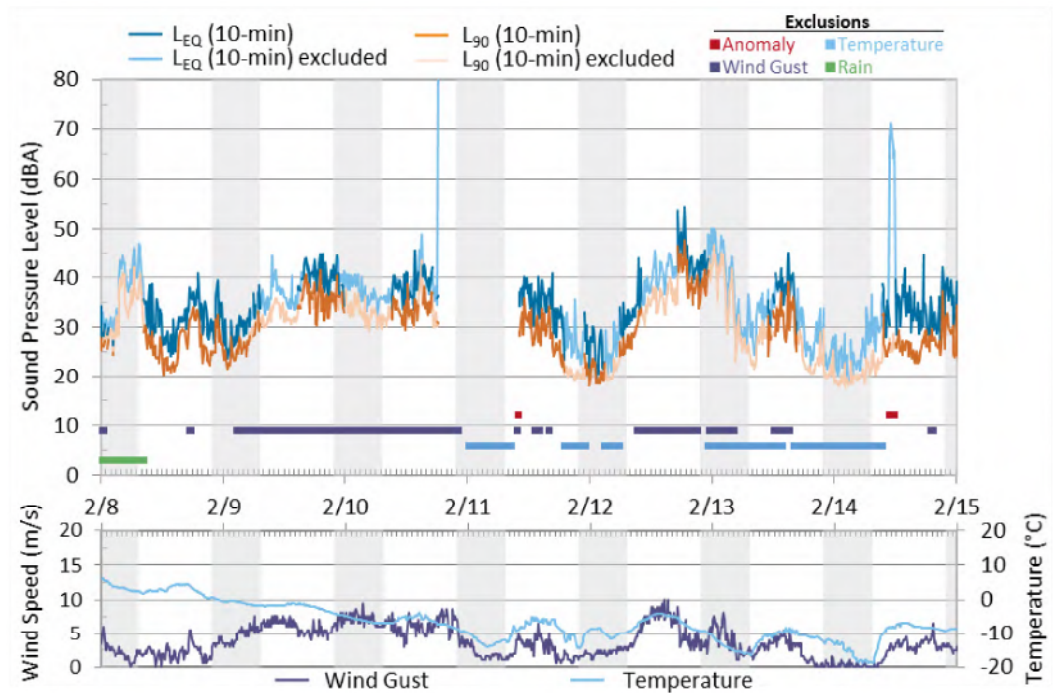


FIGURE 30: MONITOR DATA, WOODED AREA SITE, FEBRUARY 8-14, 2016

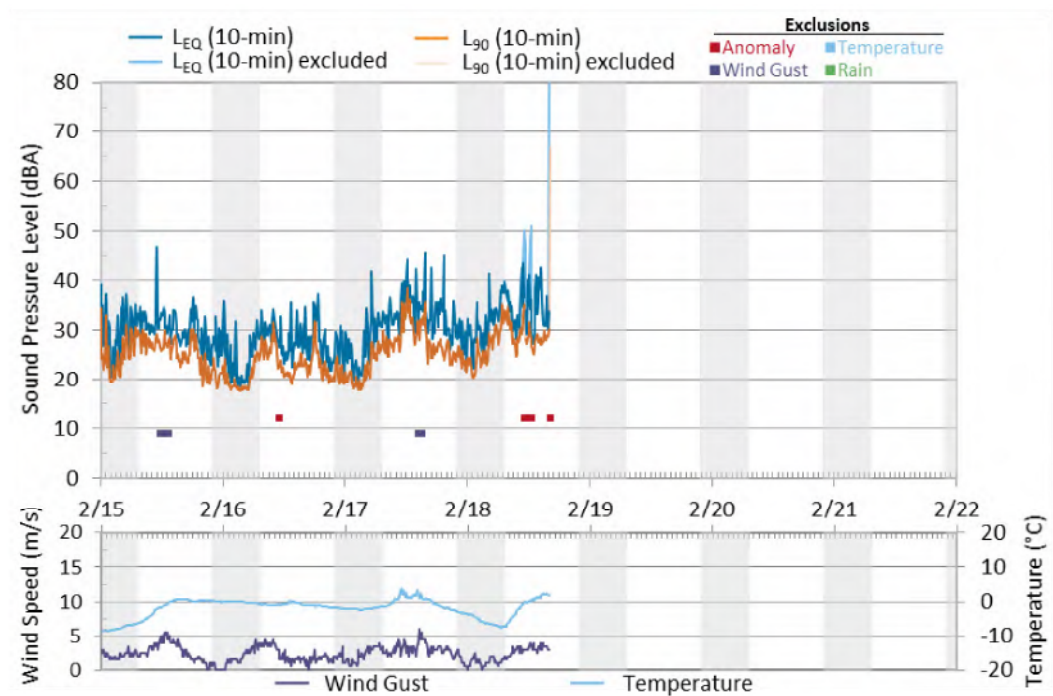


FIGURE 31: MONITOR DATA, WOODED AREA SITE, FEBRUARY 15-18, 2016

Remote Rural

The overall L_{eq} at the Remote Rural Area monitoring location was 42 dB. The daytime and nighttime L_{eq} were 43 and 39 dBA, respectively. These levels were within 2 dB of the L_{10} for the same period, indicating transient anthropogenic noise. The overall L_{90} was 24 dBA overall, 26 dBA daytime, and 21 dBA nighttime. The sound levels tended to follow a diurnal pattern, but train horns at nearby crossings during the night raised the nighttime L_{eq} .

No sound anomalies were identified and excluded from the data analysis at this location. None of the transient sounds out of character for the area, and they did not take place abnormally close to the microphone.

The sound level meter was taken out of service from midnight on February 10 until 11:10 AM on February 11, 2016 to download data and charge the system's batteries.

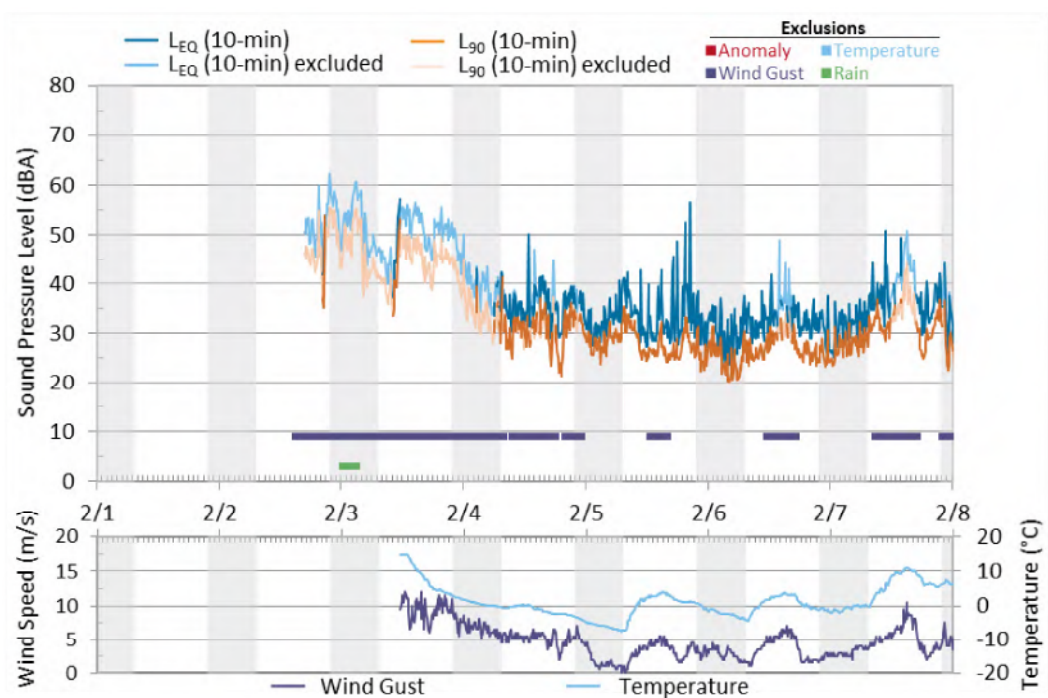


FIGURE 32: MONITOR DATA, REMOTE RURAL SITE, FEBRUARY 3-7, 2016

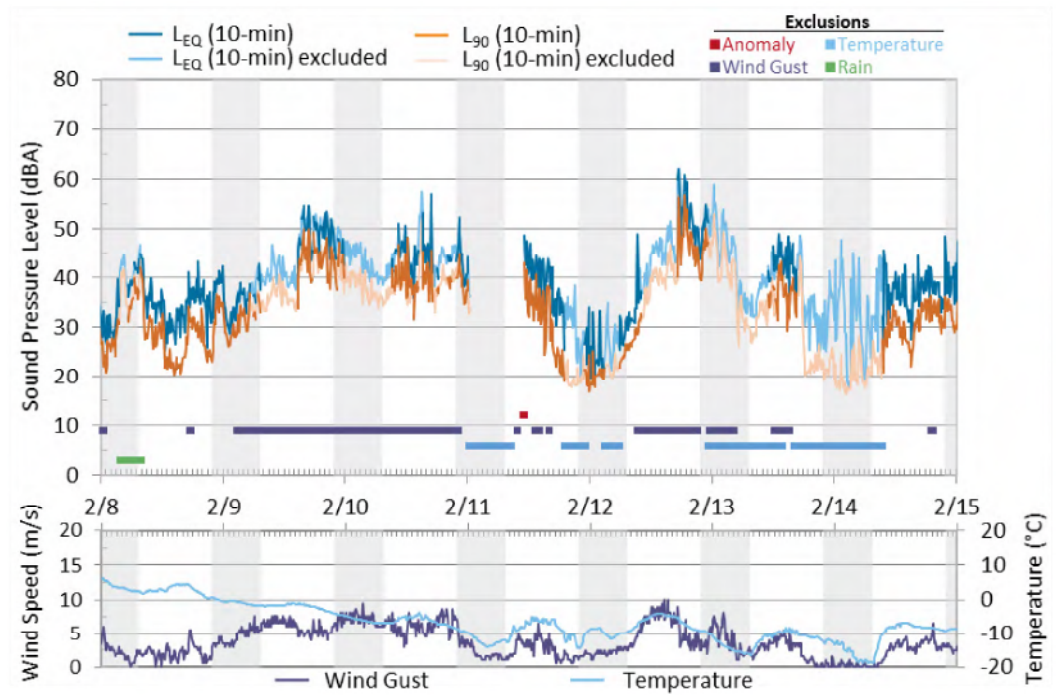


FIGURE 33: MONITOR DATA, REMOTE RURAL AREA, FEBRUARY 8-14, 2016

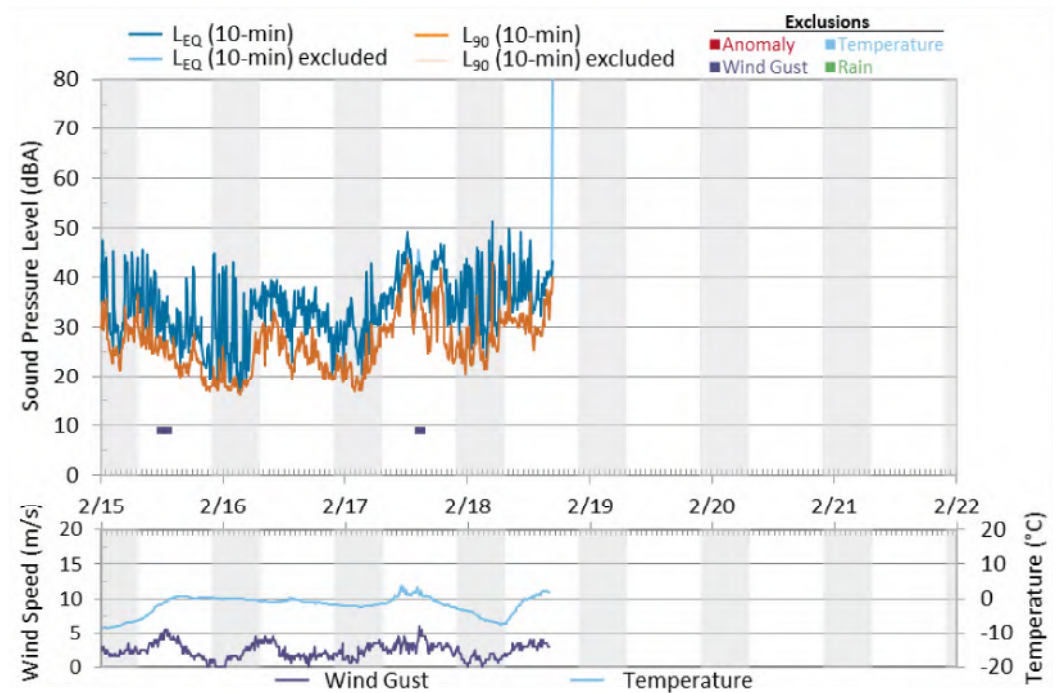


FIGURE 34: MONITOR DATA, REMOTE RURAL AREA, FEBRUARY 15-18, 2016

Southern Boundary

The overall L_{eq} at the Southern Boundary monitoring location was 37 dBA, the second-quietest monitoring location. The daytime and nighttime L_{eq} were similar, at 38 and 34 dBA, respectively. These levels were within 3 dB of the L_{10} for the same period. This indicates a relatively high amount of transient anthropogenic noise. The overall L_{90} was lower: 21 dBA overall, 23 dBA daytime, and 17 dBA nighttime. These were the lowest of all the sites and tended to be more strongly diurnal. Train horns were not as prevalent.

A single anomaly was excluded from data analysis at this site: an unmuffled ATV approached the monitor on February 6, 2016.

The sound level meter was taken out of service from 6:30 PM on February 10 until 10:30 AM on February 11, 2016 to download data and charge the system's batteries.

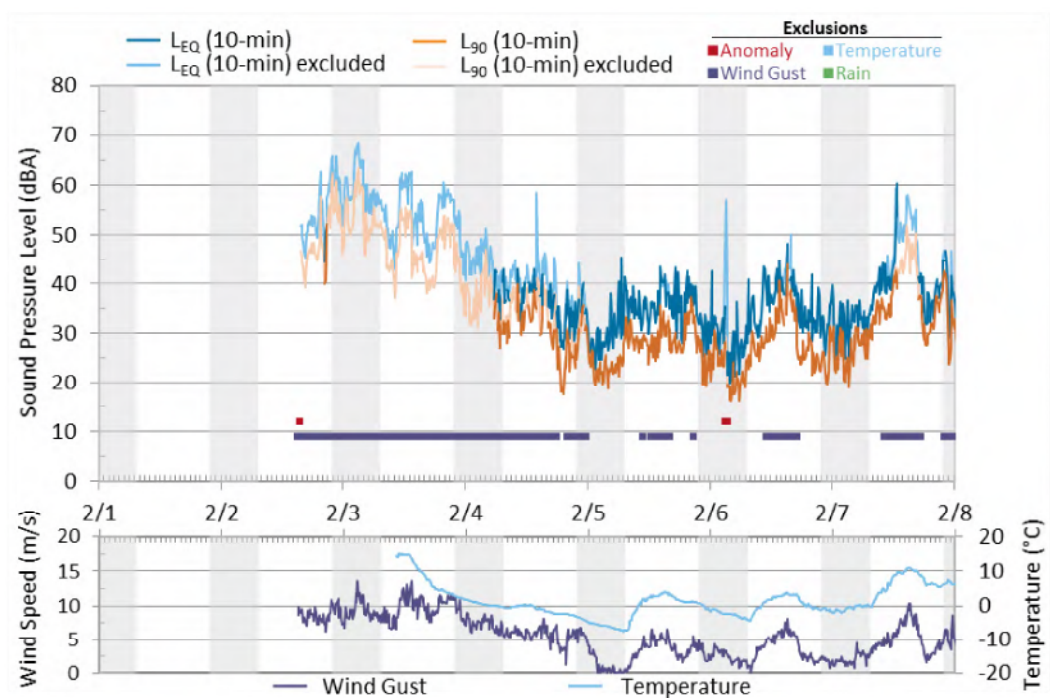


FIGURE 35: MONITOR DATA, SOUTH BOUNDARY SITE, FEBRUARY 3-7, 2016

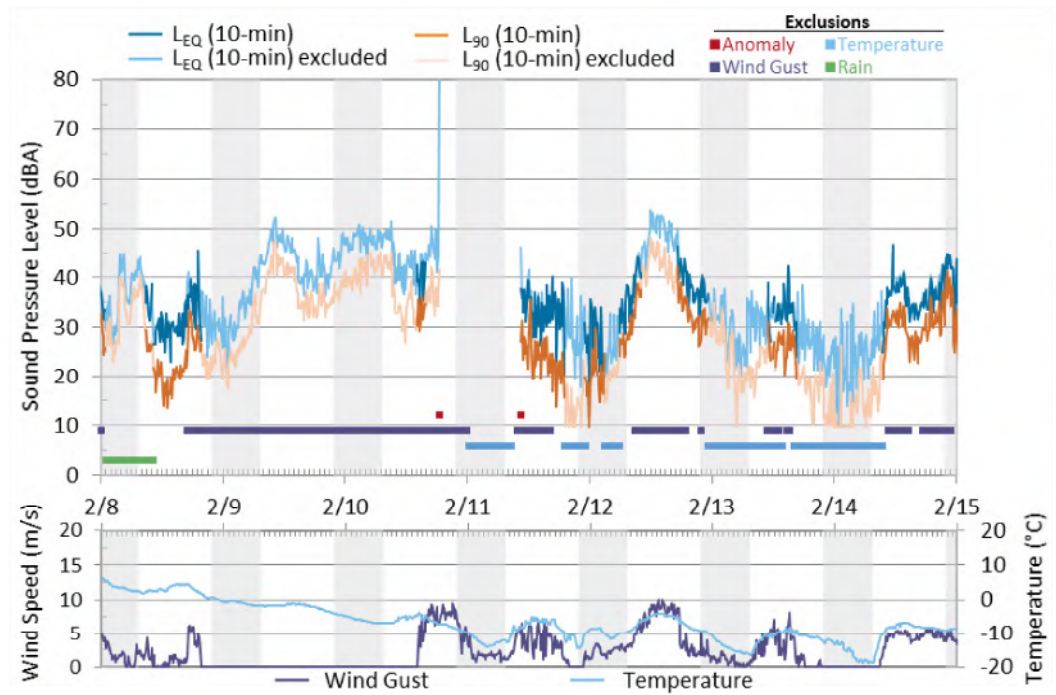


FIGURE 36: MONITOR DATA, SOUTH BOUNDARY SITE, FEBRUARY 8-14, 2016

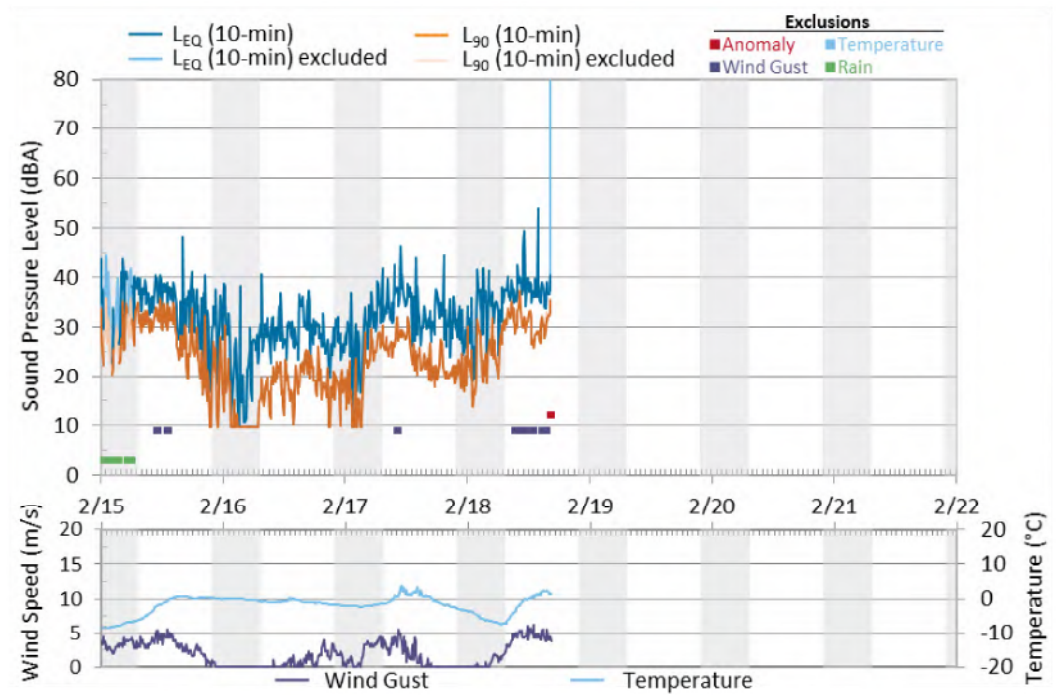


FIGURE 37: MONITOR DATA, SOUTH BOUNDARY SITE, FEBRUARY 8-14, 2016

5.0 ISSUES SPECIFIC TO WIND TURBINE SOUND

5.1 | SOUND EMISSIONS FROM WIND TURBINES

Wind turbines generate two principle types of noise: aerodynamic noise, produced from the flow of air around the blades, and mechanical noise, primarily from the gearbox and generator within the nacelle.

AERODYNAMIC NOISE

Aerodynamic (airflow) sound is the primary source of noise associated with wind turbines. These acoustic emissions can be either tonal (with an identifiable pitch) or broadband (spread over many frequencies).

Wind turbines emit aerodynamic broadband noise as air flows over and around the moving blades, and as those blades interact with atmospheric turbulence. These mechanisms result in a characteristic “whooshing” sound through several mechanisms (refer to Figure 38):

- **Flow separation:** When air flows quickly over any wing, it begins with a smooth “laminar” flow, but soon separates from the wing surface, becoming turbulent or “rough”. In most cases, including turbine blades, the amount of separation is related to the angle of the blade relative to the incoming air. The greater the angle, the more separation turbulence occurs: the more turbulence generated by the wing, the more sound is produced by the turbulence. In the limit, the wing can “stall”; there is so much turbulence that it is no longer providing lift. This is the noisiest condition for blade-induced turbulence. Wind turbines are programmed to avoid stall conditions.
- **Inflow turbulence:** As each blade passes around its full circle, it encounters many variations in the speed of the air flowing into the blade. In particular, the wind itself will naturally have eddies of different sizes, which is also a form of turbulence. Inflow turbulence noise occurs when the rotor blades encounter this atmospheric turbulence. The quick variations in air pressure on a rotor blade causes fluctuating aerodynamic loading on the blade. A small portion of the energy in these fluctuations can translate into sound. Sound from inflow turbulence varies across a wide range of frequencies, but for wind turbines it is most significant at frequencies below 500 Hz.
- **Trailing edge turbulence:** As the air passes the rear, or trailing edge, of the blade, it forms a wake. Depending on the blade speed and details of its geometry, this trailing edge wake can contain several different types of turbulence. Each type of trailing edge turbulence is capable of generating some sound. The energy in this sound is distributed across a wide frequency range, but it is most notable at higher frequencies between 700 Hz and 2 kHz.
- **Tip vortices:** Not all of the air entrained by a wind turbine blade flows directly over it. Because it is spinning, some of the air flows outward along the blade, and exits

the blade at its tip. The air speeds here can be quite high, and the mixing of the blade flow with the rest of the air can generate a special type of turbulence called a “tip vortex”. Like the other forms of turbulence, a small fraction of the tip vortex energy can be converted into noise. Tip vortex noise is often audible when one is near a turbine as a high-pitched whistling sound that passes with each tip: it tends to be a small component of the overall noise further away from the turbine.

Early wind turbines (designed in the 1970’s) often had the blades behind the tower. As each blade in turn passed behind the tower, it encountered the tower’s wind wake, a deep deficit in the airflow into the blade. This created a relatively strong blade impulse noise, sometimes referred to as a “thump”. Most modern wind turbines, like those proposed here, are built so that their rotors are located upstream of the tower. Since the blades no longer experience tower wake to the same extent, there is little to no blade impulse noise.

As a result of the turbulence-related mechanisms listed above, the majority of audible aerodynamic noise from wind turbines is broadly spread over the middle frequencies, roughly between 200 Hz and 1,000 Hz. In some unusual cases, tonal noise can originate from unstable airflows over holes, slits, or blunt trailing edges on the blades.

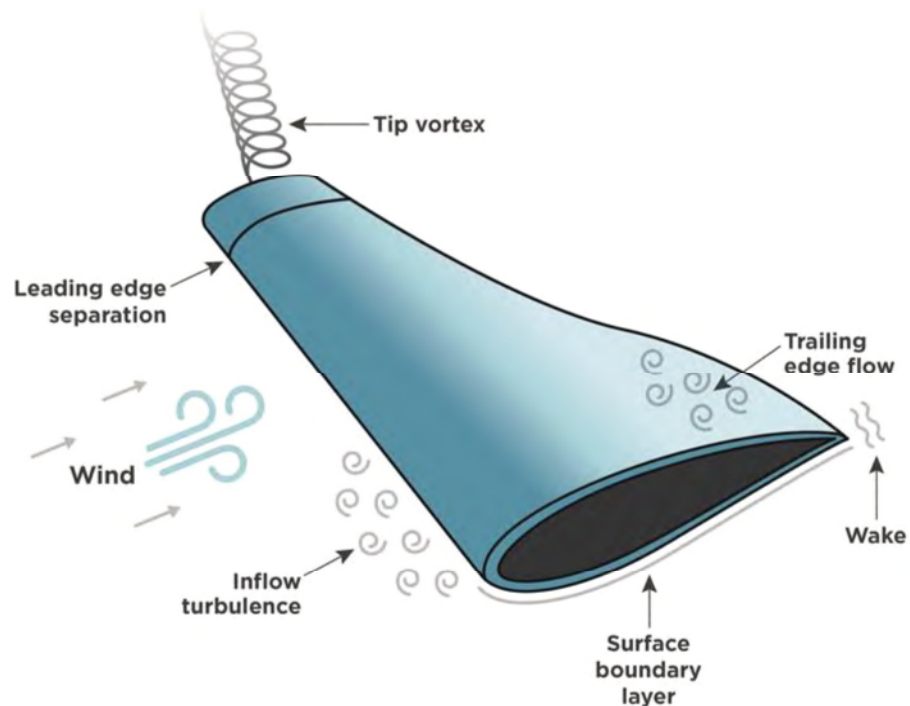


FIGURE 38: AIRFLOW AROUND A ROTOR BLADE

MECHANICAL NOISE

As the rotor of a wind turbine turns at a relatively slow speed (a few revolutions per minute), the shaft from the rotor drives a gearbox that converts to the much higher speed (hundreds

of RPM) at which the generator must turn. Mechanical noise from the gearbox and associated machinery inside the nacelle tends to be tonal in nature but can also have a broadband component. Potential sources of mechanical noise include the gears inside the gearbox, generator, yaw drives, cooling fans, and other auxiliary equipment. This sound can escape the nacelle both via cooling vents and through its walls. However, modern wind turbine machinery is designed to generate less noise, and the nacelles are designed to better contain that noise. As a result, mechanical noise is rarely a significant contribution to the total noise emitted from an operating wind turbine.

AMPLITUDE MODULATION

When the level of a relatively constant sound varies in a consistent manner, the effect is known as “Amplitude Modulation”, or AM. (This is the principle by which AM radio works, except that the waves are radio waves rather than sound waves.) Because the aerodynamic mechanisms of sound generation in wind turbines are moving with the blades around a very large circle, the sound received at some distance away varies at the same rate; it is perceived as being amplitude-modulated. Amplitude modulation occurs at a rate known as the Blade Passage Frequency (BPF). This frequency is the product of the number of blades times the rotor RPM divided by 60. For a relatively close observer, it is characterized by a “swish-swish-swish” sound. The amount of the fluctuation itself, expressed in dB, is known as the “modulation depth”.

Exaggerated blade swish can go by the names of “Amplitude Modulation” (AM), “Exaggerated Amplitude Modulation” (EAM), or “Other Amplitude Modulation” (OAM). There is no consistent definition of how much of a sound level fluctuation is necessary for blade swish to be considered amplitude-modulated. However, fluctuations in the A-weighted sound level from a wind turbine can reach as high as 10 dB close to the turbine. Fluctuations in individual 1/3-octave bands are typically higher and can exceed 15 dB. However, these amplitude modulation depths are relatively rare and short-lived. One recent study found 99.9 percent of modulation depth to be below 4.5 dB.³ Fluctuations in individual 1/3-octave bands can sometimes synchronize and desynchronize over long periods, leading to long-term increases and decreases in the magnitude of the amplitude modulation. Similarly, in wind farms with multiple turbines, fluctuations reaching a distant observer can synchronize and desynchronize, leading to variations in amplitude modulation depth.⁴

Amplitude modulation of wind turbine sound has many potential causes: some have been confirmed and others remain hypothetical. These causes include: blade passage in front of the tower, the non-uniform directivity of sound emissions from the blade tip, the action of wind shear, inflow turbulence, and turbine blade yaw error. (Recently, it was reported that although wind shear can contribute to the depth of amplitude modulation, it does not cause

³ RSG, et al., “Massachusetts Study on Wind Turbine Acoustics,” Massachusetts Clean Energy Center and Massachusetts Department of Environmental Protection, 2016.

⁴ McCunney, Robert, et al. “Wind Turbines and Health: A Critical Review of the Scientific Literature.” *Journal of Occupational and Environmental Medicine*. 56(11) November 2014: pp. e108-e130.

amplitude modulation in and of itself. Instead, there needs to be detachment of airflow from the blades for wind shear to contribute to amplitude modulation.⁵⁾ While factors like the blade passing in front of the tower are intrinsic to wind turbine design, other factors vary with turbine design, local meteorology, topography, and the layout of multiple turbines. Amplitude modulation depth varies with the relative location of an observer to the turbine. Amplitude modulation depth is largest when the receiver is between 45 and 60 degrees away from the downwind or upwind directions; it is least when the receiver is directly upwind or downwind of a turbine.

5.2 | EFFECTS OF METEOROLOGY

Meteorological conditions can significantly affect how sound propagates over long distances. The two most important conditions to consider are wind shear and temperature lapse. Wind shear is the difference in wind speeds with altitude; temperature lapse rate is the change in temperature with altitude. In both cases, sound is bent, or “refracted”, away from a straight path.

In conditions with high wind shear (a large wind speed gradient), sound levels upwind from the source tend to decrease, and sound levels downwind from the source tend to increase (Figure 39).

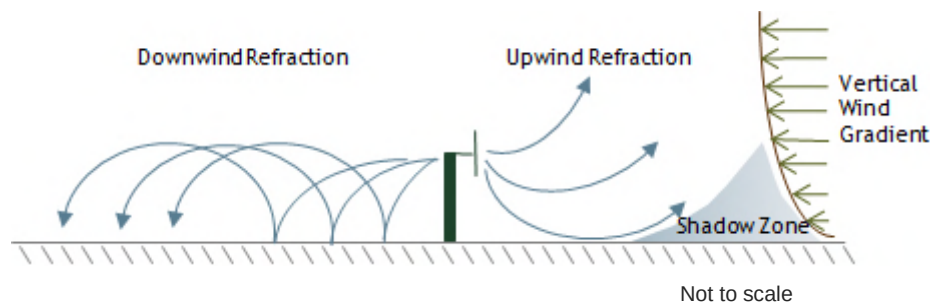


FIGURE 39: SCHEMATIC OF THE REFRACTION OF SOUND DUE TO VERTICAL WIND GRADIENT (WIND SHEAR)

With temperature lapse, when ground surface temperatures are higher than those aloft, sound will tend to refract upwards, leading to lower sound levels near the ground. The opposite is true when ground temperatures are lower than those aloft: this is known as an inversion condition.

High winds and/or high solar radiation can create turbulence that tends to break up and scatter sound energy. When this occurs, sound levels are reduced more than would normally be expected with distance. Highly stable atmospheres on the other hand, which tend to occur on clear nights with low ground-level wind speeds, tend to minimize atmospheric turbulence and are generally more favorable to downwind propagation.

In general terms, sound propagates along the ground best under stable atmospheric conditions with a strong temperature inversion. This tends to occur during the night and is

⁵ “Wind Turbine Amplitude Modulation: Research to Improve Understanding as to its Cause and Effect.” *RenewableUK*. December 2013.

characterized by low ground-level winds. However, strong inversions are also often accompanied by light surface winds. As a result, worst-case conditions for wind turbines tend to occur downwind under moderate nighttime temperature inversions when wind speeds are higher. Therefore, this is the default meteorological condition assumed for modeling wind turbine sound.

5.3 | MASKING OF SOUND

As mentioned above, sound levels from wind turbines are a function of wind speed. Background sound is also a function of wind speed, i.e., the stronger the ground-level winds, the louder the resulting background sound. This effect is greatest in areas covered by trees and other vegetation. Wind noise itself can mask the sound from a wind turbine at downwind receivers, because the frequency spectrum from wind noise is very similar to the frequency spectrum from a wind turbine. Figure 40 compares the sound spectrum measured during a 5 m/s wind event to that generated by the Vestas V150, Siemens SG4.5-145, and Nordex N149 wind turbine. The shapes of the spectra are very similar at lower frequencies. At higher frequencies, the sounds from the masking wind noise are louder than the wind turbine. As a result, the masking of turbine noise is possible at higher ground-level wind speeds.

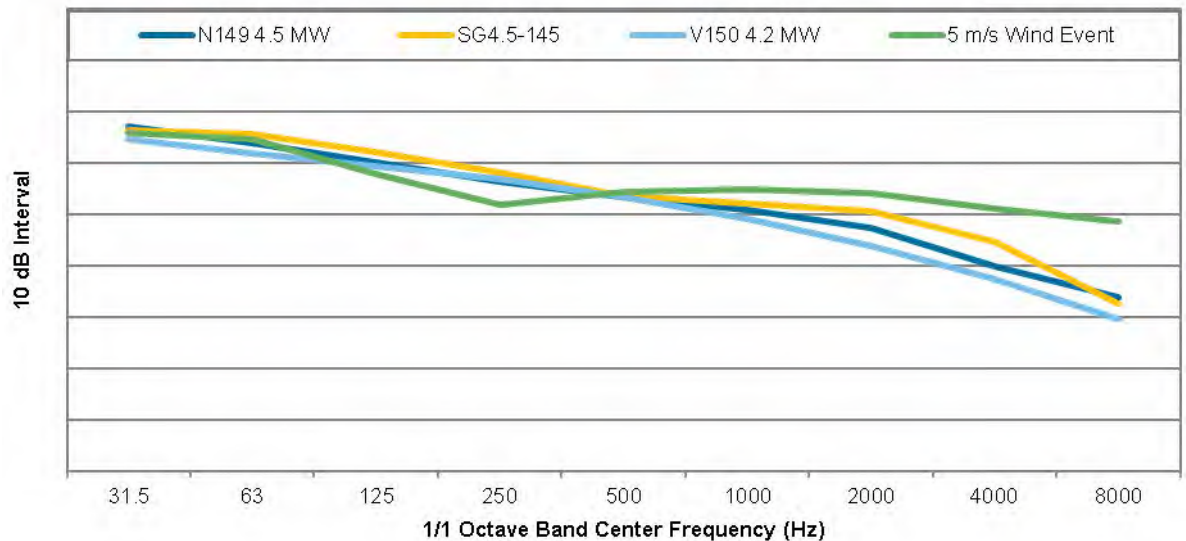


FIGURE 40: COMPARISON OF NORMALIZED FREQUENCY SPECTRA MEASURED FROM A 5 M/S WIND EVENT AND THE SOUND POWER SPECTRA FROM VESTAS V150, SIEMENS SG4.5-145, AND NORDEX N149 WIND TURBINES⁶

It is important to note that while winds may be blowing strongly at height of turbine hub, there may be little to no wind at ground level. This is especially true during periods with

⁶ The purpose of this Figure is to show the shapes to two spectra relative to one another and not the actual sound level of the two sources of sound.

strong wind gradients (high wind shear), which mostly occur at night. This can also occur on the leeward side of ridges where the ridge itself blocks the ground-level wind.

5.4 | INFRASOUND AND LOW-FREQUENCY SOUND

Infrasound is defined as any sound having its frequency content below about 20 Hz. Sound below this frequency is audible only if it has very high amplitude. Low-frequency sound is defined as being within the audible range of human hearing, that is, above 20 Hz, but below 100 to 200 Hz, depending on the application.

Low-frequency aerodynamic tonal noise is typically associated with downwind rotors on horizontal axis wind turbines, as explained in Section 5.1 above. Modern, large wind turbines have their rotor plane placed upwind of the tower. As a result, this type of low-frequency noise is of a much lower magnitude from upwind turbines than downwind turbines: it is well below established infrasonic hearing thresholds, as is shown in Figure 41. In the Figure, the curve corresponding to a sound level of 90 dBG is considered to be about 5 dB below the mean threshold of human hearing. The low-frequency sound measured at 1,150 feet from a wind turbine is 15 dB or more below the 90 dBG perceptibility curve.

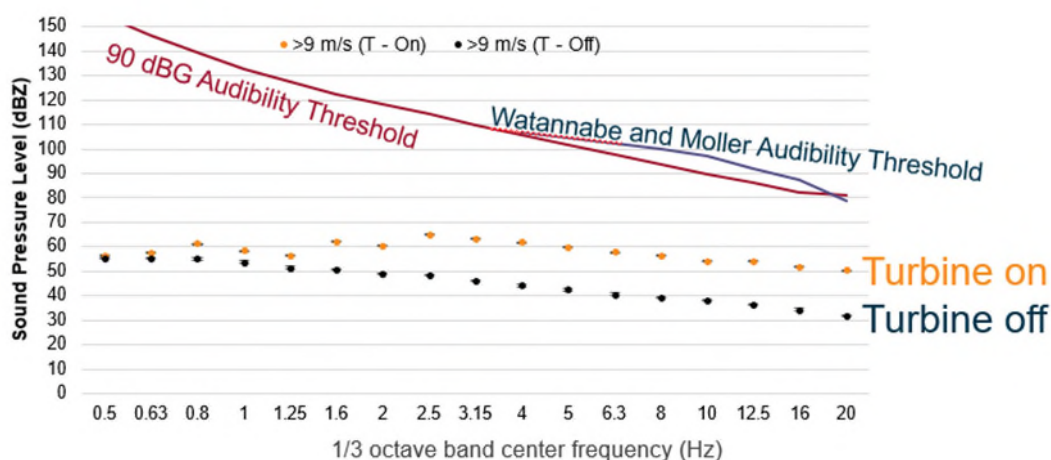


FIGURE 41: MEASURED HUMAN AUDIBILITY THRESHOLD AND THE 90 DBG CURVE (AN ASSUMED HUMAN PERCEPTION THRESHOLD) COMPARED WITH SOUND LEVEL MEASURED 350 METERS (1,150 FEET) FROM A WIND TURBINE⁷

Low-frequency sound from a wind turbine is generated primarily by the generator and mechanical components. Much of the mechanical noise has been reduced in modern wind turbines through improved sound insulation in the nacelle. Low-frequency sound can also be generated by the blades when the inflow air is very turbulent, a condition more common at higher wind speeds. However, at these wind speeds, low-frequency sound generated by the wind turbine blades is often masked by ground-level wind noise at downwind receivers.

⁷ RSG, et al., “Massachusetts Study on Wind Turbine Acoustics,” Massachusetts Clean Energy Center and Massachusetts Department of Environmental Protection, 2016 – Graphic from RSG presentation to MassDEP WNTAG, March, 2016.

Low-frequency sound is absorbed less by the atmosphere and ground than higher frequency sound. This enables it to propagate at an audible level further than higher frequency sound. (An example of this is the “clap” of thunder heard close to a lightning strike, but the “rumble” of thunder heard far from a strike.) The atmospheric propagation modeling applied to wind turbine sound accounts for frequency-specific ground attenuation and atmospheric absorption.

6.0 SOUND PROPAGATION MODELING

6.1 | PROCEDURES

Modeling for the project was in accordance with the standard ISO 9613-2, “Acoustics – Attenuation of sound during propagation outdoors, Part 2: General Method of Calculation.” The ISO standard states,

This part of ISO 9613 specifies an engineering method for calculating the attenuation of sound during propagation outdoors in order to predict the levels of environmental noise at a distance from a variety of sources. The method predicts the equivalent continuous A-weighted sound pressure level ... under meteorological conditions favorable to propagation from sources of known sound emissions. These conditions are for downwind propagation ... or, equivalently, propagation under a well-developed moderate ground-based temperature inversion, such as commonly occurs at night.

The model takes into account source sound power levels, surface reflection and absorption, atmospheric absorption, geometric divergence, meteorological conditions, walls, barriers, berms, and terrain. The acoustical modeling software used here was CadnaA®, from Datakustik GmbH. CadnaA® is a widely accepted acoustical propagation modeling tool, used by many noise control professionals in the United States and internationally.

ISO 9613-2 also assumes downwind sound propagation between every source and every receiver, consequently, all wind directions, including the prevailing wind directions, are considered.

Model configuration parameters are listed in Appendix B and are summarized here.

In the model, a grid of receivers⁸ spaced 40 meters by 40 meters was set up at a height of 1.5 meters (5 feet) above the ground, covering approximately 514 sq. km. (198 sq. mi.) around the Project area.

In addition to the grid, 4,028 discrete receivers (of which 399 are participating) were included in the model, representing residences and other sensitive locations within the calculation area. Each was placed at a height of 4 meters (13 feet) above the ground. Sound levels estimated at these receivers are summarized in Appendix C for each turbine model.

The Project area was modeled acoustically as having “mixed ground” ($G=0.5$), that is, half hard and half porous ground. An additional factor of 2 dB was added to the results. Foliage

⁸ A receiver is a point above the ground at which the computer model calculates a sound level.

was not modeled. Taken together, these model parameters have been shown to yield conservative results in estimating a one-hour L_{eq} from wind turbines.^{9,10,11}

Fifty turbines were modeled as sound sources. Turbines were modeled at the manufacturer's guaranteed maximum apparent sound power level. All turbine data used is the most recently available from the manufacturer at the time of this report. These sound power levels are marked as confidential by the manufacturers and are not included in the report.

Modeled spectra for the collector substation transformer and pad-mounted transformers are shown in Table 6. In each case, the sound power level is based on the NEMA TR-1 standard sound pressure level, along with data obtained from measurements of similarly-sized transformers measured by RSG.

TABLE 3: PROJECT TRANSFORMER SOUND POWER LEVELS

Source Description	1/1 Octave Band Sound Power (dBZ)									Sum (dBA)	Sum (dBZ)
	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz		
Power Transformer ONAF	85	97	99	99	103	97	88	80	68	102	107
Pad Transformer	80	84	88	84	83	78	72	68	63	84	92

6.2 | RESULTS OF SOUND PROPAGATION MODELING

Sound propagation modeling was performed for each of three turbine models (Vestas V150 4.2 MW, Siemens SG4.5-145, and Nordex N149 4.5 MW) at all 50 potential turbine locations. The Vestas V150 4.2 MW was modeled at a 105-meter hub height, the Siemens SG4.5-145 at a 107.5-meter hub height, and the Nordex N149 4.5 MW at a 109-meter hub height.

In the instance that modeled sound levels exceeded the project's 46 dBA noise limit at Nonparticipating residences, select turbines were placed into Noise Reduced Operations (NROs).¹² Sound propagation modeling results under this scenario are shown in Figure 42 for the Vestas V150 4.2 MW, Figure 43 for the Siemens SG4.5-145 MW, and Figure 44 for the Nordex N149 4.5 MW. Each turbine type has its own set of NRO modes which are identified differently and result in different sound level reductions. Table 4 indicates the sound level reduction resulting from each mode in parentheses. For the Vestas turbine, the NRO modes are listed as "Sound Optimized" modes. For example, "SO1" has a sound level reduction of 1.6 dB. For the Nordex these are listed as "Modes," and Mode 0 through Mode 5 are used. For the Siemens, these modes are listed as N1 to N4 for the presented modeling.

⁹ Duncan, E., and Kaliski, K., "Improving Sound Propagation Modeling for Wind Power Projects", Acoustics '08, 2008, Paris, France.

¹⁰ Bowdler, D. et al., "Prediction and Assessment of Wind Turbine Noise: Agreement about Relevant Factors for Noise Assessment from Wind Energy Projects." Acoustics Bulletin. 34(2), pp. 35-37.

¹¹ Evans, T. and Cooper, J., "Comparison of Predicted and Measured Wind Farm Noise Levels and Implications for Assessments of New Wind Farms." Acoustics Australia: April 2012. Vol. 40, No. 1.

¹² Noise Reduced Operations modes are turbine modes that reduce the maximum sound power emissions of turbines. This is typically accomplished through slowing down the rotational speed of the turbine's rotor.

The results show that Project-only sound levels in each of these three mitigated scenarios do not exceed 46 dBA at any Nonparticipating residence.

Note that particular turbine locations that are in NRO may change due to modifications to turbine locations, the final number of turbines built, and changes in manufacturer-published turbine sound emissions data. Specific NRO plans may include provisions for different NRO settings to be used depending on the time of day and meteorological conditions. The total number of turbines in each NRO mode are summarized in Table 4.

TABLE 4: NUMBER OF TURBINES IN EACH NOISE MODE

Vestas V150 4.2 MW		Siemens SG4.5-145		Nordex N149 4.5 MW	
Operational Mode	Turbine Count	Operational Mode	Turbine Count	Operational Mode	Turbine Count
Full Sound Power	47	Full Power	20	Mode 0	41
SO1 (1.6 dB)	3	N1 (2 dB)	18	Mode 1 (0.6 dB)	2
-	-	N2 (2.5 dB)	7	Mode 2 (1.1 dB)	1
-	-	N3 (4 dB)	4	Mode 3 (1.5 dB)	1
-	-	N4 (5 dB)	1	Mode 4 (2 dB)	4
-	-	-	-	Mode 5 (2.5 dB)	1

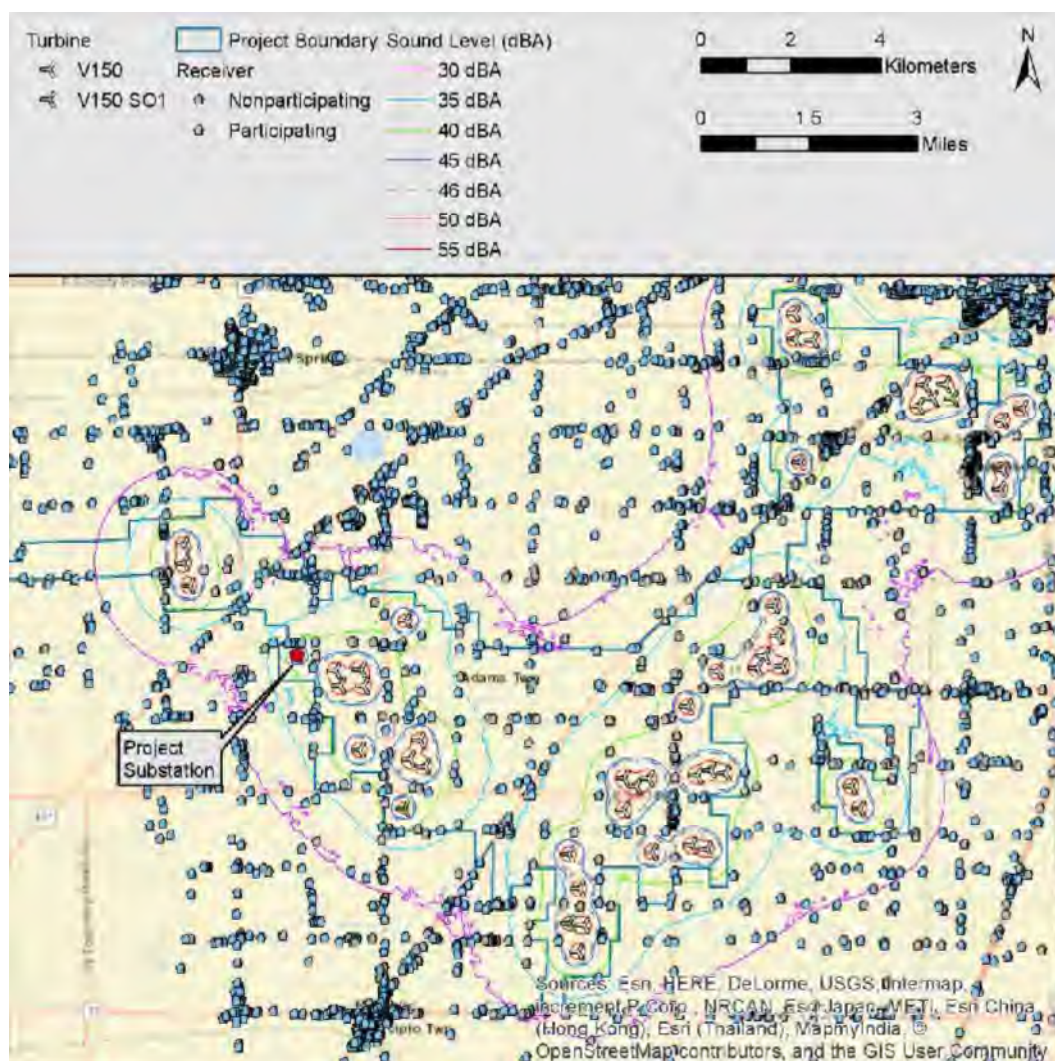


FIGURE 42: SOUND PROPAGATION MODELING RESULTS – VESTAS V150 4.2 MW

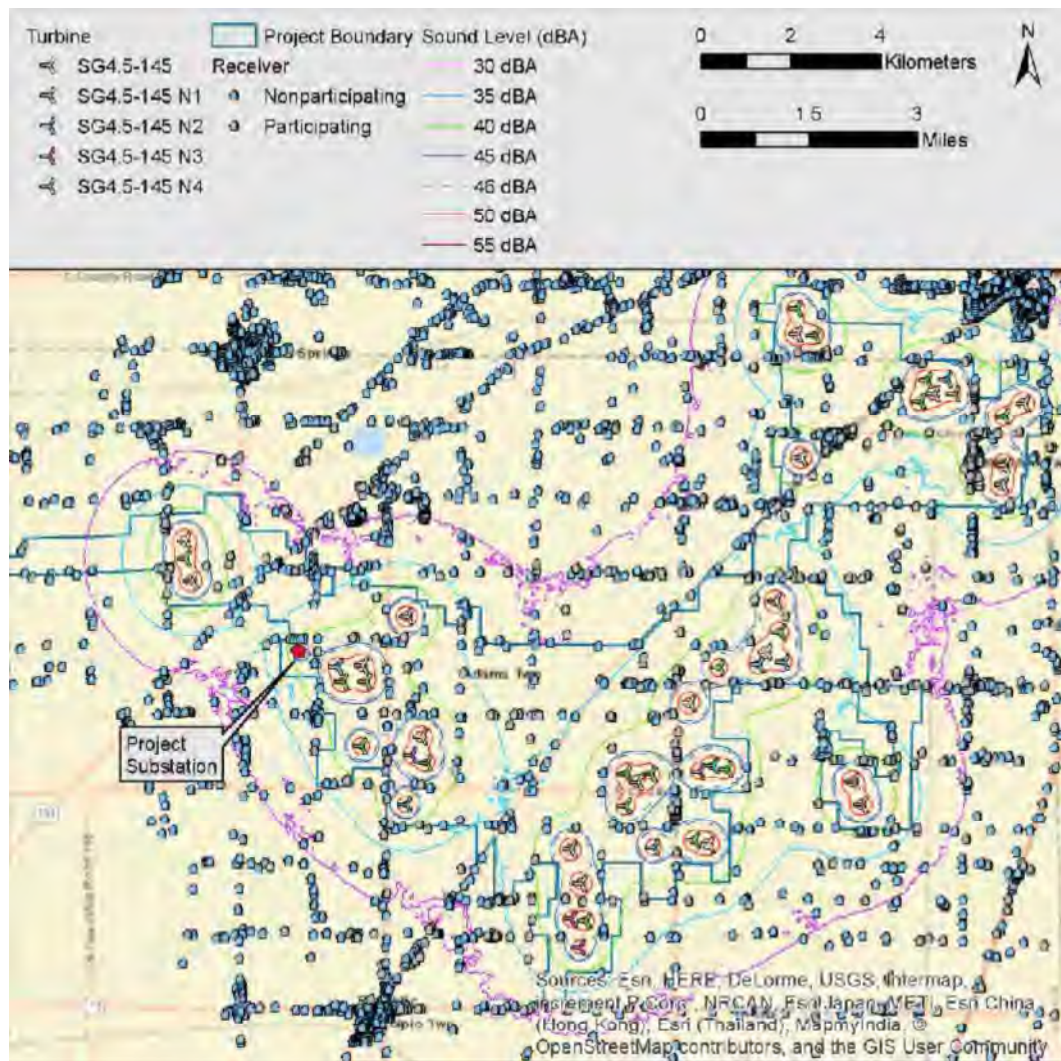


FIGURE 43: SOUND PROPAGATION MODELING RESULTS – SIEMENS SG4.5-145

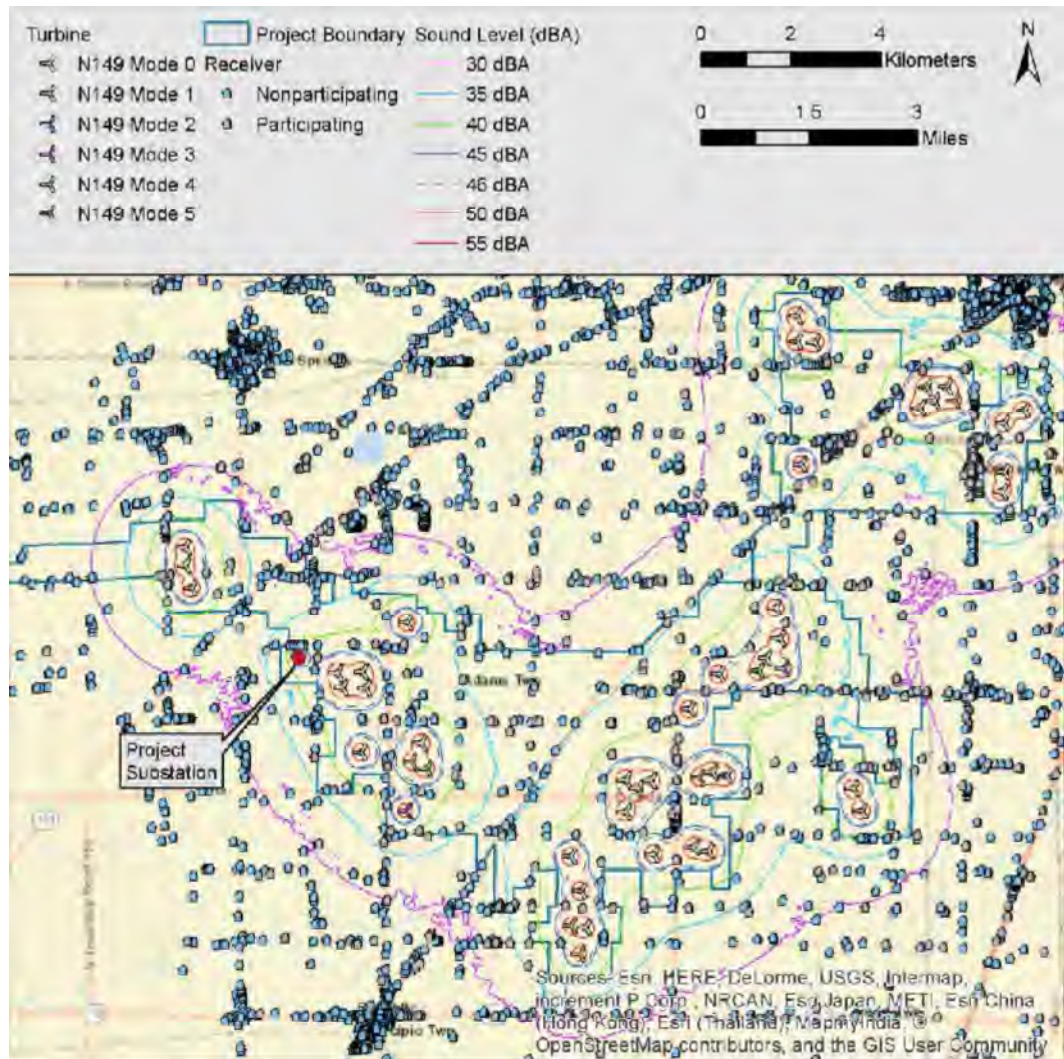


FIGURE 44: SOUND PROPAGATION MODELING RESULTS – NORDEX N149 4.5 MW

CONSTRUCTION ACTIVITY SOUND EMISSIONS

Wind turbine construction will be primarily at the turbine sites. While there may be activity closer to residences for road construction and utility work, such work will have a relatively short duration.

Equipment used for construction will vary. Some of the louder pieces of equipment are shown in Table 5 along with the approximate maximum sound pressure levels at 50 feet (15.2 m) and 1,471 feet (448 meters), the closest distance between a turbine site and a nonparticipating residence.

TABLE 5: MAXIMUM SOUND LEVELS FROM VARIOUS TYPES OF CONSTRUCTION EQUIPMENT ASSUMING NO ATTENUATION FROM TREES OR TERRAIN

Equipment	Maximum Sound Pressure Level at 448 meters (1,471 feet) (dBA) ¹³	Maximum Sound Pressure Level at 15 meters (50 feet) (dBA)
M-250 Liftcrane	48	83
2250 S3 Liftcrane	43	78
Excavator	50	83
Dump truck being loaded	54	86
Dump truck at 25 mph accelerating	44	76
Tractor trailer at 25 mph accelerating	49	80
Concrete truck	46	81
Bulldozer	50	85
Rock drill	62	100
Loader	42	80
Backhoe	45	80
Wood chipper	64	96

Major construction work, such as clearing for the access roads and any drilling and blasting, will occur during the day. Per OPSB requirements, any construction activities that increase sound above ambient levels at sensitive receptors will be limited to the hours of 7 AM to 7 PM or dusk, whichever is later. Pile driving, blasting, and rock hammering will occur between the hours of 10 AM to 5 PM.

¹³ Assumes hard ground around construction site, and ISO 9613-2 propagation with no vegetation reduction. Actual sound levels will likely be lower given the prevalence of vegetation and soft ground around the site.

7.0 SUMMARY AND CONCLUSIONS

The Republic Wind Project is a wind power project located in an area straddling the border between Seneca County and Sandusky County, Ohio, between the towns of Republic and Bellevue. In preparation for Ohio Power Siting Board (OPSB) permitting, Apex Clean Energy retained RSG to perform background sound level monitoring of the existing environment in and around the project area and sound propagation modeling to predict project-only sound levels at nearby residences. RSG previously published a report for this project (*Noise Impact Assessment for Republic Wind*, December 22, 2017), with a turbine array that included up to 58 turbines. The current report summarizes modeling results from an alternative array with up to 50 locations, with one spare location, for three additional turbine model options. Summary and conclusions are as follows:

- Republic Wind with this turbine array is proposed to include up to 50 turbine locations. Currently three additional turbine models are being considered: the Vestas V150 4.2 MW with a 150-meter diameter rotor and a 105-meter hub height, the Siemens/Gamesa SG4.5-145 with a 145-meter diameter rotor and a hub height of 107.5 meters, and the Nordex N149 4.5 MW with a 149-meter diameter rotor and a 109-meter hub height. Each turbine will include a pad-mounted transformer at its base and the collector substation will include a single 67-90-112 MVA transformer.
- The sound level limit specified in Ohio Administrative Code Section 4906-4-09(F) has set the applicable nighttime noise limit at a home to 5 dBA above the facility area nighttime ambient sound levels (L_{eq}).
- Background sound level monitoring was performed at seven locations throughout the project area. Daytime and nighttime equivalent continuous sound levels (L_{eq}) ranged from 37 to 52 dBA and 32 to 51 dBA respectively. Daytime and nighttime lower tenth-percentile sound levels (L_{90}) ranged from 23 to 32 dBA and 17 to 27 dBA respectively.
- The facility average nighttime sound level is 41 dBA, resulting in a noise limit for the Project of 46 dBA, based on the OAC limits.
- Sound propagation modeling was performed in accordance with international standard ISO 9613-2 at 4,028 discrete receivers that surround the project. Modeling was performed assuming half hard and half porous ground ($G=0.5$) and an additional 2 dB uncertainty factor was added to the results.
- With noise reduced operations applied to some turbine locations, the highest sound level modeled at a Nonparticipating receiver was 46 dBA, with all Nonparticipating receivers at or below the nighttime background L_{eq} plus 5 dB of 46 dBA.
- Other than extended concrete pours and similar events, major construction will take place during normal business hours. Construction activities that increase sound above ambient levels at sensitive receptors will be limited to the hours of 7 AM to 7

PM or dusk, whichever is later. Aside from road construction, these activities will take place at over 1,471 feet (448 meters) from the nearest residences.

APPENDIX A: A PRIMER ON SOUND AND NOISE

This report will use a variety of terms used to describe sound levels. Since sound can have many characteristics, there are many different ways to describe sound.

A.1 | SOUND AS A WAVE

Sound is the rapid oscillation of particles in any medium. Using this definition, the sound we experience day-to-day is the rapid vibration of air that we can sense with our ears. However, sound can also propagate through solids such as steel, rock, or wood and through liquids such as water.

Through air, sound propagates as a compression wave. That is, sound travels as fluctuations of air pressure above and below the atmospheric pressure. Sound can also be described in terms of vibrating of air particles where, at certain points along the wave, air particles are compressed and, at other points, the air particles are spread out.

Figure 45 illustrates two ways of describing sound. The blue section at the bottom shows an example of a compression wave, with air particles represented in blue. The green at the top of the figure shows a transverse wave. A transverse wave is similar to a vibrating string. While sound does not physically propagate as a transverse wave, the transverse wave can be used to describe the two main properties of waves in general: amplitude and wavelength.

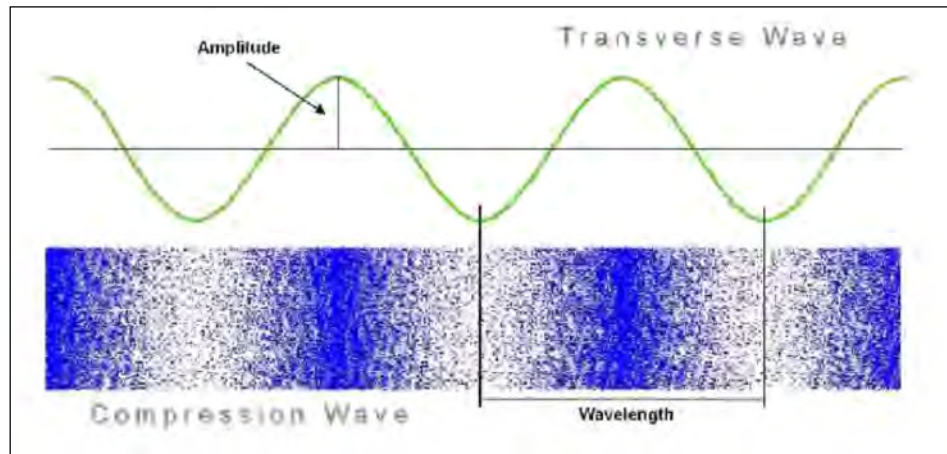


FIGURE 45: SOUND AS A WAVE

In reference to sound, amplitude is what we perceive as the sound pressure level or how loud a source is. The higher the amplitude of the sound wave, the louder it is. Physically, sound amplitude is a measure of the extent to which the air pressure, due to a sound wave, fluctuates above and below atmospheric pressure. In terms of the compression wave shown in Figure 45, amplitude is expressed by how compressed or spread out the air particles are at the various points along the sound wave.

Wavelength is the distance between two maximum compression locations in a sound wave. One wavelength is one complete cycle of the sound wave. Wavelength is important because it is directly related to the frequency of the sound, which is what the human ear perceives as pitch. Sound with longer wavelengths are lower in frequency, and shorter wavelengths are higher in frequency. Frequency is dealt with in greater depth in Section A.3 | Spectral Sound Levels.

A.2 | SOUND PRESSURE LEVEL

The level of a sound is typically quantified by the pressure it exerts. The air pressures from sound that humans can hear range from 20 μPa to over 10,000,000 μPa . In order to scale the range down and better approximate the human perception of relative loudness, we use a logarithmic scale for sound pressure level. The unit used for the logarithmic scale is the decibel (dB).

The lower threshold of human hearing is 0 dB at 1000 Hz and the threshold of pain is around 130 dB. A typical conversation in a room is between 50 and 60 dBA (“dBA” indicates that these levels are A-weighted. A-weighting is discussed in Section A.3 | Spectral Sound Levels).

Sound is difficult to describe in individual instantaneous measurements, which gives the sound pressure level at an exact moment in time. The level reading could be 62 dB, but a second later it could 57 dB. Sound pressure levels are constantly changing. It is for this reason that it makes sense to describe sound levels over time.

Take as an example, the sound levels measured over time shown in Figure 46. Instantaneous measurements are shown as a ragged grey line. The sound levels that occur over this time can be described verbally, but it is much easier to describe the recorded levels statistically. This is done using a variety of “levels” which are described below.

LMIN AND LMAX

Lmin and Lmax are simply the minimum and maximum sound level, respectively, monitored over a period of time. Note that “maximum” is not the same as “peak”. Peak levels have a different meaning, which is more applicable to sounds which can create hearing damage, which is not dealt with here.

PERCENTILE SOUND LEVEL - LN

Ln is the sound level exceeded n percent of the time. This type of statistical sound level, also shown in Figure 46, gives us information about the distribution of sound levels. For example, the L10 is the sound level that is exceeded 10 percent of the time, while the L90 is the sound level exceeded 90 percent of the time. The L50 is the median and is exceeded half the time. The L90 is often described as the “residual” level, describing a condition when most short-term contaminating sources are removed.

EQUIVALENT CONTINUOUS SOUND LEVEL - LEQ

One of the most common ways of describing noise levels is in terms of the equivalent continuous sound level (L_{eq}). The L_{eq} is the average of the sound *pressure* over an entire monitoring period and expressed as a decibel:

$$Leq_T = 10 * \log_{10} \left(\frac{1}{T} \int_0^T p_A^2(t) dt / p_0^2 \right)$$

where p_0^2 is the squared instantaneous weighted sound pressure signal, as a function of elapsed time t , p_0 is the reference pressure of $20\mu\text{Pa}$, and T is the stated time interval.

The monitoring period, T , can be for any amount of time. It could be one second ($L_{eq \text{ 1-sec}}$), one hour ($L_{eq(1)}$), or 24 hours ($L_{eq(24)}$). Because L_{eq} is a logarithmic function of the average pressure, loud and infrequent sounds have a greater effect on the resulting L_{eq} than quieter and more frequent sounds. For example, in Figure 46, the L_{50} (median) is about 47 dB, but the L_{eq} is 53 dB. Because it tends to weight the higher sound levels and is representative of sound that takes place over time, the L_{eq} is the most commonly used descriptor in noise standards and regulations.

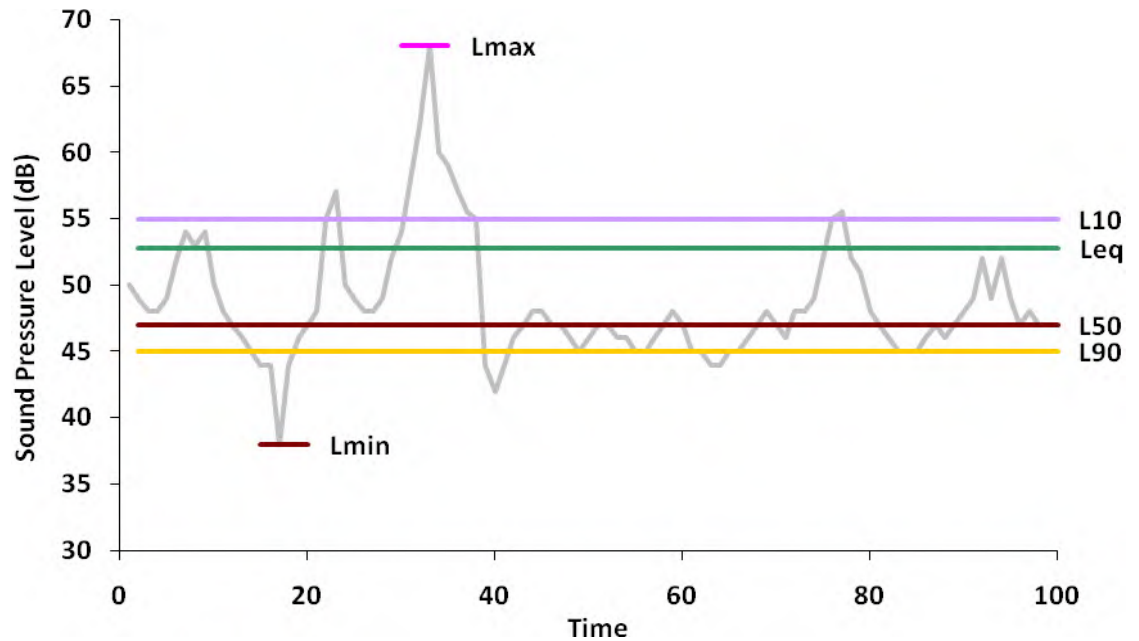


FIGURE 46: EXAMPLE OF DESCRIPTIVE TERMS OF SOUND MEASUREMENT OVER TIME

A.3 | SPECTRAL SOUND LEVELS

As previously stated, frequency is inversely related to wavelength. The unit used for frequency is cycles per second or hertz (Hz). The relationship between wavelength and frequency is dependent on the speed of sound.

$$\lambda = \frac{c}{f}$$

where λ is wavelength, c is the speed of sound, and f is frequency.

Figure 47 shows corresponding wavelengths and frequencies for sound in air at 68°F. People can generally hear sounds at frequencies between 20 and 20,000 Hz (also designated as 20 kHz). As shown, wavelengths in the range of human hearing vary considerably from 56 feet at 20 Hz, to less than an inch at 20 kHz.

Sound below 20 Hz is known as infrasound. Sometimes, we can perceive frequencies below 20 Hz, but that is typically due to our sense of vibration rather than hearing or if the levels are very high. Infrasound wavelengths are very long, with sound at 1 Hz having a wavelength of just over 1,000 feet. Sound above 20 kHz is called ultrasound and is not perceptible by the human ear.

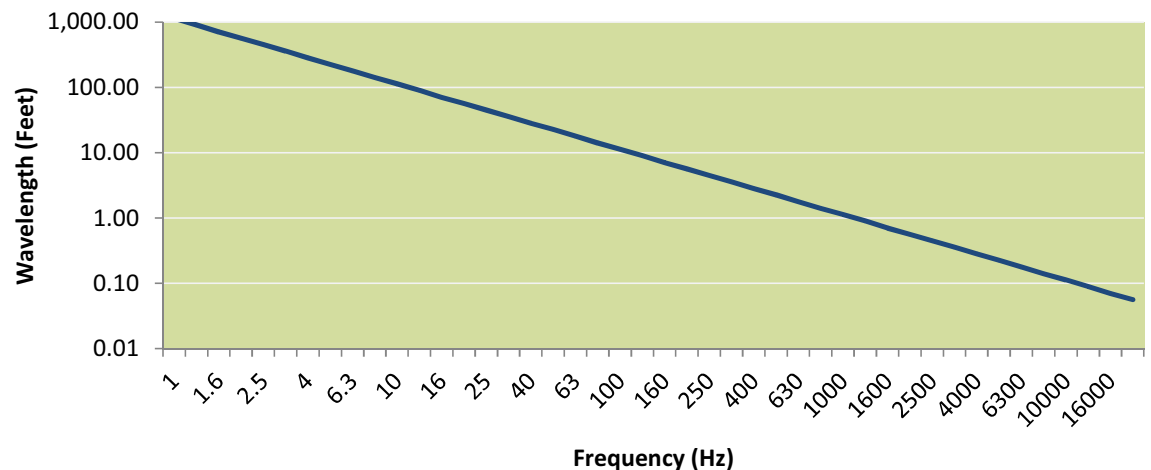


FIGURE 47: RELATIONSHIP BETWEEN FREQUENCY AND WAVELENGTH

Most sources are complex and composed of a wide range of frequencies at different sound levels. The range of frequencies and their corresponding sound levels is called a frequency spectrum.

Some sources are tonal, like the individual notes on a piano. Others are broadband, like fans. Human speech typically occurs between 200 Hz and 5 kHz.

OCTAVE BANDS

For analysis purposes, sound is typically broken down into different frequency divisions, or bands. The most common division is the standard octave band. An octave is a band of frequencies whose lower frequency limit is half of the upper frequency limit. An octave band is identified by its center frequency. As an example, the 500 Hz octave band contains all frequencies between 360 Hz and 720 Hz. An octave higher would be twice this. That is, it would be centered at 1,000 Hz with a range between 720 and 1,440 Hz. The range of human

hearing is divided into 10 standardized octave bands: 31.5 Hz, 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, and 16 kHz. For analyses that require even further frequency detail, each octave band is often broken down into parts, such as 1/3 octave bands.

FREQUENCY WEIGHTING

As previously mentioned, sound pressure levels are expressed in terms of decibels. Since the human ear is not sensitive to all frequencies equally, some frequencies, despite being the same decibel level, seem louder than others. For example, a 500 Hz tone at 80 dB sounds louder than a 63 Hz tone at 80 dB. For this reason, frequency weightings are applied to sound levels (Figure 48). The most common weighting scale used in environmental noise analysis is the A-weight, which more accurately represents the sensitivity of the human ear at low to moderate sound energy. An A-weighted sound level is usually denoted with the unit dBA or dB(A).

The C-weighting is often used for high-energy sounds such as explosions. It weights low-frequency sounds more than the A-weighting. The Z-weighting is used to designate no weighting.

Recently, a new weighting has been proposed – the Ai weighting.¹⁴ This is the A-weighted sound level with all sound above 1,250 Hz eliminated. This weighting is intended to be used to filter out biogenic sound that occurs at high frequencies, such as insects and birds.

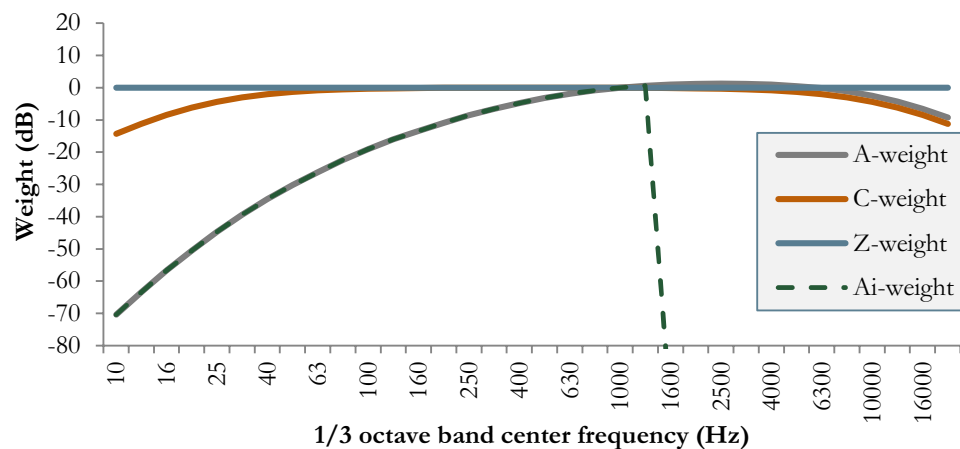


FIGURE 48: SOUND WEIGHTING SCHEMES

¹⁴ Schomer Paul, D.; Slauch Ian, M.; Hessler George, F, “Proposed "Ai"-weighting; A weighting to remove insect noise from A-weighted field measurements”, INTER-NOISE and NOISE-CON Congress and Conference Proceedings, InterNoise10, Lisbon PORTUGAL, pages 3543-4457 pp. 3991-4000(10)

A.4 | SOUND LEVEL METER RESPONSE

As noted in Section 0.2, sound levels vary over time. In fact, the variation is so fast, that one would not be able to reliably read the level on a sound level meter. For that reason, the level shown on sound level meters is often subject to exponential time response, which dampens the reading showed on the meter display to make it readable.

There are three responses available on most sound level meters: slow, fast, and impulse. These levels are denoted as L_s , L_f , and L_i , respectively. These may also be designated with a weighting, such as L_{Af} for A-weighted fast –response level. Fast response has a time constant of 125 ms. This response is similar to the response of the human ear. The slow response has a time constant of 1 second. This is often used in environmental noise measurement in that it has a slow rise and fall time, which eliminates very short spikes in noise that are not related to the measurement. The impulse response has a very fast rise time of 35 ms and a slow decay time of 1.5 seconds. It is rarely used in environmental noise measurements, but can be used with other metrics to evaluate the impulsivity of a sound event.

Fast, slow, and impulse sound levels cannot be averaged, since they are not representative of the actual sound level over time – they are simply applied to the actual sound level to slow the meter reading. So, an integration of fast, slow, or impulse sound levels will not give an accurate representation of the energy average sound level over time. However, percentiles can be used when this is needed. A true energy average, or equivalent average sound level can be calculated using the L_{eq} metric, which is independent of the sound level meter response setting.

APPENDIX B: SOUND SOURCE INFORMATION

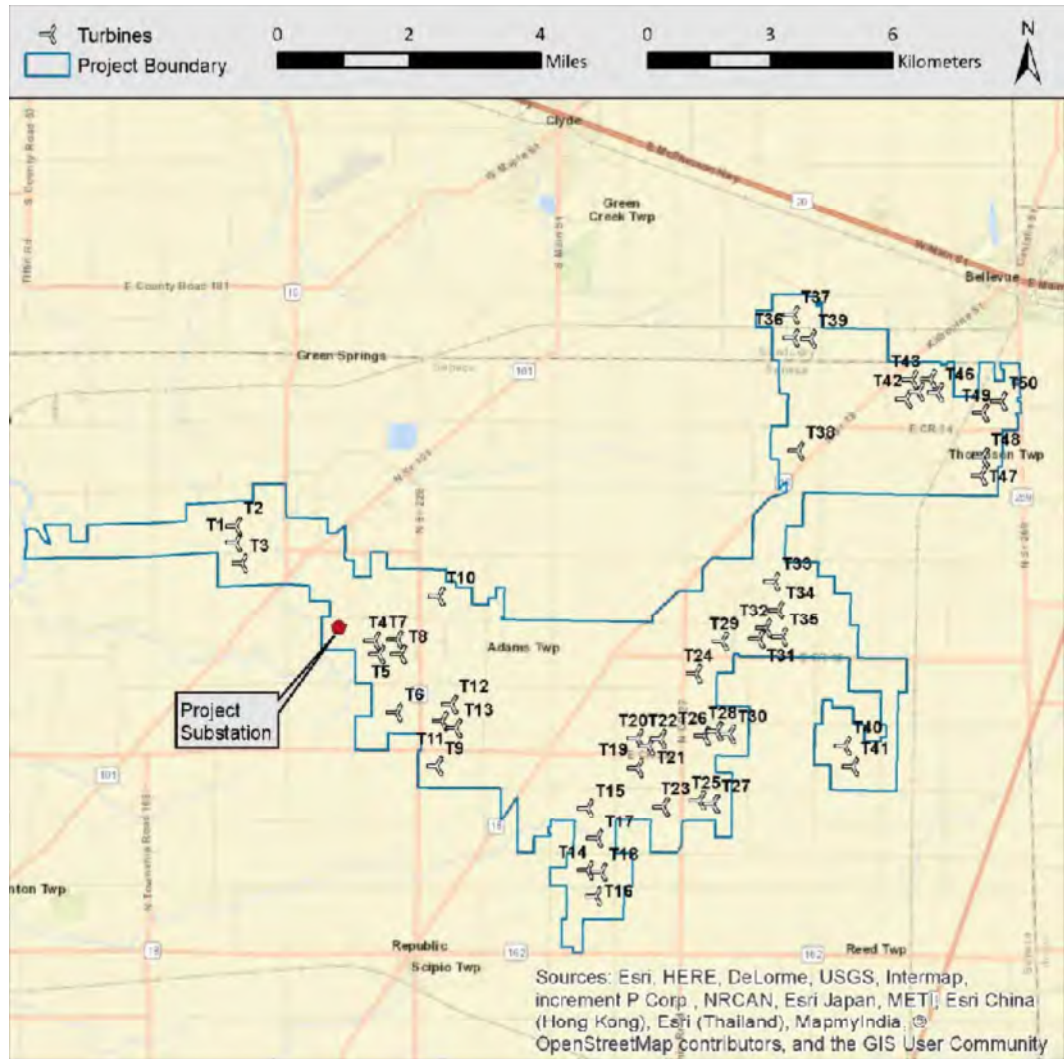


FIGURE 49: SOUND SOURCE MAP

TABLE 6: SOUND PROPAGATION MODELING PARAMETERS

Parameter	Setting
Ground Absorption	Spectral for all sources, Mixed Ground (G=0.5)
Atmospheric Attenuation	Based on 10 Degrees Celsius, 70% Relative Humidity
Reflections	None
Receiver Height	4 meters for residences, 1.5 meters for grid
Search Distance	8,000 meters

APPENDIX C: RECEIVER INFORMATION

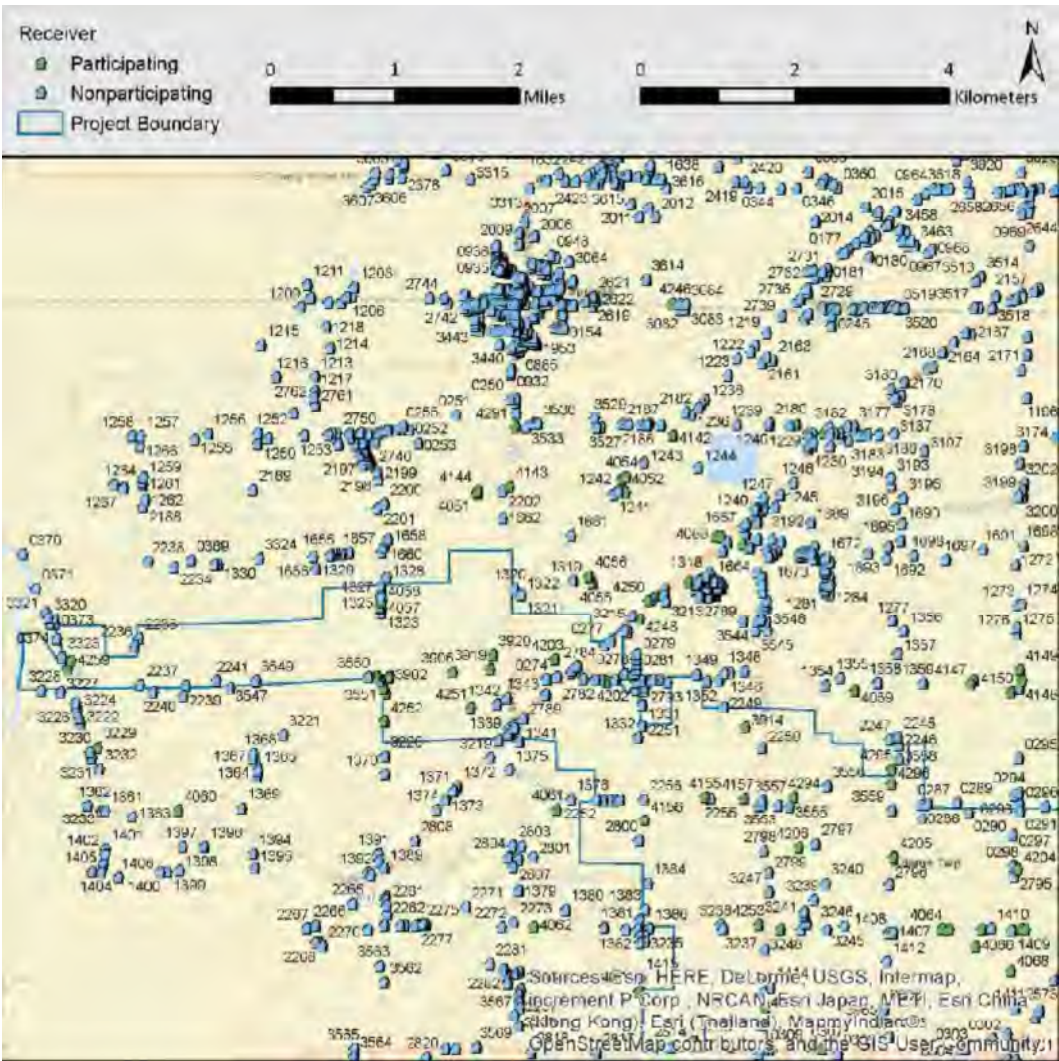


FIGURE 50: RECEIVER LOCATIONS - NW QUADRANT



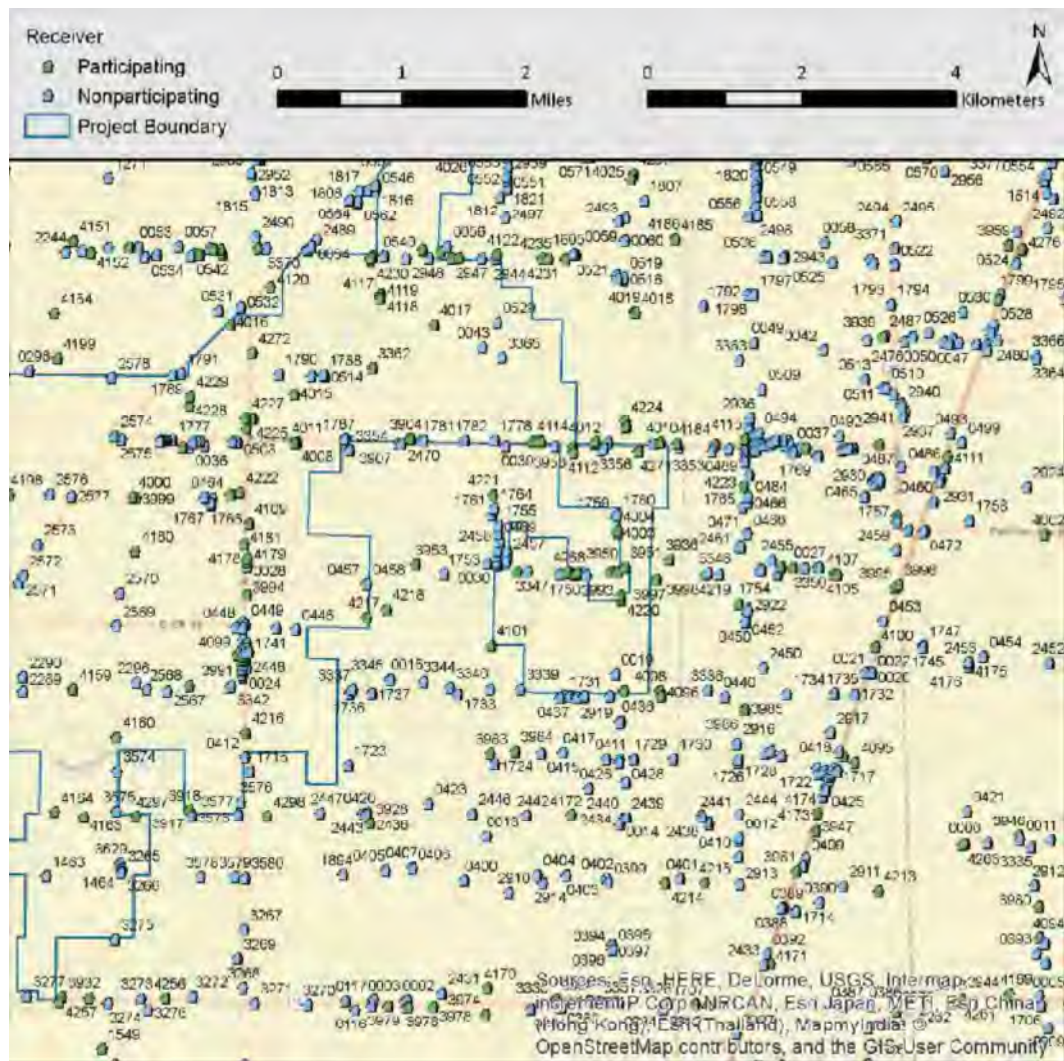


FIGURE 52: RECEIVER LOCATIONS - SE QUADRANT



TABLE 7: DISCRETE RECEIVER RESULTS

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1	Nonparticipant	28	29	28	565302	162009	281
2	Nonparticipant	28	29	28	565346	162021	280
3	Nonparticipant	29	29	29	564913	162025	277
4	Nonparticipant	26	27	26	567270	162033	280
5	Nonparticipant	12	15	13	573540	162072	268
6	Nonparticipant	19	21	20	572870	164055	264
7	Nonparticipant	19	21	20	572875	164057	264
8	Nonparticipant	12	14	12	574012	164066	263
9	Nonparticipant	26	27	26	569638	164075	270
10	Nonparticipant	16	18	16	573687	164088	262
11	Nonparticipant	15	17	16	573290	164095	263
12	Nonparticipant	25	27	25	569652	164117	269
13	Nonparticipant	31	32	32	566374	164142	276
14	Nonparticipant	30	31	30	568113	164294	274
15	Nonparticipant	39	39	39	565125	166183	269
16	Nonparticipant	45	45	45	563209	166205	264
17	Nonparticipant	45	45	45	563209	166224	264
18	Nonparticipant	45	45	45	563205	166243	264
19	Nonparticipant	39	41	40	568046	166246	268
20	Nonparticipant	25	27	25	571374	166260	261
21	Nonparticipant	25	27	25	571288	166262	261
22	Nonparticipant	25	26	25	571375	166267	261
23	Nonparticipant	45	45	45	563201	166278	265
24	Nonparticipant	45	45	45	563212	166301	266
25	Nonparticipant	27	29	27	570687	167629	260
26	Nonparticipant	28	29	28	570470	167631	260
27	Nonparticipant	27	29	27	570665	167643	260
28	Nonparticipant	45	45	46	563272	167646	261
29	Nonparticipant	39	40	40	566514	167662	263
30	Nonparticipant	39	40	39	566381	167688	263
31	Nonparticipant	39	40	39	566501	167694	263
32	Nonparticipant	33	34	33	567899	169177	259
33	Nonparticipant	28	29	28	570423	169177	261
34	Nonparticipant	29	30	30	569734	169180	258

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
35	Nonparticipant	31	32	31	568863	169183	257
36	Nonparticipant	39	39	39	562518	169186	258
37	Nonparticipant	28	29	28	570442	169187	260
38	Nonparticipant	36	36	36	567259	169196	256
39	Nonparticipant	39	39	39	566614	169201	259
40	Nonparticipant	26	27	26	572866	170447	253
41	Nonparticipant	29	30	29	570749	170453	256
42	Nonparticipant	29	30	29	570743	170454	256
43	Nonparticipant	42	42	42	566319	170491	253
44	Nonparticipant	26	27	26	572859	170516	253
45	Nonparticipant	26	27	26	572722	170532	253
46	Nonparticipant	26	27	26	572726	170532	253
47	Nonparticipant	24	25	24	572374	170534	252
48	Nonparticipant	25	26	25	572502	170543	252
49	Nonparticipant	30	31	30	569842	170549	251
50	Nonparticipant	26	28	27	572301	170555	254
51	Nonparticipant	30	32	31	571667	171766	249
52	Nonparticipant	31	32	31	561860	171774	251
53	Nonparticipant	31	32	31	561849	171782	251
54	Nonparticipant	35	36	35	564099	171789	253
55	Nonparticipant	32	33	32	562382	171789	250
56	Nonparticipant	40	41	40	565859	171789	249
57	Nonparticipant	32	33	32	562380	171793	250
58	Nonparticipant	32	33	32	570760	171846	251
59	Nonparticipant	32	33	32	568164	171865	252
60	Nonparticipant	32	33	33	568172	171868	252
61	Nonparticipant	34	35	34	564769	173099	249
62	Nonparticipant	37	38	37	571430	173099	249
63	Nonparticipant	34	35	34	564750	173148	249
64	Nonparticipant	32	33	32	572524	173150	248
65	Nonparticipant	32	33	32	572570	173155	248
66	Nonparticipant	34	35	34	572116	173157	249
67	Nonparticipant	32	34	33	572353	173157	250
68	Nonparticipant	32	33	33	572417	173157	250
69	Nonparticipant	40	42	41	571016	173165	251
70	Nonparticipant	39	41	40	571519	173931	248

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
71	Nonparticipant	39	41	40	571523	173934	248
72	Nonparticipant	35	36	35	564886	173939	247
73	Nonparticipant	36	37	36	565010	173973	247
74	Nonparticipant	36	36	36	568260	173995	243
75	Nonparticipant	42	43	42	569774	174001	246
76	Nonparticipant	42	43	42	569767	174008	246
77	Nonparticipant	42	44	43	569812	174023	247
78	Nonparticipant	38	39	39	567848	174806	245
79	Nonparticipant	41	43	42	566350	174812	245
80	Nonparticipant	42	43	43	569818	174814	245
81	Nonparticipant	37	38	38	567141	174815	244
82	Nonparticipant	39	40	39	566668	174819	246
83	Nonparticipant	37	38	38	566983	174819	245
84	Nonparticipant	43	44	44	569967	174819	245
85	Nonparticipant	43	44	44	569992	174820	245
86	Nonparticipant	43	43	43	569914	174822	245
87	Nonparticipant	43	44	44	570015	174826	245
88	Nonparticipant	43	44	43	569944	174828	245
89	Nonparticipant	40	42	41	566450	174849	246
90	Nonparticipant	39	39	39	567433	176492	243
91	Nonparticipant	41	42	42	565527	176507	243
92	Nonparticipant	40	42	41	565427	176509	243
93	Nonparticipant	41	42	42	565530	176515	243
94	Nonparticipant	41	42	41	565427	176520	243
95	Nonparticipant	31	32	32	563897	176526	242
96	Nonparticipant	31	32	32	563902	176533	242
97	Nonparticipant	43	43	43	566615	176562	242
98	Nonparticipant	43	44	44	565694	176562	246
99	Nonparticipant	43	44	44	566571	176566	242
100	Nonparticipant	40	42	41	565376	176567	244
101	Nonparticipant	40	41	40	565291	176571	244
102	Nonparticipant	32	33	33	564067	176576	243
103	Nonparticipant	36	36	36	569931	177579	235
104	Nonparticipant	36	36	36	569928	177544	235
105	Nonparticipant	36	36	36	569926	177500	235
106	Nonparticipant	36	37	37	569926	177439	236
107	Nonparticipant	36	36	36	569961	177469	236

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
108	Nonparticipant	36	36	36	570002	177500	236
109	Nonparticipant	36	36	36	570046	177531	235
110	Nonparticipant	36	36	36	569764	177602	236
111	Nonparticipant	36	36	36	569764	177641	236
112	Nonparticipant	35	36	36	569767	177677	237
113	Nonparticipant	35	35	35	569769	177720	237
114	Nonparticipant	35	35	35	569769	177753	237
115	Nonparticipant	35	35	35	569769	177805	237
116	Nonparticipant	29	29	29	564662	161894	280
117	Nonparticipant	29	30	29	564541	162016	277
118	Nonparticipant	27	28	27	573478	177627	242
119	Nonparticipant	27	28	27	573530	177634	243
120	Nonparticipant	27	28	27	573553	177641	243
121	Nonparticipant	27	28	27	573616	177646	242
122	Nonparticipant	26	27	26	573649	177645	243
123	Nonparticipant	26	27	27	573688	177653	242
124	Nonparticipant	26	27	27	573733	177660	242
125	Nonparticipant	27	28	27	573671	177592	242
126	Nonparticipant	27	28	27	573373	177881	240
127	Nonparticipant	27	28	27	573358	177887	239
128	Nonparticipant	27	27	27	573341	177889	239
129	Nonparticipant	27	27	27	573320	177893	239
130	Nonparticipant	26	27	27	573307	177889	239
131	Nonparticipant	32	33	32	571376	177705	232
132	Nonparticipant	32	33	32	571384	177726	233
133	Nonparticipant	32	33	32	571389	177755	234
134	Nonparticipant	32	32	32	571391	177784	234
135	Nonparticipant	31	32	32	571374	177860	233
136	Nonparticipant	31	32	31	571381	177926	233
137	Nonparticipant	31	31	31	571389	177971	232
138	Nonparticipant	31	32	31	571416	178011	233
139	Nonparticipant	31	31	31	571455	178064	233
140	Nonparticipant	31	31	31	571503	178071	233
141	Nonparticipant	31	31	31	571509	178043	233
142	Nonparticipant	31	31	31	571500	178020	233
143	Nonparticipant	31	32	31	571498	177976	233

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
144	Nonparticipant	24	25	24	553802	176266	220
145	Nonparticipant	24	25	24	553719	176257	220
146	Nonparticipant	24	25	24	553721	176306	220
147	Nonparticipant	24	25	24	553724	176317	220
148	Nonparticipant	24	25	24	553733	176339	220
149	Nonparticipant	23	25	24	553737	176353	220
150	Nonparticipant	23	25	24	554076	176387	220
151	Nonparticipant	23	25	24	554109	176395	220
152	Nonparticipant	23	25	24	554141	176383	220
153	Nonparticipant	23	25	24	554171	176380	221
154	Nonparticipant	23	25	24	554197	176381	220
155	Nonparticipant	23	24	23	554180	176506	220
156	Nonparticipant	23	24	23	554182	176544	219
157	Nonparticipant	22	23	22	552951	176699	215
158	Nonparticipant	22	23	22	553011	176697	215
159	Nonparticipant	21	23	21	553049	176703	216
160	Nonparticipant	22	23	23	553096	176701	216
161	Nonparticipant	21	23	22	553151	176709	216
162	Nonparticipant	23	24	23	553191	176697	215
163	Nonparticipant	23	24	23	553247	176699	215
164	Nonparticipant	23	24	23	553297	176699	215
165	Nonparticipant	23	24	23	553336	176704	215
166	Nonparticipant	23	24	23	553402	176699	215
167	Nonparticipant	23	24	23	553467	176690	216
168	Nonparticipant	22	24	23	553519	176697	216
169	Nonparticipant	21	22	21	553566	176698	216
170	Nonparticipant	19	20	19	558109	177570	227
171	Nonparticipant	20	22	21	558142	177607	227
172	Nonparticipant	20	22	21	558163	177635	227
173	Nonparticipant	21	22	21	558241	177581	227
174	Nonparticipant	20	22	21	558186	177545	227
175	Nonparticipant	21	22	21	558132	177512	226
176	Nonparticipant	19	21	20	557988	177485	227
177	Nonparticipant	18	19	18	557842	177364	227
178	Nonparticipant	18	20	19	557803	177344	226
179	Nonparticipant	19	20	19	557884	177403	227
180	Nonparticipant	20	22	21	558155	177299	228

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
181	Nonparticipant	20	22	21	557612	177151	228
182	Nonparticipant	22	24	23	560159	177955	232
183	Nonparticipant	34	34	34	568615	178158	241
184	Nonparticipant	34	34	34	568652	178157	242
185	Nonparticipant	34	34	34	568289	178292	241
186	Nonparticipant	34	34	34	568227	178273	241
187	Nonparticipant	34	35	35	567928	178210	240
188	Nonparticipant	34	34	34	569385	178145	241
189	Nonparticipant	34	34	34	569318	178085	240
190	Nonparticipant	33	34	34	568693	178165	240
191	Nonparticipant	34	34	34	568291	178247	241
192	Nonparticipant	34	34	34	568306	178197	240
193	Nonparticipant	34	35	34	570907	177468	239
194	Nonparticipant	34	34	34	570903	177481	239
195	Nonparticipant	34	34	34	570902	177514	238
196	Nonparticipant	32	32	32	570666	178199	234
197	Nonparticipant	32	32	32	570666	178190	234
198	Nonparticipant	32	32	32	570665	178162	234
199	Nonparticipant	32	32	32	570665	178137	234
200	Nonparticipant	32	32	32	570663	178117	235
201	Nonparticipant	32	32	32	570660	178077	236
202	Nonparticipant	32	32	32	570648	178073	235
203	Nonparticipant	32	32	32	570592	178078	233
204	Nonparticipant	32	33	32	570573	178079	233
205	Nonparticipant	32	33	33	570539	178080	233
206	Nonparticipant	32	33	32	570513	178080	233
207	Nonparticipant	32	33	33	570484	178078	234
208	Nonparticipant	32	33	33	570452	178075	235
209	Nonparticipant	26	27	26	571726	179677	231
210	Nonparticipant	26	27	26	571726	179711	231
211	Nonparticipant	26	27	26	571726	179796	231
212	Nonparticipant	25	26	26	571757	179929	230
213	Nonparticipant	25	26	26	571779	180014	229
214	Nonparticipant	25	26	25	571792	180118	229
215	Nonparticipant	25	26	25	571805	180171	229
216	Nonparticipant	25	26	25	571767	180196	229

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
217	Nonparticipant	25	26	25	571672	180181	229
218	Nonparticipant	25	26	25	571622	180187	230
219	Nonparticipant	25	26	25	571575	180190	230
220	Nonparticipant	25	26	26	571493	180190	230
221	Nonparticipant	25	26	26	571433	180190	230
222	Nonparticipant	30	30	30	571467	178382	233
223	Nonparticipant	29	30	30	570932	178779	235
224	Nonparticipant	30	30	30	570901	178754	236
225	Nonparticipant	30	30	30	570885	178738	236
226	Nonparticipant	30	30	30	570825	178706	236
227	Nonparticipant	30	30	30	570803	178688	236
228	Nonparticipant	30	31	30	570765	178672	236
229	Nonparticipant	30	31	30	570724	178643	236
230	Nonparticipant	30	31	31	570686	178609	237
231	Nonparticipant	30	31	31	570661	178587	236
232	Nonparticipant	31	31	31	570636	178558	236
233	Nonparticipant	31	31	31	570630	178546	236
234	Nonparticipant	30	31	31	570604	178514	234
235	Nonparticipant	22	24	23	558354	176647	233
236	Nonparticipant	21	22	21	558309	176645	232
237	Nonparticipant	22	23	22	558268	176654	231
238	Nonparticipant	22	24	23	558184	176642	231
239	Nonparticipant	21	23	22	558082	176653	232
240	Nonparticipant	22	23	22	558006	176624	233
241	Nonparticipant	22	23	22	557942	176628	232
242	Nonparticipant	18	20	18	557730	176634	229
243	Nonparticipant	20	22	21	557684	176638	230
244	Nonparticipant	21	22	21	557619	176627	230
245	Nonparticipant	20	22	21	557672	176538	231
246	Nonparticipant	18	19	18	557549	177107	226
247	Nonparticipant	19	21	20	557501	177049	228
248	Nonparticipant	26	27	26	553576	175421	220
249	Nonparticipant	26	27	26	553575	175473	219
250	Nonparticipant	25	26	25	553498	175461	220
251	Nonparticipant	27	28	27	552797	175257	219
252	Nonparticipant	27	29	28	552191	175058	217
253	Nonparticipant	28	29	28	552306	174887	219

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
254	Nonparticipant	28	29	28	552147	175058	217
255	Nonparticipant	27	28	28	552111	175106	216
256	Nonparticipant	28	29	28	552072	175059	216
257	Nonparticipant	28	29	28	552010	175060	216
258	Nonparticipant	28	29	28	551915	175053	216
259	Nonparticipant	28	29	28	551849	175039	216
260	Nonparticipant	28	29	28	551784	175014	216
261	Nonparticipant	30	31	30	556696	173215	242
262	Nonparticipant	30	31	30	556238	173009	244
263	Nonparticipant	30	31	31	556248	173020	244
264	Nonparticipant	30	31	30	556248	173042	244
265	Nonparticipant	30	31	30	556251	173061	243
266	Nonparticipant	29	30	29	556213	173085	242
267	Nonparticipant	29	30	30	556180	173093	241
268	Nonparticipant	29	30	29	556164	173096	241
269	Nonparticipant	29	29	29	556147	173103	240
270	Nonparticipant	29	29	29	556142	173103	240
271	Nonparticipant	29	30	30	556200	173022	243
272	Nonparticipant	30	31	30	556204	173011	243
273	Nonparticipant	30	31	30	556225	173002	243
274	Nonparticipant	35	36	35	553969	171821	234
275	Nonparticipant	32	33	32	555027	172433	242
276	Nonparticipant	32	32	32	554980	172451	240
277	Nonparticipant	32	33	33	554802	172311	241
278	Nonparticipant	32	33	33	554724	172264	241
279	Nonparticipant	33	33	33	555145	172145	242
280	Nonparticipant	33	33	33	555135	172082	242
281	Nonparticipant	33	34	33	555144	172024	242
282	Nonparticipant	33	34	33	555143	171952	242
283	Nonparticipant	33	34	34	555128	171896	241
284	Nonparticipant	33	34	34	555095	171880	241
285	Nonparticipant	33	34	34	554982	171888	241
286	Nonparticipant	34	35	34	558822	170195	249
287	Nonparticipant	34	35	34	558914	170212	250
288	Nonparticipant	34	35	34	558837	170015	251
289	Nonparticipant	33	34	33	559295	170240	251

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
290	Nonparticipant	33	33	33	559448	170095	253
291	Nonparticipant	32	33	32	560114	170118	254
292	Nonparticipant	32	33	32	560105	170204	253
293	Nonparticipant	32	32	32	560032	170325	252
294	Nonparticipant	31	32	31	560094	170368	250
295	Nonparticipant	31	32	31	560099	170797	253
296	Nonparticipant	31	31	31	560441	170187	252
297	Nonparticipant	33	34	33	560021	169793	256
298	Nonparticipant	33	34	34	560021	169390	256
299	Nonparticipant	36	37	36	560045	167057	257
300	Nonparticipant	37	37	37	559950	166886	259
301	Nonparticipant	36	37	36	560052	166883	259
302	Nonparticipant	36	36	36	559754	167154	260
303	Nonparticipant	36	36	36	559403	167031	258
304	Nonparticipant	36	36	36	559340	167023	258
305	Nonparticipant	40	40	40	558410	167174	254
306	Nonparticipant	42	42	42	558351	167549	256
307	Nonparticipant	46	46	46	557406	167057	256
308	Nonparticipant	44	44	44	557748	166949	252
309	Nonparticipant	43	43	43	556800	167023	255
310	Nonparticipant	34	35	34	559138	163683	269
311	Nonparticipant	34	35	34	559161	163604	270
312	Nonparticipant	34	34	34	559137	163604	270
313	Nonparticipant	34	34	34	559099	163611	270
314	Nonparticipant	33	34	33	558818	163706	265
315	Nonparticipant	31	31	31	557954	163673	268
316	Nonparticipant	30	30	30	557920	163670	267
317	Nonparticipant	30	31	30	557891	163667	266
318	Nonparticipant	27	28	27	556868	162506	267
319	Nonparticipant	25	25	24	556929	162641	265
320	Nonparticipant	28	28	28	556995	162674	267
321	Nonparticipant	27	28	27	556741	162588	266
322	Nonparticipant	27	28	27	556740	162549	266
323	Nonparticipant	27	27	27	556760	162497	267
324	Nonparticipant	27	28	27	556742	162435	268
325	Nonparticipant	26	27	26	556746	162385	267
326	Nonparticipant	27	27	27	556689	162261	269

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
327	Nonparticipant	26	27	26	556447	162061	270
328	Nonparticipant	26	27	26	556495	162064	269
329	Nonparticipant	26	27	26	556537	162067	270
330	Nonparticipant	24	25	24	556550	161712	271
331	Nonparticipant	24	25	24	556550	161725	271
332	Nonparticipant	22	23	23	556551	161744	271
333	Nonparticipant	21	22	22	556522	161742	271
334	Nonparticipant	21	22	21	556500	161749	270
335	Nonparticipant	21	22	21	556475	161752	270
336	Nonparticipant	23	24	23	556458	161752	270
337	Nonparticipant	24	25	24	556454	161786	271
338	Nonparticipant	24	24	24	556466	161785	271
339	Nonparticipant	23	24	23	556413	161795	270
340	Nonparticipant	21	21	21	556345	161790	269
341	Nonparticipant	25	26	25	556233	161743	269
342	Nonparticipant	25	26	25	556233	161716	269
343	Nonparticipant	19	21	20	556585	178213	218
344	Nonparticipant	19	21	19	556733	178206	218
345	Nonparticipant	19	21	20	557008	178189	220
346	Nonparticipant	19	21	20	557215	178200	220
347	Nonparticipant	28	29	29	563146	176898	242
348	Nonparticipant	35	35	35	567383	178384	241
349	Nonparticipant	31	31	31	567129	179463	239
350	Nonparticipant	31	32	31	567073	179461	239
351	Nonparticipant	31	31	31	566984	179513	238
352	Nonparticipant	29	30	30	566841	179477	237
353	Nonparticipant	30	30	30	566754	179470	237
354	Nonparticipant	32	32	32	566737	179393	240
355	Nonparticipant	32	32	32	566785	179405	240
356	Nonparticipant	24	25	24	561778	178340	231
357	Nonparticipant	23	25	24	561212	178311	232
358	Nonparticipant	19	21	20	557637	178279	221
359	Nonparticipant	19	20	19	557687	178246	222
360	Nonparticipant	19	21	20	557745	178216	221
361	Nonparticipant	19	20	19	557535	178255	221
362	Nonparticipant	19	21	20	557571	178321	221

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
363	Nonparticipant	18	20	19	557372	178417	220
364	Nonparticipant	18	20	19	556997	178921	218
365	Nonparticipant	14	16	15	556961	178974	217
366	Nonparticipant	17	19	18	556901	179162	220
367	Nonparticipant	17	19	18	556847	179257	220
368	Nonparticipant	16	17	16	556806	179315	218
369	Nonparticipant	26	27	27	549358	173377	215
370	Nonparticipant	18	20	19	547181	173454	213
371	Nonparticipant	21	22	21	547351	173011	214
372	Nonparticipant	21	23	22	547583	172615	214
373	Nonparticipant	22	23	22	547603	172536	214
374	Nonparticipant	22	23	22	547536	172539	214
375	Nonparticipant	14	15	14	570293	160978	273
376	Nonparticipant	5	7	5	573452	160993	260
377	Nonparticipant	22	23	22	566367	161027	283
378	Nonparticipant	5	7	5	573667	161050	266
379	Nonparticipant	8	10	8	572330	161114	271
380	Nonparticipant	21	23	21	569903	161149	278
381	Nonparticipant	26	27	26	566942	161906	282
382	Nonparticipant	24	25	24	568666	161908	278
383	Nonparticipant	24	25	24	567341	161924	280
384	Nonparticipant	24	26	24	568652	161926	278
385	Nonparticipant	24	25	24	567329	161936	280
386	Nonparticipant	19	20	19	571358	161942	276
387	Nonparticipant	20	21	20	571006	161943	277
388	Nonparticipant	22	24	23	570197	163208	272
389	Nonparticipant	24	25	24	570225	163214	272
390	Nonparticipant	23	25	23	570694	163281	270
391	Nonparticipant	13	15	13	573625	162501	265
392	Nonparticipant	22	23	22	570007	162620	272
393	Nonparticipant	13	15	13	573501	162624	266
394	Nonparticipant	26	27	26	568001	162664	277
395	Nonparticipant	26	27	26	568007	162675	277
396	Nonparticipant	26	27	26	568004	162723	277
397	Nonparticipant	26	27	26	568005	162736	276
398	Nonparticipant	9	10	9	573619	162752	265
399	Nonparticipant	27	28	27	567950	163535	278

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
400	Nonparticipant	30	31	30	566086	163566	276
401	Nonparticipant	27	28	27	568881	163587	271
402	Nonparticipant	27	28	27	567925	163593	277
403	Nonparticipant	29	30	29	567411	163629	276
404	Nonparticipant	28	29	28	567030	163638	277
405	Nonparticipant	32	33	33	565058	163698	276
406	Nonparticipant	32	32	32	565409	163718	278
407	Nonparticipant	32	33	32	565403	163734	278
408	Nonparticipant	24	25	24	570482	163751	269
409	Nonparticipant	24	26	25	570509	163856	269
410	Nonparticipant	26	27	26	569638	163870	270
411	Nonparticipant	33	35	33	567929	165155	270
412	Nonparticipant	44	44	44	563243	165172	266
413	Nonparticipant	27	28	27	570206	165193	267
414	Nonparticipant	27	28	27	570197	165196	267
415	Nonparticipant	34	36	35	567079	165218	269
416	Nonparticipant	27	29	28	569986	165218	264
417	Nonparticipant	34	36	35	567364	165233	270
418	Nonparticipant	24	26	25	570947	165245	262
419	Nonparticipant	27	28	27	570057	165255	264
420	Nonparticipant	36	36	36	564822	164459	274
421	Nonparticipant	20	22	21	572607	164477	265
422	Nonparticipant	12	14	12	574393	164557	259
423	Nonparticipant	34	34	34	565622	164575	273
424	Nonparticipant	25	26	25	570741	164667	264
425	Nonparticipant	25	26	25	570768	164750	265
426	Nonparticipant	31	32	31	567699	164773	272
427	Nonparticipant	25	26	25	570777	164792	266
428	Nonparticipant	31	33	32	568178	164855	272
429	Nonparticipant	25	26	25	570811	164880	266
430	Nonparticipant	25	26	25	570826	164922	267
431	Nonparticipant	25	26	25	570846	164954	267
432	Nonparticipant	25	27	26	570678	164962	265
433	Nonparticipant	25	26	25	570855	164978	267
434	Nonparticipant	15	18	16	574257	164988	258
435	Nonparticipant	16	18	17	574281	165633	257

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
436	Nonparticipant	35	37	36	568120	165640	267
437	Nonparticipant	41	42	41	567326	165938	266
438	Nonparticipant	40	42	41	567543	165941	267
439	Nonparticipant	40	42	41	567531	165949	267
440	Nonparticipant	30	31	30	569464	165952	265
441	Nonparticipant	40	42	41	567640	165955	267
442	Nonparticipant	40	42	41	567648	165957	267
443	Nonparticipant	38	40	38	567973	165957	268
444	Nonparticipant	41	43	41	567456	165958	267
445	Nonparticipant	46	45	46	563897	166823	267
446	Nonparticipant	46	45	46	563643	166840	263
447	Nonparticipant	45	45	45	563209	166842	260
448	Nonparticipant	45	46	46	563115	166854	260
449	Nonparticipant	45	45	46	563243	166891	260
450	Nonparticipant	29	31	30	569729	166915	262
451	Nonparticipant	46	45	46	563202	166918	260
452	Nonparticipant	29	31	30	569734	166927	263
453	Nonparticipant	24	25	24	571518	166936	257
454	Nonparticipant	20	22	21	572821	166473	256
455	Nonparticipant	19	21	20	574306	167313	254
456	Nonparticipant	19	21	20	574303	167318	254
457	Nonparticipant	45	45	45	564815	167418	265
458	Nonparticipant	45	45	45	564821	167419	265
459	Nonparticipant	29	31	30	569767	168464	259
460	Nonparticipant	24	26	25	572171	168482	256
461	Nonparticipant	21	23	21	574272	168502	251
462	Nonparticipant	41	42	42	562714	168525	261
463	Nonparticipant	42	42	42	562812	168530	260
464	Nonparticipant	41	42	42	562717	168546	261
465	Nonparticipant	26	28	27	571279	168551	258
466	Nonparticipant	29	31	30	569764	168552	258
467	Nonparticipant	21	23	22	574272	168558	251
468	Nonparticipant	29	30	29	569758	168059	260
469	Nonparticipant	38	39	38	566524	168069	260
470	Nonparticipant	29	30	29	569759	168073	260
471	Nonparticipant	29	30	29	569758	168084	260
472	Nonparticipant	24	25	24	572045	168095	257

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
473	Nonparticipant	24	26	25	572065	168111	256
474	Nonparticipant	25	27	26	571845	168120	256
475	Nonparticipant	26	28	26	571474	168757	258
476	Nonparticipant	25	27	25	571479	168758	258
477	Nonparticipant	25	26	25	571479	168774	257
478	Nonparticipant	26	28	27	571397	168777	258
479	Nonparticipant	25	26	25	572272	168782	255
480	Nonparticipant	26	28	27	571419	168789	258
481	Nonparticipant	26	28	26	571464	168791	258
482	Nonparticipant	26	28	26	571454	168795	258
483	Nonparticipant	26	27	26	571448	168796	258
484	Nonparticipant	28	29	28	569777	168826	255
485	Nonparticipant	25	27	25	572176	168875	255
486	Nonparticipant	25	26	25	572321	168919	255
487	Nonparticipant	26	27	26	571752	168939	256
488	Nonparticipant	20	21	20	574206	168962	250
489	Nonparticipant	28	29	28	569724	169004	254
490	Nonparticipant	29	30	29	569720	169031	255
491	Nonparticipant	29	30	29	569817	169335	258
492	Nonparticipant	27	29	28	570949	169335	260
493	Nonparticipant	25	27	25	572389	169367	255
494	Nonparticipant	29	30	29	569905	169383	259
495	Nonparticipant	29	30	29	569782	169422	258
496	Nonparticipant	22	24	22	574247	169444	251
497	Nonparticipant	29	30	29	569781	169492	257
498	Nonparticipant	29	30	29	570044	169246	260
499	Nonparticipant	24	25	24	572536	169248	254
500	Nonparticipant	29	30	29	570081	169253	260
501	Nonparticipant	39	39	39	562561	169255	258
502	Nonparticipant	33	34	33	567948	169255	259
503	Nonparticipant	43	44	43	563139	169255	256
504	Nonparticipant	39	40	40	562663	169257	258
505	Nonparticipant	39	40	39	562616	169257	258
506	Nonparticipant	37	38	37	562125	169261	257
507	Nonparticipant	42	43	42	563074	169263	255
508	Nonparticipant	22	24	23	574183	169897	250

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
509	Nonparticipant	29	30	29	569950	169945	255
510	Nonparticipant	27	28	27	571551	169960	256
511	Nonparticipant	27	28	27	571508	169964	256
512	Nonparticipant	21	23	21	574163	170018	250
513	Nonparticipant	28	29	28	571281	170075	256
514	Nonparticipant	45	45	45	564275	170110	256
515	Nonparticipant	44	44	45	564100	170110	257
516	Nonparticipant	32	33	33	568156	171357	248
517	Nonparticipant	32	33	32	568072	171367	247
518	Nonparticipant	32	33	33	568147	171386	248
519	Nonparticipant	32	33	33	568153	171386	248
520	Nonparticipant	33	33	33	568063	171417	247
521	Nonparticipant	33	33	33	568057	171419	247
522	Nonparticipant	30	31	30	571668	171551	249
523	Nonparticipant	30	32	31	571393	171567	250
524	Nonparticipant	27	28	27	573244	171570	248
525	Nonparticipant	31	32	31	570862	171583	250
526	Nonparticipant	27	28	27	572111	170686	258
527	Nonparticipant	26	27	26	572887	170717	250
528	Nonparticipant	26	27	26	572959	170778	250
529	Nonparticipant	40	40	40	566507	170808	250
530	Nonparticipant	26	28	26	572555	170943	250
531	Nonparticipant	35	35	35	562898	170962	255
532	Nonparticipant	36	36	36	563186	171007	256
533	Nonparticipant	32	33	32	570014	171649	252
534	Nonparticipant	31	32	31	561946	171649	251
535	Nonparticipant	31	32	32	561943	171651	251
536	Nonparticipant	32	33	32	569959	171653	252
537	Nonparticipant	32	33	32	570024	171654	251
538	Nonparticipant	32	33	32	570243	171656	250
539	Nonparticipant	32	33	32	569968	171658	252
540	Nonparticipant	41	42	41	565044	171661	253
541	Nonparticipant	32	33	33	562538	171661	250
542	Nonparticipant	32	33	33	562534	171664	250
543	Nonparticipant	34	34	34	567534	171674	247
544	Nonparticipant	35	37	36	569876	172555	250
545	Nonparticipant	34	35	35	566646	172559	249

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
546	Nonparticipant	35	36	35	564939	172595	247
547	Nonparticipant	36	37	36	569861	172596	250
548	Nonparticipant	35	36	35	564929	172598	247
549	Nonparticipant	36	37	36	569892	172636	250
550	Nonparticipant	27	29	28	573618	172655	249
551	Nonparticipant	34	35	35	566643	172663	248
552	Nonparticipant	34	35	35	566639	172667	248
553	Nonparticipant	34	35	34	566641	172706	248
554	Nonparticipant	27	29	28	573579	172707	249
555	Nonparticipant	33	35	34	569765	172175	252
556	Nonparticipant	33	35	34	569768	172176	252
557	Nonparticipant	33	35	34	569847	172193	252
558	Nonparticipant	33	34	34	569892	172194	250
559	Nonparticipant	34	35	34	569864	172312	249
560	Nonparticipant	34	35	34	569845	172315	250
561	Nonparticipant	35	36	36	564699	172360	249
562	Nonparticipant	35	36	36	564703	172363	249
563	Nonparticipant	35	36	36	564701	172394	249
564	Nonparticipant	35	36	35	564592	172399	248
565	Nonparticipant	37	39	38	571107	172916	251
566	Nonparticipant	30	32	31	563392	172924	249
567	Nonparticipant	31	32	31	563442	172924	251
568	Nonparticipant	38	39	38	569890	172938	249
569	Nonparticipant	38	39	38	569892	172944	249
570	Nonparticipant	33	34	33	572082	172954	248
571	Nonparticipant	34	34	34	567653	172960	248
572	Nonparticipant	34	34	34	567691	172964	247
573	Nonparticipant	34	34	34	567728	172964	247
574	Nonparticipant	35	36	35	566639	172966	248
575	Nonparticipant	27	28	27	573734	172967	247
576	Nonparticipant	38	39	38	569854	172974	250
577	Nonparticipant	28	29	28	573680	172983	249
578	Nonparticipant	28	29	28	573660	172993	249
579	Nonparticipant	32	33	32	572497	173030	248
580	Nonparticipant	33	34	33	572165	173031	249
581	Nonparticipant	30	31	31	562904	173330	248

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
582	Nonparticipant	37	38	37	565808	173331	249
583	Nonparticipant	36	37	36	565409	173335	249
584	Nonparticipant	36	38	37	565703	173337	250
585	Nonparticipant	36	38	37	565638	173340	250
586	Nonparticipant	36	38	37	565671	173347	249
587	Nonparticipant	33	34	33	564503	173356	248
588	Nonparticipant	33	34	33	564299	173361	248
589	Nonparticipant	31	32	31	563546	173369	248
590	Nonparticipant	30	31	31	563120	173374	247
591	Nonparticipant	36	38	37	571631	173246	249
592	Nonparticipant	35	37	36	565429	173247	250
593	Nonparticipant	31	32	31	563390	173252	247
594	Nonparticipant	33	34	33	564430	173256	247
595	Nonparticipant	33	34	33	564289	173262	248
596	Nonparticipant	33	34	34	564525	173262	248
597	Nonparticipant	35	36	36	568948	173266	248
598	Nonparticipant	34	36	35	565064	173267	247
599	Nonparticipant	33	34	33	564471	173269	248
600	Nonparticipant	32	33	33	564191	173271	249
601	Nonparticipant	35	36	35	565231	173271	249
602	Nonparticipant	36	37	36	565419	173274	250
603	Nonparticipant	35	36	36	568949	173274	247
604	Nonparticipant	34	35	34	568201	173281	248
605	Nonparticipant	30	31	30	573265	173531	246
606	Nonparticipant	33	34	33	572438	173566	251
607	Nonparticipant	28	29	28	573755	173609	245
608	Nonparticipant	35	36	35	564917	173635	248
609	Nonparticipant	38	40	39	571523	173639	248
610	Nonparticipant	39	40	39	571517	173666	249
611	Nonparticipant	35	36	35	565008	173670	248
612	Nonparticipant	31	32	31	563401	173674	246
613	Nonparticipant	35	36	35	567545	173691	245
614	Nonparticipant	30	31	30	573216	173703	246
615	Nonparticipant	31	32	31	563452	173704	245
616	Nonparticipant	39	40	39	571532	173718	249
617	Nonparticipant	30	31	30	563313	174328	246
618	Nonparticipant	42	44	43	569879	174336	248

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
619	Nonparticipant	42	43	42	571252	174336	245
620	Nonparticipant	42	43	43	569835	174341	247
621	Nonparticipant	42	43	42	569809	174345	246
622	Nonparticipant	30	32	31	573251	174357	246
623	Nonparticipant	43	44	44	569963	174357	247
624	Nonparticipant	42	44	43	569884	174365	248
625	Nonparticipant	42	43	43	569847	174376	247
626	Nonparticipant	42	44	43	569838	174173	247
627	Nonparticipant	43	44	43	569875	174173	247
628	Nonparticipant	43	45	44	569955	174188	247
629	Nonparticipant	42	43	42	569765	174196	247
630	Nonparticipant	42	43	42	569795	174196	247
631	Nonparticipant	42	44	43	569830	174203	248
632	Nonparticipant	36	38	37	565024	174209	247
633	Nonparticipant	40	41	40	571501	174210	247
634	Nonparticipant	41	43	42	569743	174212	247
635	Nonparticipant	30	31	30	563295	174218	246
636	Nonparticipant	30	31	30	563337	174221	246
637	Nonparticipant	42	43	42	569761	174225	247
638	Nonparticipant	30	31	30	562986	174234	246
639	Nonparticipant	42	43	42	569792	174235	247
640	Nonparticipant	36	38	37	565032	174252	247
641	Nonparticipant	40	42	41	566639	174505	248
642	Nonparticipant	42	43	43	569845	174513	246
643	Nonparticipant	42	43	43	569842	174536	246
644	Nonparticipant	42	43	43	569844	174557	245
645	Nonparticipant	38	40	39	566824	174572	246
646	Nonparticipant	34	36	35	564743	174578	246
647	Nonparticipant	34	36	35	564730	174589	246
648	Nonparticipant	42	43	43	569842	174605	245
649	Nonparticipant	40	41	40	566659	174605	248
650	Nonparticipant	38	39	39	566876	174622	246
651	Nonparticipant	42	43	43	569880	174627	245
652	Nonparticipant	42	43	43	569830	174637	245
653	Nonparticipant	40	42	41	566572	174654	247
654	Nonparticipant	42	44	43	571477	175150	244

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
655	Nonparticipant	44	44	44	569665	175177	239
656	Nonparticipant	42	44	43	571477	175189	244
657	Nonparticipant	44	44	44	569815	175191	238
658	Nonparticipant	42	44	43	571501	175225	243
659	Nonparticipant	42	43	42	571560	175256	243
660	Nonparticipant	35	36	36	565115	175303	249
661	Nonparticipant	34	35	35	564977	175329	248
662	Nonparticipant	34	35	35	564969	175332	248
663	Nonparticipant	35	36	35	572427	175339	243
664	Nonparticipant	45	46	46	568294	175361	243
665	Nonparticipant	38	39	38	571955	175363	242
666	Nonparticipant	37	38	37	572116	175367	242
667	Nonparticipant	38	39	38	566769	174873	245
668	Nonparticipant	44	45	45	570151	174873	245
669	Nonparticipant	38	39	38	566803	174874	245
670	Nonparticipant	38	39	38	566830	174875	245
671	Nonparticipant	38	40	39	566671	174875	245
672	Nonparticipant	39	40	39	566626	174883	245
673	Nonparticipant	44	45	45	570178	174885	245
674	Nonparticipant	40	41	40	565642	174886	247
675	Nonparticipant	39	41	40	565600	174889	246
676	Nonparticipant	37	39	38	565325	174892	247
677	Nonparticipant	43	44	43	569897	174894	245
678	Nonparticipant	37	39	38	565327	174897	247
679	Nonparticipant	31	32	31	563799	174902	245
680	Nonparticipant	38	39	38	565370	174904	247
681	Nonparticipant	41	41	41	567831	175524	245
682	Nonparticipant	37	38	38	565983	175537	245
683	Nonparticipant	37	38	37	565693	175539	249
684	Nonparticipant	37	38	37	565644	175550	248
685	Nonparticipant	43	45	44	571488	175552	242
686	Nonparticipant	42	42	42	567927	175566	246
687	Nonparticipant	42	42	42	567917	175568	246
688	Nonparticipant	40	41	41	567775	175582	244
689	Nonparticipant	43	45	44	571482	175594	242
690	Nonparticipant	41	41	41	567807	175616	244
691	Nonparticipant	41	41	41	567812	175630	244

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
692	Nonparticipant	45	45	46	569923	175656	237
693	Nonparticipant	41	41	42	567853	175664	244
694	Nonparticipant	45	45	46	569907	175670	237
695	Nonparticipant	30	31	30	563495	175672	245
696	Nonparticipant	41	42	42	567880	175682	244
697	Nonparticipant	45	45	46	569907	175701	237
698	Nonparticipant	43	43	43	568013	175709	243
699	Nonparticipant	42	42	42	566872	176723	242
700	Nonparticipant	34	34	34	564274	176738	242
701	Nonparticipant	39	39	39	567531	176804	243
702	Nonparticipant	39	39	39	567520	176807	243
703	Nonparticipant	34	34	34	564248	176819	242
704	Nonparticipant	39	40	40	564986	177069	244
705	Nonparticipant	45	46	46	566498	177532	240
706	Nonparticipant	27	29	28	574068	174167	245
707	Nonparticipant	30	32	31	573291	174662	247
708	Nonparticipant	39	39	39	564992	177732	241
709	Nonparticipant	39	39	39	564987	177673	242
710	Nonparticipant	39	39	39	564992	177632	242
711	Nonparticipant	39	40	39	564983	177580	242
712	Nonparticipant	34	34	34	564243	177415	242
713	Nonparticipant	33	34	34	564251	177750	242
714	Nonparticipant	33	34	33	564192	177747	242
715	Nonparticipant	29	30	29	571317	178657	233
716	Nonparticipant	29	30	30	571248	178595	232
717	Nonparticipant	29	30	30	571195	178523	228
718	Nonparticipant	26	26	26	571123	178462	229
719	Nonparticipant	29	29	29	571072	178390	233
720	Nonparticipant	30	31	31	571056	178365	235
721	Nonparticipant	30	31	31	571039	178339	235
722	Nonparticipant	31	31	31	571015	178311	234
723	Nonparticipant	31	32	31	570962	178239	233
724	Nonparticipant	31	32	31	570911	178181	233
725	Nonparticipant	32	32	32	570867	178132	234
726	Nonparticipant	32	32	32	570842	178101	235
727	Nonparticipant	31	31	31	570816	178065	236

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
728	Nonparticipant	32	33	33	570724	178004	238
729	Nonparticipant	29	30	29	570744	178987	235
730	Nonparticipant	29	30	29	570778	178938	236
731	Nonparticipant	29	30	29	570811	178910	236
732	Nonparticipant	29	30	30	570842	178877	236
733	Nonparticipant	29	30	30	570852	178866	236
734	Nonparticipant	29	30	30	570885	178838	236
735	Nonparticipant	29	30	29	570939	178800	235
736	Nonparticipant	29	30	29	570952	178782	235
737	Nonparticipant	29	30	29	570980	178751	235
738	Nonparticipant	30	30	30	571005	178713	234
739	Nonparticipant	30	30	30	571021	178695	234
740	Nonparticipant	30	30	30	571064	178633	234
741	Nonparticipant	30	30	30	571123	178572	232
742	Nonparticipant	29	30	30	571169	178523	229
743	Nonparticipant	29	30	30	571241	178480	230
744	Nonparticipant	30	30	30	571297	178442	232
745	Nonparticipant	30	31	30	571356	178367	233
746	Nonparticipant	32	33	32	571453	177633	234
747	Nonparticipant	32	33	32	571445	177687	234
748	Nonparticipant	32	32	32	571445	177771	234
749	Nonparticipant	31	32	32	571445	177825	233
750	Nonparticipant	31	32	32	571422	177874	233
751	Nonparticipant	32	32	32	571363	177605	233
752	Nonparticipant	33	33	33	571315	177587	233
753	Nonparticipant	33	33	33	571264	177577	233
754	Nonparticipant	33	33	33	571195	177544	234
755	Nonparticipant	33	34	33	571189	177508	234
756	Nonparticipant	33	33	33	571223	177551	233
757	Nonparticipant	33	34	34	571123	177446	235
758	Nonparticipant	34	34	34	571041	177436	237
759	Nonparticipant	34	35	34	570854	177492	239
760	Nonparticipant	33	33	33	570793	177805	238
761	Nonparticipant	33	33	33	570795	177838	238
762	Nonparticipant	33	33	33	570808	177894	238
763	Nonparticipant	32	33	32	570824	177955	237
764	Nonparticipant	29	31	30	562294	173409	248

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
765	Nonparticipant	27	28	28	562405	175132	245
766	Nonparticipant	27	28	28	562372	174958	245
767	Nonparticipant	29	30	29	562840	175012	245
768	Nonparticipant	29	30	29	562801	174573	247
769	Nonparticipant	27	29	28	561887	175036	247
770	Nonparticipant	29	30	29	563102	176548	243
771	Nonparticipant	26	27	26	562276	176395	245
772	Nonparticipant	27	28	28	562283	175880	245
773	Nonparticipant	27	28	28	562632	176810	242
774	Nonparticipant	27	29	28	562567	176603	243
775	Nonparticipant	28	29	28	562807	176629	243
776	Nonparticipant	28	29	29	562934	176605	243
777	Nonparticipant	30	31	30	563443	176607	244
778	Nonparticipant	44	44	44	566492	176566	241
779	Nonparticipant	44	45	45	566418	176564	242
780	Nonparticipant	44	45	45	566352	176568	243
781	Nonparticipant	35	35	35	571064	177167	237
782	Nonparticipant	36	36	36	570826	177161	237
783	Nonparticipant	36	37	37	570813	177008	238
784	Nonparticipant	36	36	36	570891	177045	238
785	Nonparticipant	36	36	36	570940	177025	238
786	Participant	35	36	36	571140	177056	240
787	Nonparticipant	33	34	34	571429	177307	237
788	Nonparticipant	33	34	33	571453	177347	236
789	Nonparticipant	33	34	33	571450	177377	235
790	Nonparticipant	33	34	33	571452	177408	235
791	Nonparticipant	33	33	33	571455	177440	235
792	Nonparticipant	33	33	33	571453	177472	235
793	Nonparticipant	33	33	33	571452	177485	235
794	Nonparticipant	29	30	30	572634	177598	240
795	Nonparticipant	23	24	24	574393	178833	235
796	Nonparticipant	24	25	24	574231	178791	235
797	Nonparticipant	24	25	25	574022	178735	234
798	Nonparticipant	24	25	24	574071	178736	234
799	Nonparticipant	24	25	24	573986	178716	234
800	Nonparticipant	23	24	23	574029	178663	236

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
801	Nonparticipant	30	31	30	572468	177540	240
802	Nonparticipant	30	31	30	572463	177571	240
803	Nonparticipant	30	31	30	572463	177599	240
804	Nonparticipant	30	30	30	572464	177625	240
805	Nonparticipant	30	30	30	572464	177652	240
806	Nonparticipant	29	30	30	572461	177705	240
807	Nonparticipant	29	29	29	572452	177768	237
808	Nonparticipant	29	30	30	572506	177691	240
809	Nonparticipant	29	30	30	572548	177687	240
810	Nonparticipant	29	30	29	572577	177682	240
811	Nonparticipant	29	30	29	572616	177677	240
812	Nonparticipant	29	30	29	572629	177679	240
813	Nonparticipant	29	30	29	572653	177680	239
814	Nonparticipant	29	30	29	572687	177684	240
815	Nonparticipant	29	30	29	572722	177691	240
816	Nonparticipant	28	29	29	572747	177692	240
817	Nonparticipant	27	28	28	572773	177724	240
818	Nonparticipant	29	30	29	572769	177550	241
819	Nonparticipant	28	29	28	573495	176928	242
820	Nonparticipant	27	28	27	573296	177960	237
821	Nonparticipant	27	28	27	573292	177977	237
822	Nonparticipant	27	28	27	573281	177925	238
823	Nonparticipant	27	28	27	573260	177901	238
824	Nonparticipant	27	28	27	573229	177908	238
825	Nonparticipant	27	28	27	573237	177923	238
826	Nonparticipant	27	28	27	573249	177939	237
827	Nonparticipant	27	28	27	573263	177959	237
828	Nonparticipant	26	27	27	573794	177663	242
829	Nonparticipant	24	25	24	574016	177799	241
830	Nonparticipant	26	27	26	573794	177953	241
831	Nonparticipant	26	27	26	573792	178004	241
832	Nonparticipant	26	27	26	573719	177985	241
833	Nonparticipant	32	33	33	571104	177762	236
834	Nonparticipant	32	33	32	571128	177801	237
835	Nonparticipant	32	33	32	571145	177828	237
836	Nonparticipant	32	33	32	571162	177855	237
837	Nonparticipant	32	32	32	571181	177882	236

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
838	Nonparticipant	32	32	32	571198	177916	236
839	Nonparticipant	32	32	32	571210	177944	236
840	Nonparticipant	32	32	32	571223	177960	236
841	Nonparticipant	31	32	32	571244	177980	236
842	Nonparticipant	32	33	33	571414	177617	233
843	Nonparticipant	32	33	33	571358	177635	232
844	Nonparticipant	32	33	33	571319	177658	233
845	Nonparticipant	32	33	33	571300	177667	233
846	Nonparticipant	32	33	33	571280	177680	233
847	Nonparticipant	32	33	32	571263	177695	233
848	Nonparticipant	32	33	32	571243	177719	233
849	Nonparticipant	32	33	32	571208	177744	235
850	Nonparticipant	32	33	33	571204	177750	235
851	Nonparticipant	18	19	18	553370	177130	214
852	Nonparticipant	19	20	20	553356	177146	214
853	Nonparticipant	20	22	21	553354	177167	214
854	Nonparticipant	20	22	21	553353	177197	214
855	Nonparticipant	21	22	21	553353	177226	214
856	Nonparticipant	21	23	22	553356	177248	213
857	Nonparticipant	21	23	22	553358	177279	213
858	Nonparticipant	21	23	22	553359	177291	213
859	Nonparticipant	21	23	22	553395	177289	213
860	Nonparticipant	21	23	22	553397	177281	213
861	Nonparticipant	21	23	22	553396	177248	213
862	Nonparticipant	21	23	22	553396	177236	213
863	Nonparticipant	21	23	22	553394	177212	214
864	Nonparticipant	16	17	16	554151	176906	212
865	Nonparticipant	19	21	21	554126	176870	215
866	Nonparticipant	20	22	21	554092	176870	215
867	Nonparticipant	20	21	20	554088	176828	216
868	Nonparticipant	22	23	22	554127	176825	216
869	Nonparticipant	22	23	22	553973	176741	218
870	Nonparticipant	22	24	23	554031	176745	219
871	Nonparticipant	21	22	22	554082	176749	218
872	Nonparticipant	21	22	21	553945	176742	218
873	Nonparticipant	22	23	22	553905	176738	218

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
874	Nonparticipant	22	24	23	553891	176797	218
875	Nonparticipant	22	23	22	553900	176828	217
876	Nonparticipant	21	22	21	553931	176871	216
877	Nonparticipant	21	23	22	553896	176868	217
878	Nonparticipant	20	21	21	553864	176866	217
879	Nonparticipant	21	22	21	553840	176869	216
880	Nonparticipant	22	24	23	553771	176870	218
881	Nonparticipant	22	24	23	553760	176890	217
882	Nonparticipant	21	23	22	553913	177197	217
883	Nonparticipant	21	23	22	553864	177193	217
884	Nonparticipant	21	23	22	553849	177194	217
885	Nonparticipant	24	25	24	553627	176080	220
886	Nonparticipant	24	25	24	553630	176094	220
887	Nonparticipant	24	25	24	553653	176134	220
888	Nonparticipant	24	26	25	553570	176048	219
889	Nonparticipant	24	25	24	553583	176089	219
890	Nonparticipant	24	25	24	553591	176125	220
891	Nonparticipant	24	25	24	553603	176153	220
892	Nonparticipant	24	25	24	553624	176208	220
893	Nonparticipant	24	25	24	553647	176231	220
894	Nonparticipant	24	25	24	553654	176264	220
895	Nonparticipant	24	25	24	553663	176289	220
896	Nonparticipant	23	25	24	553678	176322	220
897	Nonparticipant	24	25	24	553672	176168	220
898	Nonparticipant	24	25	24	553693	176232	220
899	Nonparticipant	24	25	24	553256	176356	217
900	Nonparticipant	22	24	23	553329	176841	215
901	Nonparticipant	22	24	23	553325	176887	215
902	Nonparticipant	20	22	21	553583	177051	212
903	Nonparticipant	21	22	21	553619	177035	215
904	Nonparticipant	18	19	18	553640	177033	214
905	Nonparticipant	20	22	21	553676	177016	216
906	Nonparticipant	21	23	22	553654	176963	216
907	Nonparticipant	21	22	21	553600	176975	214
908	Nonparticipant	22	23	22	553906	177097	217
909	Nonparticipant	21	23	22	553905	177142	217
910	Nonparticipant	21	23	22	553790	177172	217

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
911	Nonparticipant	21	23	22	553786	177214	217
912	Nonparticipant	23	24	23	553329	176608	216
913	Nonparticipant	23	24	23	553522	176565	217
914	Nonparticipant	22	23	22	553576	176563	217
915	Nonparticipant	22	23	23	553570	176516	217
916	Nonparticipant	22	23	22	553571	176465	217
917	Nonparticipant	22	24	23	553572	176342	217
918	Nonparticipant	22	24	23	553575	176299	219
919	Nonparticipant	22	24	23	553604	176381	219
920	Nonparticipant	23	25	24	553683	176380	220
921	Nonparticipant	23	24	23	552962	176641	216
922	Nonparticipant	23	24	23	552960	176617	215
923	Nonparticipant	23	24	23	552995	176638	216
924	Nonparticipant	23	24	23	553001	176598	215
925	Nonparticipant	23	24	23	553058	176603	215
926	Nonparticipant	23	24	23	553053	176638	215
927	Nonparticipant	23	24	23	553045	176668	216
928	Nonparticipant	23	24	23	553106	176668	216
929	Nonparticipant	23	24	23	553104	176642	215
930	Nonparticipant	23	24	23	553101	176597	215
931	Nonparticipant	25	26	25	553511	175851	218
932	Nonparticipant	25	26	25	553508	175815	218
933	Nonparticipant	20	22	21	553311	177143	214
934	Nonparticipant	20	22	21	553311	177164	214
935	Nonparticipant	20	22	21	553315	177180	214
936	Nonparticipant	20	22	21	553318	177196	214
937	Nonparticipant	20	22	21	553322	177228	213
938	Nonparticipant	20	22	21	553325	177247	213
939	Nonparticipant	20	22	21	553320	177291	213
940	Nonparticipant	21	22	21	553320	177298	212
941	Nonparticipant	21	22	21	553317	177350	212
942	Nonparticipant	21	22	21	553317	177374	212
943	Nonparticipant	21	22	21	553317	177385	212
944	Nonparticipant	21	22	21	553318	177413	212
945	Nonparticipant	21	22	21	553318	177428	212
946	Nonparticipant	21	22	21	553320	177445	213

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
947	Nonparticipant	21	23	22	554092	177294	218
948	Nonparticipant	21	22	21	554030	177322	218
949	Nonparticipant	23	24	23	561444	178166	234
950	Nonparticipant	23	25	24	561503	178168	233
951	Nonparticipant	24	25	24	561559	178169	234
952	Nonparticipant	20	20	20	561304	178237	230
953	Nonparticipant	24	25	24	561642	178243	232
954	Nonparticipant	17	18	17	560962	178095	228
955	Nonparticipant	23	24	23	560733	178179	231
956	Nonparticipant	24	25	24	561766	177802	235
957	Nonparticipant	24	25	24	562029	177681	240
958	Nonparticipant	25	26	25	562081	177700	240
959	Nonparticipant	26	27	26	562216	177757	241
960	Nonparticipant	26	27	26	562487	177808	237
961	Nonparticipant	27	28	27	562549	177917	242
962	Nonparticipant	19	20	19	559097	178188	225
963	Nonparticipant	18	20	19	559050	178187	225
964	Nonparticipant	19	21	20	558980	178189	226
965	Nonparticipant	20	21	20	558887	178133	227
966	Nonparticipant	19	21	20	558787	178062	227
967	Nonparticipant	21	23	22	558923	177361	232
968	Nonparticipant	19	21	20	558967	177399	232
969	Nonparticipant	19	21	20	560232	177444	234
970	Nonparticipant	23	24	23	561739	177758	236
971	Nonparticipant	23	24	24	561746	177786	235
972	Nonparticipant	24	25	24	561768	177883	234
973	Nonparticipant	24	25	25	561774	177735	237
974	Nonparticipant	23	24	23	561760	177680	236
975	Nonparticipant	23	24	23	561857	177748	235
976	Nonparticipant	24	25	24	561845	177719	236
977	Nonparticipant	24	25	24	561847	177677	237
978	Nonparticipant	25	26	25	561856	177630	238
979	Nonparticipant	25	26	25	561842	177561	240
980	Nonparticipant	41	41	41	566368	178177	240
981	Nonparticipant	40	40	41	566512	178151	240
982	Nonparticipant	40	40	40	566608	178117	240
983	Nonparticipant	39	39	39	566682	178188	241

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
984	Nonparticipant	38	39	39	566748	178187	241
985	Nonparticipant	38	38	39	566822	178183	241
986	Nonparticipant	38	38	38	566894	178185	241
987	Nonparticipant	38	39	39	566836	178105	242
988	Nonparticipant	40	40	41	566609	178076	240
989	Nonparticipant	40	41	41	566612	178016	240
990	Nonparticipant	34	34	34	569009	178153	238
991	Nonparticipant	34	34	34	569095	178090	236
992	Nonparticipant	33	33	33	569139	178067	236
993	Nonparticipant	33	33	33	569187	178082	236
994	Nonparticipant	32	32	33	569229	178082	238
995	Nonparticipant	34	34	34	569263	178091	238
996	Nonparticipant	34	34	34	569253	178170	237
997	Nonparticipant	33	34	34	569194	178188	237
998	Nonparticipant	35	35	35	569960	177739	235
999	Nonparticipant	35	35	35	569962	177780	234
1000	Nonparticipant	34	35	35	569964	177806	234
1001	Nonparticipant	34	35	35	569964	177834	234
1002	Nonparticipant	34	34	35	569963	177857	234
1003	Nonparticipant	34	34	34	569962	177874	235
1004	Nonparticipant	34	34	34	569962	177890	235
1005	Nonparticipant	34	34	34	569962	177910	235
1006	Nonparticipant	34	34	34	569867	178041	236
1007	Nonparticipant	34	34	34	569862	178012	235
1008	Nonparticipant	34	34	34	569856	177985	235
1009	Nonparticipant	34	34	34	569859	177958	235
1010	Nonparticipant	34	34	34	569861	177927	235
1011	Nonparticipant	35	35	35	570050	177760	236
1012	Nonparticipant	34	35	35	570053	177799	236
1013	Nonparticipant	34	35	35	570050	177823	236
1014	Nonparticipant	34	34	34	570048	177854	236
1015	Nonparticipant	34	34	34	570047	177871	236
1016	Nonparticipant	34	34	34	570048	177893	237
1017	Nonparticipant	34	34	34	570048	177910	237
1018	Nonparticipant	34	34	34	570048	177925	237
1019	Nonparticipant	34	34	34	570017	177928	235

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1020	Nonparticipant	34	34	34	570004	177914	235
1021	Nonparticipant	34	34	34	570003	177882	235
1022	Nonparticipant	34	34	34	570004	177857	234
1023	Nonparticipant	34	35	35	570004	177838	234
1024	Nonparticipant	34	35	35	570006	177812	234
1025	Nonparticipant	34	35	35	570012	177791	234
1026	Nonparticipant	35	35	35	570013	177768	234
1027	Nonparticipant	35	35	35	570018	177719	235
1028	Nonparticipant	35	35	35	570012	177693	235
1029	Nonparticipant	33	34	34	569763	178129	237
1030	Nonparticipant	33	33	33	569814	178147	236
1031	Nonparticipant	33	33	33	569860	178147	236
1032	Nonparticipant	37	37	37	569703	177400	238
1033	Nonparticipant	34	35	35	570980	177351	237
1034	Nonparticipant	33	34	34	571046	177478	236
1035	Nonparticipant	34	34	34	571033	177477	237
1036	Nonparticipant	34	34	34	570973	177478	238
1037	Nonparticipant	34	34	34	570996	177497	237
1038	Nonparticipant	34	34	34	570997	177509	237
1039	Nonparticipant	33	34	34	571018	177538	238
1040	Nonparticipant	33	34	34	571053	177544	237
1041	Nonparticipant	34	34	34	571002	177477	237
1042	Nonparticipant	33	34	33	571063	177602	237
1043	Nonparticipant	33	33	33	571085	177602	236
1044	Nonparticipant	33	33	33	571121	177605	236
1045	Nonparticipant	32	33	32	571171	177592	234
1046	Nonparticipant	32	33	33	571197	177601	233
1047	Nonparticipant	33	33	33	570352	177980	236
1048	Nonparticipant	33	33	33	570374	177975	235
1049	Nonparticipant	33	33	33	570414	177977	234
1050	Nonparticipant	33	33	33	570432	177973	233
1051	Nonparticipant	33	33	33	570450	177970	233
1052	Nonparticipant	33	33	33	570471	177966	233
1053	Nonparticipant	32	33	33	570489	177950	234
1054	Nonparticipant	32	32	33	570511	177936	234
1055	Nonparticipant	32	33	33	570523	177916	235
1056	Nonparticipant	36	36	37	569904	177477	235

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1057	Nonparticipant	36	36	36	569907	177499	235
1058	Nonparticipant	39	39	40	569497	177118	238
1059	Nonparticipant	36	36	36	569763	177535	236
1060	Nonparticipant	32	32	32	570390	178272	233
1061	Nonparticipant	32	32	32	570368	178249	233
1062	Nonparticipant	32	32	32	570394	178220	233
1063	Nonparticipant	32	32	32	570409	178215	233
1064	Nonparticipant	32	32	32	570431	178215	234
1065	Nonparticipant	32	32	32	570456	178208	234
1066	Nonparticipant	32	32	32	570486	178197	233
1067	Nonparticipant	33	33	33	570092	178139	236
1068	Nonparticipant	32	32	32	570110	178135	236
1069	Nonparticipant	31	32	32	570160	178152	235
1070	Nonparticipant	32	32	32	570201	178153	236
1071	Nonparticipant	31	32	31	570267	178183	235
1072	Nonparticipant	33	33	33	570270	178067	237
1073	Nonparticipant	33	33	33	570293	178082	237
1074	Nonparticipant	33	33	33	570295	178058	237
1075	Nonparticipant	33	33	33	570301	178026	237
1076	Nonparticipant	33	33	33	570301	178011	237
1077	Nonparticipant	33	34	34	570245	177973	238
1078	Nonparticipant	26	27	27	573175	178376	236
1079	Nonparticipant	26	27	26	573364	178451	236
1080	Nonparticipant	25	26	25	573433	178470	236
1081	Nonparticipant	25	26	25	573424	178470	236
1082	Nonparticipant	26	26	26	573263	178420	236
1083	Nonparticipant	26	27	27	573231	178398	236
1084	Nonparticipant	27	27	27	573131	178369	236
1085	Nonparticipant	27	28	27	573008	178354	235
1086	Nonparticipant	27	28	27	572964	178369	234
1087	Nonparticipant	27	28	27	572904	178477	233
1088	Nonparticipant	26	27	27	572869	178653	233
1089	Nonparticipant	26	27	27	572863	178747	232
1090	Nonparticipant	26	27	26	572866	178864	232
1091	Nonparticipant	26	27	26	572875	178946	232
1092	Nonparticipant	26	27	26	572872	179021	232

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1093	Nonparticipant	26	27	26	572838	179031	231
1094	Nonparticipant	26	27	26	572731	179034	231
1095	Nonparticipant	26	27	26	572623	179034	230
1096	Nonparticipant	28	29	29	571099	178889	233
1097	Nonparticipant	29	30	29	571027	178845	235
1098	Nonparticipant	29	30	29	570995	178826	234
1099	Nonparticipant	29	30	30	570976	178807	235
1100	Nonparticipant	29	29	29	571937	178225	232
1101	Nonparticipant	29	30	29	571953	178243	231
1102	Nonparticipant	29	30	29	572006	178284	232
1103	Nonparticipant	29	29	29	572072	178310	232
1104	Nonparticipant	29	29	29	572085	178329	232
1105	Nonparticipant	29	29	29	572135	178357	232
1106	Nonparticipant	28	29	29	572233	178385	234
1107	Nonparticipant	28	29	28	572258	178395	234
1108	Nonparticipant	28	29	28	572302	178423	235
1109	Nonparticipant	28	28	28	570819	179009	235
1110	Nonparticipant	29	29	29	570778	178990	235
1111	Nonparticipant	28	29	28	571121	179217	233
1112	Nonparticipant	28	29	28	571118	179173	233
1113	Nonparticipant	28	29	29	571231	179025	233
1114	Nonparticipant	28	29	29	571360	178886	233
1115	Nonparticipant	28	29	29	571370	178861	233
1116	Nonparticipant	28	29	28	571386	178842	233
1117	Nonparticipant	28	29	29	571341	178895	233
1118	Nonparticipant	28	29	28	571310	178930	233
1119	Nonparticipant	28	29	29	571291	178962	233
1120	Nonparticipant	28	29	28	571234	179069	233
1121	Nonparticipant	28	29	28	571219	179091	233
1122	Nonparticipant	28	29	28	571181	179154	232
1123	Nonparticipant	27	28	27	571373	179519	231
1124	Nonparticipant	27	27	27	571458	179450	230
1125	Nonparticipant	27	28	27	571530	179387	230
1126	Nonparticipant	27	28	27	571616	179308	229
1127	Nonparticipant	27	28	27	572532	178612	233
1128	Nonparticipant	27	28	27	572620	178558	233
1129	Nonparticipant	27	28	27	572636	178543	233

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1130	Nonparticipant	27	28	27	572743	178477	233
1131	Nonparticipant	27	28	27	572765	178458	233
1132	Nonparticipant	27	28	27	572850	178407	234
1133	Nonparticipant	25	26	25	572885	178395	234
1134	Nonparticipant	26	27	26	572904	178382	234
1135	Nonparticipant	27	28	27	572633	178631	233
1136	Nonparticipant	27	28	27	572583	178618	233
1137	Nonparticipant	27	28	28	572538	178562	233
1138	Nonparticipant	27	28	28	572504	178530	233
1139	Nonparticipant	28	29	28	572390	178486	234
1140	Nonparticipant	28	29	28	572315	178458	234
1141	Nonparticipant	29	29	29	572113	178395	231
1142	Nonparticipant	29	30	29	571984	178335	232
1143	Nonparticipant	27	28	27	571578	178914	230
1144	Nonparticipant	28	28	28	571612	178858	228
1145	Nonparticipant	27	28	27	570447	179560	237
1146	Nonparticipant	28	29	28	570400	179485	238
1147	Nonparticipant	28	29	28	570359	179428	234
1148	Nonparticipant	28	29	28	570315	179340	233
1149	Nonparticipant	28	29	28	570289	179308	233
1150	Nonparticipant	28	29	28	570261	179277	234
1151	Nonparticipant	28	29	28	570252	179267	234
1152	Nonparticipant	27	27	27	570204	179374	236
1153	Nonparticipant	26	26	26	570192	179399	235
1154	Nonparticipant	24	24	24	570211	179444	233
1155	Nonparticipant	27	28	28	570274	179478	232
1156	Nonparticipant	28	29	28	570283	179513	232
1157	Nonparticipant	27	27	27	570299	179651	233
1158	Nonparticipant	29	30	29	570759	178996	235
1159	Nonparticipant	29	29	29	570847	179006	235
1160	Nonparticipant	27	28	27	571452	179368	230
1161	Nonparticipant	26	27	27	571464	179415	230
1162	Nonparticipant	25	26	26	571490	179516	229
1163	Nonparticipant	27	27	27	571505	179611	229
1164	Nonparticipant	26	27	27	571496	179667	229
1165	Nonparticipant	26	27	27	571521	179680	229

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1166	Nonparticipant	26	27	27	571559	179699	229
1167	Nonparticipant	26	27	26	571597	179711	230
1168	Nonparticipant	26	27	26	571622	179718	230
1169	Nonparticipant	26	27	26	571638	179727	230
1170	Nonparticipant	25	26	26	571685	179951	229
1171	Nonparticipant	26	27	26	571612	179954	229
1172	Nonparticipant	26	26	26	571565	179954	230
1173	Nonparticipant	26	27	26	571534	179954	230
1174	Nonparticipant	26	27	26	571490	179951	230
1175	Nonparticipant	25	26	26	571449	179951	230
1176	Nonparticipant	32	32	32	569943	178420	238
1177	Nonparticipant	32	32	32	569940	178467	239
1178	Nonparticipant	31	31	31	569940	178546	239
1179	Nonparticipant	30	30	30	569933	178565	238
1180	Nonparticipant	30	30	30	569848	178643	238
1181	Nonparticipant	31	32	32	569852	178543	240
1182	Nonparticipant	32	32	32	569855	178508	240
1183	Nonparticipant	32	32	32	569861	178451	240
1184	Nonparticipant	32	32	32	569864	178420	240
1185	Nonparticipant	32	33	33	569877	178325	237
1186	Nonparticipant	33	33	33	569883	178294	237
1187	Nonparticipant	33	33	33	569886	178256	237
1188	Nonparticipant	25	26	25	561830	177213	244
1189	Nonparticipant	27	28	27	562568	177178	242
1190	Nonparticipant	27	28	27	562551	177223	241
1191	Nonparticipant	27	28	27	562104	176660	242
1192	Nonparticipant	27	28	27	562046	176552	243
1193	Nonparticipant	26	27	27	561806	176567	244
1194	Nonparticipant	46	46	46	569854	175974	241
1195	Nonparticipant	45	45	45	569918	176071	241
1196	Nonparticipant	24	26	25	560206	175482	244
1197	Nonparticipant	26	28	27	560660	175030	247
1198	Nonparticipant	26	28	27	560812	175024	247
1199	Nonparticipant	26	27	26	560895	175025	246
1200	Nonparticipant	26	27	27	561013	175024	246
1201	Nonparticipant	27	28	27	561205	175081	246
1202	Nonparticipant	27	29	28	561690	175041	246

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1203	Nonparticipant	26	28	27	561646	175032	245
1204	Nonparticipant	27	29	28	561792	174959	245
1205	Nonparticipant	27	28	28	561520	174955	244
1206	Nonparticipant	21	22	22	551380	176785	210
1207	Nonparticipant	22	23	22	551312	176716	211
1208	Nonparticipant	22	23	22	551480	176909	210
1209	Nonparticipant	22	23	22	550786	176653	211
1210	Nonparticipant	21	23	22	550916	176777	210
1211	Nonparticipant	19	21	20	550870	176942	209
1212	Nonparticipant	22	23	22	551139	176715	210
1213	Nonparticipant	24	25	24	550968	175753	212
1214	Nonparticipant	23	24	24	551163	176130	211
1215	Nonparticipant	21	22	21	550270	176164	211
1216	Nonparticipant	21	22	21	550467	175749	210
1217	Nonparticipant	25	26	25	550967	175570	214
1218	Nonparticipant	23	24	23	551109	176403	211
1219	Nonparticipant	23	24	23	556827	176318	228
1220	Nonparticipant	22	23	22	556671	176158	228
1221	Nonparticipant	22	23	22	556620	176075	227
1222	Nonparticipant	20	21	20	556439	175986	226
1223	Nonparticipant	24	25	24	556325	175769	228
1224	Nonparticipant	22	23	22	557641	175009	236
1225	Nonparticipant	23	24	23	557702	175010	238
1226	Nonparticipant	23	24	23	557771	175013	239
1227	Nonparticipant	25	26	25	557785	174956	240
1228	Nonparticipant	26	27	26	557647	174838	241
1229	Nonparticipant	24	25	24	557362	174848	235
1230	Nonparticipant	24	26	25	557362	174805	236
1231	Nonparticipant	24	25	25	557425	174848	237
1232	Nonparticipant	23	24	24	557433	174890	236
1233	Nonparticipant	23	24	23	557368	174954	234
1234	Nonparticipant	24	25	25	557371	175014	234
1235	Nonparticipant	24	25	24	557425	174999	234
1236	Nonparticipant	24	25	24	555945	175350	228
1237	Nonparticipant	24	25	24	555984	175408	228
1238	Nonparticipant	24	26	25	556031	175451	228

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1239	Nonparticipant	19	21	20	556439	175131	228
1240	Nonparticipant	24	25	24	556855	175121	230
1241	Nonparticipant	28	29	28	554835	174222	227
1242	Nonparticipant	26	27	27	554899	174264	224
1243	Nonparticipant	26	27	26	555238	174634	229
1244	Nonparticipant	26	27	26	555938	174576	228
1245	Nonparticipant	27	28	27	557000	174225	240
1246	Nonparticipant	27	28	27	557178	174376	241
1247	Nonparticipant	25	26	26	556790	174177	238
1248	Nonparticipant	26	27	26	556706	174053	238
1249	Nonparticipant	26	27	27	556677	174035	238
1250	Nonparticipant	25	26	25	550223	174879	213
1251	Nonparticipant	26	27	26	550357	174946	214
1252	Nonparticipant	25	26	25	550231	175013	213
1253	Nonparticipant	26	28	27	550831	174982	214
1254	Nonparticipant	25	26	26	550697	175282	213
1255	Nonparticipant	23	25	24	549406	174934	212
1256	Nonparticipant	24	25	24	549581	175009	212
1257	Nonparticipant	22	23	22	548706	174976	212
1258	Nonparticipant	22	23	22	548593	174979	211
1259	Nonparticipant	23	24	23	548743	174440	214
1260	Nonparticipant	23	24	23	548731	174381	214
1261	Nonparticipant	23	24	23	548742	174342	214
1262	Nonparticipant	23	25	24	548762	174163	213
1263	Nonparticipant	22	24	23	548489	174304	214
1264	Nonparticipant	21	22	21	548363	174355	214
1265	Nonparticipant	22	24	23	548483	174310	214
1266	Nonparticipant	22	23	23	548696	174840	212
1267	Nonparticipant	22	24	23	548485	174309	214
1268	Nonparticipant	27	28	27	561110	174731	245
1269	Nonparticipant	31	32	32	563724	173706	247
1270	Nonparticipant	29	30	29	561149	173289	247
1271	Nonparticipant	29	31	30	561474	172694	251
1272	Nonparticipant	28	29	28	560047	173315	245
1273	Nonparticipant	29	30	29	560077	172794	246
1274	Nonparticipant	29	30	29	560133	172809	246
1275	Nonparticipant	29	30	29	560065	172490	247

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1276	Nonparticipant	29	30	30	560068	172411	247
1277	Nonparticipant	30	32	31	558455	172586	244
1278	Nonparticipant	30	31	31	557645	172936	246
1279	Nonparticipant	30	31	31	557586	172955	245
1280	Nonparticipant	30	31	30	557579	172981	245
1281	Nonparticipant	30	31	30	557581	173006	245
1282	Nonparticipant	30	31	30	557590	173045	245
1283	Nonparticipant	30	31	30	557592	173077	244
1284	Nonparticipant	29	31	30	557647	173045	244
1285	Nonparticipant	30	31	30	557654	173086	244
1286	Nonparticipant	27	28	27	556009	173138	237
1287	Nonparticipant	27	28	27	555969	173130	236
1288	Nonparticipant	27	28	27	555957	173130	236
1289	Nonparticipant	26	27	26	555933	173127	235
1290	Nonparticipant	26	27	26	555936	173107	236
1291	Nonparticipant	26	27	27	555957	173108	236
1292	Nonparticipant	28	29	28	555983	173107	238
1293	Nonparticipant	28	29	29	556009	173108	239
1294	Nonparticipant	29	30	29	556021	173115	239
1295	Nonparticipant	29	30	29	555917	173075	239
1296	Nonparticipant	29	30	29	555916	173058	239
1297	Nonparticipant	29	30	30	555916	173044	239
1298	Nonparticipant	29	30	29	555921	173019	240
1299	Nonparticipant	30	31	31	556042	172972	242
1300	Nonparticipant	30	31	31	556041	172982	242
1301	Nonparticipant	30	31	31	556041	172997	242
1302	Nonparticipant	29	30	30	556041	173008	241
1303	Nonparticipant	29	30	29	556041	173020	241
1304	Nonparticipant	29	30	29	556058	173020	240
1305	Nonparticipant	29	30	29	556058	173003	241
1306	Nonparticipant	30	31	31	556058	172997	242
1307	Nonparticipant	30	31	31	556058	172985	242
1308	Nonparticipant	30	31	31	556057	172977	242
1309	Nonparticipant	30	31	31	556056	172969	242
1310	Nonparticipant	30	31	31	556055	172953	242
1311	Nonparticipant	30	31	31	556055	172937	241

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1312	Nonparticipant	30	31	31	556055	172927	241
1313	Nonparticipant	30	31	31	556087	172976	242
1314	Nonparticipant	30	31	31	556086	172986	242
1315	Nonparticipant	30	31	30	556017	173043	241
1316	Nonparticipant	30	31	30	556000	173043	241
1317	Nonparticipant	29	30	29	556074	173150	238
1318	Nonparticipant	26	27	26	556033	173170	232
1319	Nonparticipant	31	32	31	554310	173106	226
1320	Nonparticipant	35	36	35	553550	173013	228
1321	Nonparticipant	35	36	35	553633	172914	226
1322	Nonparticipant	35	36	35	553639	172938	226
1323	Nonparticipant	44	45	45	551826	172685	220
1324	Nonparticipant	43	45	44	551837	172745	220
1325	Nonparticipant	43	44	43	551813	172778	220
1326	Nonparticipant	41	43	42	551826	172914	220
1327	Nonparticipant	40	42	41	551819	173043	219
1328	Nonparticipant	39	41	40	551895	173166	219
1329	Nonparticipant	33	35	34	550977	173263	218
1330	Nonparticipant	28	29	28	549710	173323	216
1331	Nonparticipant	35	35	35	555213	171486	242
1332	Nonparticipant	36	37	37	555161	171067	243
1333	Nonparticipant	36	37	36	553671	171316	239
1334	Nonparticipant	36	38	37	553518	171159	239
1335	Nonparticipant	36	37	37	553561	171193	239
1336	Nonparticipant	37	38	37	553545	171231	239
1337	Nonparticipant	37	38	37	553498	171135	239
1338	Nonparticipant	37	38	37	553474	171179	238
1339	Nonparticipant	36	37	37	553475	171098	238
1340	Nonparticipant	37	38	37	553352	171040	238
1341	Nonparticipant	36	37	36	553622	171019	240
1342	Nonparticipant	38	40	39	553331	171492	235
1343	Nonparticipant	38	39	38	553461	171578	234
1344	Nonparticipant	34	35	34	555130	171687	241
1345	Nonparticipant	35	36	35	556349	171909	243
1346	Nonparticipant	34	35	35	556277	171896	243
1347	Nonparticipant	34	34	34	555435	171826	243
1348	Nonparticipant	35	36	35	556538	171930	243

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1349	Nonparticipant	34	35	34	555921	171886	242
1350	Nonparticipant	34	35	34	555543	171782	242
1351	Nonparticipant	35	36	35	556211	171805	239
1352	Nonparticipant	35	36	35	556050	171794	241
1353	Nonparticipant	34	34	34	555139	171786	242
1354	Nonparticipant	36	37	36	557591	171742	246
1355	Nonparticipant	35	36	35	557777	171840	245
1356	Nonparticipant	30	31	30	558604	172448	244
1357	Nonparticipant	32	33	32	558529	172148	245
1358	Nonparticipant	34	35	34	558270	171772	245
1359	Nonparticipant	32	33	32	558856	171768	247
1360	Nonparticipant	31	32	31	559507	171807	249
1361	Nonparticipant	20	21	20	548246	170125	219
1362	Nonparticipant	23	24	23	548019	170194	220
1363	Nonparticipant	24	25	24	548600	170040	221
1364	Nonparticipant	29	30	30	550211	170565	226
1365	Nonparticipant	29	30	30	550232	170643	224
1366	Nonparticipant	30	31	30	550208	170720	226
1367	Nonparticipant	30	31	30	550160	170804	227
1368	Nonparticipant	30	31	30	550164	170860	226
1369	Nonparticipant	28	29	28	550018	170156	227
1370	Nonparticipant	36	37	37	551875	170593	230
1371	Nonparticipant	35	36	36	552763	170380	239
1372	Nonparticipant	35	37	36	552815	170439	240
1373	Nonparticipant	34	36	35	552662	170268	239
1374	Nonparticipant	34	35	34	552544	170136	240
1375	Nonparticipant	35	35	35	553492	170653	243
1376	Nonparticipant	37	37	37	554291	170277	243
1377	Nonparticipant	29	30	29	552135	168626	242
1378	Nonparticipant	29	30	29	552075	168630	242
1379	Nonparticipant	33	34	34	553611	169077	245
1380	Nonparticipant	36	36	36	554221	168831	244
1381	Nonparticipant	38	38	38	554720	168602	245
1382	Nonparticipant	39	39	40	555001	168573	245
1383	Nonparticipant	42	42	43	555252	168834	245
1384	Nonparticipant	45	45	46	555288	169172	242

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1385	Nonparticipant	41	41	42	555184	168699	244
1386	Nonparticipant	41	41	42	555305	168591	241
1387	Nonparticipant	40	40	41	555158	168573	243
1388	Nonparticipant	40	40	40	555180	168483	244
1389	Nonparticipant	27	28	28	551868	169369	225
1390	Nonparticipant	30	31	30	551798	169460	234
1391	Nonparticipant	31	32	31	551794	169550	236
1392	Nonparticipant	30	31	30	551650	169306	236
1393	Nonparticipant	29	30	29	551694	169274	236
1394	Nonparticipant	26	26	26	550167	169548	224
1395	Nonparticipant	27	28	27	550181	169369	230
1396	Nonparticipant	26	27	26	549529	169645	221
1397	Nonparticipant	25	26	25	549247	169641	226
1398	Nonparticipant	25	26	25	549206	169336	222
1399	Nonparticipant	24	25	25	549049	169320	227
1400	Nonparticipant	24	25	24	548959	169318	227
1401	Nonparticipant	23	24	23	548255	169610	220
1402	Nonparticipant	21	23	22	548251	169543	218
1403	Nonparticipant	23	24	23	548221	169419	221
1404	Nonparticipant	22	24	23	548195	169317	222
1405	Nonparticipant	22	24	23	548079	169321	222
1406	Nonparticipant	21	22	21	548422	169249	222
1407	Nonparticipant	39	40	39	558464	168529	254
1408	Nonparticipant	39	40	39	558413	168532	253
1409	Nonparticipant	35	35	35	560007	168563	256
1410	Nonparticipant	35	35	35	559735	168591	258
1411	Nonparticipant	36	36	36	560049	167559	261
1412	Nonparticipant	41	41	41	558383	168168	254
1413	Nonparticipant	45	45	45	556776	167767	251
1414	Nonparticipant	46	46	46	556875	167825	251
1415	Nonparticipant	38	38	39	555188	167947	245
1416	Nonparticipant	32	32	32	553560	168008	244
1417	Nonparticipant	32	33	32	556035	165169	259
1418	Nonparticipant	31	32	31	554929	165679	254
1419	Nonparticipant	30	31	30	554920	165238	256
1420	Nonparticipant	29	29	29	554579	165299	255
1421	Nonparticipant	28	29	28	554054	165241	255

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1422	Nonparticipant	28	28	28	553908	165134	254
1423	Nonparticipant	28	28	28	553748	165243	253
1424	Nonparticipant	26	27	26	553492	165247	251
1425	Nonparticipant	25	26	25	553433	165252	250
1426	Nonparticipant	27	28	27	553492	165355	251
1427	Nonparticipant	25	26	26	551992	165978	243
1428	Nonparticipant	26	27	26	551830	166571	246
1429	Nonparticipant	30	30	30	553568	166769	246
1430	Nonparticipant	28	28	28	553355	165892	248
1431	Nonparticipant	39	40	40	556822	166044	253
1432	Nonparticipant	39	40	39	556815	166000	254
1433	Nonparticipant	40	41	40	556966	166007	252
1434	Nonparticipant	41	42	42	557128	166064	255
1435	Nonparticipant	40	41	41	556722	166181	255
1436	Nonparticipant	36	36	36	559239	166123	262
1437	Nonparticipant	36	36	36	559185	166117	262
1438	Nonparticipant	36	36	36	559041	166125	262
1439	Nonparticipant	36	37	36	559353	166155	261
1440	Nonparticipant	33	33	33	556766	165006	261
1441	Nonparticipant	32	33	32	556372	165026	259
1442	Nonparticipant	34	34	34	558505	164743	267
1443	Nonparticipant	33	33	33	558244	164514	266
1444	Nonparticipant	33	34	33	558401	164500	266
1445	Nonparticipant	31	32	31	558194	164434	264
1446	Nonparticipant	31	31	31	558148	164377	261
1447	Nonparticipant	31	31	31	558180	164311	260
1448	Nonparticipant	32	33	32	558564	164420	260
1449	Nonparticipant	34	35	34	558635	164874	266
1450	Nonparticipant	35	35	35	559094	164400	267
1451	Nonparticipant	35	35	35	559226	164430	263
1452	Nonparticipant	35	36	35	559257	164431	264
1453	Nonparticipant	36	36	36	559333	164413	267
1454	Nonparticipant	36	36	36	559300	164484	267
1455	Nonparticipant	29	30	29	557485	163437	265
1456	Nonparticipant	29	30	29	557418	163350	266
1457	Nonparticipant	29	30	29	557368	163263	267

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1458	Nonparticipant	28	29	28	557320	163204	267
1459	Nonparticipant	29	29	29	557331	163010	268
1460	Nonparticipant	31	31	31	558405	163332	268
1461	Nonparticipant	31	31	31	558413	163029	267
1462	Nonparticipant	31	31	31	558388	162932	267
1463	Nonparticipant	46	46	46	560666	163617	275
1464	Nonparticipant	45	45	45	561633	163721	273
1465	Nonparticipant	27	28	27	555318	164050	252
1466	Nonparticipant	27	28	27	555280	164069	252
1467	Nonparticipant	28	29	28	555199	164058	253
1468	Nonparticipant	26	27	26	555153	163656	258
1469	Nonparticipant	27	27	27	555439	163689	255
1470	Nonparticipant	28	29	28	555763	163600	260
1471	Nonparticipant	24	25	24	554002	163691	251
1472	Nonparticipant	24	25	24	553742	163742	253
1473	Nonparticipant	25	26	25	553556	163719	255
1474	Nonparticipant	25	26	25	553561	163780	256
1475	Nonparticipant	23	24	23	553564	163669	254
1476	Nonparticipant	23	23	23	553381	163657	253
1477	Nonparticipant	19	20	19	553060	163593	247
1478	Nonparticipant	19	20	19	553169	163598	248
1479	Nonparticipant	20	21	20	553475	163534	250
1480	Nonparticipant	25	26	26	553451	164227	254
1481	Nonparticipant	23	24	23	552450	163654	254
1482	Nonparticipant	33	33	33	560031	162076	280
1483	Nonparticipant	30	30	30	559453	162068	274
1484	Nonparticipant	32	32	32	559638	162070	276
1485	Nonparticipant	31	31	30	559348	161996	274
1486	Nonparticipant	30	30	30	558827	162005	279
1487	Nonparticipant	30	31	30	558964	162066	280
1488	Nonparticipant	29	29	29	558331	162096	274
1489	Nonparticipant	24	24	24	557024	161981	271
1490	Nonparticipant	27	27	27	557010	162054	272
1491	Nonparticipant	26	27	26	556943	162067	271
1492	Nonparticipant	27	28	27	557064	162066	271
1493	Nonparticipant	27	28	27	557222	162072	273
1494	Nonparticipant	26	27	26	557241	162009	272

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1495	Nonparticipant	27	28	27	557169	162005	273
1496	Nonparticipant	24	25	25	555584	162075	264
1497	Nonparticipant	25	26	25	555650	161989	264
1498	Nonparticipant	25	26	25	555464	161979	264
1499	Nonparticipant	25	26	25	556180	161928	269
1500	Nonparticipant	24	25	25	555329	161955	264
1501	Nonparticipant	24	25	24	555269	161978	264
1502	Nonparticipant	24	25	24	555231	161981	264
1503	Nonparticipant	23	25	24	554946	161990	264
1504	Nonparticipant	22	23	22	554758	161988	264
1505	Nonparticipant	23	24	23	553536	162567	260
1506	Nonparticipant	23	24	23	553418	162491	260
1507	Nonparticipant	23	24	23	553530	162454	260
1508	Nonparticipant	23	24	23	553538	162512	260
1509	Nonparticipant	26	27	26	556731	161881	273
1510	Nonparticipant	26	27	26	556757	161884	273
1511	Nonparticipant	26	27	26	556683	161821	273
1512	Nonparticipant	26	27	26	556679	161858	273
1513	Nonparticipant	24	25	24	556203	162004	268
1514	Nonparticipant	26	27	26	556250	162003	270
1515	Nonparticipant	26	26	26	556274	162008	270
1516	Nonparticipant	25	26	26	556312	162009	270
1517	Nonparticipant	25	26	25	556343	162008	270
1518	Nonparticipant	26	27	26	556344	162059	271
1519	Nonparticipant	25	26	25	555839	161990	265
1520	Nonparticipant	25	26	25	555884	161987	265
1521	Nonparticipant	25	26	25	555999	162009	266
1522	Nonparticipant	24	25	24	556090	162003	267
1523	Nonparticipant	24	25	24	556134	162005	267
1524	Nonparticipant	24	25	24	556167	162011	268
1525	Nonparticipant	25	26	25	556269	161928	271
1526	Nonparticipant	26	26	26	556273	161945	271
1527	Nonparticipant	21	23	22	553457	161968	262
1528	Nonparticipant	21	23	22	553394	161960	262
1529	Nonparticipant	22	23	22	553358	161970	261
1530	Nonparticipant	22	23	22	553328	161970	261

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1531	Nonparticipant	20	22	21	553224	161970	260
1532	Nonparticipant	20	22	21	553382	162030	261
1533	Nonparticipant	21	22	21	553437	162033	262
1534	Nonparticipant	22	24	23	553537	162180	261
1535	Nonparticipant	22	23	22	553581	161956	262
1536	Nonparticipant	22	23	22	553610	161890	262
1537	Nonparticipant	22	23	22	553450	161933	262
1538	Nonparticipant	21	23	22	553461	161882	262
1539	Nonparticipant	20	21	20	553239	161938	261
1540	Nonparticipant	21	23	21	553159	161888	260
1541	Nonparticipant	22	23	22	553455	161817	262
1542	Nonparticipant	21	23	22	553456	161783	262
1543	Nonparticipant	20	22	21	553513	161240	263
1544	Nonparticipant	20	22	21	553512	161306	262
1545	Nonparticipant	23	25	24	556365	161267	270
1546	Nonparticipant	25	26	25	556322	161273	272
1547	Nonparticipant	30	31	30	558938	162087	279
1548	Nonparticipant	27	27	26	558252	161520	273
1549	Participant	31	31	31	561387	161378	286
1550	Nonparticipant	30	30	30	561550	161173	286
1551	Nonparticipant	25	25	25	563160	160899	280
1552	Nonparticipant	25	26	25	556155	161621	270
1553	Nonparticipant	25	26	25	556149	161642	270
1554	Nonparticipant	25	26	25	556388	161604	271
1555	Nonparticipant	25	26	25	556459	161606	272
1556	Nonparticipant	25	26	25	556554	161609	274
1557	Nonparticipant	25	26	25	556551	161569	273
1558	Nonparticipant	24	25	25	556540	161510	273
1559	Nonparticipant	25	26	25	556454	161522	273
1560	Nonparticipant	25	26	25	556454	161549	273
1561	Nonparticipant	25	26	25	556549	161473	273
1562	Nonparticipant	23	23	22	556587	161512	272
1563	Nonparticipant	22	23	22	556615	161510	272
1564	Nonparticipant	22	23	22	556638	161509	273
1565	Nonparticipant	23	24	23	556660	161510	273
1566	Nonparticipant	25	26	26	556684	161530	273
1567	Nonparticipant	23	24	23	556605	161472	272

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1568	Nonparticipant	25	26	25	556238	161784	269
1569	Nonparticipant	24	25	24	556215	161941	269
1570	Nonparticipant	28	28	28	559890	160961	278
1571	Nonparticipant	27	27	27	559935	161034	278
1572	Nonparticipant	29	30	30	563717	178396	243
1573	Nonparticipant	30	30	30	563658	178364	242
1574	Nonparticipant	29	30	30	563595	178311	242
1575	Nonparticipant	29	30	29	563598	178546	243
1576	Nonparticipant	32	33	32	564258	178364	240
1577	Nonparticipant	31	32	32	564304	178678	242
1578	Nonparticipant	31	32	32	564476	178785	240
1579	Nonparticipant	32	32	32	564661	178879	241
1580	Nonparticipant	37	37	37	565711	178637	241
1581	Nonparticipant	39	40	40	566117	178374	240
1582	Nonparticipant	40	41	41	566076	178316	241
1583	Nonparticipant	39	39	39	565818	178453	240
1584	Nonparticipant	32	33	33	566468	179351	240
1585	Nonparticipant	30	30	30	566609	179746	235
1586	Nonparticipant	30	30	30	566621	179920	235
1587	Nonparticipant	29	30	30	566614	179959	235
1588	Nonparticipant	29	30	30	566611	180017	234
1589	Nonparticipant	29	30	29	567079	179983	236
1590	Nonparticipant	31	31	31	567429	179477	239
1591	Nonparticipant	33	33	33	565864	179286	241
1592	Nonparticipant	32	32	32	565789	179283	242
1593	Nonparticipant	33	33	33	565709	179260	242
1594	Nonparticipant	33	33	33	565629	179238	241
1595	Nonparticipant	32	33	33	565498	179231	240
1596	Nonparticipant	32	33	33	565183	179124	241
1597	Nonparticipant	32	33	32	564874	179037	241
1598	Nonparticipant	33	33	33	564919	178950	241
1599	Nonparticipant	33	33	33	564995	178981	241
1600	Nonparticipant	33	33	33	565062	178993	241
1601	Nonparticipant	33	33	33	565006	178911	241
1602	Nonparticipant	33	34	34	564956	178833	242
1603	Nonparticipant	22	24	23	560759	178279	233

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1604	Nonparticipant	17	18	17	560846	179565	229
1605	Nonparticipant	16	17	16	560792	179526	230
1606	Nonparticipant	15	16	15	560739	179489	227
1607	Nonparticipant	16	18	17	560684	179460	227
1608	Nonparticipant	16	17	16	560664	179513	227
1609	Nonparticipant	15	16	15	560708	179545	227
1610	Nonparticipant	16	17	16	560740	179591	228
1611	Nonparticipant	15	16	15	560819	179651	228
1612	Nonparticipant	15	16	15	560887	179683	228
1613	Nonparticipant	15	16	15	560923	179715	228
1614	Nonparticipant	16	17	17	560964	179743	229
1615	Nonparticipant	17	17	17	561010	179777	228
1616	Nonparticipant	18	18	18	561039	179797	228
1617	Nonparticipant	15	16	15	561069	179821	227
1618	Nonparticipant	21	22	21	560967	179668	232
1619	Nonparticipant	21	22	21	560923	179613	232
1620	Nonparticipant	19	21	20	560582	179468	227
1621	Nonparticipant	17	18	17	554749	178356	212
1622	Nonparticipant	13	14	13	554863	178265	214
1623	Nonparticipant	15	16	15	553669	179322	207
1624	Nonparticipant	12	14	13	553788	179311	207
1625	Nonparticipant	15	17	16	553798	179264	208
1626	Nonparticipant	17	19	17	553798	179173	208
1627	Nonparticipant	17	19	18	553774	179061	209
1628	Nonparticipant	18	20	18	553749	178920	209
1629	Nonparticipant	18	20	19	553749	178824	210
1630	Nonparticipant	19	20	19	554216	178292	213
1631	Nonparticipant	14	15	14	554349	178289	212
1632	Nonparticipant	17	18	17	554141	178390	213
1633	Nonparticipant	19	21	19	553979	178299	211
1634	Nonparticipant	10	12	10	556114	179480	217
1635	Nonparticipant	10	12	11	556066	179490	216
1636	Nonparticipant	11	12	11	556039	179504	216
1637	Nonparticipant	17	18	17	555405	178321	217
1638	Nonparticipant	16	18	17	555461	178318	218
1639	Nonparticipant	18	20	19	555303	178407	219
1640	Nonparticipant	18	20	19	555318	178492	219

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1641	Nonparticipant	14	15	14	555269	178320	218
1642	Nonparticipant	18	19	18	555153	178350	219
1643	Nonparticipant	16	18	17	555022	178364	218
1644	Nonparticipant	16	18	17	554959	178349	215
1645	Nonparticipant	17	19	18	554829	178354	214
1646	Nonparticipant	17	19	18	554783	178359	213
1647	Nonparticipant	17	19	18	554834	178415	214
1648	Nonparticipant	18	20	19	554781	178500	214
1649	Nonparticipant	18	20	19	554848	178553	214
1650	Nonparticipant	16	19	18	554906	178603	213
1651	Nonparticipant	17	19	18	554792	178577	214
1652	Nonparticipant	34	35	35	551312	173455	216
1653	Nonparticipant	34	35	34	551242	173452	217
1654	Nonparticipant	34	35	34	551169	173437	218
1655	Nonparticipant	34	35	34	551203	173458	217
1656	Nonparticipant	33	34	33	550941	173418	218
1657	Nonparticipant	35	36	35	551410	173476	217
1658	Nonparticipant	35	36	36	551914	173642	219
1659	Nonparticipant	36	37	37	551835	173484	219
1660	Nonparticipant	36	37	36	551863	173552	219
1661	Nonparticipant	30	31	30	554286	173699	227
1662	Nonparticipant	31	32	31	553401	173921	220
1663	Nonparticipant	26	28	27	556313	173602	233
1664	Nonparticipant	23	24	23	556255	173487	229
1665	Nonparticipant	27	28	28	556708	173867	239
1666	Nonparticipant	27	28	27	556562	173847	241
1667	Nonparticipant	27	28	27	556525	173817	240
1668	Nonparticipant	28	29	28	556705	173643	235
1669	Nonparticipant	28	29	28	556549	173714	239
1670	Nonparticipant	23	24	23	556606	173534	230
1671	Nonparticipant	26	27	26	557577	173407	241
1672	Nonparticipant	25	27	26	557598	173413	240
1673	Nonparticipant	29	30	29	557429	173406	243
1674	Nonparticipant	29	30	29	557462	173387	242
1675	Nonparticipant	26	27	26	557414	173460	240
1676	Nonparticipant	26	27	27	557395	173466	239

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1677	Nonparticipant	28	29	28	557351	173474	241
1678	Nonparticipant	29	30	29	557310	173481	243
1679	Nonparticipant	29	30	29	557265	173478	244
1680	Nonparticipant	27	28	27	557441	173555	240
1681	Nonparticipant	29	30	29	557289	173414	242
1682	Nonparticipant	29	30	29	557252	173432	244
1683	Nonparticipant	29	30	29	556967	173500	243
1684	Nonparticipant	26	27	26	557010	173609	240
1685	Nonparticipant	27	28	28	556889	173644	240
1686	Nonparticipant	27	27	27	556857	173411	238
1687	Nonparticipant	28	29	28	556914	173444	241
1688	Nonparticipant	28	29	29	556823	173514	237
1689	Nonparticipant	27	28	27	557397	173866	238
1690	Nonparticipant	27	29	28	558580	173850	242
1691	Nonparticipant	28	29	28	559635	173515	245
1692	Nonparticipant	28	29	28	558383	173395	244
1693	Nonparticipant	28	29	28	558148	173471	245
1694	Nonparticipant	28	29	28	558407	173548	243
1695	Nonparticipant	26	27	27	558568	173627	244
1696	Nonparticipant	28	29	28	558730	173439	244
1697	Nonparticipant	28	29	28	559153	173382	245
1698	Nonparticipant	28	29	28	560158	173570	245
1699	Nonparticipant	28	29	28	560656	173457	245
1700	Nonparticipant	11	12	11	571241	160906	266
1701	Nonparticipant	5	7	5	573282	160907	265
1702	Nonparticipant	18	20	19	570259	160913	274
1703	Nonparticipant	17	18	17	569422	160917	269
1704	Nonparticipant	11	12	11	571252	160936	267
1705	Nonparticipant	29	29	29	564878	161948	280
1706	Nonparticipant	10	12	10	573569	161948	269
1707	Nonparticipant	22	23	22	568704	161973	278
1708	Nonparticipant	25	26	25	568088	161977	279
1709	Nonparticipant	25	26	25	567892	161978	280
1710	Nonparticipant	12	14	12	574486	163071	264
1711	Nonparticipant	10	12	10	574454	163102	264
1712	Nonparticipant	10	12	10	574502	163132	264
1713	Nonparticipant	24	25	24	570370	163164	271

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1714	Nonparticipant	21	22	22	570390	163165	270
1715	Nonparticipant	42	42	43	563304	164989	267
1716	Nonparticipant	25	27	25	570823	164994	266
1717	Nonparticipant	23	24	23	570918	164995	265
1718	Nonparticipant	25	27	25	570760	164998	266
1719	Nonparticipant	25	27	26	570750	165000	266
1720	Nonparticipant	23	24	23	570919	165005	265
1721	Nonparticipant	24	26	24	570865	165019	266
1722	Nonparticipant	25	27	26	570656	165039	263
1723	Nonparticipant	40	41	40	564578	165072	273
1724	Nonparticipant	34	35	34	566481	165092	271
1725	Nonparticipant	32	34	33	568093	165105	271
1726	Nonparticipant	28	29	28	569630	165110	265
1727	Nonparticipant	33	34	33	568099	165143	271
1728	Nonparticipant	28	29	28	569640	165147	264
1729	Nonparticipant	32	34	33	568282	165152	269
1730	Nonparticipant	30	32	31	568795	165154	268
1731	Nonparticipant	41	43	42	567373	165965	266
1732	Nonparticipant	25	27	25	571149	165984	260
1733	Nonparticipant	37	38	37	565997	165986	269
1734	Nonparticipant	28	29	28	570267	165988	263
1735	Nonparticipant	26	27	26	570880	166000	262
1736	Nonparticipant	42	43	42	564595	166000	268
1737	Nonparticipant	40	40	40	564886	166000	267
1738	Nonparticipant	17	19	17	574313	166497	255
1739	Nonparticipant	18	21	19	574316	166507	255
1740	Nonparticipant	44	44	45	563254	166526	264
1741	Nonparticipant	44	44	45	563287	166529	262
1742	Nonparticipant	44	44	45	563251	166562	264
1743	Nonparticipant	44	44	45	563212	166563	265
1744	Nonparticipant	44	44	45	563253	166574	264
1745	Nonparticipant	24	26	24	572031	166593	258
1746	Nonparticipant	44	45	45	563212	166597	264
1747	Nonparticipant	24	26	25	572031	166613	257
1748	Nonparticipant	45	45	45	563208	166694	262
1749	Nonparticipant	29	30	29	570148	167531	261

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1750	Nonparticipant	41	43	42	567665	167532	262
1751	Nonparticipant	31	32	31	569386	167548	260
1752	Nonparticipant	43	45	44	567320	167550	261
1753	Nonparticipant	38	39	39	565826	167551	262
1754	Nonparticipant	29	30	29	570148	167551	261
1755	Nonparticipant	37	38	38	566527	168183	258
1756	Nonparticipant	25	27	26	571696	168218	257
1757	Nonparticipant	25	27	26	571698	168225	257
1758	Nonparticipant	24	25	24	572638	168239	254
1759	Nonparticipant	35	36	35	568058	168278	262
1760	Nonparticipant	35	36	35	568062	168316	262
1761	Nonparticipant	38	38	38	566442	168318	260
1762	Nonparticipant	21	23	21	574216	168346	251
1763	Nonparticipant	21	23	21	574213	168397	250
1764	Nonparticipant	37	38	37	566469	168397	260
1765	Nonparticipant	30	31	30	569698	168410	260
1766	Nonparticipant	42	42	42	562798	168447	261
1767	Nonparticipant	42	42	42	562796	168456	261
1768	Nonparticipant	27	28	27	570674	169078	260
1769	Nonparticipant	27	28	27	570653	169078	260
1770	Nonparticipant	29	30	29	569725	169086	255
1771	Nonparticipant	28	29	28	570351	169124	261
1772	Nonparticipant	28	29	28	570326	169131	261
1773	Nonparticipant	28	30	29	570209	169270	261
1774	Nonparticipant	46	46	46	565554	169272	260
1775	Nonparticipant	37	38	38	562227	169273	258
1776	Nonparticipant	28	30	29	570281	169276	260
1777	Nonparticipant	38	38	38	562296	169278	258
1778	Nonparticipant	40	40	40	566477	169278	259
1779	Nonparticipant	28	30	29	570184	169279	261
1780	Nonparticipant	37	38	37	562145	169281	258
1781	Nonparticipant	46	46	46	565529	169281	260
1782	Nonparticipant	42	43	42	566090	169281	259
1783	Nonparticipant	28	29	28	570221	169282	260
1784	Nonparticipant	37	38	37	562151	169282	258
1785	Nonparticipant	37	38	37	562194	169282	258
1786	Nonparticipant	28	29	28	570122	169283	260

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1787	Nonparticipant	46	46	46	564535	169300	256
1788	Nonparticipant	44	45	45	564252	170132	256
1789	Nonparticipant	35	36	36	562302	170139	255
1790	Nonparticipant	41	42	42	563682	170145	257
1791	Nonparticipant	36	36	36	562411	170149	256
1792	Nonparticipant	30	31	30	569187	171021	249
1793	Nonparticipant	29	30	29	571621	171045	250
1794	Nonparticipant	29	30	29	571625	171046	250
1795	Nonparticipant	24	26	25	573878	171111	250
1796	Nonparticipant	23	24	23	573991	171117	249
1797	Nonparticipant	30	31	31	569839	171162	252
1798	Nonparticipant	31	32	31	569755	171165	252
1799	Nonparticipant	26	28	27	573040	171171	249
1800	Nonparticipant	25	26	25	573927	171171	249
1801	Nonparticipant	24	26	25	574065	171293	249
1802	Nonparticipant	32	32	32	562101	171683	251
1803	Nonparticipant	32	32	32	562092	171683	251
1804	Nonparticipant	32	33	33	562571	171687	250
1805	Nonparticipant	33	34	34	567498	171690	247
1806	Nonparticipant	32	33	33	562574	171692	250
1807	Nonparticipant	33	34	33	568419	172400	250
1808	Nonparticipant	35	36	35	564596	172405	248
1809	Nonparticipant	27	28	27	573727	172430	249
1810	Nonparticipant	35	36	35	569880	172443	250
1811	Nonparticipant	35	36	35	569877	172445	250
1812	Nonparticipant	35	36	35	566550	172448	248
1813	Nonparticipant	32	33	32	563368	172485	249
1814	Nonparticipant	27	28	27	573644	172498	248
1815	Nonparticipant	32	33	32	563369	172513	248
1816	Nonparticipant	35	36	35	564928	172524	247
1817	Nonparticipant	35	36	35	564720	172526	248
1818	Nonparticipant	35	36	35	564823	172529	248
1819	Nonparticipant	35	36	35	564824	172532	248
1820	Nonparticipant	35	36	36	569860	172538	250
1821	Nonparticipant	34	35	35	566644	172554	249
1822	Nonparticipant	28	29	29	573497	173037	248

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1823	Nonparticipant	28	29	29	573504	173037	248
1824	Nonparticipant	29	30	29	573410	173050	248
1825	Nonparticipant	28	29	28	573542	173051	249
1826	Nonparticipant	29	30	29	573419	173058	248
1827	Nonparticipant	29	30	29	573302	173059	247
1828	Nonparticipant	40	41	40	571178	173286	250
1829	Nonparticipant	33	34	33	564252	173286	248
1830	Nonparticipant	35	36	35	565129	173286	249
1831	Nonparticipant	36	37	36	565470	173288	251
1832	Nonparticipant	31	33	32	563789	173298	247
1833	Nonparticipant	34	35	34	568191	173298	248
1834	Nonparticipant	31	32	32	563655	173305	249
1835	Nonparticipant	32	33	32	563693	173309	248
1836	Nonparticipant	31	32	31	563388	173310	248
1837	Nonparticipant	36	37	36	565553	173320	251
1838	Nonparticipant	30	31	31	563329	173321	246
1839	Nonparticipant	30	31	30	562881	173323	248
1840	Nonparticipant	36	37	36	565578	173325	251
1841	Nonparticipant	34	34	34	568202	173328	249
1842	Nonparticipant	37	38	37	565766	173329	249
1843	Nonparticipant	39	40	39	571498	173743	249
1844	Nonparticipant	35	36	35	567538	173776	247
1845	Nonparticipant	39	40	39	571508	173794	249
1846	Nonparticipant	39	40	39	571512	173796	249
1847	Nonparticipant	35	37	36	565008	173821	248
1848	Nonparticipant	42	44	43	569878	174258	248
1849	Nonparticipant	42	43	42	569794	174263	247
1850	Nonparticipant	44	45	44	570010	174267	248
1851	Nonparticipant	30	31	30	563251	174268	246
1852	Nonparticipant	42	43	43	569827	174270	247
1853	Nonparticipant	30	31	30	563323	174271	246
1854	Nonparticipant	42	43	42	569796	174279	247
1855	Nonparticipant	42	43	42	569805	174291	247
1856	Nonparticipant	42	44	43	569872	174291	248
1857	Nonparticipant	42	43	43	569821	174293	247
1858	Nonparticipant	42	43	42	569793	174299	247
1859	Nonparticipant	44	45	44	570004	174301	247

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1860	Nonparticipant	30	31	30	563291	174303	246
1861	Nonparticipant	42	43	43	569839	174307	247
1862	Nonparticipant	42	44	43	571215	174316	246
1863	Nonparticipant	30	31	30	563088	174319	246
1864	Nonparticipant	38	40	39	566801	174654	247
1865	Nonparticipant	42	43	43	569830	174669	245
1866	Nonparticipant	42	43	43	569885	174672	245
1867	Nonparticipant	38	40	39	566835	174673	247
1868	Nonparticipant	42	43	43	569898	174676	245
1869	Nonparticipant	38	39	39	566846	174688	247
1870	Nonparticipant	40	42	41	566586	174689	247
1871	Nonparticipant	38	40	39	566778	174691	246
1872	Nonparticipant	42	43	43	569891	174701	245
1873	Nonparticipant	38	39	38	566869	174708	246
1874	Nonparticipant	31	32	31	563797	174938	245
1875	Nonparticipant	37	38	38	567059	174949	245
1876	Nonparticipant	40	42	41	571569	174965	244
1877	Nonparticipant	41	43	42	571487	174996	244
1878	Nonparticipant	30	31	30	563208	175019	246
1879	Nonparticipant	41	42	41	571581	175020	244
1880	Nonparticipant	42	43	42	571483	175053	244
1881	Nonparticipant	42	43	42	571484	175093	244
1882	Nonparticipant	32	33	32	564225	175104	245
1883	Nonparticipant	42	43	42	571483	175106	244
1884	Nonparticipant	32	33	32	564230	175115	245
1885	Nonparticipant	45	45	46	569920	175709	237
1886	Nonparticipant	43	43	43	568010	175722	243
1887	Nonparticipant	45	46	46	568231	175896	243
1888	Nonparticipant	38	39	38	566679	175907	244
1889	Nonparticipant	45	45	46	568221	175910	243
1890	Nonparticipant	38	39	39	566686	175931	244
1891	Nonparticipant	44	45	45	568171	175982	242
1892	Nonparticipant	41	43	42	571419	175989	243
1893	Nonparticipant	41	42	41	571475	176003	243
1894	Nonparticipant	33	34	33	564510	163643	277
1895	Nonparticipant	33	33	33	564191	177811	241

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1896	Nonparticipant	34	34	34	564231	176981	244
1897	Nonparticipant	34	35	35	568928	177981	243
1898	Nonparticipant	40	40	41	569355	177011	238
1899	Nonparticipant	41	41	41	569278	176976	238
1900	Nonparticipant	45	45	46	568874	176607	236
1901	Nonparticipant	45	45	45	568618	176538	240
1902	Nonparticipant	44	45	45	568541	176530	241
1903	Nonparticipant	44	44	44	568495	176541	241
1904	Nonparticipant	30	31	30	571425	178273	234
1905	Nonparticipant	30	31	30	571445	178245	233
1906	Nonparticipant	30	31	30	571473	178211	233
1907	Nonparticipant	30	31	31	571499	178183	233
1908	Nonparticipant	30	31	31	571553	178122	233
1909	Nonparticipant	29	30	29	571601	178058	231
1910	Nonparticipant	30	31	31	571619	178037	232
1911	Nonparticipant	26	27	27	571752	179112	226
1912	Nonparticipant	27	28	28	571668	179020	227
1913	Nonparticipant	27	28	27	571560	178915	230
1914	Nonparticipant	28	29	28	571537	178887	231
1915	Nonparticipant	28	29	28	571520	178864	231
1916	Nonparticipant	27	28	27	571581	178956	230
1917	Nonparticipant	26	27	26	571614	178971	228
1918	Nonparticipant	27	28	28	571645	178992	228
1919	Nonparticipant	28	28	28	571709	179056	227
1920	Nonparticipant	28	29	28	571461	178820	232
1921	Nonparticipant	29	29	29	571417	178764	234
1922	Nonparticipant	29	30	29	571328	178672	233
1923	Nonparticipant	31	31	31	570875	177963	236
1924	Nonparticipant	31	32	32	571003	177963	237
1925	Nonparticipant	31	32	32	571126	177963	235
1926	Nonparticipant	44	45	45	566274	176565	243
1927	Nonparticipant	44	45	45	566204	176568	244
1928	Nonparticipant	45	46	45	566127	176572	243
1929	Nonparticipant	29	30	29	572801	177549	241
1930	Nonparticipant	29	29	29	572835	177543	241
1931	Nonparticipant	29	30	29	572788	177481	242
1932	Nonparticipant	29	30	29	572868	177490	242

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1933	Nonparticipant	29	30	29	572917	177499	242
1934	Nonparticipant	29	30	29	572941	177500	242
1935	Nonparticipant	29	29	29	572975	177498	243
1936	Nonparticipant	28	29	29	573005	177507	242
1937	Nonparticipant	28	29	29	573035	177513	242
1938	Nonparticipant	28	29	29	573062	177514	242
1939	Nonparticipant	32	33	32	571183	177783	236
1940	Nonparticipant	32	33	32	571160	177815	237
1941	Nonparticipant	32	33	32	571145	177831	237
1942	Nonparticipant	31	32	32	571116	177847	237
1943	Nonparticipant	32	33	32	571085	177861	238
1944	Nonparticipant	32	33	32	571045	177875	239
1945	Nonparticipant	32	33	32	570997	177898	239
1946	Nonparticipant	31	32	32	570981	177907	239
1947	Nonparticipant	32	32	32	570956	177927	239
1948	Nonparticipant	31	31	31	570939	177944	238
1949	Nonparticipant	28	29	29	573730	175471	244
1950	Nonparticipant	31	32	31	573153	175636	245
1951	Nonparticipant	32	33	32	573049	175283	245
1952	Nonparticipant	27	28	27	574344	174695	244
1953	Nonparticipant	24	25	24	553850	176170	220
1954	Nonparticipant	24	25	24	553815	176181	220
1955	Nonparticipant	24	25	24	553791	176182	220
1956	Nonparticipant	24	25	24	553757	176216	220
1957	Nonparticipant	24	25	24	553800	176220	220
1958	Nonparticipant	22	24	23	553759	176912	217
1959	Nonparticipant	21	23	22	553706	176872	217
1960	Nonparticipant	21	22	21	553670	176870	217
1961	Nonparticipant	21	22	21	553618	176877	214
1962	Nonparticipant	21	22	21	553607	176877	213
1963	Nonparticipant	21	23	22	553579	176877	213
1964	Nonparticipant	21	22	21	553558	176876	214
1965	Nonparticipant	22	24	23	553508	176876	215
1966	Nonparticipant	22	24	23	553469	176879	215
1967	Nonparticipant	22	24	23	553442	176879	215
1968	Nonparticipant	22	24	23	553382	176883	215

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
1969	Nonparticipant	22	23	22	553356	176879	215
1970	Nonparticipant	22	23	22	553500	177096	214
1971	Nonparticipant	22	23	22	553483	177096	215
1972	Nonparticipant	22	23	22	553455	177107	215
1973	Nonparticipant	20	21	20	553435	177111	215
1974	Nonparticipant	18	19	18	553403	177120	215
1975	Nonparticipant	18	19	19	553395	177123	215
1976	Nonparticipant	18	19	18	553377	177127	215
1977	Nonparticipant	24	25	24	553281	176353	217
1978	Nonparticipant	24	25	24	553295	176350	217
1979	Nonparticipant	24	25	24	553309	176350	217
1980	Nonparticipant	24	25	24	553326	176351	217
1981	Nonparticipant	24	25	24	553378	176356	217
1982	Nonparticipant	24	25	24	553404	176357	218
1983	Nonparticipant	24	25	24	553437	176354	218
1984	Nonparticipant	22	24	23	553498	176351	216
1985	Nonparticipant	24	25	24	553516	176119	220
1986	Nonparticipant	24	25	24	553527	176153	220
1987	Nonparticipant	23	24	23	553138	176763	216
1988	Nonparticipant	23	24	23	553166	176760	216
1989	Nonparticipant	23	24	23	553201	176758	216
1990	Nonparticipant	23	24	23	553239	176762	216
1991	Nonparticipant	23	24	23	553277	176754	215
1992	Nonparticipant	23	24	23	553321	176755	215
1993	Nonparticipant	23	24	23	553388	176760	215
1994	Nonparticipant	23	24	23	553424	176741	215
1995	Nonparticipant	23	24	23	553443	176739	215
1996	Nonparticipant	22	24	23	553485	176745	215
1997	Nonparticipant	22	24	23	553498	176746	215
1998	Nonparticipant	22	24	23	553529	176746	215
1999	Nonparticipant	22	23	23	553646	176742	217
2000	Nonparticipant	21	23	22	553657	176776	218
2001	Nonparticipant	19	20	19	553631	176825	214
2002	Nonparticipant	21	22	21	553590	176833	213
2003	Nonparticipant	22	24	23	553549	176836	215
2004	Nonparticipant	22	24	23	553442	176839	215
2005	Nonparticipant	22	24	23	553379	176839	215

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2006	Nonparticipant	19	21	20	553814	177575	214
2007	Nonparticipant	18	20	19	553690	177757	213
2008	Nonparticipant	20	22	21	553619	177617	213
2009	Nonparticipant	19	21	20	553623	177472	212
2010	Nonparticipant	20	21	20	555172	177824	218
2011	Nonparticipant	17	18	17	555064	177991	222
2012	Nonparticipant	20	21	20	555387	177828	218
2013	Nonparticipant	19	21	20	555295	177949	218
2014	Nonparticipant	20	22	21	557458	177766	222
2015	Nonparticipant	19	20	19	558116	177959	223
2016	Nonparticipant	25	26	26	561762	177473	241
2017	Nonparticipant	25	26	25	561713	177441	240
2018	Nonparticipant	25	26	25	561677	177435	241
2019	Nonparticipant	25	26	25	561503	177344	241
2020	Nonparticipant	22	23	22	561170	177267	238
2021	Nonparticipant	23	24	24	561057	178125	233
2022	Nonparticipant	23	24	23	560678	178177	232
2023	Nonparticipant	21	22	21	560650	178182	232
2024	Nonparticipant	20	21	20	560613	178178	231
2025	Nonparticipant	22	24	23	560556	178169	232
2026	Nonparticipant	22	24	23	560726	178244	232
2027	Nonparticipant	21	23	22	560837	178235	229
2028	Nonparticipant	17	18	17	560875	178237	227
2029	Nonparticipant	22	24	23	561020	178250	231
2030	Nonparticipant	21	22	21	561051	178247	231
2031	Nonparticipant	23	24	24	561100	178246	232
2032	Nonparticipant	23	24	24	561136	178241	232
2033	Nonparticipant	19	20	19	561312	178175	231
2034	Nonparticipant	20	21	21	561354	178171	232
2035	Nonparticipant	34	34	34	568778	178159	240
2036	Nonparticipant	34	34	34	568879	178165	240
2037	Nonparticipant	34	34	35	568618	178089	240
2038	Nonparticipant	34	34	35	568588	178089	241
2039	Nonparticipant	34	34	35	568551	178091	241
2040	Nonparticipant	34	34	35	568516	178093	241
2041	Nonparticipant	34	34	35	568487	178091	241

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2042	Nonparticipant	34	35	35	568439	178089	241
2043	Nonparticipant	34	35	35	568394	178096	241
2044	Nonparticipant	34	35	35	568320	178073	242
2045	Nonparticipant	35	35	35	570009	177653	235
2046	Nonparticipant	36	36	36	570030	177563	235
2047	Nonparticipant	35	36	36	570047	177581	235
2048	Nonparticipant	35	35	36	570068	177608	235
2049	Nonparticipant	35	35	35	570093	177620	235
2050	Nonparticipant	35	35	35	570115	177637	234
2051	Nonparticipant	34	35	35	570254	177707	234
2052	Nonparticipant	33	34	34	570369	177778	235
2053	Nonparticipant	33	34	34	570382	177789	235
2054	Nonparticipant	34	34	34	570422	177818	237
2055	Nonparticipant	34	34	34	570437	177832	237
2056	Nonparticipant	33	34	34	570456	177849	237
2057	Nonparticipant	33	34	34	570485	177862	237
2058	Nonparticipant	36	36	36	569975	177541	235
2059	Nonparticipant	36	36	36	570000	177555	234
2060	Nonparticipant	35	35	36	569981	177638	235
2061	Nonparticipant	35	35	35	569966	177658	235
2062	Nonparticipant	35	35	35	569964	177687	235
2063	Nonparticipant	35	35	35	569960	177714	235
2064	Nonparticipant	32	33	33	571218	177605	232
2065	Nonparticipant	32	33	33	571229	177646	232
2066	Nonparticipant	32	33	33	571213	177656	233
2067	Nonparticipant	32	33	33	571179	177655	234
2068	Nonparticipant	33	33	33	571134	177651	236
2069	Nonparticipant	33	33	33	571073	177649	237
2070	Nonparticipant	31	31	31	570917	178258	232
2071	Nonparticipant	31	31	31	570910	178260	232
2072	Nonparticipant	31	31	31	570900	178264	233
2073	Nonparticipant	31	31	31	570886	178270	233
2074	Nonparticipant	33	34	34	570227	177972	238
2075	Nonparticipant	33	34	34	570202	177973	238
2076	Nonparticipant	33	34	34	570175	177973	238
2077	Nonparticipant	33	34	34	570164	177973	238
2078	Nonparticipant	33	34	34	570143	177972	238

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2079	Nonparticipant	34	34	34	570111	177971	237
2080	Nonparticipant	34	34	34	570069	177969	237
2081	Nonparticipant	34	34	34	570035	177975	236
2082	Nonparticipant	34	34	34	570005	177974	236
2083	Nonparticipant	34	34	34	569958	177973	235
2084	Nonparticipant	34	34	34	569914	177973	236
2085	Nonparticipant	34	34	34	569908	178000	236
2086	Nonparticipant	34	34	34	569910	178021	236
2087	Nonparticipant	33	34	34	569946	178064	236
2088	Nonparticipant	33	34	34	570017	178059	237
2089	Nonparticipant	33	33	33	570109	178062	238
2090	Nonparticipant	33	33	33	570124	178062	238
2091	Nonparticipant	33	33	33	570166	178076	238
2092	Nonparticipant	33	33	33	570211	178080	238
2093	Nonparticipant	26	27	27	572586	179006	230
2094	Nonparticipant	26	27	27	572526	178974	230
2095	Nonparticipant	26	27	27	572390	178930	228
2096	Nonparticipant	25	26	25	572327	178908	229
2097	Nonparticipant	25	26	26	572280	178861	228
2098	Nonparticipant	27	28	27	572176	178710	229
2099	Nonparticipant	26	27	27	572154	178684	229
2100	Nonparticipant	27	27	27	572101	178647	230
2101	Nonparticipant	28	28	28	572085	178637	231
2102	Nonparticipant	28	29	28	572003	178716	230
2103	Nonparticipant	27	28	27	571647	179280	229
2104	Nonparticipant	27	28	27	571688	179233	228
2105	Nonparticipant	27	28	27	571729	179176	228
2106	Nonparticipant	27	28	27	571742	179163	227
2107	Nonparticipant	27	27	27	571754	179154	226
2108	Nonparticipant	26	27	26	571808	179459	227
2109	Nonparticipant	26	27	26	571779	179422	227
2110	Nonparticipant	27	28	27	571710	179340	228
2111	Nonparticipant	27	27	27	571691	179330	228
2112	Nonparticipant	27	28	27	571571	179289	229
2113	Nonparticipant	27	28	27	571559	179289	229
2114	Nonparticipant	27	28	28	571527	179277	229

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2115	Nonparticipant	24	25	25	571474	179242	229
2116	Nonparticipant	28	28	28	571423	179188	231
2117	Nonparticipant	27	28	28	571382	179135	231
2118	Nonparticipant	28	29	28	571338	179091	232
2119	Nonparticipant	28	29	29	571266	179021	233
2120	Nonparticipant	29	29	29	571206	178968	233
2121	Nonparticipant	29	29	29	571146	178924	233
2122	Nonparticipant	28	29	28	571679	178782	229
2123	Nonparticipant	28	29	28	571710	178757	230
2124	Nonparticipant	28	29	28	571808	178637	230
2125	Nonparticipant	28	29	28	571861	178596	229
2126	Nonparticipant	28	29	28	571886	178574	230
2127	Nonparticipant	29	29	29	571953	178502	231
2128	Nonparticipant	28	29	29	571968	178486	231
2129	Nonparticipant	27	28	28	572000	178962	229
2130	Nonparticipant	27	28	28	571984	178924	230
2131	Nonparticipant	28	28	28	571940	178873	229
2132	Nonparticipant	26	27	26	571222	179922	231
2133	Nonparticipant	26	27	26	571203	179919	231
2134	Nonparticipant	26	27	27	571162	179907	231
2135	Nonparticipant	26	27	27	571090	179907	231
2136	Nonparticipant	26	27	27	571055	179907	232
2137	Nonparticipant	26	27	27	571014	179916	232
2138	Nonparticipant	26	27	27	570976	179916	232
2139	Nonparticipant	26	27	26	570951	179919	233
2140	Nonparticipant	26	27	26	570938	179897	233
2141	Nonparticipant	26	27	27	570935	179815	233
2142	Nonparticipant	27	27	27	570938	179777	233
2143	Nonparticipant	27	27	27	570951	179765	232
2144	Nonparticipant	27	27	27	571102	179759	232
2145	Nonparticipant	26	27	27	571156	179759	231
2146	Nonparticipant	27	27	27	571175	179762	231
2147	Nonparticipant	26	27	27	571190	179799	232
2148	Nonparticipant	26	27	27	571203	179828	231
2149	Nonparticipant	26	27	27	571212	179847	231
2150	Nonparticipant	27	28	27	570469	179588	238
2151	Nonparticipant	22	23	23	561237	177220	241

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2152	Nonparticipant	23	24	23	561287	177234	241
2153	Nonparticipant	22	23	22	561008	177185	239
2154	Nonparticipant	24	26	25	560747	176977	242
2155	Nonparticipant	24	26	25	560743	176984	242
2156	Nonparticipant	23	25	24	560357	176891	239
2157	Nonparticipant	23	25	24	560302	176858	241
2158	Nonparticipant	24	25	24	560057	176756	241
2159	Nonparticipant	24	25	24	560143	176784	241
2160	Nonparticipant	24	25	24	560146	176823	241
2161	Nonparticipant	23	25	24	556767	175931	229
2162	Nonparticipant	22	23	22	556820	176009	229
2163	Nonparticipant	22	23	22	556904	175969	231
2164	Nonparticipant	23	25	23	559104	176078	243
2165	Nonparticipant	24	25	24	559254	176203	243
2166	Nonparticipant	22	24	23	559410	176323	243
2167	Nonparticipant	23	25	24	559482	176300	244
2168	Nonparticipant	24	26	25	558982	175883	243
2169	Nonparticipant	24	26	25	558923	175855	243
2170	Nonparticipant	23	25	23	558609	175683	242
2171	Nonparticipant	25	26	25	560128	175841	242
2172	Nonparticipant	25	26	25	560200	176032	241
2173	Nonparticipant	25	26	25	560210	176275	241
2174	Nonparticipant	29	30	29	563152	176556	243
2175	Nonparticipant	45	45	46	569899	175727	237
2176	Nonparticipant	45	45	46	569907	175766	238
2177	Nonparticipant	45	45	46	569903	175788	239
2178	Nonparticipant	45	45	46	569906	175826	239
2179	Nonparticipant	45	45	46	569905	175865	239
2180	Nonparticipant	24	25	24	556856	175155	229
2181	Nonparticipant	24	25	24	557124	175103	232
2182	Nonparticipant	23	24	23	555776	175289	225
2183	Nonparticipant	24	25	24	555841	175252	228
2184	Nonparticipant	24	25	24	555973	175394	228
2185	Nonparticipant	25	26	25	555452	175125	224
2186	Nonparticipant	25	26	25	555271	175124	222
2187	Nonparticipant	25	26	26	555307	175141	223

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2188	Nonparticipant	23	25	24	548736	174071	213
2189	Nonparticipant	27	28	27	550164	174279	214
2190	Nonparticipant	28	30	29	551618	174771	216
2191	Nonparticipant	29	30	29	551634	174736	216
2192	Nonparticipant	29	30	29	551650	174708	216
2193	Nonparticipant	29	30	29	551661	174680	217
2194	Nonparticipant	29	30	29	551677	174650	217
2195	Nonparticipant	29	30	30	551698	174615	217
2196	Nonparticipant	29	30	29	551586	174605	215
2197	Nonparticipant	28	29	29	551556	174733	215
2198	Nonparticipant	29	30	29	551773	174509	217
2199	Nonparticipant	30	31	31	551792	174419	215
2200	Nonparticipant	32	33	32	551864	174099	219
2201	Nonparticipant	32	33	33	551782	174036	219
2202	Nonparticipant	30	31	31	553402	174264	218
2203	Nonparticipant	30	31	30	557644	173132	244
2204	Nonparticipant	30	31	30	557646	173174	244
2205	Nonparticipant	30	31	30	557591	173168	244
2206	Nonparticipant	29	30	29	557586	173200	244
2207	Nonparticipant	29	30	29	557586	173221	244
2208	Nonparticipant	29	30	29	557586	173248	244
2209	Nonparticipant	29	30	30	557573	173305	243
2210	Nonparticipant	29	30	29	557647	173346	243
2211	Nonparticipant	30	31	30	556764	173159	242
2212	Nonparticipant	30	31	30	556763	173100	242
2213	Nonparticipant	30	31	30	555986	173045	241
2214	Nonparticipant	30	31	30	555969	173045	241
2215	Nonparticipant	30	31	30	555945	173046	240
2216	Nonparticipant	29	30	29	555933	173053	240
2217	Nonparticipant	29	30	29	555948	173054	241
2218	Nonparticipant	30	31	30	555961	173052	241
2219	Nonparticipant	30	31	30	555980	173052	241
2220	Nonparticipant	29	30	30	555991	173054	241
2221	Nonparticipant	29	30	30	556004	173057	241
2222	Nonparticipant	29	30	29	556014	173059	241
2223	Nonparticipant	28	29	29	556034	173092	239
2224	Nonparticipant	29	30	29	556037	173102	239

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2225	Nonparticipant	29	30	29	556043	173113	239
2226	Nonparticipant	29	30	29	556053	173121	238
2227	Nonparticipant	29	30	29	556063	173132	238
2228	Nonparticipant	28	29	28	556043	173150	237
2229	Nonparticipant	27	28	28	556035	173149	237
2230	Nonparticipant	27	28	27	556020	173143	236
2231	Nonparticipant	27	28	27	555998	173137	236
2232	Nonparticipant	27	28	28	549667	173324	216
2233	Nonparticipant	25	26	25	548801	173358	214
2234	Nonparticipant	26	27	26	549137	173286	215
2235	Nonparticipant	25	26	25	548685	172347	217
2236	Nonparticipant	25	26	25	548627	172253	217
2237	Nonparticipant	25	26	25	548700	171747	218
2238	Nonparticipant	27	28	27	549293	171737	220
2239	Nonparticipant	27	28	27	549256	171603	220
2240	Nonparticipant	26	27	26	548862	171656	219
2241	Nonparticipant	29	30	29	549690	171800	220
2242	Nonparticipant	30	31	31	560107	171703	249
2243	Nonparticipant	30	31	30	561129	171734	254
2244	Nonparticipant	29	30	29	560914	171714	254
2245	Nonparticipant	31	32	31	561476	171776	252
2246	Nonparticipant	35	36	35	558540	170974	248
2247	Nonparticipant	35	36	36	558422	171047	248
2248	Nonparticipant	35	36	35	558525	171073	248
2249	Nonparticipant	36	37	37	556271	171463	237
2250	Nonparticipant	43	45	44	556770	170937	247
2251	Nonparticipant	36	36	36	555215	171221	243
2252	Nonparticipant	41	41	41	554616	170268	243
2253	Nonparticipant	42	42	43	554701	170258	244
2254	Nonparticipant	44	44	44	554785	170259	244
2255	Nonparticipant	44	45	44	556093	170281	247
2256	Nonparticipant	43	43	43	555234	170268	244
2257	Nonparticipant	43	43	43	554924	170268	243
2258	Nonparticipant	44	44	44	554860	170258	243
2259	Nonparticipant	29	30	30	551887	168998	240
2260	Nonparticipant	29	30	30	551882	168951	241

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2261	Nonparticipant	28	29	29	551894	168891	241
2262	Nonparticipant	29	30	29	551904	168772	243
2263	Nonparticipant	28	29	29	551867	168629	239
2264	Nonparticipant	28	29	28	551654	168575	240
2265	Nonparticipant	28	29	28	551455	168907	241
2266	Nonparticipant	25	26	25	550975	168631	235
2267	Nonparticipant	26	27	26	550860	168590	233
2268	Nonparticipant	25	26	25	550973	168405	239
2269	Nonparticipant	26	27	26	551013	168417	241
2270	Nonparticipant	23	24	24	551064	168360	237
2271	Nonparticipant	31	32	31	552924	168864	242
2272	Nonparticipant	32	32	32	553394	168606	243
2273	Nonparticipant	33	33	33	553544	168665	242
2274	Nonparticipant	30	30	30	552407	168637	244
2275	Nonparticipant	29	30	29	552369	168641	244
2276	Nonparticipant	29	30	30	552307	168637	242
2277	Nonparticipant	29	30	30	552268	168630	242
2278	Nonparticipant	32	32	32	553618	168036	245
2279	Nonparticipant	31	32	32	553460	167997	245
2280	Nonparticipant	31	32	32	553416	168069	246
2281	Nonparticipant	31	31	31	553235	168131	246
2282	Nonparticipant	31	32	31	553463	167884	245
2283	Nonparticipant	31	32	32	553619	167646	246
2284	Nonparticipant	32	32	32	553610	167739	246
2285	Nonparticipant	32	32	32	553635	167774	245
2286	Nonparticipant	32	32	32	553632	167808	245
2287	Nonparticipant	31	32	32	553624	167559	246
2288	Nonparticipant	37	38	37	558028	166097	259
2289	Nonparticipant	41	42	41	560363	166021	265
2290	Nonparticipant	40	41	40	560362	166210	266
2291	Nonparticipant	36	37	37	559560	166201	262
2292	Nonparticipant	36	37	36	559482	166183	260
2293	Nonparticipant	36	37	36	559535	166390	261
2294	Nonparticipant	37	37	37	559548	166108	261
2295	Nonparticipant	37	37	37	559579	166036	262
2296	Nonparticipant	45	45	45	561828	166141	268
2297	Nonparticipant	35	35	35	558906	165372	264

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2298	Nonparticipant	34	35	35	558749	165111	266
2299	Nonparticipant	35	35	35	556769	165415	260
2300	Nonparticipant	33	34	33	556719	165184	260
2301	Nonparticipant	33	34	33	556702	165135	260
2302	Nonparticipant	37	37	37	559503	164419	267
2303	Nonparticipant	37	37	37	559567	164418	268
2304	Nonparticipant	37	38	38	559640	164486	268
2305	Nonparticipant	34	35	34	558881	164393	264
2306	Nonparticipant	34	35	35	559032	164335	268
2307	Nonparticipant	40	40	40	560021	164486	271
2308	Nonparticipant	39	40	40	559982	165000	264
2309	Nonparticipant	22	23	22	552329	163656	253
2310	Nonparticipant	24	25	24	553477	163137	258
2311	Nonparticipant	19	21	20	552969	163578	248
2312	Nonparticipant	21	22	21	553487	162685	259
2313	Nonparticipant	20	21	20	552215	163023	248
2314	Nonparticipant	26	26	26	555079	163164	261
2315	Nonparticipant	28	29	28	556670	162990	267
2316	Nonparticipant	28	29	28	556767	163028	266
2317	Nonparticipant	28	28	28	556770	162812	267
2318	Nonparticipant	28	28	28	556771	162764	267
2319	Nonparticipant	25	25	25	556764	162703	265
2320	Nonparticipant	28	28	28	557004	162699	267
2321	Nonparticipant	28	29	28	557168	162964	269
2322	Nonparticipant	29	29	29	557205	163026	268
2323	Nonparticipant	29	29	29	557211	163139	267
2324	Nonparticipant	29	29	29	556760	163386	267
2325	Nonparticipant	27	28	27	557541	162016	273
2326	Nonparticipant	26	27	26	556732	161945	272
2327	Nonparticipant	26	27	26	556722	161977	271
2328	Nonparticipant	26	27	26	556721	162017	270
2329	Nonparticipant	26	27	26	556820	161998	271
2330	Nonparticipant	26	27	26	556824	161978	271
2331	Nonparticipant	26	27	26	556824	161954	271
2332	Nonparticipant	26	27	26	556818	161919	272
2333	Nonparticipant	26	27	26	556872	161905	272

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2334	Nonparticipant	26	27	26	556310	161980	270
2335	Nonparticipant	26	27	26	556307	161930	271
2336	Nonparticipant	25	25	25	556316	161907	271
2337	Nonparticipant	26	27	26	556341	161919	271
2338	Nonparticipant	26	27	26	556376	161921	271
2339	Nonparticipant	26	27	26	556422	161920	271
2340	Nonparticipant	26	27	26	556415	161938	271
2341	Nonparticipant	26	27	26	556415	161950	271
2342	Nonparticipant	26	27	26	556418	161960	271
2343	Nonparticipant	26	27	26	556408	161882	271
2344	Nonparticipant	25	26	25	556377	161880	271
2345	Nonparticipant	24	25	24	556341	161881	271
2346	Nonparticipant	23	24	23	556314	161880	270
2347	Nonparticipant	22	22	21	556217	161881	268
2348	Nonparticipant	25	26	25	555931	161897	265
2349	Nonparticipant	24	25	25	555758	161965	265
2350	Nonparticipant	25	26	25	555738	162055	264
2351	Nonparticipant	25	26	25	555816	162053	264
2352	Nonparticipant	24	25	24	555633	162103	264
2353	Nonparticipant	20	21	20	555876	160913	265
2354	Nonparticipant	26	27	26	556874	161852	273
2355	Nonparticipant	24	25	24	556215	161922	269
2356	Nonparticipant	26	27	26	556376	161981	270
2357	Nonparticipant	25	26	25	556191	161489	271
2358	Nonparticipant	24	25	24	556172	161380	272
2359	Nonparticipant	23	24	24	556104	161352	272
2360	Nonparticipant	24	25	24	556075	161334	272
2361	Nonparticipant	24	25	24	556069	161311	272
2362	Nonparticipant	24	25	24	556060	161281	273
2363	Nonparticipant	24	25	24	556023	161246	273
2364	Nonparticipant	24	25	24	556095	161260	273
2365	Nonparticipant	24	25	24	556126	161306	272
2366	Nonparticipant	24	25	24	556136	161298	272
2367	Nonparticipant	24	25	25	556155	161299	272
2368	Nonparticipant	24	25	24	556129	161252	273
2369	Nonparticipant	24	25	25	556180	161271	272
2370	Nonparticipant	24	25	25	556234	161268	273

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2371	Nonparticipant	24	26	25	556238	161315	272
2372	Nonparticipant	24	25	25	556265	161263	273
2373	Nonparticipant	24	25	25	556289	161258	273
2374	Nonparticipant	23	24	23	556771	161039	272
2375	Nonparticipant	24	25	24	556601	161358	271
2376	Nonparticipant	18	20	19	552113	178485	208
2377	Nonparticipant	16	17	16	552045	178564	206
2378	Nonparticipant	17	19	17	552092	178339	209
2379	Nonparticipant	12	14	13	551935	178385	205
2380	Nonparticipant	18	20	19	551925	178326	208
2381	Nonparticipant	18	20	19	551742	178323	207
2382	Nonparticipant	32	33	33	564696	178868	241
2383	Nonparticipant	32	32	32	564724	178955	241
2384	Nonparticipant	32	32	32	564668	178931	242
2385	Nonparticipant	31	32	32	564590	178916	241
2386	Nonparticipant	31	32	32	564552	178899	241
2387	Nonparticipant	31	32	32	564494	178862	242
2388	Nonparticipant	31	32	32	564454	178833	242
2389	Nonparticipant	29	30	30	564263	179068	235
2390	Nonparticipant	29	29	29	564169	179313	235
2391	Nonparticipant	29	29	29	564181	179375	237
2392	Nonparticipant	29	29	29	564268	179380	237
2393	Nonparticipant	27	27	27	564189	179666	233
2394	Nonparticipant	28	28	28	564334	179772	233
2395	Nonparticipant	27	28	27	564402	179826	233
2396	Nonparticipant	29	30	30	564121	178616	241
2397	Nonparticipant	30	30	30	563920	178504	242
2398	Nonparticipant	30	31	31	563881	178482	243
2399	Nonparticipant	30	31	30	563799	178437	243
2400	Nonparticipant	30	31	30	563762	178417	243
2401	Nonparticipant	16	18	18	560623	179497	227
2402	Nonparticipant	18	20	19	560524	179451	226
2403	Nonparticipant	18	19	18	560475	179410	226
2404	Nonparticipant	17	18	17	560425	179368	226
2405	Nonparticipant	18	19	18	560398	179344	226
2406	Nonparticipant	17	18	17	560359	179317	226

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2407	Nonparticipant	18	19	18	560333	179301	226
2408	Nonparticipant	18	20	19	560275	179252	227
2409	Nonparticipant	17	18	17	559899	179003	226
2410	Nonparticipant	15	16	16	559931	179059	225
2411	Nonparticipant	18	20	18	554715	178529	212
2412	Nonparticipant	18	19	19	554669	178483	212
2413	Nonparticipant	17	18	17	554828	178640	213
2414	Nonparticipant	16	17	16	555044	178807	216
2415	Nonparticipant	16	18	17	555153	178933	217
2416	Nonparticipant	17	19	18	555480	179081	217
2417	Nonparticipant	18	20	19	556201	178483	221
2418	Nonparticipant	17	19	18	556443	178596	220
2419	Nonparticipant	19	21	19	556424	178284	218
2420	Nonparticipant	19	21	19	556538	178282	218
2421	Nonparticipant	16	17	16	554550	178400	212
2422	Nonparticipant	15	18	17	554502	178361	212
2423	Nonparticipant	13	14	13	554555	178255	212
2424	Nonparticipant	13	14	13	554596	178252	212
2425	Nonparticipant	13	14	13	554650	178255	213
2426	Nonparticipant	12	14	13	554672	178356	211
2427	Nonparticipant	12	14	13	554695	178396	211
2428	Nonparticipant	18	20	19	554744	178449	213
2429	Nonparticipant	18	20	19	554778	178471	213
2430	Nonparticipant	28	29	29	560780	173410	246
2431	Nonparticipant	26	27	26	565791	162115	282
2432	Nonparticipant	9	11	10	574471	162369	262
2433	Nonparticipant	22	23	22	569967	162480	274
2434	Nonparticipant	30	31	30	568095	164295	274
2435	Nonparticipant	27	29	28	569257	164300	271
2436	Nonparticipant	35	36	35	564863	164315	276
2437	Nonparticipant	27	29	28	569242	164326	271
2438	Nonparticipant	26	28	27	569166	164387	271
2439	Nonparticipant	29	31	30	568183	164390	273
2440	Nonparticipant	30	31	30	568163	164393	273
2441	Nonparticipant	28	29	28	569153	164419	270
2442	Nonparticipant	32	33	32	566888	164423	272
2443	Nonparticipant	36	36	36	564818	164434	275

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2444	Nonparticipant	26	28	27	569651	164439	269
2445	Nonparticipant	36	36	36	564765	164440	274
2446	Nonparticipant	32	33	32	566191	164445	271
2447	Nonparticipant	37	38	38	564217	164451	273
2448	Nonparticipant	45	45	45	563264	166322	266
2449	Nonparticipant	45	45	45	563212	166324	266
2450	Nonparticipant	29	30	29	569960	166329	264
2451	Nonparticipant	44	45	45	563216	166365	266
2452	Nonparticipant	18	20	18	573670	166390	257
2453	Nonparticipant	22	23	22	572626	166399	258
2454	Nonparticipant	39	41	40	566634	167726	261
2455	Nonparticipant	29	30	29	570067	167730	260
2456	Nonparticipant	39	40	39	566508	167789	262
2457	Nonparticipant	39	40	39	566638	167831	260
2458	Nonparticipant	38	40	39	566514	167852	261
2459	Nonparticipant	24	26	25	571692	167858	258
2460	Nonparticipant	29	31	30	569675	167894	260
2461	Nonparticipant	30	31	30	569638	167910	260
2462	Nonparticipant	38	39	38	566551	167961	261
2463	Nonparticipant	40	41	40	562717	169210	257
2464	Nonparticipant	28	30	29	570264	169211	260
2465	Nonparticipant	29	30	29	569983	169216	260
2466	Nonparticipant	29	30	29	570015	169218	260
2467	Nonparticipant	28	30	29	570225	169218	260
2468	Nonparticipant	29	30	29	569939	169222	259
2469	Nonparticipant	29	30	29	570052	169222	260
2470	Nonparticipant	46	46	46	565267	169228	258
2471	Nonparticipant	29	30	29	569904	169229	259
2472	Nonparticipant	28	29	28	570308	169231	260
2473	Nonparticipant	32	33	32	568525	169232	256
2474	Nonparticipant	46	46	46	565230	169233	257
2475	Nonparticipant	29	30	29	569867	169242	259
2476	Nonparticipant	27	29	28	571796	170559	258
2477	Nonparticipant	27	28	27	572310	170561	255
2478	Nonparticipant	23	25	24	574215	170571	250
2479	Nonparticipant	23	25	24	574215	170575	250

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2480	Nonparticipant	26	27	26	573005	170575	251
2481	Nonparticipant	28	29	28	571307	170588	257
2482	Nonparticipant	25	27	26	572422	170601	252
2483	Nonparticipant	23	25	23	574280	170608	250
2484	Nonparticipant	27	29	28	571902	170624	259
2485	Nonparticipant	28	29	28	571512	170625	254
2486	Nonparticipant	27	29	28	571896	170628	259
2487	Nonparticipant	28	29	28	571547	170639	255
2488	Nonparticipant	26	27	26	572920	170680	251
2489	Nonparticipant	36	36	36	564173	171880	252
2490	Nonparticipant	33	34	34	563377	171916	250
2491	Nonparticipant	27	29	28	573253	171983	248
2492	Nonparticipant	26	28	27	573647	172031	249
2493	Nonparticipant	32	33	33	568086	172113	247
2494	Nonparticipant	32	33	32	571686	172118	248
2495	Nonparticipant	32	33	32	571688	172121	248
2496	Nonparticipant	33	34	33	568172	172163	247
2497	Nonparticipant	35	36	35	566619	172166	248
2498	Nonparticipant	33	35	34	569843	172170	252
2499	Nonparticipant	42	44	43	570592	173177	249
2500	Nonparticipant	43	44	43	570582	173180	249
2501	Nonparticipant	42	44	43	570679	173190	250
2502	Nonparticipant	42	44	43	570694	173192	250
2503	Nonparticipant	35	37	36	566675	173214	248
2504	Nonparticipant	33	35	34	572176	173219	249
2505	Nonparticipant	35	37	36	566672	173219	248
2506	Nonparticipant	34	35	35	567237	173219	248
2507	Nonparticipant	34	35	34	567591	173222	249
2508	Nonparticipant	33	34	33	564350	173226	248
2509	Nonparticipant	35	37	36	565383	173239	250
2510	Nonparticipant	34	36	35	564778	174049	248
2511	Nonparticipant	42	44	43	569829	174064	247
2512	Nonparticipant	43	44	43	569879	174078	247
2513	Nonparticipant	36	38	37	565019	174087	247
2514	Nonparticipant	41	43	42	569740	174089	247
2515	Nonparticipant	42	43	42	569766	174093	247
2516	Nonparticipant	41	42	42	569703	174123	247

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2517	Nonparticipant	41	43	42	569718	174132	247
2518	Nonparticipant	36	38	37	565018	174143	247
2519	Nonparticipant	43	44	43	569873	174144	247
2520	Nonparticipant	40	41	40	571475	174165	247
2521	Nonparticipant	40	42	40	566447	174853	246
2522	Nonparticipant	41	43	42	565912	174854	246
2523	Nonparticipant	41	43	42	565823	174862	247
2524	Nonparticipant	37	38	38	566980	174866	245
2525	Nonparticipant	37	38	38	567194	174868	245
2526	Nonparticipant	37	38	38	566949	174868	246
2527	Nonparticipant	37	38	38	567023	174868	245
2528	Nonparticipant	38	40	39	566701	174870	245
2529	Nonparticipant	38	40	39	566734	174870	246
2530	Nonparticipant	44	45	45	570178	174871	245
2531	Nonparticipant	38	39	38	566903	174871	245
2532	Nonparticipant	38	39	38	566800	174871	245
2533	Nonparticipant	44	45	45	570110	174872	245
2534	Nonparticipant	38	39	38	566860	174873	245
2535	Nonparticipant	38	39	39	566761	174873	245
2536	Nonparticipant	35	36	35	564565	176576	243
2537	Nonparticipant	32	33	33	564062	176581	243
2538	Nonparticipant	32	32	32	564003	176585	242
2539	Nonparticipant	35	36	35	564561	176585	244
2540	Nonparticipant	30	31	31	563574	176590	243
2541	Nonparticipant	33	33	33	564142	176590	242
2542	Nonparticipant	30	31	31	563629	176590	244
2543	Nonparticipant	31	31	31	563684	176591	243
2544	Nonparticipant	31	32	31	563669	176593	243
2545	Nonparticipant	31	31	31	563578	176598	243
2546	Nonparticipant	33	33	33	564147	176598	242
2547	Nonparticipant	35	36	36	564600	176606	243
2548	Nonparticipant	32	33	32	563949	176618	241
2549	Nonparticipant	33	34	34	564242	176696	242
2550	Nonparticipant	35	35	35	569769	177833	236
2551	Nonparticipant	34	35	35	569769	177858	236
2552	Nonparticipant	34	35	35	569769	177876	236

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2553	Nonparticipant	36	36	36	569772	177569	235
2554	Nonparticipant	35	36	36	570089	177554	235
2555	Nonparticipant	35	35	35	570146	177600	234
2556	Nonparticipant	35	35	35	570189	177618	234
2557	Nonparticipant	34	35	35	570281	177661	236
2558	Nonparticipant	34	34	34	570325	177718	235
2559	Nonparticipant	34	34	34	570366	177748	235
2560	Nonparticipant	34	34	34	570430	177802	237
2561	Nonparticipant	33	34	34	570481	177838	237
2562	Nonparticipant	33	34	34	570509	177861	237
2563	Nonparticipant	33	33	33	570565	177894	238
2564	Nonparticipant	33	33	33	570593	177922	238
2565	Nonparticipant	33	33	33	570629	177945	237
2566	Nonparticipant	33	33	33	570673	177979	237
2567	Nonparticipant	45	45	46	562226	166025	268
2568	Nonparticipant	45	45	45	561970	166049	268
2569	Nonparticipant	44	45	45	561571	166872	263
2570	Nonparticipant	45	45	46	561619	167300	261
2571	Nonparticipant	37	37	37	560308	167427	261
2572	Nonparticipant	37	37	37	560365	167528	260
2573	Nonparticipant	36	36	36	560550	167925	258
2574	Nonparticipant	35	36	35	561549	169339	254
2575	Nonparticipant	35	36	35	561638	169291	253
2576	Nonparticipant	35	36	35	560708	168581	256
2577	Nonparticipant	36	37	36	560996	168548	257
2578	Nonparticipant	34	34	34	561514	170097	254
2579	Nonparticipant	29	30	29	562112	173208	246
2580	Nonparticipant	27	28	27	573292	177896	238
2581	Nonparticipant	27	28	27	573285	177899	238
2582	Nonparticipant	27	28	27	573276	177903	238
2583	Nonparticipant	27	28	27	573277	177940	238
2584	Nonparticipant	27	28	27	573292	177925	238
2585	Nonparticipant	27	28	27	573309	177917	238
2586	Nonparticipant	27	28	27	573315	177913	238
2587	Nonparticipant	26	28	27	573348	177921	239
2588	Nonparticipant	27	28	27	573366	177919	239
2589	Nonparticipant	27	28	27	573386	177916	239

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2590	Nonparticipant	27	28	27	573380	177947	238
2591	Nonparticipant	27	28	27	573366	177947	238
2592	Nonparticipant	27	28	27	573356	177948	238
2593	Nonparticipant	27	28	27	573344	177951	238
2594	Nonparticipant	27	28	27	573329	177949	238
2595	Nonparticipant	27	28	27	573318	177951	238
2596	Nonparticipant	27	28	27	573313	177958	238
2597	Nonparticipant	31	32	31	571499	177946	233
2598	Nonparticipant	31	32	31	571499	177914	233
2599	Nonparticipant	31	32	31	571495	177899	233
2600	Nonparticipant	31	32	32	571483	177868	234
2601	Nonparticipant	31	32	32	571481	177857	234
2602	Nonparticipant	39	40	39	570801	176514	239
2603	Nonparticipant	39	40	40	570996	176416	240
2604	Nonparticipant	41	42	41	570965	176265	241
2605	Nonparticipant	37	38	38	571449	176514	242
2606	Nonparticipant	37	38	37	571460	176583	242
2607	Nonparticipant	37	37	37	571468	176619	242
2608	Nonparticipant	38	40	39	571544	176245	242
2609	Nonparticipant	31	32	31	573140	175868	243
2610	Nonparticipant	22	24	23	554185	176565	219
2611	Nonparticipant	23	24	23	554183	176602	219
2612	Nonparticipant	21	22	21	554168	176680	218
2613	Nonparticipant	23	24	23	554189	176682	218
2614	Nonparticipant	22	23	22	554228	176679	217
2615	Nonparticipant	22	23	22	554246	176679	217
2616	Nonparticipant	22	23	22	554264	176677	217
2617	Nonparticipant	22	23	22	554282	176677	217
2618	Nonparticipant	20	21	20	554320	176677	217
2619	Nonparticipant	22	24	23	554563	176660	217
2620	Nonparticipant	22	24	23	554535	176773	217
2621	Nonparticipant	22	23	22	554571	176786	217
2622	Nonparticipant	22	24	23	554613	176740	217
2623	Nonparticipant	22	23	22	554481	176730	216
2624	Nonparticipant	22	23	22	554314	176992	217
2625	Nonparticipant	22	23	22	554295	176972	216

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2626	Nonparticipant	17	18	17	554156	176952	213
2627	Nonparticipant	21	23	22	553611	176695	215
2628	Nonparticipant	23	24	23	553695	176690	220
2629	Nonparticipant	23	24	23	553882	176624	220
2630	Nonparticipant	23	24	23	553838	176648	220
2631	Nonparticipant	21	23	22	553828	176703	219
2632	Nonparticipant	21	22	21	553963	176810	217
2633	Nonparticipant	21	22	21	554004	176876	216
2634	Nonparticipant	19	20	19	554052	176879	215
2635	Nonparticipant	20	21	20	554053	176809	217
2636	Nonparticipant	23	24	23	553923	176680	219
2637	Nonparticipant	23	24	23	553990	176689	219
2638	Nonparticipant	23	24	23	553889	176586	220
2639	Nonparticipant	23	24	23	553823	176516	220
2640	Nonparticipant	23	24	23	553809	176535	220
2641	Nonparticipant	23	25	24	553518	176451	217
2642	Nonparticipant	23	25	24	553517	176472	218
2643	Nonparticipant	23	24	23	553519	176519	217
2644	Nonparticipant	19	20	19	560137	177868	231
2645	Nonparticipant	20	21	20	560229	177883	233
2646	Nonparticipant	20	22	21	560240	177966	233
2647	Nonparticipant	21	23	22	560243	178110	230
2648	Nonparticipant	19	20	19	560149	178153	229
2649	Nonparticipant	21	23	22	560255	178176	231
2650	Nonparticipant	21	23	22	560288	178185	231
2651	Nonparticipant	22	24	23	560372	178199	232
2652	Nonparticipant	19	21	20	560118	178189	229
2653	Nonparticipant	21	23	22	560052	178189	229
2654	Nonparticipant	20	21	20	559996	178188	229
2655	Nonparticipant	20	21	20	559873	178156	230
2656	Nonparticipant	19	20	19	559826	178146	230
2657	Nonparticipant	21	22	21	559952	178166	230
2658	Nonparticipant	20	22	21	559461	178140	230
2659	Nonparticipant	18	20	19	559199	178189	226
2660	Nonparticipant	18	20	19	559168	178192	226
2661	Nonparticipant	34	34	34	570903	177535	238
2662	Nonparticipant	34	34	34	570907	177569	238

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2663	Nonparticipant	34	34	34	570906	177589	238
2664	Nonparticipant	34	34	34	570904	177605	238
2665	Nonparticipant	33	34	34	570908	177660	238
2666	Nonparticipant	33	33	33	570924	177737	238
2667	Nonparticipant	33	33	33	570923	177784	238
2668	Nonparticipant	33	33	33	570896	177788	238
2669	Nonparticipant	33	33	33	570853	177791	238
2670	Nonparticipant	33	33	33	570852	177816	238
2671	Nonparticipant	33	33	33	570902	177856	239
2672	Nonparticipant	32	33	33	570920	177859	239
2673	Nonparticipant	32	33	33	570941	177862	239
2674	Nonparticipant	32	33	33	570958	177863	239
2675	Nonparticipant	32	33	33	570971	177863	239
2676	Nonparticipant	35	35	35	570057	177710	235
2677	Nonparticipant	35	35	35	570053	177733	235
2678	Nonparticipant	33	33	33	570423	178074	235
2679	Nonparticipant	32	32	32	570505	178145	233
2680	Nonparticipant	32	32	32	570513	178169	232
2681	Nonparticipant	32	32	32	570513	178184	233
2682	Nonparticipant	32	32	32	570519	178215	233
2683	Nonparticipant	32	33	32	570562	178135	233
2684	Nonparticipant	32	33	32	570562	178152	233
2685	Nonparticipant	32	32	32	570563	178189	233
2686	Nonparticipant	32	32	32	570563	178211	233
2687	Nonparticipant	32	32	32	570563	178237	233
2688	Nonparticipant	32	32	32	570564	178272	233
2689	Nonparticipant	32	32	32	570567	178302	234
2690	Nonparticipant	32	32	32	570486	178308	234
2691	Nonparticipant	32	32	32	570459	178259	234
2692	Nonparticipant	32	32	32	570440	178259	234
2693	Nonparticipant	32	32	32	570433	178270	234
2694	Nonparticipant	32	32	32	570417	178278	234
2695	Nonparticipant	26	26	26	571376	180133	230
2696	Nonparticipant	25	26	26	571367	180064	231
2697	Nonparticipant	26	27	26	571357	179938	231
2698	Nonparticipant	26	27	26	571351	179878	231

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2699	Nonparticipant	26	27	27	571345	179787	231
2700	Nonparticipant	25	26	25	571341	179711	230
2701	Nonparticipant	27	28	27	571338	179620	231
2702	Nonparticipant	27	28	27	571338	179500	232
2703	Nonparticipant	27	28	28	571329	179368	232
2704	Nonparticipant	27	28	28	571291	179346	232
2705	Nonparticipant	28	28	28	571168	179324	232
2706	Nonparticipant	28	28	28	571105	179314	232
2707	Nonparticipant	28	29	28	571045	179277	233
2708	Nonparticipant	28	29	28	571020	179229	232
2709	Nonparticipant	28	29	29	570986	179113	233
2710	Nonparticipant	29	29	29	570945	179069	233
2711	Nonparticipant	28	29	29	570869	179034	234
2712	Nonparticipant	30	31	31	570592	178505	234
2713	Nonparticipant	30	31	30	570576	178489	234
2714	Nonparticipant	31	31	31	570904	178363	236
2715	Nonparticipant	31	31	31	570891	178363	236
2716	Nonparticipant	31	31	31	570730	178414	235
2717	Nonparticipant	31	31	31	570570	178467	235
2718	Nonparticipant	31	31	31	570456	178505	236
2719	Nonparticipant	31	31	31	570390	178527	236
2720	Nonparticipant	31	31	31	570365	178546	236
2721	Nonparticipant	31	31	31	570337	178659	235
2722	Nonparticipant	30	31	31	570315	178766	234
2723	Nonparticipant	30	31	30	570390	178814	235
2724	Nonparticipant	30	30	30	570409	178873	234
2725	Nonparticipant	28	29	29	570419	178958	233
2726	Nonparticipant	29	30	30	570431	178981	233
2727	Nonparticipant	28	29	28	570573	178965	233
2728	Nonparticipant	29	30	29	570702	178981	235
2729	Nonparticipant	19	20	19	557453	177034	227
2730	Nonparticipant	21	23	22	557596	177055	227
2731	Nonparticipant	18	20	19	557428	177130	225
2732	Nonparticipant	19	20	20	557353	177123	223
2733	Nonparticipant	20	21	20	557343	176897	227
2734	Nonparticipant	21	23	22	557363	176832	228
2735	Nonparticipant	22	23	22	557261	176756	228

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2736	Nonparticipant	22	24	22	557225	176728	227
2737	Nonparticipant	22	23	22	557370	176568	229
2738	Nonparticipant	19	20	19	557542	176654	228
2739	Nonparticipant	22	24	23	557026	176542	228
2740	Nonparticipant	22	24	23	557664	176410	231
2741	Nonparticipant	22	24	23	557319	176503	229
2742	Nonparticipant	23	24	23	552693	176700	214
2743	Nonparticipant	22	24	23	552647	176776	213
2744	Nonparticipant	22	24	23	552454	176772	213
2745	Nonparticipant	22	23	22	551451	176792	210
2746	Nonparticipant	28	29	28	551746	174903	216
2747	Nonparticipant	28	29	28	551612	174864	216
2748	Nonparticipant	28	29	28	551582	174882	215
2749	Nonparticipant	28	29	28	551552	174890	215
2750	Nonparticipant	27	28	28	551562	175021	215
2751	Nonparticipant	27	29	28	551653	175009	215
2752	Nonparticipant	27	28	27	551417	175006	213
2753	Nonparticipant	27	28	27	551435	174963	214
2754	Nonparticipant	27	28	28	551485	174869	213
2755	Nonparticipant	28	29	29	551526	174799	215
2756	Nonparticipant	28	29	29	551608	174812	216
2757	Nonparticipant	27	28	27	551246	175014	214
2758	Nonparticipant	27	28	27	551188	175012	214
2759	Nonparticipant	27	28	27	551142	174994	211
2760	Nonparticipant	28	29	28	551273	174868	212
2761	Nonparticipant	25	27	26	550972	175382	214
2762	Nonparticipant	23	24	23	550955	175486	213
2763	Nonparticipant	30	31	31	556165	172913	241
2764	Nonparticipant	30	31	31	556141	172914	241
2765	Nonparticipant	30	31	31	556130	172915	241
2766	Nonparticipant	30	31	31	556117	172915	241
2767	Nonparticipant	30	31	31	556105	172915	240
2768	Nonparticipant	30	31	30	556083	172908	240
2769	Nonparticipant	30	31	30	556071	172897	239
2770	Nonparticipant	30	31	30	556048	172905	240
2771	Nonparticipant	30	31	30	556035	172902	239

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2772	Nonparticipant	30	31	30	556019	172902	239
2773	Nonparticipant	30	31	30	556008	172902	239
2774	Nonparticipant	30	31	30	555984	172902	238
2775	Nonparticipant	29	30	29	555969	172903	238
2776	Nonparticipant	29	30	29	555955	172907	237
2777	Nonparticipant	30	31	31	556043	172939	241
2778	Nonparticipant	30	31	31	556042	172954	242
2779	Nonparticipant	30	31	31	556042	172963	242
2780	Nonparticipant	33	34	33	554859	171816	239
2781	Nonparticipant	33	34	33	554678	171814	239
2782	Nonparticipant	33	33	33	554600	171817	239
2783	Nonparticipant	33	34	34	554450	171832	239
2784	Nonparticipant	33	34	33	554367	171992	238
2785	Nonparticipant	34	34	34	554340	171969	238
2786	Nonparticipant	33	34	33	554304	171939	238
2787	Nonparticipant	33	34	34	554287	171902	239
2788	Nonparticipant	34	35	35	554109	171851	236
2789	Nonparticipant	35	36	35	553961	171622	239
2790	Nonparticipant	34	34	34	555204	171806	242
2791	Nonparticipant	34	34	34	555297	171808	243
2792	Nonparticipant	34	34	34	555352	171811	243
2793	Nonparticipant	34	35	34	555239	171717	242
2794	Nonparticipant	34	35	34	555237	171672	242
2795	Nonparticipant	34	34	34	560032	169253	256
2796	Nonparticipant	37	38	37	558418	169154	251
2797	Nonparticipant	40	41	40	557463	169677	248
2798	Nonparticipant	45	46	46	556789	169590	247
2799	Nonparticipant	44	45	45	556853	169304	248
2800	Nonparticipant	46	46	46	555177	169725	245
2801	Nonparticipant	35	35	35	553798	169513	243
2802	Nonparticipant	34	35	34	553641	169649	243
2803	Nonparticipant	34	34	34	553531	169660	243
2804	Nonparticipant	33	34	34	553474	169505	241
2805	Nonparticipant	33	34	34	553602	169474	243
2806	Nonparticipant	33	34	34	553593	169522	241
2807	Nonparticipant	33	34	33	553537	169382	242
2808	Nonparticipant	32	33	32	552264	169720	240

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2809	Nonparticipant	44	44	44	556861	167015	255
2810	Nonparticipant	43	43	43	556729	166963	254
2811	Nonparticipant	41	41	41	556369	167050	253
2812	Nonparticipant	44	44	44	556754	167328	252
2813	Nonparticipant	38	38	38	555593	167045	247
2814	Nonparticipant	37	37	37	555432	167058	249
2815	Nonparticipant	35	35	35	555240	166800	246
2816	Nonparticipant	34	34	34	555003	166703	247
2817	Nonparticipant	33	34	34	554621	166969	245
2818	Nonparticipant	30	31	30	553771	166974	246
2819	Nonparticipant	31	32	31	554036	166800	248
2820	Nonparticipant	27	28	28	552408	166912	247
2821	Nonparticipant	25	26	26	551815	166243	244
2822	Nonparticipant	23	24	24	551525	166205	245
2823	Nonparticipant	25	26	25	551744	165901	244
2824	Nonparticipant	30	30	30	557857	163682	265
2825	Nonparticipant	32	32	32	558391	163473	267
2826	Nonparticipant	32	32	32	558393	163509	267
2827	Nonparticipant	32	32	32	558395	163545	266
2828	Nonparticipant	32	32	32	558522	163591	265
2829	Nonparticipant	33	33	33	558700	163591	268
2830	Nonparticipant	29	29	29	557241	163716	261
2831	Nonparticipant	28	29	28	556783	163554	263
2832	Nonparticipant	28	29	28	556780	164092	256
2833	Nonparticipant	28	29	28	556156	163676	259
2834	Nonparticipant	28	29	28	556079	163668	261
2835	Nonparticipant	28	29	28	555974	163682	261
2836	Nonparticipant	26	27	26	555347	164053	251
2837	Nonparticipant	26	27	26	556698	162082	269
2838	Nonparticipant	26	27	26	556456	162001	270
2839	Nonparticipant	26	27	26	556400	161986	270
2840	Nonparticipant	26	27	26	556401	162026	270
2841	Nonparticipant	26	27	26	556400	162067	270
2842	Nonparticipant	26	27	26	556372	162063	271
2843	Nonparticipant	26	27	26	556751	162058	270
2844	Nonparticipant	26	27	26	556799	162056	269

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2845	Nonparticipant	26	27	26	556726	162054	270
2846	Nonparticipant	26	27	27	556732	162122	269
2847	Nonparticipant	27	27	27	556733	162201	269
2848	Nonparticipant	27	28	27	556777	162258	269
2849	Nonparticipant	26	27	26	556595	161919	272
2850	Nonparticipant	26	27	26	556602	161847	273
2851	Nonparticipant	26	27	26	556593	161814	273
2852	Nonparticipant	26	27	26	556681	161952	272
2853	Nonparticipant	26	27	26	556677	161879	272
2854	Nonparticipant	25	26	25	556176	161737	270
2855	Nonparticipant	25	26	25	556253	161674	269
2856	Nonparticipant	25	26	25	556244	161650	269
2857	Nonparticipant	24	25	24	556307	161740	269
2858	Nonparticipant	24	25	24	556353	161732	269
2859	Nonparticipant	24	25	25	556348	161698	269
2860	Nonparticipant	25	26	25	556331	161683	269
2861	Nonparticipant	25	26	25	556320	161654	270
2862	Nonparticipant	25	26	25	556328	161602	270
2863	Nonparticipant	25	26	25	556318	161581	270
2864	Nonparticipant	25	26	25	556304	161566	270
2865	Nonparticipant	25	26	25	556294	161549	271
2866	Nonparticipant	25	26	25	556261	161510	272
2867	Nonparticipant	25	26	25	556242	161471	272
2868	Nonparticipant	25	26	25	556203	161507	271
2869	Nonparticipant	25	26	25	556217	161538	272
2870	Nonparticipant	25	26	25	556237	161560	271
2871	Nonparticipant	32	32	32	566846	179424	240
2872	Nonparticipant	32	32	32	566684	179397	240
2873	Nonparticipant	32	33	33	566635	179300	241
2874	Nonparticipant	32	33	33	566679	179269	241
2875	Nonparticipant	33	33	33	566691	179201	241
2876	Nonparticipant	34	34	34	566676	178995	241
2877	Nonparticipant	34	34	35	566688	178887	242
2878	Nonparticipant	34	34	34	566664	178928	242
2879	Nonparticipant	35	35	35	566607	178829	243
2880	Nonparticipant	34	35	35	566611	178880	242
2881	Nonparticipant	34	34	34	566611	178923	241

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2882	Nonparticipant	32	32	32	566556	179354	239
2883	Nonparticipant	29	30	30	566693	179501	236
2884	Nonparticipant	31	31	31	566723	179582	237
2885	Nonparticipant	31	31	31	566688	179588	237
2886	Nonparticipant	31	31	31	566655	179594	237
2887	Nonparticipant	30	31	31	566609	179663	236
2888	Nonparticipant	15	17	16	556745	179342	218
2889	Nonparticipant	15	17	16	556680	179392	218
2890	Nonparticipant	16	18	17	556607	179395	218
2891	Nonparticipant	16	18	17	556542	179334	217
2892	Nonparticipant	16	18	17	556692	179283	217
2893	Nonparticipant	17	19	17	556724	179231	217
2894	Nonparticipant	17	19	17	556784	179197	218
2895	Nonparticipant	16	17	16	556722	178930	219
2896	Nonparticipant	18	20	19	556693	178853	220
2897	Nonparticipant	15	17	16	556898	179523	219
2898	Nonparticipant	16	18	17	556504	179421	217
2899	Nonparticipant	16	18	17	556467	179451	216
2900	Nonparticipant	15	17	16	556411	179478	215
2901	Nonparticipant	16	18	16	556382	179398	215
2902	Nonparticipant	15	17	15	556325	179421	215
2903	Nonparticipant	16	18	17	556273	179434	217
2904	Nonparticipant	15	17	16	556179	179458	218
2905	Nonparticipant	20	22	21	570184	161165	274
2906	Nonparticipant	11	13	11	571309	161183	273
2907	Nonparticipant	22	23	22	569612	161575	275
2908	Nonparticipant	16	18	17	571319	161645	278
2909	Nonparticipant	5	8	6	573659	161657	263
2910	Nonparticipant	29	30	29	566665	163407	276
2911	Nonparticipant	22	23	22	571001	163492	268
2912	Nonparticipant	15	17	16	573482	163505	265
2913	Nonparticipant	24	26	25	569653	163512	271
2914	Nonparticipant	29	30	29	567102	163532	277
2915	Nonparticipant	27	28	27	570061	165256	264
2916	Nonparticipant	28	29	28	569617	165352	267
2917	Nonparticipant	23	25	24	570839	165493	263

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2918	Nonparticipant	17	19	17	574224	165609	257
2919	Nonparticipant	35	37	35	568104	165620	267
2920	Nonparticipant	30	31	30	569749	167012	262
2921	Nonparticipant	30	31	30	569745	167035	262
2922	Nonparticipant	30	31	30	569763	167069	262
2923	Nonparticipant	30	31	30	569748	167104	262
2924	Nonparticipant	23	25	23	573384	168676	253
2925	Nonparticipant	16	17	16	574280	168693	249
2926	Nonparticipant	26	27	26	571439	168712	258
2927	Nonparticipant	26	28	26	571424	168714	258
2928	Nonparticipant	26	28	27	571410	168715	258
2929	Nonparticipant	26	28	26	571429	168717	258
2930	Nonparticipant	26	28	27	571387	168723	258
2931	Nonparticipant	24	26	25	572250	168736	256
2932	Nonparticipant	26	28	27	571387	168739	258
2933	Nonparticipant	25	27	25	571476	168741	257
2934	Nonparticipant	26	28	27	571387	168749	258
2935	Nonparticipant	20	22	21	574195	168753	251
2936	Nonparticipant	29	30	29	569790	169571	257
2937	Nonparticipant	25	27	26	571773	169580	257
2938	Nonparticipant	26	27	27	571805	169657	256
2939	Nonparticipant	22	24	22	574183	169722	251
2940	Nonparticipant	26	27	26	571763	169728	256
2941	Nonparticipant	26	27	26	571753	169761	256
2942	Nonparticipant	27	28	27	571653	169883	257
2943	Nonparticipant	31	32	31	570859	171586	250
2944	Nonparticipant	37	38	38	566482	171618	250
2945	Nonparticipant	31	32	31	571349	171620	249
2946	Nonparticipant	43	44	43	565326	171631	252
2947	Nonparticipant	38	39	39	566312	171633	251
2948	Nonparticipant	42	44	43	565624	171635	250
2949	Nonparticipant	37	38	37	566499	171637	250
2950	Nonparticipant	32	33	32	570220	171644	251
2951	Nonparticipant	36	38	37	569870	172717	250
2952	Nonparticipant	32	32	32	563323	172719	250
2953	Nonparticipant	36	38	37	569864	172719	250
2954	Nonparticipant	27	28	27	573647	172741	248

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2955	Nonparticipant	31	32	31	563316	172758	251
2956	Nonparticipant	31	32	32	572318	172786	249
2957	Nonparticipant	37	38	37	569876	172798	250
2958	Nonparticipant	37	38	37	569866	172814	250
2959	Nonparticipant	34	35	35	566654	172825	249
2960	Nonparticipant	37	39	38	569864	172861	250
2961	Nonparticipant	27	28	28	573709	172892	247
2962	Nonparticipant	28	29	28	573807	173374	246
2963	Nonparticipant	30	31	31	563194	173376	248
2964	Nonparticipant	31	32	32	563618	173386	248
2965	Nonparticipant	30	32	31	563165	173410	248
2966	Nonparticipant	37	39	38	565759	173453	248
2967	Nonparticipant	37	39	38	565759	173468	248
2968	Nonparticipant	27	29	28	573916	173479	245
2969	Nonparticipant	38	39	38	565764	173501	247
2970	Nonparticipant	30	31	30	573261	173526	246
2971	Nonparticipant	37	39	38	571616	173529	249
2972	Nonparticipant	37	39	38	571613	173530	249
2973	Nonparticipant	42	43	43	569848	174403	246
2974	Nonparticipant	42	44	43	569882	174403	247
2975	Nonparticipant	36	38	37	565019	174406	247
2976	Nonparticipant	43	44	43	569958	174418	246
2977	Nonparticipant	31	32	31	573142	174422	246
2978	Nonparticipant	42	43	43	569847	174426	246
2979	Nonparticipant	31	32	31	573148	174430	246
2980	Nonparticipant	43	45	44	570004	174442	246
2981	Nonparticipant	43	44	43	569957	174442	246
2982	Nonparticipant	30	31	30	563314	174474	246
2983	Nonparticipant	30	31	30	563310	174482	246
2984	Nonparticipant	42	43	43	569892	174489	246
2985	Nonparticipant	42	44	43	569919	174492	246
2986	Nonparticipant	38	39	38	571988	175367	242
2987	Nonparticipant	38	40	39	571896	175368	242
2988	Nonparticipant	37	38	38	572039	175375	242
2989	Nonparticipant	39	40	40	567655	175386	244
2990	Nonparticipant	32	34	33	572837	175404	243

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
2991	Nonparticipant	39	40	40	571835	175409	241
2992	Nonparticipant	40	40	40	567725	175429	245
2993	Nonparticipant	42	44	43	571563	175433	242
2994	Nonparticipant	42	44	43	571558	175436	242
2995	Nonparticipant	37	38	37	572112	175440	242
2996	Nonparticipant	37	38	38	572048	175453	242
2997	Nonparticipant	38	39	38	572001	175463	242
2998	Nonparticipant	39	40	40	567648	175464	246
2999	Nonparticipant	37	38	38	566581	175465	244
3000	Nonparticipant	37	38	38	566572	175466	244
3001	Nonparticipant	32	33	32	570783	178022	237
3002	Nonparticipant	33	33	33	570811	177894	238
3003	Nonparticipant	33	34	33	570790	177779	238
3004	Nonparticipant	33	34	33	570790	177738	238
3005	Nonparticipant	33	34	34	570808	177666	238
3006	Nonparticipant	34	34	34	570834	177613	238
3007	Nonparticipant	34	34	34	570847	177546	239
3008	Nonparticipant	34	34	34	570849	177505	239
3009	Nonparticipant	34	35	35	570849	177421	239
3010	Nonparticipant	34	35	35	570862	177411	239
3011	Nonparticipant	34	35	35	570936	177411	239
3012	Nonparticipant	34	34	34	571028	177426	237
3013	Nonparticipant	33	34	33	571054	177428	236
3014	Nonparticipant	34	34	34	571105	177434	235
3015	Nonparticipant	33	34	34	571179	177480	234
3016	Nonparticipant	33	33	33	571266	177569	233
3017	Nonparticipant	32	33	33	571410	177613	233
3018	Nonparticipant	36	36	36	571066	177035	240
3019	Nonparticipant	35	36	36	571048	177097	238
3020	Nonparticipant	35	36	35	571102	177120	238
3021	Nonparticipant	24	25	25	573994	178644	236
3022	Nonparticipant	25	26	25	573947	178622	236
3023	Nonparticipant	25	26	25	573915	178620	236
3024	Nonparticipant	25	26	25	573867	178587	236
3025	Nonparticipant	25	26	25	573834	178583	236
3026	Nonparticipant	25	26	25	573777	178560	235
3027	Nonparticipant	25	26	26	573794	178302	236

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3028	Nonparticipant	25	26	26	573795	178221	237
3029	Nonparticipant	26	27	26	573795	178152	237
3030	Nonparticipant	25	26	26	573805	178112	238
3031	Nonparticipant	25	27	26	573795	178192	237
3032	Nonparticipant	26	27	26	573724	178132	237
3033	Nonparticipant	26	27	26	573722	178085	237
3034	Nonparticipant	24	26	25	573720	178303	236
3035	Nonparticipant	25	26	26	573718	178378	236
3036	Nonparticipant	30	31	30	572448	177447	242
3037	Nonparticipant	30	31	31	572417	177437	242
3038	Nonparticipant	30	31	31	572358	177433	242
3039	Nonparticipant	31	31	31	572312	177433	242
3040	Nonparticipant	31	32	31	572242	177425	241
3041	Nonparticipant	34	35	34	570891	177433	239
3042	Nonparticipant	34	35	34	570896	177444	239
3043	Nonparticipant	34	34	34	570933	177486	238
3044	Nonparticipant	34	34	34	570943	177499	238
3045	Nonparticipant	34	34	34	570962	177542	238
3046	Nonparticipant	34	34	34	570977	177560	238
3047	Nonparticipant	33	34	34	570989	177579	238
3048	Nonparticipant	33	34	34	571012	177605	238
3049	Nonparticipant	33	34	33	571027	177634	238
3050	Nonparticipant	33	33	33	571045	177666	238
3051	Nonparticipant	32	32	32	571071	177708	236
3052	Nonparticipant	32	33	33	571084	177724	236
3053	Nonparticipant	32	33	33	571100	177754	236
3054	Nonparticipant	21	22	21	553396	177195	214
3055	Nonparticipant	18	19	18	553402	177183	214
3056	Nonparticipant	18	19	18	553410	177163	214
3057	Nonparticipant	21	22	21	553431	177152	215
3058	Nonparticipant	21	23	22	553460	177142	215
3059	Nonparticipant	21	22	21	553470	177138	215
3060	Nonparticipant	22	23	22	553489	177131	215
3061	Nonparticipant	22	23	22	553512	177123	214
3062	Nonparticipant	22	23	22	553522	177122	214
3063	Nonparticipant	22	23	22	553526	177120	214

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3064	Nonparticipant	21	23	22	554270	177243	218
3065	Nonparticipant	22	23	22	554136	177100	217
3066	Nonparticipant	22	23	22	554051	177005	215
3067	Nonparticipant	22	23	22	553968	177081	217
3068	Nonparticipant	21	22	21	553974	177137	217
3069	Nonparticipant	21	23	22	553979	177178	217
3070	Nonparticipant	21	23	22	553954	177186	217
3071	Nonparticipant	23	24	23	553368	176605	216
3072	Nonparticipant	23	24	23	553394	176606	216
3073	Nonparticipant	23	24	23	553441	176606	216
3074	Nonparticipant	23	24	23	553470	176610	216
3075	Nonparticipant	23	24	23	553393	176552	216
3076	Nonparticipant	23	24	23	553368	176544	217
3077	Nonparticipant	23	24	23	553315	176553	216
3078	Nonparticipant	22	24	23	553250	176613	216
3079	Nonparticipant	22	24	23	552936	176790	215
3080	Nonparticipant	22	23	23	553619	176438	219
3081	Nonparticipant	23	25	24	553717	176446	221
3082	Nonparticipant	22	23	22	555697	176619	220
3083	Nonparticipant	22	23	22	555769	176622	220
3084	Nonparticipant	22	23	22	555776	176688	220
3085	Nonparticipant	22	23	22	555702	176688	220
3086	Nonparticipant	25	26	25	553502	175785	218
3087	Nonparticipant	27	28	27	562730	177996	239
3088	Nonparticipant	27	27	27	562780	178016	240
3089	Nonparticipant	27	28	28	562965	178103	243
3090	Nonparticipant	28	29	28	563045	178060	241
3091	Nonparticipant	25	26	25	562864	178234	241
3092	Nonparticipant	27	28	28	562986	178217	241
3093	Nonparticipant	26	27	27	562569	177755	238
3094	Nonparticipant	25	26	26	562549	177687	240
3095	Nonparticipant	27	28	27	562573	177605	241
3096	Nonparticipant	27	28	27	562643	177464	243
3097	Nonparticipant	27	28	27	562594	177437	243
3098	Nonparticipant	27	28	27	562564	177307	241
3099	Nonparticipant	27	28	27	562623	177272	241
3100	Nonparticipant	27	28	28	562581	177254	241

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3101	Nonparticipant	32	33	33	564249	178203	240
3102	Nonparticipant	29	30	29	563368	178232	242
3103	Nonparticipant	40	41	41	566460	178165	240
3104	Nonparticipant	34	34	34	569860	177899	235
3105	Nonparticipant	34	35	35	569866	177860	235
3106	Nonparticipant	34	35	35	569869	177832	235
3107	Nonparticipant	35	35	35	569868	177801	235
3108	Nonparticipant	35	35	35	569865	177718	235
3109	Nonparticipant	36	36	36	569865	177602	235
3110	Nonparticipant	35	36	36	569816	177656	236
3111	Nonparticipant	35	35	35	569811	177718	237
3112	Nonparticipant	35	35	35	569818	177768	236
3113	Nonparticipant	34	35	35	569819	177850	236
3114	Nonparticipant	33	34	34	569828	178084	237
3115	Nonparticipant	33	34	34	569762	178080	236
3116	Nonparticipant	33	34	34	569730	178081	236
3117	Nonparticipant	33	34	34	569703	178083	238
3118	Nonparticipant	34	34	34	569653	178082	240
3119	Nonparticipant	33	33	33	569636	178150	239
3120	Nonparticipant	33	33	33	569682	178130	238
3121	Nonparticipant	36	36	37	569813	177506	236
3122	Nonparticipant	33	34	34	569849	178078	236
3123	Nonparticipant	30	31	31	572220	177554	239
3124	Nonparticipant	30	31	31	572189	177601	240
3125	Nonparticipant	30	31	31	572148	177651	238
3126	Nonparticipant	30	31	30	572069	177724	236
3127	Nonparticipant	30	31	30	572038	177758	235
3128	Nonparticipant	30	31	30	572028	177784	234
3129	Nonparticipant	30	31	30	572012	177865	234
3130	Nonparticipant	29	30	30	571956	178193	233
3131	Nonparticipant	29	30	29	572126	178196	234
3132	Nonparticipant	29	30	29	572157	178203	234
3133	Nonparticipant	28	29	29	572482	178149	234
3134	Nonparticipant	28	29	28	572564	178180	235
3135	Nonparticipant	28	29	28	572721	178193	236
3136	Nonparticipant	24	25	25	572879	178250	234

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3137	Nonparticipant	27	28	27	573090	178329	235
3138	Nonparticipant	28	29	28	572406	178461	234
3139	Nonparticipant	27	28	28	572501	178508	233
3140	Nonparticipant	27	28	27	572538	178577	233
3141	Nonparticipant	27	28	27	572646	178662	233
3142	Nonparticipant	27	28	27	572680	178732	232
3143	Nonparticipant	27	27	27	572702	178792	232
3144	Nonparticipant	26	27	27	572762	178855	232
3145	Nonparticipant	26	27	26	572800	178899	232
3146	Nonparticipant	26	27	26	572812	178908	232
3147	Nonparticipant	26	26	26	572283	178826	228
3148	Nonparticipant	27	28	27	572296	178807	228
3149	Nonparticipant	27	28	27	572349	178773	229
3150	Nonparticipant	27	28	27	572384	178741	231
3151	Nonparticipant	27	28	27	572406	178732	231
3152	Nonparticipant	27	28	27	572463	178688	232
3153	Nonparticipant	26	27	27	572482	178662	232
3154	Nonparticipant	27	28	27	572520	178628	233
3155	Nonparticipant	24	24	24	570252	179658	230
3156	Nonparticipant	23	24	23	570201	179642	230
3157	Nonparticipant	24	24	24	570170	179636	232
3158	Nonparticipant	26	26	26	570119	179604	235
3159	Nonparticipant	26	27	26	570091	179582	235
3160	Nonparticipant	28	29	29	570066	179544	237
3161	Nonparticipant	28	29	29	570053	179516	237
3162	Nonparticipant	28	29	29	570034	179475	237
3163	Nonparticipant	26	26	26	570028	179447	236
3164	Nonparticipant	27	27	27	570006	179403	236
3165	Nonparticipant	27	28	27	569987	179396	237
3166	Nonparticipant	27	27	27	569924	179396	237
3167	Nonparticipant	25	26	26	569899	179485	235
3168	Nonparticipant	27	28	28	569899	179525	235
3169	Nonparticipant	27	28	27	569899	179592	235
3170	Nonparticipant	28	28	28	569902	179651	234
3171	Nonparticipant	28	29	28	569911	179674	234
3172	Nonparticipant	27	28	27	560886	174956	246
3173	Nonparticipant	26	28	27	560566	174957	247

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3174	Nonparticipant	26	27	26	560159	174846	245
3175	Nonparticipant	27	28	27	561809	175582	245
3176	Nonparticipant	24	25	24	558535	175505	242
3177	Nonparticipant	20	22	21	558491	175475	240
3178	Nonparticipant	23	25	24	558525	175436	242
3179	Nonparticipant	23	24	24	558571	175502	241
3180	Nonparticipant	23	24	23	558433	175590	242
3181	Nonparticipant	25	27	26	557956	175101	243
3182	Nonparticipant	23	24	23	557870	175101	241
3183	Nonparticipant	25	27	26	557889	174926	242
3184	Nonparticipant	25	27	26	558035	174986	243
3185	Nonparticipant	25	26	25	558128	175000	243
3186	Nonparticipant	25	27	26	558283	174990	244
3187	Nonparticipant	25	27	26	558479	175005	245
3188	Nonparticipant	24	25	24	557633	175091	235
3189	Nonparticipant	28	29	28	556702	173982	239
3190	Nonparticipant	28	29	28	556759	174027	240
3191	Nonparticipant	27	28	28	556788	174055	240
3192	Nonparticipant	27	28	28	556934	174061	241
3193	Nonparticipant	26	28	27	558438	174433	244
3194	Nonparticipant	26	28	27	558442	174339	243
3195	Nonparticipant	24	25	24	558596	174176	241
3196	Nonparticipant	26	28	27	558497	174040	244
3197	Nonparticipant	26	27	26	558871	174788	243
3198	Nonparticipant	26	27	26	560112	174625	245
3199	Nonparticipant	26	27	26	560099	174201	244
3200	Nonparticipant	27	28	27	560150	174191	243
3201	Nonparticipant	26	28	27	560152	174284	243
3202	Nonparticipant	27	28	27	560161	174368	245
3203	Nonparticipant	27	28	27	561734	174832	244
3204	Nonparticipant	28	29	28	561694	174274	245
3205	Nonparticipant	28	29	28	561777	174314	245
3206	Nonparticipant	29	30	30	555916	173006	240
3207	Nonparticipant	29	30	30	555902	172987	241
3208	Nonparticipant	30	31	31	556019	172954	242
3209	Nonparticipant	30	31	31	556015	172990	242

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3210	Nonparticipant	30	31	31	556015	172998	242
3211	Nonparticipant	29	30	30	556012	173013	241
3212	Nonparticipant	30	31	30	555494	172927	239
3213	Nonparticipant	28	29	28	555514	172847	238
3214	Nonparticipant	30	31	30	555500	173013	241
3215	Nonparticipant	31	32	31	555084	172646	240
3216	Nonparticipant	30	31	30	555333	172875	241
3217	Nonparticipant	27	28	27	556081	173214	234
3218	Nonparticipant	29	30	29	556100	173179	237
3219	Nonparticipant	36	37	36	553239	170811	239
3220	Nonparticipant	38	39	39	551875	170831	228
3221	Nonparticipant	32	33	32	550555	171106	227
3222	Nonparticipant	23	24	23	547930	171256	219
3223	Nonparticipant	23	24	23	547903	171325	218
3224	Nonparticipant	23	24	23	547892	171407	218
3225	Nonparticipant	23	24	23	547874	171463	218
3226	Nonparticipant	23	24	23	547865	171520	218
3227	Nonparticipant	22	23	22	547666	171651	217
3228	Nonparticipant	22	23	22	547419	171674	217
3229	Participant	23	24	23	548149	170941	220
3230	Nonparticipant	22	23	22	548048	170885	219
3231	Nonparticipant	23	24	23	548072	170800	219
3232	Nonparticipant	23	25	24	548171	170662	220
3233	Nonparticipant	23	24	23	548202	170121	220
3234	Nonparticipant	40	40	40	555184	168402	246
3235	Nonparticipant	40	40	41	555248	168426	245
3236	Nonparticipant	40	40	41	555246	168495	244
3237	Nonparticipant	44	44	45	556262	168583	248
3238	Nonparticipant	44	45	45	556224	168633	248
3239	Nonparticipant	41	42	42	557436	168956	249
3240	Nonparticipant	40	41	40	557588	169166	250
3241	Nonparticipant	42	43	43	557312	168799	249
3242	Nonparticipant	43	43	43	557315	168748	250
3243	Nonparticipant	43	44	44	557346	168649	251
3244	Nonparticipant	44	45	44	557276	168574	250
3245	Nonparticipant	44	46	45	557605	168569	249
3246	Nonparticipant	43	44	43	557833	168621	253

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3247	Nonparticipant	44	44	44	556854	169054	248
3248	Nonparticipant	44	44	44	556797	168313	250
3249	Nonparticipant	28	28	28	553562	165770	249
3250	Nonparticipant	26	27	26	552737	165270	248
3251	Nonparticipant	26	27	26	552774	165276	248
3252	Nonparticipant	26	27	26	552789	165274	248
3253	Nonparticipant	26	27	26	552826	165271	248
3254	Nonparticipant	24	26	25	552452	164674	249
3255	Nonparticipant	25	26	25	552454	165123	248
3256	Nonparticipant	26	27	26	553483	164678	253
3257	Nonparticipant	29	30	30	555092	164904	259
3258	Nonparticipant	29	30	29	555156	164565	261
3259	Nonparticipant	29	30	29	555148	164654	261
3260	Nonparticipant	27	28	27	555156	164311	257
3261	Nonparticipant	31	32	31	556764	164491	258
3262	Nonparticipant	31	31	31	556700	164303	258
3263	Nonparticipant	30	31	30	556518	164406	259
3264	Nonparticipant	33	33	33	556710	165030	261
3265	Nonparticipant	45	44	45	561639	163690	273
3266	Nonparticipant	45	44	45	561633	163662	273
3267	Nonparticipant	33	34	33	563229	162932	277
3268	Nonparticipant	31	32	31	563211	162182	274
3269	Nonparticipant	33	33	33	563145	162563	278
3270	Nonparticipant	30	30	30	564053	161960	280
3271	Nonparticipant	31	31	31	563364	161982	279
3272	Nonparticipant	32	32	32	562562	162068	278
3273	Nonparticipant	34	34	34	561894	162044	275
3274	Nonparticipant	34	34	34	561468	161983	277
3275	Nonparticipant	40	39	39	561559	162808	280
3276	Nonparticipant	33	33	33	561986	161896	278
3277	Nonparticipant	34	34	34	560414	162075	279
3278	Nonparticipant	23	24	23	553528	162406	260
3279	Nonparticipant	23	24	23	553469	162368	260
3280	Nonparticipant	23	24	23	553459	162332	261
3281	Nonparticipant	22	23	22	553450	162298	260
3282	Nonparticipant	23	24	23	553565	162332	260

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3283	Nonparticipant	22	24	23	553540	162245	260
3284	Nonparticipant	22	24	23	553470	162186	261
3285	Nonparticipant	22	24	23	553553	162175	261
3286	Nonparticipant	22	23	22	553554	162069	262
3287	Nonparticipant	22	23	22	553631	162029	261
3288	Nonparticipant	22	23	22	553660	162077	261
3289	Nonparticipant	22	24	23	553728	162036	261
3290	Nonparticipant	22	24	23	553760	162036	260
3291	Nonparticipant	22	23	22	553905	162026	261
3292	Nonparticipant	23	24	23	554280	162064	260
3293	Nonparticipant	22	23	22	553522	161972	263
3294	Nonparticipant	27	28	27	563225	161176	284
3295	Nonparticipant	25	26	25	562951	179814	230
3296	Nonparticipant	25	25	25	563068	179824	231
3297	Nonparticipant	25	26	25	562997	179847	231
3298	Nonparticipant	26	27	26	563082	179243	234
3299	Nonparticipant	26	27	27	563056	178352	238
3300	Nonparticipant	22	23	23	563056	178446	237
3301	Nonparticipant	29	29	29	563487	178284	242
3302	Nonparticipant	29	30	29	563448	178270	242
3303	Nonparticipant	29	30	29	563482	178345	241
3304	Nonparticipant	25	26	25	561983	178238	235
3305	Nonparticipant	24	26	25	561702	178064	234
3306	Nonparticipant	23	24	23	560843	178279	230
3307	Nonparticipant	22	24	23	560841	178318	232
3308	Nonparticipant	22	24	23	560838	178349	232
3309	Nonparticipant	22	23	22	560817	178422	232
3310	Nonparticipant	22	24	23	560771	178362	233
3311	Nonparticipant	22	24	23	560766	178327	233
3312	Nonparticipant	19	21	19	553928	178298	211
3313	Nonparticipant	19	21	20	553749	178202	211
3314	Nonparticipant	13	15	13	553691	179499	208
3315	Nonparticipant	19	21	19	552987	178318	209
3316	Nonparticipant	15	18	18	552669	178434	207
3317	Nonparticipant	17	19	18	552546	178652	207
3318	Nonparticipant	16	17	16	552128	178523	207
3319	Nonparticipant	16	18	17	552582	179175	205

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3320	Nonparticipant	20	21	20	547505	172624	213
3321	Nonparticipant	22	23	22	547477	172702	214
3322	Nonparticipant	22	23	22	547622	172338	215
3323	Nonparticipant	20	21	21	547680	172101	215
3324	Nonparticipant	30	31	30	550241	173397	217
3325	Nonparticipant	23	24	23	568001	161988	279
3326	Nonparticipant	24	25	24	568696	161988	278
3327	Nonparticipant	25	26	25	567957	161989	279
3328	Nonparticipant	24	25	24	567849	161991	280
3329	Nonparticipant	25	26	25	568085	161992	279
3330	Nonparticipant	26	27	26	567249	161993	280
3331	Nonparticipant	25	26	25	567824	162001	280
3332	Nonparticipant	25	27	26	567699	162004	280
3333	Nonparticipant	25	27	26	567712	162008	280
3334	Nonparticipant	13	15	13	574345	163982	260
3335	Nonparticipant	16	18	17	573436	163999	263
3336	Nonparticipant	31	32	31	569244	166039	266
3337	Nonparticipant	42	42	42	564637	166050	269
3338	Nonparticipant	38	39	38	566415	166052	269
3339	Nonparticipant	40	41	40	566813	166053	268
3340	Nonparticipant	37	38	37	565900	166066	269
3341	Nonparticipant	45	45	46	563033	166074	266
3342	Nonparticipant	45	45	46	563055	166088	266
3343	Nonparticipant	18	20	19	574260	166095	255
3344	Nonparticipant	37	38	37	565558	166154	267
3345	Nonparticipant	39	39	39	565125	166175	269
3346	Nonparticipant	31	32	31	569244	167560	261
3347	Nonparticipant	42	44	43	566903	167580	263
3348	Nonparticipant	29	30	29	569940	167598	259
3349	Nonparticipant	29	31	30	569897	167616	259
3350	Nonparticipant	28	29	28	570501	167624	261
3351	Nonparticipant	29	30	29	569724	169134	256
3352	Nonparticipant	28	29	28	570395	169135	261
3353	Nonparticipant	30	31	30	569296	169138	258
3354	Nonparticipant	44	45	45	564596	169152	254
3355	Nonparticipant	29	30	29	569872	169155	259

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3356	Nonparticipant	34	35	34	567858	169155	259
3357	Nonparticipant	27	29	27	570984	169156	259
3358	Nonparticipant	29	30	29	569514	169159	254
3359	Nonparticipant	27	28	27	571033	169165	259
3360	Nonparticipant	26	27	26	571075	169169	260
3361	Nonparticipant	26	28	27	571126	169173	259
3362	Participant	47	48	48	564891	170221	253
3363	Nonparticipant	29	30	29	569649	170320	252
3364	Nonparticipant	24	26	25	573504	170345	252
3365	Nonparticipant	40	40	40	566572	170353	252
3366	Nonparticipant	24	26	25	573499	170382	251
3367	Nonparticipant	36	37	36	564045	171746	252
3368	Nonparticipant	35	36	36	564060	171748	252
3369	Nonparticipant	32	33	33	562783	171757	251
3370	Nonparticipant	34	35	34	563511	171759	251
3371	Nonparticipant	30	32	31	571670	171763	249
3372	Nonparticipant	34	35	35	563518	171763	251
3373	Nonparticipant	37	38	37	571445	173061	249
3374	Nonparticipant	37	38	37	571438	173063	249
3375	Nonparticipant	29	30	29	573308	173063	247
3376	Nonparticipant	41	43	42	570418	173065	250
3377	Nonparticipant	30	31	30	573009	173065	246
3378	Nonparticipant	35	36	35	568946	173068	250
3379	Nonparticipant	35	36	35	565258	173075	251
3380	Nonparticipant	35	36	35	568927	173076	250
3381	Nonparticipant	35	36	35	566676	173076	249
3382	Nonparticipant	41	43	42	570422	173076	250
3383	Nonparticipant	31	32	31	572704	173082	247
3384	Nonparticipant	39	41	40	571515	173850	248
3385	Nonparticipant	31	32	32	563812	173854	247
3386	Nonparticipant	39	40	39	566635	173858	247
3387	Nonparticipant	30	31	30	573273	173860	245
3388	Nonparticipant	30	31	30	573261	173860	246
3389	Nonparticipant	39	41	40	571500	173890	249
3390	Nonparticipant	45	46	45	570334	174739	246
3391	Nonparticipant	43	43	43	569892	174751	245
3392	Nonparticipant	45	46	45	570323	174755	246

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3393	Nonparticipant	39	41	40	566652	174755	247
3394	Nonparticipant	42	43	43	569821	174759	245
3395	Nonparticipant	43	43	43	569908	174779	245
3396	Nonparticipant	37	39	38	566951	174787	246
3397	Nonparticipant	43	43	43	569892	174789	245
3398	Nonparticipant	39	40	39	566648	174791	246
3399	Nonparticipant	39	40	39	566656	174791	246
3400	Nonparticipant	44	44	44	568153	176023	242
3401	Nonparticipant	40	41	40	571550	176067	241
3402	Nonparticipant	40	41	40	571550	176081	241
3403	Nonparticipant	39	40	40	566615	176107	242
3404	Nonparticipant	39	39	39	567373	176484	243
3405	Nonparticipant	43	43	43	569762	176543	238
3406	Nonparticipant	39	39	39	569785	177068	236
3407	Nonparticipant	38	38	38	569926	177152	238
3408	Nonparticipant	35	36	36	569923	177615	235
3409	Nonparticipant	35	35	35	569926	177679	235
3410	Nonparticipant	35	35	35	569926	177723	235
3411	Nonparticipant	34	35	35	569931	177794	235
3412	Nonparticipant	34	34	34	569931	177848	234
3413	Nonparticipant	34	34	34	569931	177879	235
3414	Nonparticipant	34	34	34	569928	177922	235
3415	Nonparticipant	34	34	34	569926	177966	236
3416	Nonparticipant	28	29	29	573092	177521	242
3417	Nonparticipant	28	29	28	573119	177525	243
3418	Nonparticipant	27	27	27	573162	177531	243
3419	Nonparticipant	27	28	28	573195	177532	242
3420	Nonparticipant	27	28	27	573186	177585	242
3421	Nonparticipant	28	29	28	573148	177584	242
3422	Nonparticipant	28	29	28	573043	177584	242
3423	Nonparticipant	28	29	29	573012	177571	242
3424	Nonparticipant	28	28	28	573208	177590	242
3425	Nonparticipant	28	28	28	573283	177608	242
3426	Nonparticipant	27	28	28	573390	177607	243
3427	Nonparticipant	27	28	27	573438	177620	243
3428	Nonparticipant	31	31	31	570913	177974	236

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3429	Nonparticipant	30	30	30	570908	177989	234
3430	Nonparticipant	29	29	29	570902	178014	233
3431	Nonparticipant	30	30	30	570897	178021	233
3432	Nonparticipant	33	34	34	571149	177461	234
3433	Nonparticipant	33	34	34	571173	177472	234
3434	Nonparticipant	33	34	33	571205	177504	234
3435	Nonparticipant	33	34	33	571234	177532	233
3436	Nonparticipant	33	33	33	571258	177562	233
3437	Nonparticipant	32	33	33	571289	177606	232
3438	Nonparticipant	32	33	33	571328	177638	232
3439	Nonparticipant	32	33	33	571345	177659	233
3440	Nonparticipant	24	25	24	553360	176170	218
3441	Nonparticipant	24	25	24	553050	176365	216
3442	Nonparticipant	23	25	24	553047	176416	216
3443	Nonparticipant	23	24	23	553045	176451	216
3444	Nonparticipant	23	24	23	553041	176492	215
3445	Nonparticipant	23	24	23	553098	176525	215
3446	Nonparticipant	23	25	24	553094	176487	215
3447	Nonparticipant	23	25	24	553092	176448	215
3448	Nonparticipant	24	25	24	553107	176406	216
3449	Nonparticipant	24	25	24	553101	176349	216
3450	Nonparticipant	23	24	23	552904	176646	215
3451	Nonparticipant	22	24	23	552903	176812	214
3452	Nonparticipant	20	22	21	558275	177897	225
3453	Nonparticipant	20	22	21	558269	177840	226
3454	Nonparticipant	19	21	20	558400	177719	226
3455	Nonparticipant	19	21	20	558381	177702	225
3456	Nonparticipant	20	22	21	558424	177765	227
3457	Nonparticipant	20	22	21	558502	177898	227
3458	Nonparticipant	18	20	19	558546	177662	227
3459	Nonparticipant	20	22	21	558632	177626	230
3460	Nonparticipant	20	22	21	558587	177514	230
3461	Nonparticipant	18	20	19	558690	177512	230
3462	Nonparticipant	20	22	21	558655	177445	231
3463	Nonparticipant	19	21	19	558747	177453	232
3464	Nonparticipant	34	35	35	568224	178086	241
3465	Nonparticipant	34	35	35	568166	178084	240

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3466	Nonparticipant	34	35	35	568091	178097	241
3467	Nonparticipant	34	34	34	568177	178170	240
3468	Nonparticipant	34	34	34	568231	178174	240
3469	Nonparticipant	34	34	34	568289	178152	241
3470	Nonparticipant	34	34	34	568346	178151	240
3471	Nonparticipant	34	34	34	568388	178154	240
3472	Nonparticipant	34	34	34	568449	178157	241
3473	Nonparticipant	34	34	34	568487	178157	242
3474	Nonparticipant	34	34	34	568531	178167	241
3475	Nonparticipant	34	34	34	568567	178154	241
3476	Nonparticipant	31	32	31	570871	178274	233
3477	Nonparticipant	31	32	31	570857	178279	233
3478	Nonparticipant	31	32	31	570835	178283	233
3479	Nonparticipant	31	32	31	570805	178292	234
3480	Nonparticipant	31	32	31	570782	178301	234
3481	Nonparticipant	31	32	31	570772	178307	234
3482	Nonparticipant	31	32	31	570751	178315	234
3483	Nonparticipant	31	32	31	570733	178322	234
3484	Nonparticipant	31	32	32	570660	178279	234
3485	Nonparticipant	32	32	32	570663	178250	234
3486	Nonparticipant	32	32	32	570663	178234	234
3487	Nonparticipant	32	32	32	570665	178217	234
3488	Nonparticipant	28	28	28	571975	178820	230
3489	Nonparticipant	27	28	28	571959	178955	229
3490	Nonparticipant	27	28	27	571953	179044	229
3491	Nonparticipant	27	28	27	571949	179129	230
3492	Nonparticipant	27	27	27	571946	179251	229
3493	Nonparticipant	25	26	25	571940	179406	227
3494	Nonparticipant	26	27	26	571949	179491	226
3495	Nonparticipant	26	27	26	571956	179560	226
3496	Nonparticipant	26	27	26	571956	179585	226
3497	Nonparticipant	26	27	26	571943	179604	227
3498	Nonparticipant	26	27	26	571805	179629	229
3499	Nonparticipant	26	27	26	571738	179639	231
3500	Nonparticipant	28	29	28	571893	178826	230
3501	Nonparticipant	28	29	28	571871	178792	230

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3502	Nonparticipant	28	29	28	571852	178769	229
3503	Nonparticipant	28	29	28	571798	178735	229
3504	Nonparticipant	28	28	28	571782	178725	229
3505	Nonparticipant	28	29	29	571723	178650	232
3506	Nonparticipant	28	29	29	571707	178637	232
3507	Nonparticipant	27	27	27	571666	178584	232
3508	Nonparticipant	28	28	28	571644	178558	233
3509	Nonparticipant	29	29	29	571631	178549	234
3510	Nonparticipant	29	30	30	571562	178477	235
3511	Nonparticipant	29	30	30	571537	178445	234
3512	Nonparticipant	24	25	24	560000	176735	242
3513	Nonparticipant	19	21	19	559538	176990	236
3514	Nonparticipant	21	23	22	559604	177049	236
3515	Nonparticipant	21	23	22	559801	176788	241
3516	Nonparticipant	19	21	20	559577	176648	240
3517	Nonparticipant	18	20	19	559517	176643	239
3518	Nonparticipant	21	22	22	559753	176636	243
3519	Nonparticipant	21	23	22	558615	176640	231
3520	Nonparticipant	22	23	22	558550	176632	230
3521	Nonparticipant	22	23	22	558510	176647	230
3522	Nonparticipant	22	23	22	558456	176664	231
3523	Nonparticipant	22	23	22	558404	176666	233
3524	Nonparticipant	25	27	26	555196	175128	222
3525	Nonparticipant	26	27	26	555040	175128	222
3526	Nonparticipant	26	27	26	554955	175135	221
3527	Nonparticipant	25	26	25	554626	175081	220
3528	Nonparticipant	25	27	26	554679	175089	220
3529	Nonparticipant	26	27	26	554593	175211	220
3530	Nonparticipant	25	26	26	553859	175139	218
3531	Nonparticipant	26	27	26	553828	175136	219
3532	Nonparticipant	26	27	26	553785	175143	219
3533	Nonparticipant	27	28	27	553701	175092	219
3534	Nonparticipant	26	28	27	553580	175277	218
3535	Nonparticipant	30	31	30	556769	173054	242
3536	Nonparticipant	30	32	31	556777	172975	244
3537	Nonparticipant	31	32	31	556831	172843	243
3538	Nonparticipant	31	32	31	556820	172788	242

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3539	Nonparticipant	31	32	32	556831	172748	241
3540	Nonparticipant	31	32	32	556748	172719	240
3541	Nonparticipant	31	32	32	556817	172558	240
3542	Nonparticipant	30	31	30	556756	172592	239
3543	Nonparticipant	30	31	30	556695	172571	239
3544	Nonparticipant	30	31	31	556520	172569	236
3545	Nonparticipant	32	33	33	556681	172449	243
3546	Nonparticipant	32	34	33	556837	172454	244
3547	Nonparticipant	29	31	30	549859	171704	221
3548	Nonparticipant	31	32	32	550206	171794	221
3549	Nonparticipant	31	32	32	550197	171810	221
3550	Nonparticipant	43	44	43	551663	171852	225
3551	Nonparticipant	44	46	45	551814	171806	228
3552	Nonparticipant	43	44	43	556772	170204	244
3553	Nonparticipant	43	44	44	556719	170181	245
3554	Nonparticipant	43	44	43	556968	170191	241
3555	Nonparticipant	42	44	43	557122	170179	243
3556	Nonparticipant	43	44	43	557609	170445	247
3557	Nonparticipant	43	44	43	556768	170259	246
3558	Nonparticipant	35	36	35	558540	170795	248
3559	Nonparticipant	36	37	36	558447	170127	249
3560	Nonparticipant	34	35	34	558874	170200	249
3561	Nonparticipant	31	32	32	553627	167618	246
3562	Nonparticipant	28	28	28	551867	167897	244
3563	Nonparticipant	28	29	28	551807	168107	244
3564	Nonparticipant	25	26	26	551471	166922	245
3565	Nonparticipant	26	27	26	551475	167020	245
3566	Nonparticipant	26	27	26	551777	166753	246
3567	Nonparticipant	31	31	31	553552	167466	246
3568	Nonparticipant	31	31	31	553612	167321	246
3569	Nonparticipant	29	29	29	553060	167044	246
3570	Nonparticipant	28	29	29	552800	167031	246
3571	Nonparticipant	28	29	28	552656	167032	247
3572	Nonparticipant	36	36	36	559948	167214	259
3573	Nonparticipant	39	39	40	562546	164412	273
3574	Nonparticipant	44	46	45	561579	164993	267

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3575	Nonparticipant	45	46	45	561568	164476	270
3576	Nonparticipant	39	40	40	563183	164599	269
3577	Nonparticipant	39	39	39	563147	164418	271
3578	Nonparticipant	37	37	37	562660	163611	275
3579	Nonparticipant	36	36	36	563112	163610	277
3580	Nonparticipant	35	36	36	563243	163598	276
3581	Nonparticipant	26	27	26	556870	161874	273
3582	Nonparticipant	26	27	26	556808	161843	274
3583	Nonparticipant	26	27	26	556822	161875	273
3584	Nonparticipant	26	27	26	556604	161951	272
3585	Nonparticipant	26	27	26	556629	162006	270
3586	Nonparticipant	26	27	26	556627	162123	269
3587	Nonparticipant	26	27	26	556638	162141	269
3588	Nonparticipant	26	27	26	556684	162242	269
3589	Nonparticipant	27	27	27	556731	162272	269
3590	Nonparticipant	27	28	27	556795	162376	268
3591	Nonparticipant	27	28	27	556813	162413	268
3592	Nonparticipant	27	28	27	556829	162441	268
3593	Nonparticipant	26	27	26	556825	161821	274
3594	Nonparticipant	26	27	26	556818	161798	274
3595	Nonparticipant	25	26	25	556819	161777	274
3596	Nonparticipant	26	27	26	556734	161779	274
3597	Nonparticipant	26	27	26	556725	161816	274
3598	Nonparticipant	25	26	25	556682	161709	274
3599	Nonparticipant	25	26	25	556680	161738	274
3600	Nonparticipant	26	27	26	556679	161662	274
3601	Nonparticipant	25	26	25	556673	161652	274
3602	Nonparticipant	24	25	24	556542	161649	272
3603	Nonparticipant	24	25	24	556553	161666	272
3604	Nonparticipant	24	25	24	556551	161687	272
3605	Nonparticipant	18	20	19	551751	178406	206
3606	Nonparticipant	19	20	19	551699	178263	207
3607	Nonparticipant	19	20	19	551637	178226	206
3608	Nonparticipant	17	19	18	552013	178771	207
3609	Nonparticipant	17	19	17	552060	178902	208
3610	Nonparticipant	17	19	17	552097	178905	208
3611	Nonparticipant	16	18	16	552147	179194	207

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3612	Nonparticipant	16	18	16	552174	179285	206
3613	Nonparticipant	13	14	13	552539	178656	205
3614	Nonparticipant	21	23	22	555264	177014	219
3615	Nonparticipant	15	17	16	554914	178244	215
3616	Nonparticipant	19	20	19	555525	178197	222
3617	Nonparticipant	20	21	20	559565	178691	228
3618	Nonparticipant	17	20	19	559428	178286	226
3619	Nonparticipant	21	22	21	560129	178407	228
3620	Nonparticipant	17	19	18	559394	178642	227
3621	Nonparticipant	16	17	17	559290	178569	226
3622	Nonparticipant	18	19	18	559979	179061	227
3623	Nonparticipant	15	16	15	560229	178950	226
3624	Nonparticipant	19	20	19	560202	178850	228
3625	Nonparticipant	20	22	21	560226	178787	228
3626	Nonparticipant	21	22	21	560239	178812	228
3627	Nonparticipant	19	20	19	560238	178853	229
3628	Nonparticipant	22	23	22	561122	178574	231
3629	Nonparticipant	45	45	46	561627	163787	272
3901	Participant	47	48	47	551936	171871	228
3902	Participant	46	48	47	551930	171846	227
3903	Participant	46	47	47	565357	169299	259
3904	Participant	46	47	47	565390	169299	259
3905	Participant	45	45	45	566601	176719	241
3906	Participant	46	47	46	552751	171913	227
3907	Participant	46	46	46	565230	169233	257
3908	Participant	43	45	44	570006	174343	247
3909	Participant	43	45	44	570005	174398	247
3910	Participant	43	44	44	569967	174819	245
3911	Participant	43	44	44	569969	174394	247
3912	Participant	44	45	45	551769	171863	227
3913	Participant	41	42	42	571484	174954	244
3914	Participant	39	41	40	556547	171206	245
3915	Participant	40	40	40	560023	163991	272
3916	Participant	40	40	40	560023	163991	272
3917	Participant	40	40	40	562519	164496	274
3918	Participant	40	40	40	562519	164496	274

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3919	Participant	40	41	40	553242	171954	228
3920	Participant	39	40	40	553280	172133	227
3921	Participant	38	39	39	566836	174748	246
3922	Participant	38	39	39	566836	174748	246
3923	Participant	38	39	38	566917	174758	246
3924	Participant	38	39	38	566917	174758	246
3925	Participant	37	37	37	559526	164416	268
3926	Participant	37	37	37	559526	164416	268
3927	Participant	35	36	35	572427	175339	243
3928	Participant	35	36	35	564863	164315	276
3929	Participant	35	34	34	561219	162054	273
3930	Participant	35	34	34	561219	162054	273
3931	Participant	34	35	34	558436	165120	264
3932	Participant	34	33	33	560865	162064	279
3933	Participant	34	34	34	559027	163628	269
3934	Participant	34	35	34	567405	171623	248
3935	Participant	34	35	34	567403	171631	248
3936	Participant	33	35	34	568744	167737	263
3937	Participant	30	32	31	573291	174662	247
3938	Participant	30	31	30	557633	163494	267
3939	Participant	28	29	28	571512	170625	254
3940	Participant	27	28	28	556665	162795	267
3941	Participant	26	27	26	573719	177985	241
3942	Participant	24	25	24	557565	175012	235
3943	Participant	14	16	14	572527	162029	272
3944	Participant	14	16	14	573112	162072	269
3945	Participant	20	21	20	572572	164038	266
3946	Participant	18	20	19	573279	164158	264
3947	Participant	23	25	24	570645	164209	269
3948	Participant	28	29	28	570334	167625	261
3949	Participant	28	29	28	570345	167626	261
3950	Participant	37	38	37	568164	167627	264
3951	Participant	37	38	37	568174	167637	264
3952	Participant	28	30	29	570194	167644	261
3953	Participant	39	39	39	565452	167673	262
3954	Participant	28	29	28	570517	169174	260
3955	Participant	28	29	28	570508	169180	260

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3956	Participant	35	36	35	567485	169183	260
3957	Participant	38	39	39	562436	169194	258
3958	Participant	27	28	27	573145	171801	248
3959	Participant	27	28	27	573140	171807	248
3960	Participant	36	37	36	566203	173162	249
3961	Participant	35	37	36	565428	173163	251
3962	Participant	43	45	44	569951	173921	247
3963	Participant	43	45	43	566300	173923	250
3964	Participant	43	43	43	569895	174823	245
3965	Participant	42	42	42	558312	167357	255
3966	Participant	45	45	45	557546	167027	255
3967	Participant	36	36	36	559529	163622	273
3968	Participant	35	35	35	559265	163637	269
3969	Participant	35	35	35	559210	163633	269
3970	Participant	26	27	26	556418	162226	270
3971	Participant	5	7	5	573435	161050	264
3972	Participant	5	7	6	573030	161061	269
3973	Participant	20	22	20	569836	161162	278
3974	Participant	27	28	27	566358	161839	282
3975	Participant	16	18	16	571690	161876	276
3976	Participant	28	29	28	565338	161928	281
3977	Participant	28	29	28	565356	161930	281
3978	Participant	28	28	28	565681	161933	282
3979	Participant	28	28	28	565103	161942	277
3980	Participant	14	16	15	573534	163222	265
3981	Participant	23	24	23	570390	163684	270
3982	Participant	25	26	25	571003	165188	264
3983	Participant	34	35	35	566415	165224	267
3984	Participant	34	36	35	566744	165251	269
3985	Participant	29	30	29	569727	165787	265
3986	Participant	29	30	29	569715	165791	265
3987	Participant	44	44	45	563251	166420	265
3988	Participant	44	45	45	563180	166422	265
3989	Participant	44	44	45	563218	166439	265
3990	Participant	44	44	45	563217	166467	265
3991	Participant	44	45	45	563168	166482	265

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
3992	Participant	44	44	45	563213	166483	265
3993	Participant	39	40	39	568111	167263	264
3994	Participant	47	46	47	563262	167276	261
3995	Participant	25	27	25	571666	167369	257
3996	Participant	25	26	25	571715	167410	257
3997	Participant	35	36	35	568574	167476	264
3998	Participant	32	33	32	569203	167530	260
3999	Participant	39	39	39	561827	168527	259
4000	Participant	38	39	39	561786	168543	258
4001	Participant	43	45	44	563053	168572	260
4002	Participant	22	24	23	573612	168059	253
4003	Participant	35	37	36	568072	168067	262
4004	Participant	35	37	36	568071	168119	262
4005	Participant	42	43	43	563257	169424	258
4006	Participant	33	33	33	568178	169447	258
4007	Participant	32	33	32	568187	169459	259
4008	Participant	46	46	46	563892	169247	257
4009	Participant	34	35	34	567775	169248	260
4010	Participant	32	32	32	568628	169252	257
4011	Participant	46	46	46	563915	169254	258
4012	Participant	34	35	34	567792	169258	260
4013	Participant	36	37	36	567077	169260	254
4014	Participant	37	37	37	566967	169262	255
4015	Participant	45	46	46	563881	169885	258
4016	Participant	36	36	36	563048	170778	256
4017	Participant	48	49	48	565690	170778	253
4018	Participant	32	33	32	568306	170935	249
4019	Participant	32	33	32	568291	170944	250
4020	Participant	40	41	40	564875	171646	256
4021	Participant	40	41	40	566016	171646	250
4022	Participant	40	41	40	564900	171661	257
4023	Participant	33	33	33	562655	171677	251
4024	Participant	32	33	33	562647	171681	251
4025	Participant	33	34	33	568247	172670	248
4026	Participant	35	36	36	565675	173022	249
4027	Participant	43	45	44	570688	173252	249
4028	Participant	36	37	36	565531	173262	251

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
4029	Participant	41	43	42	569806	173605	248
4030	Participant	41	43	42	569811	173606	248
4031	Participant	44	46	45	570007	173684	248
4032	Participant	44	46	45	570032	173689	248
4033	Participant	44	46	45	570000	173730	248
4034	Participant	43	45	44	569958	174336	247
4035	Participant	43	44	43	569878	174202	247
4036	Participant	44	46	45	570039	174229	248
4037	Participant	42	43	43	569827	174254	247
4038	Participant	39	40	39	571652	174543	245
4039	Participant	39	41	40	571586	174553	245
4040	Participant	37	38	37	567514	174582	245
4041	Participant	42	43	43	569885	174600	245
4042	Participant	37	38	37	567526	174641	245
4043	Participant	46	47	47	570425	174877	245
4044	Participant	43	44	44	569962	174895	245
4045	Participant	43	43	43	568901	174896	241
4046	Participant	44	44	44	570020	174900	245
4047	Participant	33	34	33	564164	177608	241
4048	Participant	27	29	28	561890	174969	245
4049	Participant	28	29	28	573568	177067	243
4050	Participant	45	45	46	569905	175891	239
4051	Participant	31	32	31	553061	174259	221
4052	Participant	28	29	28	554993	174256	226
4053	Participant	26	27	27	554944	174420	227
4054	Participant	26	27	26	554995	174454	228
4055	Participant	31	32	31	554563	173082	228
4056	Participant	31	32	31	554519	173167	229
4057	Participant	42	44	43	551833	172832	220
4058	Participant	42	44	43	551837	172855	220
4059	Participant	35	36	36	557968	171675	246
4060	Participant	25	27	26	549194	170130	223
4061	Participant	36	36	36	554096	170142	242
4062	Participant	34	34	34	553802	168606	244
4063	Participant	36	36	36	559188	168574	253
4064	Participant	36	36	36	559095	168580	254

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
4065	Participant	35	35	35	559618	168577	257
4066	Participant	35	36	35	559531	168352	254
4067	Participant	35	35	35	560126	168580	257
4068	Participant	35	36	35	559990	168044	255
4069	Participant	45	45	45	556801	167567	250
4070	Participant	38	38	38	555175	167778	245
4071	Participant	32	33	32	555257	165838	255
4072	Participant	32	33	32	555259	165845	255
4073	Participant	28	29	28	554172	165164	255
4074	Participant	41	41	41	557511	166127	251
4075	Participant	39	39	39	557692	166011	259
4076	Participant	40	41	41	556865	166123	255
4077	Participant	36	37	36	559353	166028	263
4078	Participant	37	37	37	558417	166237	262
4079	Participant	35	35	35	559284	164431	266
4080	Participant	29	30	29	557423	163094	268
4081	Participant	29	30	29	557528	163171	268
4082	Participant	37	37	37	559936	163117	271
4083	Participant	24	25	25	554505	163734	252
4084	Participant	33	32	32	559952	162001	279
4085	Participant	32	32	32	559846	161990	277
4086	Participant	30	30	30	559206	161993	278
4087	Participant	27	28	27	557088	162003	272
4088	Participant	28	30	29	556167	173688	237
4089	Participant	28	29	28	556237	173678	236
4090	Participant	26	27	26	556513	173581	229
4091	Participant	24	25	24	569076	161972	280
4092	Participant	6	8	6	573927	161973	265
4093	Participant	6	8	6	573926	161982	265
4094	Participant	14	16	14	573539	162826	267
4095	Participant	24	26	25	571152	165107	264
4096	Participant	34	35	34	568635	165961	267
4097	Participant	37	39	38	568157	166027	269
4098	Participant	34	36	35	568624	166031	267
4099	Participant	44	45	45	563143	166504	264
4100	Participant	24	26	25	571414	166600	260
4101	Participant	40	41	40	566433	166618	268

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
4102	Participant	44	45	45	563264	166642	263
4103	Participant	19	21	19	574249	166695	256
4104	Participant	19	21	19	574244	166697	256
4105	Participant	27	28	27	570922	167538	260
4106	Participant	42	44	43	567525	167544	262
4107	Participant	27	28	27	570874	167549	260
4108	Participant	42	44	42	567553	167550	262
4109	Participant	43	44	44	563293	168203	260
4110	Participant	25	27	26	571698	168295	257
4111	Participant	25	26	25	572357	169071	254
4112	Participant	35	35	35	567497	169112	259
4113	Participant	29	30	29	569815	169127	259
4114	Participant	37	37	37	567053	169281	253
4115	Participant	29	30	29	569727	169298	258
4116	Participant	26	28	27	573007	171104	249
4117	Participant	44	46	45	564993	171119	254
4118	Participant	45	46	45	565002	171152	254
4119	Participant	44	46	45	565002	171161	254
4120	Participant	36	37	36	563570	171263	254
4121	Participant	33	34	33	562941	171687	252
4122	Participant	37	38	37	566506	171689	250
4123	Participant	41	42	41	565780	171719	249
4124	Participant	27	28	27	573321	171741	248
4125	Participant	28	29	28	573677	173035	248
4126	Participant	44	46	45	570697	173305	249
4127	Participant	42	44	43	565966	173802	250
4128	Participant	43	45	44	569954	173805	248
4129	Participant	44	46	45	570013	173805	247
4130	Participant	42	43	42	569811	173843	246
4131	Participant	45	46	46	570903	174907	245
4132	Participant	37	38	38	567163	174924	244
4133	Participant	37	38	38	567193	174962	244
4134	Participant	30	31	30	563303	175004	245
4135	Participant	40	40	41	567983	175024	240
4136	Participant	40	40	40	567925	175026	239
4137	Participant	40	40	40	567954	175041	239

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
4138	Participant	30	31	30	563441	175919	245
4139	Participant	47	47	48	568761	176443	239
4140	Participant	30	31	30	573385	175365	247
4141	Participant	25	26	25	557207	175128	233
4142	Participant	25	27	26	555607	174985	228
4143	Participant	30	31	30	553490	174326	220
4144	Participant	31	32	31	553075	174266	221
4145	Participant	31	32	31	553073	174240	220
4146	Participant	31	32	31	553084	174260	221
4147	Participant	30	31	31	559474	171763	249
4148	Participant	30	31	30	560135	171803	248
4149	Participant	30	31	30	560115	171945	249
4150	Participant	30	31	30	559990	171652	250
4151	Participant	30	31	30	561016	171858	254
4152	Participant	30	31	30	561244	171702	253
4153	Participant	31	32	31	561737	171777	251
4154	Participant	31	32	32	560771	170926	253
4155	Participant	44	44	44	556028	170300	247
4156	Participant	45	45	45	555244	169991	245
4157	Participant	43	44	44	556533	170283	245
4158	Participant	36	37	36	559437	166266	260
4159	Participant	44	45	44	561010	166049	266
4160	Participant	43	44	44	561573	165435	267
4161	Participant	40	41	41	560091	165325	265
4162	Participant	37	38	38	556716	165881	255
4163	Participant	48	49	49	561152	164401	273
4164	Participant	46	47	47	560775	164464	273
4165	Participant	40	40	40	560027	164423	271
4166	Participant	28	29	28	556072	163608	261
4167	Participant	26	27	26	557478	162014	273
4168	Participant	28	30	29	561234	173425	248
4169	Participant	14	16	14	573158	162106	269
4170	Participant	27	28	27	566381	162177	283
4171	Participant	23	25	24	570051	162493	272
4172	Participant	31	32	31	567466	164424	272
4173	Participant	25	26	25	570661	164449	267
4174	Participant	25	26	25	570661	164450	267

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
4175	Participant	22	24	23	572631	166338	258
4176	Participant	22	24	23	572621	166339	258
4177	Participant	16	17	16	574227	166379	255
4178	Participant	45	45	45	563271	167705	262
4179	Participant	45	45	45	563272	167749	261
4180	Participant	43	43	44	561818	167846	261
4181	Participant	44	44	44	563222	167934	261
4182	Participant	26	28	27	571465	169222	258
4183	Participant	30	31	30	569337	169224	257
4184	Participant	31	32	31	568840	169239	257
4185	Participant	31	32	32	568815	171880	250
4186	Participant	31	33	32	568813	171889	250
4187	Participant	33	34	34	567847	173209	248
4188	Participant	34	35	34	568604	173218	249
4189	Participant	34	35	34	568599	173232	249
4190	Participant	36	37	36	565508	173236	250
4191	Participant	41	42	41	569671	174076	246
4192	Participant	42	44	43	569835	174119	247
4193	Participant	42	44	43	569836	174150	247
4194	Participant	40	41	41	568224	174858	246
4195	Participant	46	47	47	570416	174864	245
4196	Participant	43	44	44	566613	176612	242
4197	Participant	46	48	47	565966	176690	247
4198	Participant	35	35	35	560181	168574	255
4199	Participant	32	33	32	560808	170348	253
4200	Participant	40	41	40	570712	176438	241
4201	Participant	29	30	30	573323	176491	242
4202	Participant	33	34	34	554744	171791	241
4203	Participant	34	35	35	554078	172079	235
4204	Participant	33	34	34	560082	169357	255
4205	Participant	36	37	36	558476	169507	252
4206	Participant	41	42	42	557235	169631	248
4207	Participant	43	44	44	556784	166717	254
4208	Participant	40	40	40	555877	167123	250
4209	Participant	31	31	31	557773	163829	266
4210	Participant	30	31	30	557729	163779	266

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
4211	Participant	29	30	29	556499	163678	260
4212	Participant	28	29	28	556125	163593	260
4213	Participant	22	23	22	571454	163429	267
4214	Participant	27	28	27	568692	163532	271
4215	Participant	26	27	26	569199	163533	270
4216	Participant	46	47	47	563251	165487	269
4217	Participant	43	43	44	564818	166982	266
4218	Participant	41	41	42	565077	167088	265
4219	Participant	30	31	30	569639	167157	262
4220	Participant	39	40	39	568120	167211	264
4221	Participant	38	38	38	566458	168575	261
4222	Participant	45	46	45	563175	168606	259
4223	Participant	29	30	29	569708	168689	259
4224	Participant	33	33	33	568168	169530	258
4225	Participant	42	43	42	563331	169560	258
4226	Participant	42	43	42	563340	169562	258
4227	Participant	41	42	42	563249	169575	259
4228	Participant	37	38	37	562513	169730	259
4229	Participant	37	37	37	562528	169857	259
4230	Participant	40	41	41	564867	171609	256
4231	Participant	34	35	34	567171	171626	251
4232	Participant	34	34	34	567175	171629	251
4233	Participant	40	42	41	565914	171633	250
4234	Participant	40	42	41	565913	171637	250
4235	Participant	35	36	35	567096	171639	252
4236	Participant	40	41	40	566017	171642	250
4237	Participant	33	34	33	568275	172745	247
4238	Participant	32	33	32	563847	173410	248
4239	Participant	42	44	43	569880	174431	247
4240	Participant	41	43	42	566586	174440	248
4241	Participant	41	43	42	566585	174474	247
4242	Participant	42	43	43	569885	174475	247
4243	Participant	45	45	45	569926	175423	240
4244	Participant	45	45	45	569898	175425	240
4245	Participant	29	30	29	573451	176651	242
4246	Participant	22	23	22	555603	176702	219
4247	Participant	27	28	28	555813	173101	230

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
4248	Participant	31	32	32	555178	172605	241
4249	Participant	30	31	31	555380	172909	241
4250	Participant	30	31	30	555292	172853	240
4251	Participant	42	43	42	552990	171445	230
4252	Participant	42	43	43	551869	171278	228
4253	Participant	43	44	44	556723	168634	250
4254	Participant	43	44	44	557001	168576	251
4255	Participant	31	32	31	556783	164582	259
4256	Participant	33	33	33	562203	162048	275
4257	Participant	32	32	32	560831	161996	276
4258	Participant	23	24	23	553938	162041	261
4259	Participant	22	23	22	547803	172069	216
4260	Participant	22	24	23	547757	171960	216
4261	Participant	16	18	16	572488	161995	273
4262	Participant	16	18	16	572467	161995	273
4263	Participant	20	21	20	572535	164026	265
4264	Participant	46	46	46	562514	166096	268
4265	Participant	42	43	42	567557	167560	262
4266	Participant	42	44	43	567444	167563	262
4267	Participant	38	39	38	568072	167575	263
4268	Participant	42	44	43	567424	167578	261
4269	Participant	38	40	39	567977	167581	263
4270	Participant	41	43	42	566770	167585	265
4271	Participant	32	33	32	568349	169135	257
4272	Participant	38	38	38	563333	170420	255
4273	Participant	41	43	42	565542	171744	250
4274	Participant	32	33	33	562835	171749	252
4275	Participant	33	33	33	562922	171750	251
4276	Participant	26	28	27	573323	171753	248
4277	Participant	34	35	34	563407	171761	251
4278	Participant	43	45	44	565955	173856	249
4279	Participant	42	43	42	569806	173858	247
4280	Participant	43	45	44	569926	173871	247
4281	Participant	44	46	45	569998	173880	247
4282	Participant	42	44	43	569814	173905	246
4283	Participant	36	37	37	564965	176309	244

Receiver ID	Status	Sound Pressure Level (dBA)			Coordinates (Ohio State Plane North)		
		Vestas V150 4.2 MW	Siemens SG4.5-145	Nordex N149 4.5 MW	X (m)	Y (m)	Z (m)
4284	Participant	37	38	37	564982	176361	245
4285	Participant	31	31	31	563765	176422	248
4286	Participant	30	31	31	563716	176462	245
4287	Participant	30	31	31	563719	176469	244
4288	Participant	33	34	34	564258	176471	244
4289	Participant	33	34	34	564228	176476	244
4290	Participant	44	44	44	569703	176464	237
4291	Participant	27	28	27	553562	175097	219
4292	Participant	45	46	45	551859	171704	227
4293	Participant	45	46	45	551893	171638	225
4294	Participant	44	45	44	557173	170294	245
4295	Participant	36	37	36	558443	170663	248
4296	Participant	36	37	36	558445	170476	247
4297	Participant	43	43	43	561825	164409	274
4298	Participant	38	39	39	563525	164412	272
4299	Participant	39	39	39	559962	163618	274

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Summary: Application Exhibit F Part 6 of 6, Exhibits G and H electronically filed by Teresa Orahoad on behalf of Dylan F. Borchers