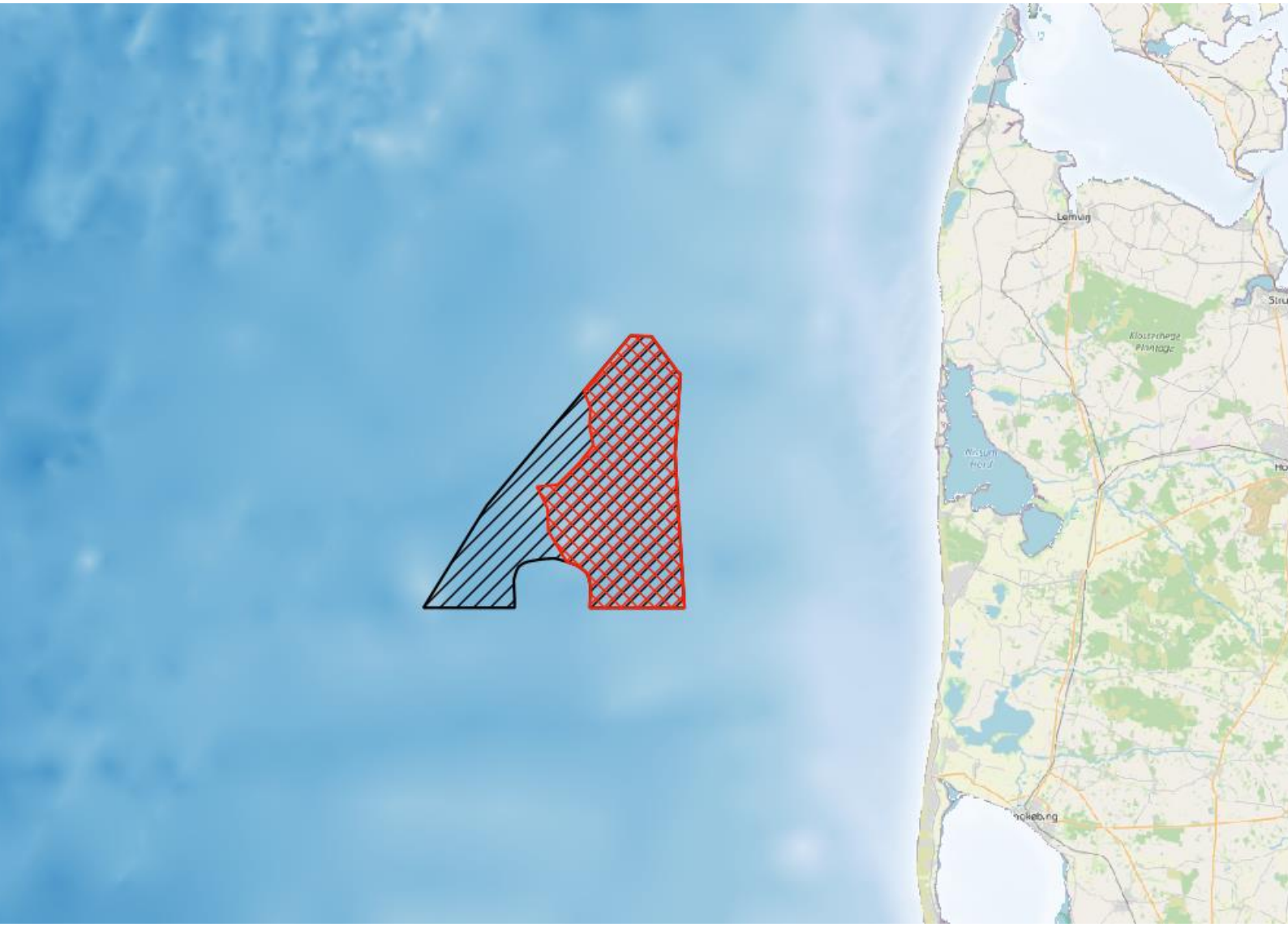

Thor Offshore Wind Farm

Airborne noise
Technical report

Thor Wind Farm I/S

Date: 19. September 2023

Rev.no.	Date	Description	Prepared by	Verified by	Approved by
03	19-09-2023	Final version	AES	HKD	RHO

Contents

1. Introduction

In relation to the planned construction of Thor Offshore Wind Farm (Figure 1-1), calculations were conducted for the expected noise impact during the operational phase. Figure 1-2 highlights the locations of the major wind turbines off the coast of western Jutland, as well as the planning framework for residential areas (brown) and holiday cottage zones (light brown) inland.

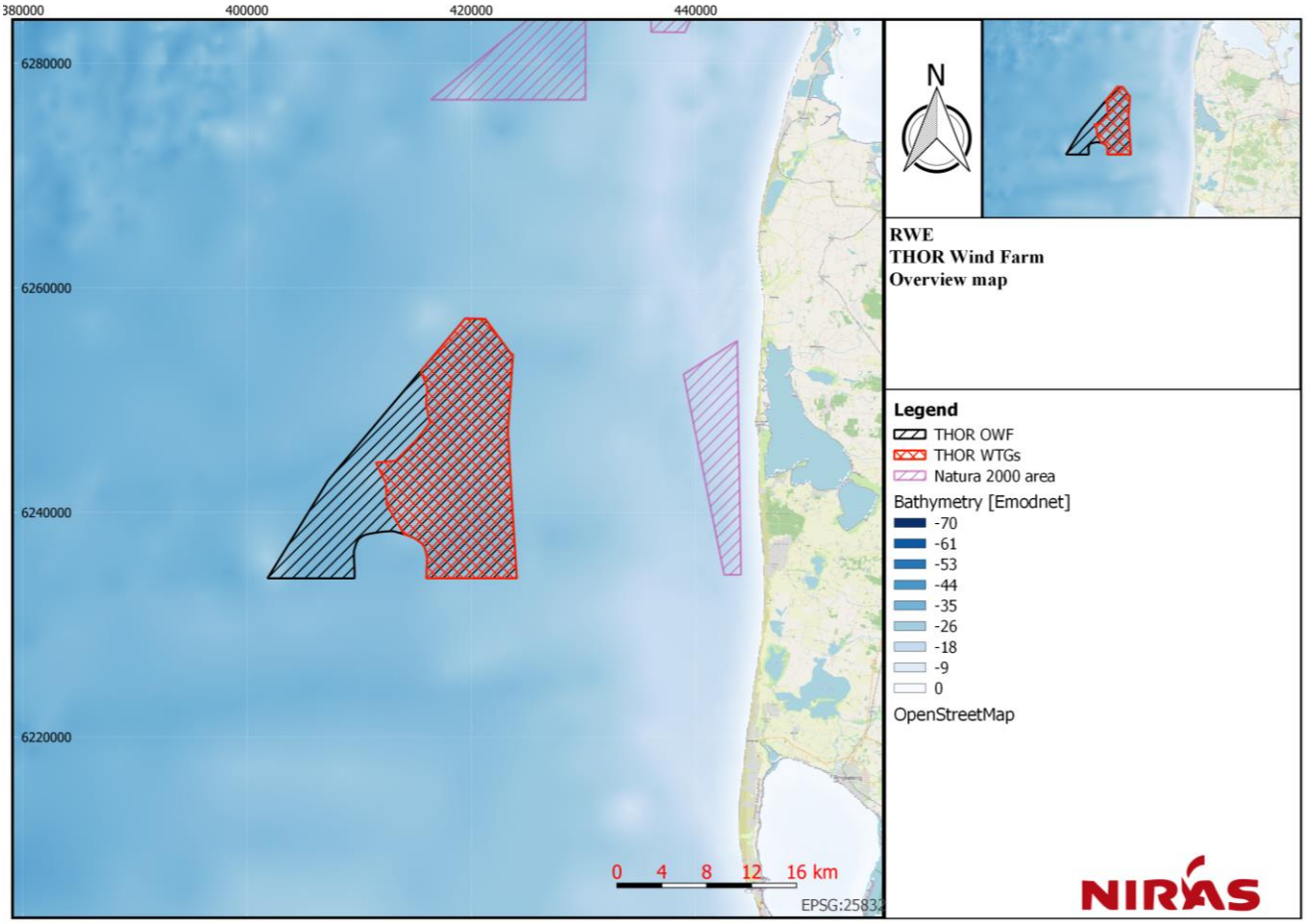

Figure 1-1: Project area for Thor Offshore Wind Farm (OWF).

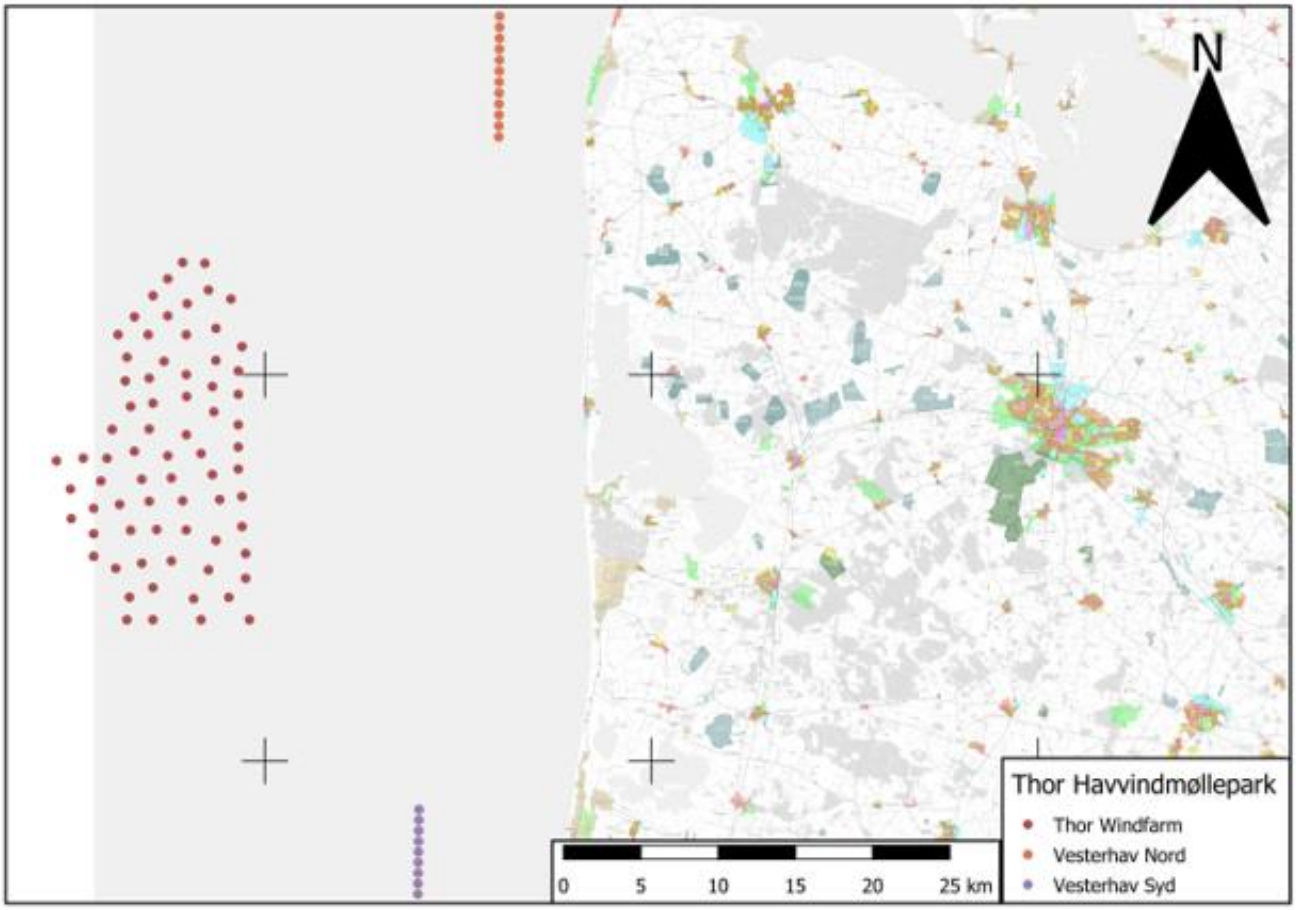

Figure 1-2: Expected placement of Thor OWF, in between Vesterhav Nord and Vesterhav Syd Offshore windfarms.

2. Project description

As part of the Danish Parliament's Energy Agreement of 29 June 2018, the Danish Energy Agency (DEA) agreed to the construction of three new 800–1,000 MW offshore wind farms (OWF), to be completed prior to 2030. Subsequently in 2019, the DEA initiated a screening study of Danish territorial waters to identify suitable sites for OWF developments, from which the Thor Offshore Wind Farm (Thor OWF) was identified. According to the agreement, the site for Thor OWF is located in the North Sea, offshore Nissum Fjord and the coastal town of Thorsminde, at a distance of at least 20 km and will be constructed and fully operational latest 31st December 2027. Thor Wind Farm I/S, owned by RWE, has been awarded the Concession Agreement for the construction and connection of Thor OWF – with a capacity of up to 1,000 MW – to the 220 kV grid at Volder Mark, while Energinet is responsible for the conversion of the 220/400 kV substation at Idomlund.

Prior to offshore works commencing, an environmental impact assessment (EIA) of the offshore Thor OWF project must be completed in accordance with Section III of the Danish Environmental Assessment Act.

Once completed, Thor OWF will comprise 72 14 MW wind turbines, an offshore substation platform, inter-array cables connecting the turbines to the substation and two export cables connecting the OWF to the onshore substation (Figure 2-1).

Calculations have been conducted for the SG DD-236+ model by Siemens Gamesa. Thor OWF will have a maximum installed capacity of 1,000 MW allowing for 72 14 MW wind turbines. The location of the 72 sites investigated for turbine placement are shown in Figure 2-1.

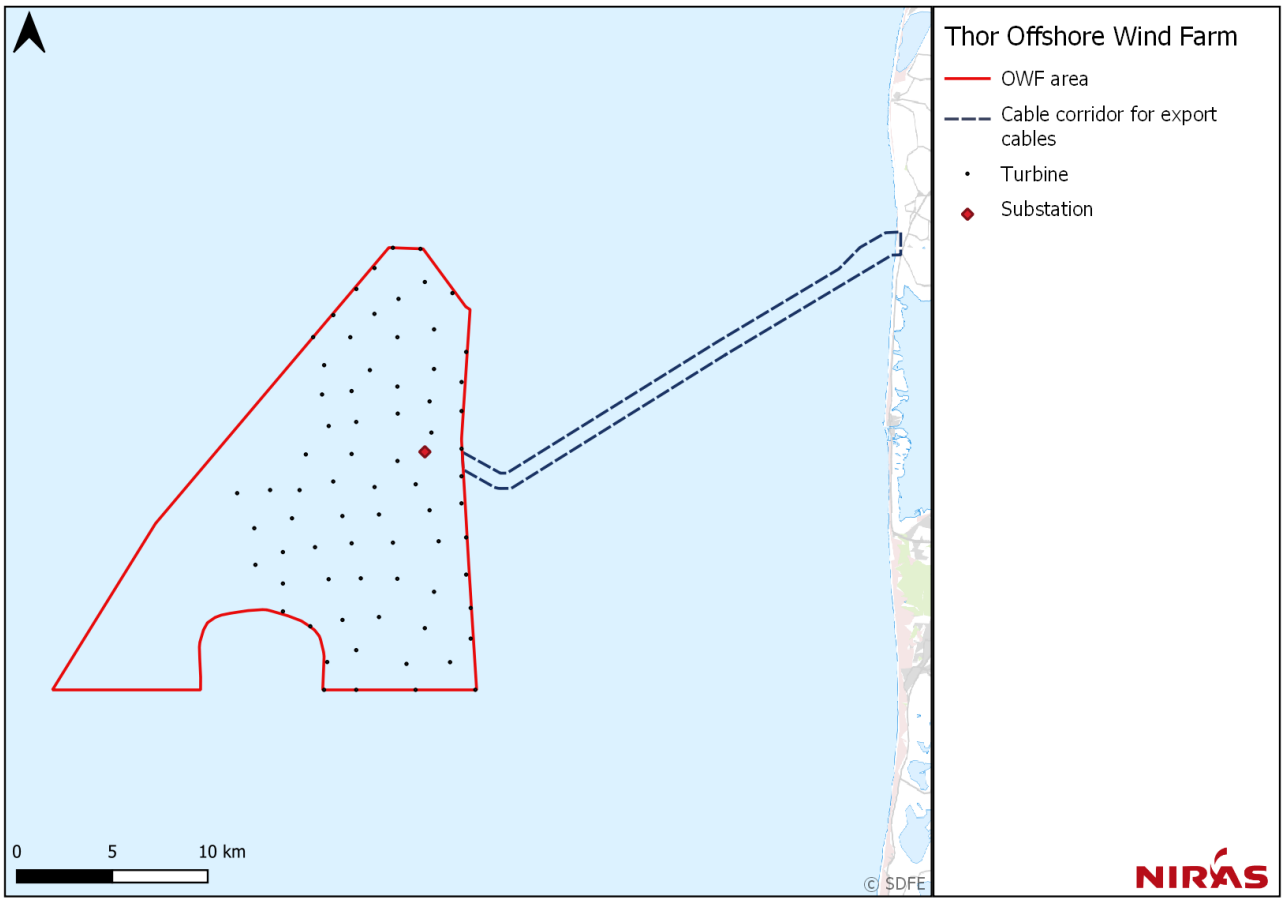

Figure 2-1: Indicative layout for 14 MW turbines. The total number of tubines in this layout is 72. The location of the offshore substation and the export cable corridor are also illustrated.

The wind turbines will have a rotor diameter of approximately 236 m and a hub height of 143–148 m, resulting in a total tip height of between 261–266 m. The wind turbines will be located toward the eastern part of the Thor OWF project area to account for the parameters identified during preliminary investigations and the strategic environmental assessment.

3. Wind turbines

3.1. Description

Based on a maximum installed capacity of 1,000 MW, Thor OWF will comprise 72 turbines with an individual capacity of 14 MW. Each wind turbine comprises a steel tower, a nacelle and three blades (Figure 3-1), with the exact dimensions and appearances of the wind turbines dependent on the manufacturers design.

The nacelle houses a generator, which converts the mechanical energy of the three-bladed rotor to electric energy. The rotor blades will turn clockwise, when viewed from the windward direction and will have a diameter of approximately 236 m (Figure 3-1). The nacelle is placed on top of a tower, which will be attached to a foundation to secure it

to the seabed. The turbines begin generating power when the wind speed at hub height is 3 m/s. The turbine power output increases with increasing wind speed and the wind turbines typically achieve their rated output at wind speeds between 12.5 and 14 m/s at hub height. The design of the turbines ensures safe operation, such that if the average wind speed exceeds 28–30 m/s for extended periods, the turbines shut down automatically.

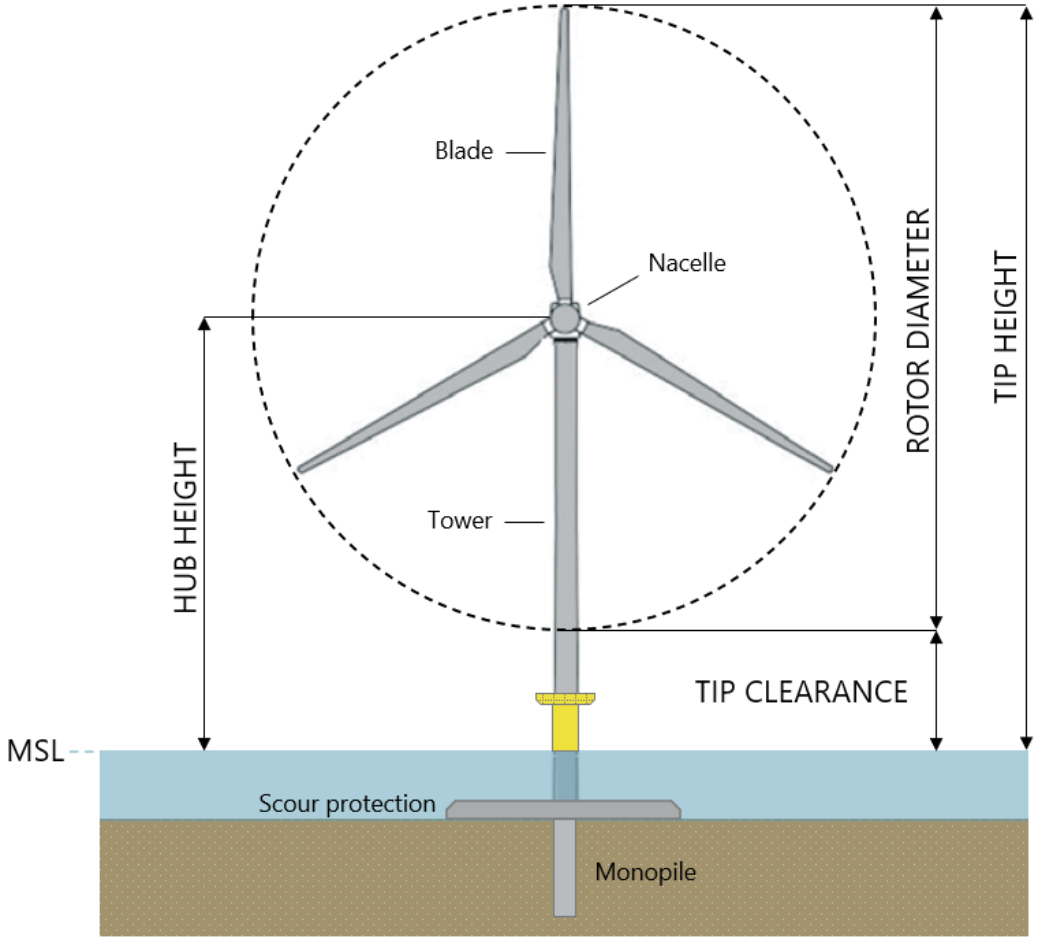

Figure 3-1: Illustration of a typical offshore wind turbine with blades, nacelle, tower, monopile foundation and scour protection. Visual explanations of hub height, tip clearance, rotor diameter and tip height are included for reference.

3.2. Dimensions

The dimensions of the turbines considered for the Thor OWF are summarised in Table 3.1.

Table 3.1: Dimensions of the 14MW turbines considered for Thor OWF. A tip clearance of 25–30 m (the distance between the lower wing tip and the highest astronomical tide) is assumed.

Dimensions	**14-15 MW**
Rotor diameter (m)	236
Tip height (m)	261–266
Hub height above MSL* (m)	143–148
Rotor swept area (m^2)	43,743
Nacelle (length x width x height) (m)	22x11x12 – 29x12x12

** MSL = Mean Sea level*

4. Noise Regulations

Noise from wind turbines is regulated in accordance with the Danish wind turbine executive order. The noise requirements for wind turbines are divided into several classes depending on frequency range, wind speed and land use.

Table 4.1: below summarizes the noise requirements, as stated in the wind turbine executive order (BEK nr. 135 af 07/02/2019, 2019).

Noise regulation	**Residential and holiday cottage zones**		**Neighbouring housing in the countryside**	
Wind Speed at 10 m	6 m/s	8 m/s	6 m/s	8 m/s
Broadband (63-8.000 Hz)	37 dB(A)	39 dB(A)	42 dB(A)	44 dB(A)
Low Frequency (10-160Hz)	20 dB(A)	20 dB(A)	20 dB(A)	20 dB(A)

The limit values listed above comprise:

1. The specified wind speed applies at a height of 10 m.
2. Limit values for the open country apply at a distance from buildings of up to 15 m.
3. The limit values specified for low-frequency noise, refers to the noise level indoors for all buildings. Standard figures are used for the attenuation of the noise inside the building. Special attenuations apply to the sound attenuation of holiday homes, which are smaller than for residential homes, owing to generally poorer sound insulation.

5. Thor offshore wind turbines

The following source levels were used in the calculations for the Thor OWF turbines:

Table 5.1: Noise emission, Thor OWF (data from Siemens) (Siemens Gamesa, 2023).

Wind speed	Broadband dB(A)	Low Frequency dB(A)
6 m/s	114.6	104.8
8 m/s	118.8	108.0

See Appendix 01: Wind turbine overview for the frequency distribution of the source data used in the calculations.

6. Calculation Method

First, the noise originating from the planned Thor OWF was calculated separately. This was done to quantify to what extent the noise contribution, at different wind speeds and frequency ranges, could potentially lead to a significant increase in the overall accumulated noise level in residential areas and cottage zones.

For this exercise a lower 'trifle' limit was set at -15 dB, relative to a given permit (Lr_{per}) for a specific condition, according to the Danish guidelines (Miljøstyrelsen, 2021). For example, all noise sensitive areas where the contribution from Thor OWF to the overall noise level was found to be less than LrA_{LF}: 5 dB (whereby the limit for Low frequency permit is Lr_{perLF}: 20 dB), were excluded from the model since the contribution to the accumulated noise level is deemed to be insignificant below this this value (the coherent trifle limits for broadband noise levels in noise sensitive areas are Lr: 22 and 24 dB(A), at 6 and 8 m/s).

Following these initial calculations, a secondary set of calculations were conducted which included a selection of the existing wind turbines placed off, and along, the west coast of Jutland.

To ensure that the model would stay manageable in size, all wind turbines with an effect below 500 kW were first excluded. It is estimated that these turbines do not significantly contribute to the overall accumulated noise level owing to their relatively low source level, thus the effect of removing these on the accumulated noise levels, both broadband and low frequency, is deemed acceptable. Secondly, using the results from the initial calculations for Thor OWF alone, all wind turbines with an effect below 1,000 kW which were also placed outside the trifle limit of L_{rper} -15dB, were excluded from the model. This left 284 wind turbines classified as existing based on the above mentioned calculations, resulting in the most far reaching significant contribution to the overall noise level (see *Appendix 01: Wind turbine overview*). This includes the two wind farms to the north and south of Thor OWF, Vesterhav Nord and Vesterhav Syd offshore wind farms.

By analysing the calculated accumulated noise levels as presented in the appendix, and comparing these results to information from the municipality's planning framework (Figure 6-1 and Figure 6-2), a number of noise-sensitive areas (4 broadband and 7 low frequency) were located, which are assessed to be the most exposed from the cumulative noise contribution, both from existing wind turbines and from the Thor OWF wind turbines.

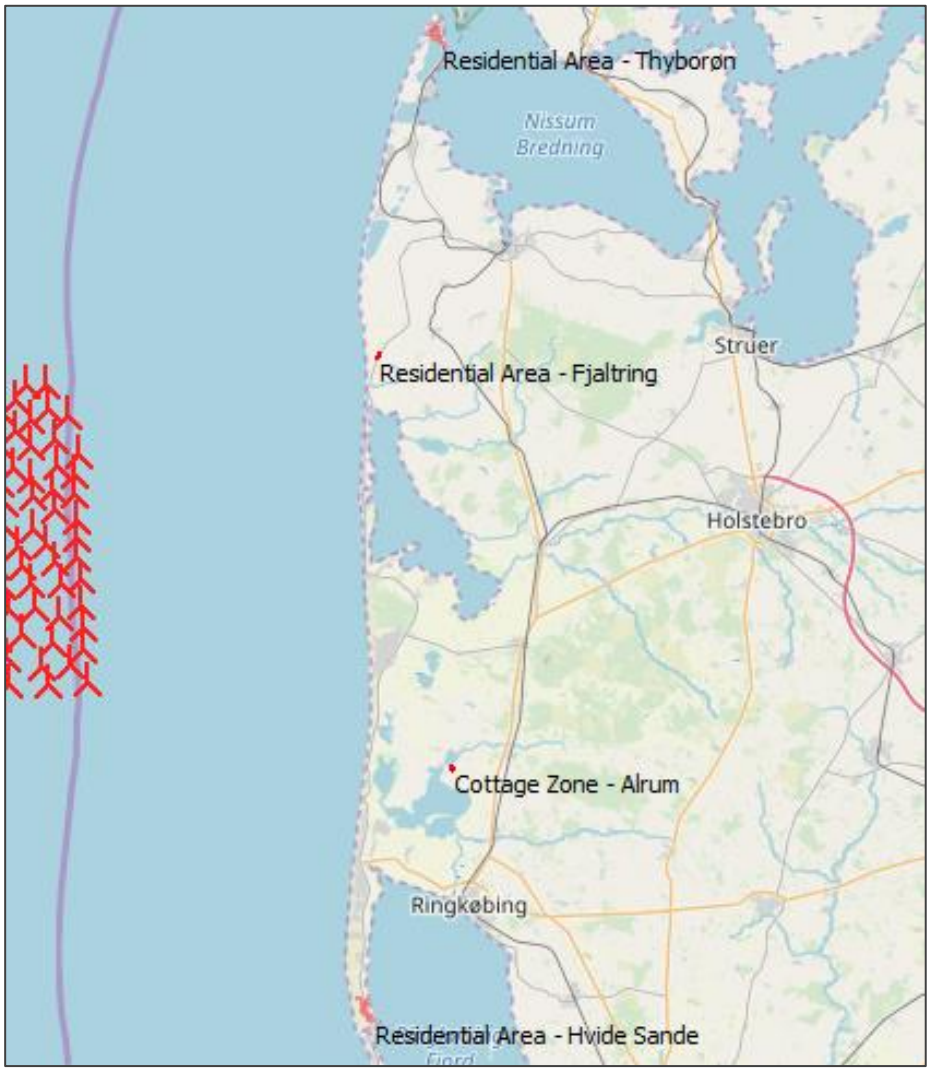

Figure 6-1: Noise sensitive areas included in the calculations for the accumulated broadband frequency noise exposure, including 3 residential areas and a holiday cottage zone.

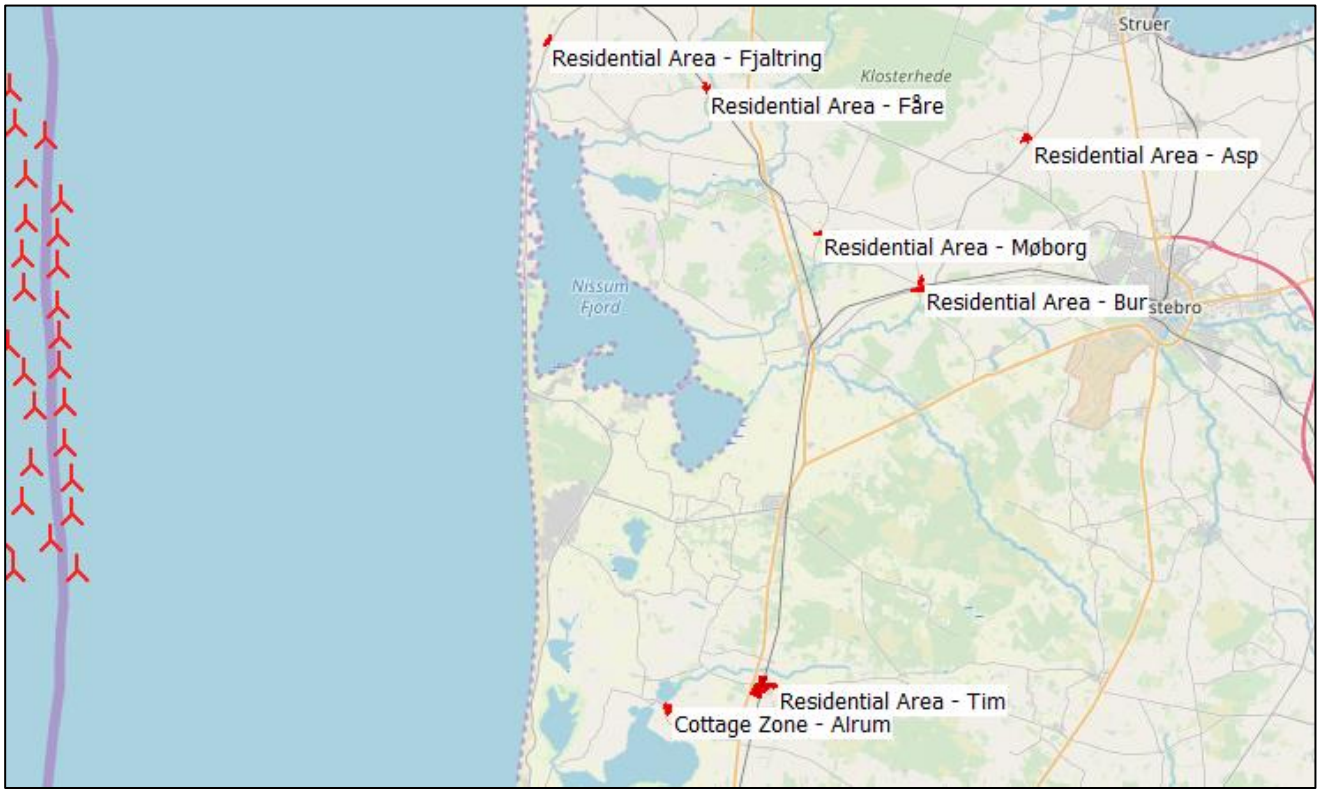

Figure 6-2: Noise sensitive areas included in the calculations for the accumulated low frequency noise exposure, including 6 residential areas and a holiday cottage zone

For holiday cottage zones, special attention is paid to low-frequency noise, as the requirements for sound insulation (damping of the noise) is less than that required for year-round residences, whereby the permit threshold for low frequency noise is with reference to the estimated indoor noise level.

The analysed Siemens turbine results in a significant broadband contribution onshore, at 8 m/s (see *Appendix 04: Noise Map* – Thor OWF, Broadband noise, 8m/s). Further calculations of the accumulated noise identified several areas that could potentially see accumulated levels in excess of the permits (see Figure 6-1 and *Appendix 08: Noise Map* – Accumulated (Thor OWF), Broadband noise, 8m/s, Residential area).

The predicted low frequency noise propagates far into Jutland, and further calculations of the accumulated noise level in western Jutland is therefore necessary in order to clarify if the planned wind farm could lead to violations of the limit values.

When sound propagates over water, so-called multiple reflections can occur over relatively large distances, which increase sound propagation in a way that is not seen in the same way when sound propagates over land. Therefore, with the wind turbine executive order 2019, a change to the calculation method for calculating noise from offshore wind turbines has been introduced, which includes a correction for multiple reflections (BEK nr. 135 af 07/02/2019, 2019). The correction is frequency-dependent and depends on the height of the turbines and the distance above water. For offshore wind farms, installation patterns and the individual distance of the wind turbines to the coast will be decisive for the significance of the correction for the total noise from the wind farm in question.

To calculate the expected noise impact, WindPRO (V. 3.5.587) was used. Calculation of noise from the offshore turbines is done using the Danish rules for calculating noise from wind turbines (BEK nr. 135 af 07/02/2019, 2019).

6.1. Existing turbines

In addition to the planned turbines, the calculations also include existing turbines in the western part of Jutland, as the noise regulations, summarised in section 4, apply to the accumulated noise.

To reduce the size of the model, all turbines with an effect below 500 kW were cut from the model. Additionally, all turbines below 1.000 kW, outside the trifle limit of Lr < 5 dB, defined by calculations of low frequency noise inside cottage zones at 8 m/s, were also removed (see *Appendix 01: Wind turbine overview*).

The majority of the existing wind turbines left in the model do not have precise source data available, especially in the low frequency band. Data from the DEA, presented in their guidelines for wind turbine noise (BEK nr. 135 af 07/02/2019, 2019), has therefore been used extensively (see *Appendix 02: Source data, Danish Environmental Agency*). This data comprises source values recommended by the authorities for turbines in the range of 0-2.000 kW, should original source data for a specific wind turbine not be available.

For turbines above 2.000 kW, a combination of different data sets and reports were used, e.g. Grontmij (2014) and data from Windpro. An overview of the cases where source data were not drawn either directly from WindPRO or taken from the guidelines by the Danish environmental agency, can be seen below in Table 6.1.

Table 6.1: Data used in the noise model.

Wind turbine	**Location**	**Quantity**	**Effect MW**	**Source level, LW dB(A)**		**Reference**
				Broadband	**Low frequency**	
				6/8 m/s	**6/8 m/s**	
Siemens SWT 8.0	Vesterhav Nord and Vesterhav Syd	41	8.0	108.4 / 111.7	93.9 / 98.5	(EMD International A/S, 2020)
Vestas V112	Hvide Sande harbour, V	3	3.0	Turbine 1 101.8 / 103.0 Turbine 2 103.3 / 105.6 Turbine 3 103.5 / 104.8	Turbine 1 90.9 / 92.9 Turbine 2 91.3 / 96.0 Turbine 3 92.8 / 93.8	(Grontmij, 2012)
Vestas V52 - 850	Hvide Sande harbour, E	1	0,.85	98.4 / 99.5	81.3 / 83.1	(Sweco, 2017)
NEG Micon NM 750/44	Fjaltring, S	3	0.75	97.7 / 98.5	As in Appendix 02: Source data, Danish Environmental Agency	(broadband): (Grontmij, 2014)
Vestas V117-3.3	Volder Mark / Møborg	11	3.3	107.4 / 108.0	98.7 / 98.1	Datasheet SWT-3.6-120

To aid in the overall conclusion, a set of broadband and low frequency calculations were conducted, containing only the existing turbines. This was done to clarify to what extent any potential violations of the thresholds summarised in section 4, was caused by the existing or the planned turbines.

6.2. Uncertainty

The model does not include elevation data, due to the size of the required calculation area making it an unnecessarily time-consuming task to model most of western Jutland. This could potentially result in an underestimation of the

transmission loss inland. However, taking the overall flat topography of western Jutland into account, and the overarching nature of noise from wind turbines, the omission of elevation data, to ensure that the model remains manageable in size, is deemed acceptable.

Owing to the overall sparse availability of source data for specific turbines, especially in the low frequency range, and the inherent uncertainty related to calculations of accumulated noise, the uncertainty of the results presented in this report is estimated to ± 3 dB.

7. Results

Noise maps for the Thor OWF utilising the Siemens turbines alone as well as accumulated with the relevant additional turbines, both broadband and low frequency, can be seen in *Appendix 03: Noise Map – Thor OWF alone, Broadband noise, 6m/s, Residential Area* through *Appendix 10: Noise Map – Accumulated (Thor OWF), Low frequency noise, 8m/s, Cottage Area*.

The noise maps for low frequency noise shows the noise level inside buildings.

For the noise sensitive areas, chosen by the results visualised in the noise maps, the following noise levels were found. Each value represents the highest value calculated within each area.

7.1. Existing turbines

Table 7.1: Calculated accumulated broadband noise level contribution from existing turbines, excluding the turbines planned for Thor Offshore Wind Farm, Lr in dB(A).

Noise Sensitive area	**Broadband noise level, Lr dB(A)**		**Noise limit dB(A)**	
	6 m/s	8 m/s	6 m/s	8 m/s
Cottage Zone - Alrum	30.3	31.0	37	39
Residential Area Fjaltring	34.7	35.5		
Residential Area – Hvide Sande	36.7	38.1		
Residential Area Thyborøn	31.2	33.9		

Table 7.2: Calculated accumulated low frequency noise level contribution from existing turbines, excluding the turbines planned for Thor Offshore Wind Farm, Lr in dB(A)

Noise Sensitive area	**Low frequency noise level, Lr dB(A)**		**Noise limit dB(A)**	
	6 m/s	8 m/s	6 m/s	8 m/s
Cottage Zone - Alrum	14.5	15.6	20	20
Residential Area – Asp	13.2	16.0		
Residential Area – Bur	14.6	16.7		
Residential Area Fjaltring	15.1	16.7		
Residential Area - Fåre	15.2	17.4		
Residential Area Møberg	14.6	16.1		
Residential Area - Tim	10.9	11.8		

7.2. Thor OWF – Broadband noise

Table 7.3: Calculated broadband noise level contribution, Lr in dB(A) – exclusively from Thor OWF.

Noise Sensitive area	**Broadband noise level, Lr dB(A)**	
	6 m/s	8 m/s
Cottage Zone - Alrum	19.3	23.7
Residential Area Fjaltring	21.9	26.4
Residential Area – Hvide Sande	20.2	24.5
Residential Area Thyborøn	19.0	23.2

Table 7.4: Calculated accumulated broadband noise level from Thor OWF and relevant existing turbines, Lr in dB(A).

Noise Sensitive area	**Broadband noise level, Lr dB(A)**		**Noise limit dB(A)**	
	6 m/s	8 m/s	6 m/s	8 m/s
Cottage Zone - Alrum	30.6	31.5	37	39
Residential Area Fjaltring	34.8	35.8		
Residential Area – Hvide Sande	36.7	38.1		
Residential Area Thyborøn	31.2	34.0		

7.3. Thor OWF – Low Frequency noise

Table 7.5: Calculated low frequency noise level contribution, Lr in dB(A) – exclusively from Thor OWF.

Noise Sensitive area	**Low frequency noise level, Lr dB(A)**	
	6 m/s	8 m/s
Cottage Zone - Alrum	12.3	16.7
Residential Area – Asp	3.4	7.8
Residential Area – Bur	4.7	9.1
Residential Area Fjaltring	9.8	14.4
Residential Area – Fåre	7.3	11.8
Residential Area Møberg	5.9	10.3
Residential Area – Tim	6.6	11.0

Table 7.6: Calculated accumulated low frequency noise level from Thor OWF and relevant existing turbines, Lr in dB(A).

Noise Sensitive area	**Low frequency noise level, Lr dB(A)**		**Noise limit dB(A)**	
	6 m/s	8 m/s	6 m/s	8 m/s
Cottage Zone - Alrum	16.1	18.5	20	20
Residential Area – Asp	13.5	16.4		
Residential Area – Bur	14.9	17.3		
Residential Area Fjaltring	15.7	17.7		
Residential Area – Fåre	15.7	18.1		
Residential Area Møberg	15.0	16.9		
Residential Area – Tim	12.1	14.0		

8. Conclusion

It is concluded that the existing turbines alone result in no violations of the permit in the broadband frequency range, in the noise sensitive areas chosen for this study.

It is concluded, using the proposed Siemens SG DD-236+ turbines, that broadband noise levels are expected to exceed the trifle limit of Lr: 22 and 24 dB(A), at 6 and 8 m/s, up to 8 km in land from the western coast of Jutland in noise sensitive areas (*Appendix 04: Noise Map – Thor OWF*, *Broadband noise*, *8m/s*, *Residential Area* and Table 7.3).

Further calculations of the accumulated noise levels at a select number of noise sensitive areas, show that the accumulated noise levels does not exceed the noise limit (Table 7.4). It is concluded using the proposed Siemens SG DD-236+ turbines, that low frequency noise levels are exceeding the trifle limit of Lr: 5 dB at 6 and 8 m/s, both for residential areas and cottage zones up to 25 km in land from the western coast of Jutland (*see Appendix 06: Noise Map – Thor OWF*, *Low frequency noise*, *8m/s*, *Cottage area*). Further accumulated calculations, of a select number of noise sensitive areas, show no violations of the low frequency threshold, in any of the chosen residential areas or cottage zones (Table 7.6).

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Appendix 01: Wind turbine overview

Siemens Gamesa SG DD-236+ (Siemens Gamesa, 2023)												
Origen	Hub Height	Wind Speed	LwA, ref	Tone	Octave data [Hz]							
					63	125	250	500	1000	2000	4000	8000
	[m]	[m/s]	[dB(A)]		[dB]							
Fra Windcat	147.6	6	114.6	Nej	99.3	103.2	106.9	107.9	109.5	107	100.3	83.3
Fra Windcat	147.6	8	118.8	Nej	102.6	106.3	10.2	110.9	112.5	114.6	104	86

Siemens Gamesa SG DD-236+ (Siemens Gamesa, 2023)														
Origen	Hub Height	Wind Speed	LwA, ref	Low frequency data [Hz]												
				10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0	100.0	125.0	160.0
	[m]	[m/s]	[dB(A)]	[dB]												
From Windcat	147.6	6	105.0	59.1	64.9	70.4	77	81.3	83.3	86.8	89.8	94.2	96.8	97	98.6	99.4
From Windcat	147.6	8	108.2	62	67.9	73.3	79.9	84.3	86.5	90.2	93.3	97.6	100.1	100.3	101.8	102.2

WindPro model for existing wind turbines in the investigated area are shown in the table below. For wind turbines where data in the model was insufficient to perform precise calculations, i.e., for full frequency distribution, both broad-spectrum and low-frequency, data from *similar* turbines was used instead. Data from the DEA, presented in their guidelines for wind turbine noise (BEK nr. 135 af 07/02/2019, 2019), has therefore been used extensively (see Appendix 02: Source data, Danish Environmental Agency). In some instances, the most representative data therefore came from a different supplier to the actual turbine modelled.

Turbine	Description	Fabrikant	Type-generator	Effect	Rotor diame-ter	Hub Height	Crea-tor	Name	Lwa Ref, 6 m/s	Lwa Ref, 8 m/s	Lwa_{LF} Ref, 6 m/s	Lwa_{LF} Ref, 8 m/s
				kW	m				dB(A)	dB(A)		
Thor Hav-vindmøl-lepark	**VESTAS V236-15MW 15000 236.0 !O! nav: 150,0 m (TOT:268,0 m) (98)**	**VESTAS**	**V236-15MW-15.000**	**15.000**	**236**	**150**	**USER**	**Vestas V236-15MW 118 dB**	**116**	**118**	**103,9**	**105,7**
Thor Hav-vindmøl-lepark	**Siemens Gamesa SG DD-236+ 14000 236.0 !O! nav: 147,6 m (TOT:265,6 m) (26)**	**Siemens Gamesa**	**SG DD-236+-14.000**	**14.000**	**236**	**147,6**	**USER**	**Acoustic Emis-sions SG DD-236+, Thor, Rev. December 2022**	**114,6**	**118,8**	**104,8**	**108,0**
100	570715000000039348: 1000 kW BONUS - Idom	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
101	570715000000039355: 1000 kW BONUS - Navr	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
102	570715000000039485: 1650 kW Vestas Wind Systems A/S - Sir	VESTAS	V66-1.650/300	1.650	66	67	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
103	570715000000039492: 1650 kW Vestas Wind Systems A/S - Sir	VESTAS	V66-1.650/300	1.650	66	67	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
104	570715000000039508: 1650 kW Vestas Wind Systems A/S - Sir	VESTAS	V66-1.650/300	1.650	66	67	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
105	570715000000039515: 1650 kW Vestas Wind Systems A/S - Sir	VESTAS	V66-1.650/300	1.650	66	67	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
106	570715000000040634: 500 kW Vestas Wind Systems A/S - Den Nordlige De	VESTAS	V39-500	500	39	40,5	USER	Vestas V39-500	98,6	99,3	93,2	95,6
107	570715000000041310: 500 kW Vestas Wind Systems A/S - Den nordlige de	VESTAS	V39-500	500	39	40,5	USER	Vestas V39-500	98,6	99,3	93,2	95,6
108	570715000000091728: 3600 kW SIEMENS - Ulfborg	Siemens	SWT-3.6-107-3.600	3.600	107	90	USER	Level 0 - Calcu-lated - Std. 108dB - 04-2016 (inkl. lavfrekvent)	107,4	108	96,3	98,7
109	570715000000091735: 3600 kW SIEMENS - Ulfborg	Siemens	SWT-3.6-107-3.600	3.600	107	90	USER	Level 0 - Calcu-lated - Std. 108dB - 04-2016 (inkl. lavfrekvent)	107,4	108	96,3	98,7
110	570715000000091742: 3600 kW SIEMENS - Ulfborg	Siemens	SWT-3.6-107-3.600	3.600	107	90	USER	Level 0 - Calcu-lated - Std. 108dB - 04-2016 (inkl. lavfrekvent)	107,4	108	96,3	98,7

111	571313134700402980: 3450 kW Vestas Wind Systems A/S - Vemb	VESTAS	V112-3.45-3.450	3.450	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
112	571313134700402997: 3450 kW Vestas Wind Systems A/S - Vemb	VESTAS	V112-3.45-3.450	3.450	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
113	571313134700403000: 3450 kW Vestas Wind Systems A/S - Vemb	VESTAS	V112-3.45-3.450	3.450	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
114	571313134700403017: 3450 kW Vestas Wind Systems A/S - Vemb	VESTAS	V112-3.45-3.450	3.450	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
115	571313134700403024: 3450 kW Vestas Wind Systems A/S - Vemb	VESTAS	V112-3.45-3.450	3.450	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
116	571313134700403031: 3450 kW Vestas Wind Systems A/S - Vemb	VESTAS	V112-3.45-3.450	3.450	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
117	571313134700403048: 3450 kW Vestas Wind Systems A/S - Vemb	VESTAS	V112-3.45-3.450	3.450	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
118	571313134700403055: 3450 kW Vestas Wind Systems A/S - Vemb	VESTAS	V112-3.45-3.450	3.450	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
119	571313134700403062: 3450 kW Vestas Wind Systems A/S - Vemb	VESTAS	V112-3.45-3.450	3.450	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
120	571313134700403079: 3450 kW Vestas Wind Systems A/S - Bur	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	84	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
121	571313134700403086: 3450 kW Vestas Wind Systems A/S - Bur	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	84	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
122	571313134700403093: 3450 kW Vestas Wind Systems A/S - Bur	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	84	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
123	571313134700404144: 2200 kW Vestas Wind Systems A/S - Bur	VESTAS	V100-2.200	2.200	100	75	EMD	Level 0 - Expected - Mode 0-0S - 11-2016	103,9	105	91,3	92,3
124	571313134700404151: 2200 kW Vestas Wind Systems A/S - Bur	VESTAS	V100-2.200	2.200	100	75	EMD	Level 0 - Expected - Mode 0-0S - 11-2016	103,9	105	91,3	92,3
125	571313134700404168: 2200 kW Vestas Wind Systems A/S - Bur	VESTAS	V100-2.200	2.200	100	75	EMD	Level 0 - Expected - Mode 0-0S - 11-2016	103,9	105	91,3	92,3
126	571313134700404175: 2200 kW Vestas Wind Systems A/S - Bur	VESTAS	V100-2.200	2.200	100	75	EMD	Level 0 - Expected - Mode 0-0S - 11-2016	103,9	105	91,3	92,3
127	571313134700404182: 2200 kW Vestas Wind Systems A/S - Bur	VESTAS	V100-2.200	2.200	100	75	EMD	Level 0 - Expected - Mode 0-0S - 11-2016	103,9	105	91,3	92,3
128	571313134700404199: 2200 kW Vestas Wind Systems A/S - Bur	VESTAS	V100-2.200	2.200	100	75	EMD	Level 0 - Expected - Mode 0-0S - 11-2016	103,9	105	91,3	92,3

129	571313134700404335: 3450 kW Vestas Wind Systems A/S - Idom	VESTAS	V112-3.45-3.450	3.450	112	84	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
130	571313134700404342: 3450 kW Vestas Wind Systems A/S - Råsted	VESTAS	V112-3.45-3.450	3.450	112	84	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
131	571313134700404359: 3450 kW Vestas Wind Systems A/S - Råsted	VESTAS	V112-3.45-3.450	3.450	112	84	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
132	571313134700404366: 3450 kW Vestas Wind Systems A/S - Råsted	VESTAS	V112-3.45-3.450	3.450	112	84	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
133	570715000000037108: 600 kW BONUS - Harboøre	BONUS	MK IV-600/120	600	44	46	USER	600 kW - Data fra: Støj fra Vind-møller - Vejled-ning fra Miljøsty-relsen nr. 1, 2012	100	101,1	89,3	90,8
134	570715000000037573: 750 kW NEG Micon - Rom	NEG MICON	NM44/750-750/200	750	44	40,5	USER	750 kW fra Mil-jøstyrelsens vej-ledning nr. 51	101	102,8	91,9	92,9
135	570715000000037597: 500 kW Vestas Wind Systems A/S - Rom	VESTAS	V39-500	500	39	40	USER	Vestas V39-500	98,6	99,3	93,2	95,6
136	570715000000037603: 600 kW Nordex - Rom	NORDEX	N-43/600-600/125	600	43	40,5	USER	600 kW fra Mil-jøstyrelsens vej-ledning nr. 51	100	101,1	89,3	90,8
137	570715000000037818: 600 kW NEG Micon - Flynder	MICON	M1500-600/150	600	43	40	USER	600 kW fra Mil-jøstyrelsens vej-ledning nr. 51	100	101,1	89,3	90,8
138	570715000000037825: 600 kW NEG Micon - Flynder	MICON	M1500-600/150	600	43	40	USER	600 kW fra Mil-jøstyrelsens vej-ledning nr. 51	100	101,1	89,3	90,8
139	570715000000037832: 600 kW NEG Micon - Flynder	MICON	M1500-600/150	600	43	40	USER	600 kW fra Mil-jøstyrelsens vej-ledning nr. 51	100	101,1	89,3	90,8
140	570715000000037948: 600 kW NEG Micon - Bøvling	MICON	M1500-600/150	600	43	40	USER	600 kW fra Mil-jøstyrelsens vej-ledning nr. 51	100	101,1	89,3	90,8
141	570715000000037955: 600 kW NEG Micon - Bøvling	MICON	M1500-600/150	600	43	40	USER	600 kW fra Mil-jøstyrelsens vej-ledning nr. 51	100	101,1	89,3	90,8
142	570715000000037979: 600 kW NEG Micon - Flynder	MICON	M1500-600/150	600	43	40	USER	600 kW fra Mil-jøstyrelsens vej-ledning nr. 51	100	101,1	89,3	90,8
143	570715000000037986: 600 kW NEG Micon - Flynder	MICON	M1500-600/150	600	43	40	USER	600 kW fra Mil-jøstyrelsens vej-ledning nr. 51	100	101,1	89,3	90,8
144	570715000000037993: 600 kW NEG Micon - Flynder	MICON	M1500-600/150	600	43	40	USER	600 kW fra Mil-jøstyrelsens vej-ledning nr. 51	100	101,1	89,3	90,8
149	570715000000038433: 600 kW Vestas Wind Systems A/S - Nees	VESTAS	V44-600	600	44	45	USER	Vestas V44-600	99,4	100	93,3	95,7
150	570715000000038440: 600 kW Vestas Wind Systems A/S - Nees	VESTAS	V44-600	600	44	45	USER	Vestas V44-600	99,4	100	93,3	95,7

151	570715000000038457: 600 kW Vestas Wind Systems A/S - Nees	VESTAS	V44-600	600	44	45	USER	Vestas V44-600	99,4	100	93,3	95,7
152	570715000000038464: 600 kW Vestas Wind Systems A/S - Nees	VESTAS	V44-600	600	44	45	USER	Vestas V44-600	99,4	100	93,3	95,7
153	570715000000038471: 600 kW Vestas Wind Systems A/S - Nees	VESTAS	V44-600	600	44	45	USER	Vestas V44-600	99,4	100	93,3	95,7
154	570715000000059452: 750 kW NEG Micon - Lomborg	NEG MICON	NM48/750-750/200	750	48,2	45,5	USER	750 kW fra Miljøstyrelsens vejledning nr. 51	101	102,8	91,9	92,9
155	570715000000059469: 750 kW NEG Micon - Lomborg	NEG MICON	NM48/750-750/200	750	48,2	45,5	USER	750 kW fra Miljøstyrelsens vejledning nr. 51	101	102,8	91,9	92,9
156	570715000000059476: 750 kW NEG Micon - Lomborg	NEG MICON	NM48/750-750/200	750	48,2	45,5	USER	750 kW fra Miljøstyrelsens vejledning nr. 51	101	102,8	91,9	92,9
157	570715000000059483: 750 kW NEG Micon - Lomborg	NEG MICON	NM48/750-750/200	750	48,2	45,5	USER	750 kW fra Miljøstyrelsens vejledning nr. 51	101	102,8	91,9	92,9
158	570715000000059537: 2000 kW Vestas Wind Systems A/S - Harboøre	VESTAS	V80-2.0MW offshore-2.000	2.000	80	78	USER	Miljømåling - Ekstern Støj, Dokumentation af støj fra vindmøller ved Prøvestenen - T3	102,6	104,6	89	91,5
159	570715000000059544: 2000 kW Vestas Wind Systems A/S - Harboøre	VESTAS	V80-2.0MW offshore-2.000	2.000	80	78	USER	Miljømåling - Ekstern Støj, Dokumentation af støj fra vindmøller ved Prøvestenen - T3	102,6	104,6	89	91,5
160	570715000000062568: 2000 kW Vestas Wind Systems A/S - Harboøre	VESTAS	V80-2.0MW offshore-2.000	2.000	80	78	USER	Miljømåling - Ekstern Støj, Dokumentation af støj fra vindmøller ved Prøvestenen - T3	102,6	104,6	89	91,5
161	570715000000062575: 2000 kW Vestas Wind Systems A/S - Harboøre	VESTAS	V80-2.0MW offshore-2.000	2.000	80	78	USER	Miljømåling - Ekstern Støj, Dokumentation af støj fra vindmøller ved Prøvestenen - T3	102,6	104,6	89	91,5
162	570715000000062599: 2300 kW BONUS - Harboøre	BONUS	2.3 MW-2.300/400	2.300	82,4	78,8	USER	2MW fra Miljøstyrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
163	570715000000062605: 2300 kW BONUS - Ukendt	BONUS	2.3 MW-2.300/400	2.300	82,4	78,8	USER	2MW fra Miljøstyrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
164	570715000000062612: 2300 kW BONUS - Harboøre	BONUS	2.3 MW-2.300/400	2.300	82,4	78,8	USER	2MW fra Miljøstyrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
165	570715000000062629: 2300 kW BONUS - Harboøre	BONUS	2.3 MW-2.300/400	2.300	82,4	78,8	USER	2MW fra Miljøstyrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
170	570715000000087066: 3600 kW SIEMENS - Nees	Siemens	SWT-3.6-120-3.600	3.600	120	89,9	USER	Level 0 - Calculated - Std. 108dB - 04-2016	107,4	108	96,3	98,7

								(inkl. lavfrekvent)				
171	570715000000087073: 3600 kW SIEMENS - Nees	Siemens	SWT-3.6-120-3.600	3.600	120	89,9	USER	Level 0 - Calculated - Std. 108dB - 04-2016 (inkl. lavfrekvent)	107,4	108	96,3	98,7
172	570715000000087080: 3600 kW SIEMENS - Nees	Siemens	SWT-3.6-120-3.600	3.600	120	89,9	USER	Level 0 - Calculated - Std. 108dB - 04-2016 (inkl. lavfrekvent)	107,4	108	96,3	98,7
173	570715000000087097: 3000 kW Vestas Wind Systems A/S - Nees	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
174	570715000000087103: 3000 kW Vestas Wind Systems A/S - Nees	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
175	570715000000087110: 3000 kW Vestas Wind Systems A/S - Nees	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
176	570715000000107573: 3075 kW Vestas Wind Systems A/S - Møborg	VESTAS	V112-3.075	3.075	112	84	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
177	570715000000107610: 3075 kW Vestas Wind Systems A/S - Møborg	VESTAS	V112-3.075	3.075	112	84	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
178	570715000000107627: 3075 kW Vestas Wind Systems A/S - Møborg	VESTAS	V112-3.075	3.075	112	84	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
184	571313134700402386: 3300 kW Ukendt - Møborg	VESTAS	V117-3.3 Grid-Streame-3.300	3.300	117	91,5	USER	SWT-3.6-120	107,4	108	98,7	98,1
185	571313134700402393: 3300 kW Ukendt - Møborg	VESTAS	V117-3.3 Grid-Streame-3.300	3.300	117	91,5	USER	SWT-3.6-120	107,4	108	98,7	98,1
186	571313134700402409: 3300 kW Vestas Wind Systems A/S - Møborg	VESTAS	V117-3.3 Grid-Streame-3.300	3.300	117	91,5	USER	SWT-3.6-120	107,4	108	98,7	98,1
187	571313134700402416: 3300 kW Ukendt - Møborg	VESTAS	V117-3.3 Grid-Streame-3.300	3.300	117	91,5	USER	SWT-3.6-120	107,4	108	98,7	98,1
188	571313134700402423: 3300 kW Ukendt - Møborg	VESTAS	V117-3.3 Grid-Streame-3.300	3.300	117	91,5	USER	SWT-3.6-120	107,4	108	98,7	98,1
195	571313134700403918: 2000 kW Vestas Wind Systems A/S - Nees	VESTAS	V80-2.0MW-2.000	2.000	80	80	USER	2MW fra Miljø-styrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
196	571313134700403925: 2000 kW Vestas Wind Systems A/S - Nees	VESTAS	V80-2.0MW-2.000	2.000	80	80	USER	2MW fra Miljø-styrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
197	571313134700403932: 2000 kW Vestas Wind Systems A/S - Nees	VESTAS	V80-2.0MW-2.000	2.000	80	80	USER	2MW fra Miljø-styrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
199	571313134700404373: 3600 kW Vestas Wind Systems A/S - Flynder	VESTAS	V126-3.6 HTq-3.600	3.600	126	87	EMD	Mode PO1 - Measured - Mode PO1. With serrations - 11-2016	103,3	104,9	90,9	92
2.000 kW - Vestas - Bøvling	571313134700404328: 2000 kW Vestas Wind Systems A/S - Bøvling	VESTAS	V110-2.0-2.000	2.000	110	95	USER	2MW fra Miljø-styrelsens vejledning nr. 51	104,8	106,7	92,9	95,2

2.000 kW - Vestas - Ramme N	570715000000147364: 2000 kW Vestas Wind Systems A/S - Ramme Hgd. Ramm	VESTAS	V80-2.0MW off-shore-2.000	2.000	80	60	USER	2MW fra Miljø-styrelsen vejled-ning nr. 51	104,8	106,7	92,9	95,2
2.000 kW - Vestas - Ramme N	570715000000147319: 2000 kW Vestas Wind Systems A/S - Ramme Hgd. Ramm	VESTAS	V80-2.0MW off-shore-2.000	2.000	80	60	USER	2MW fra Miljø-styrelsen vejled-ning nr. 51	104,8	106,7	92,9	95,2
2.000 kW - Vestas - Ramme N	570715000000147371: 2000 kW Vestas Wind Systems A/S - Ramme Hovedgård	VESTAS	V80-2.0MW off-shore-2.000	2.000	80	60	USER	2MW fra Miljø-styrelsen vejled-ning nr. 51	104,8	106,7	92,9	95,2
2.000 kW - Vestas - Ramme N	570715000000147166: 2000 kW Vestas Wind Systems A/S - Ramme Hgd. Ramm	VESTAS	V80-2.0MW off-shore-2.000	2.000	80	60	USER	2MW fra Miljø-styrelsen vejled-ning nr. 51	104,8	106,7	92,9	95,2
2.000 kW - Vestas - Ramme N	570715000000083365: 2000 kW Vestas Wind Systems A/S - ramme	VESTAS	V80-2.0MW off-shore-2.000	2.000	80	60	USER	2MW fra Miljø-styrelsen vejled-ning nr. 51	104,8	106,7	92,9	95,2
2.000 kW - Vestas - Ramme N	570715000000120312: 2000 kW Ukendt - Ramme	VESTAS	V80-2.0MW off-shore-2.000	2.000	80	60	USER	2MW fra Miljø-styrelsen vejled-ning nr. 51	104,8	106,7	92,9	95,2
200	571313134700404380: 3600 kW Vestas Wind Systems A/S - Flynder	VESTAS	V126-3.6 HTq-3.600	3.600	126	87	EMD	Mode PO1 - Measured - Mode PO1. With serrations - 11-2016	103,3	104,9	90,9	92
201	571313134700404397: 3600 kW Vestas Wind Systems A/S - Flynder	VESTAS	V126-3.6 HTq-3.600	3.600	126	87	EMD	Mode PO1 - Measured - Mode PO1. With serrations - 11-2016	103,3	104,9	90,9	92
202	571313134700404403: 3600 kW Vestas Wind Systems A/S - Flynder	VESTAS	V126-3.6 HTq-3.600	3.600	126	87	EMD	Mode PO1 - Measured - Mode PO1. With serrations - 11-2016	103,3	104,9	90,9	92
203	571313134700404410: 3600 kW Vestas Wind Systems A/S - Flynder	VESTAS	V126-3.6 HTq-3.600	3.600	126	87	EMD	Mode PO1 - Measured - Mode PO1. With serrations - 11-2016	103,3	104,9	90,9	92
207	571313134701404280: 7000 kW Siemens Wind Power A/S - 99999x	Siemens	SWT-8.0-167-8.000	8.000	167	85,3	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
208	571313134702404289: 7000 kW Siemens Wind Power A/S - 99999X	Siemens	SWT-8.0-167-8.000	8.000	167	85,3	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
209	571313134703404288: 7000 kW Siemens Wind Power A/S - 99999X	Siemens	SWT-8.0-167-8.000	8.000	167	85,3	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
210	571313134704404287: 7000 kW Siemens Wind Power A/S - 99999X	Siemens	SWT-8.0-167-8.000	8.000	167	85,3	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
211	570715000000039232: 1000 kW BONUS - Fousing	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
212	570715000000039249: 1000 kW BONUS - Fousing	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra	100,7	102,9	91,7	93,9

								Miljøstyrelsens vejledning nr. 51				
213	570715000000039256: 1000 kW BONUS - Fousing	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
214	570715000000039263: 1000 kW BONUS - Fousing	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
215	570715000000039270: 1000 kW BONUS - Fousing	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
216	570715000000039287: 1000 kW BONUS - Fousing	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
217	570715000000039294: 1000 kW BONUS - Fousing	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
218	570715000000039300: 1000 kW BONUS - Fousing	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
219	570715000000039362: 1000 kW BONUS - Asp	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
220	570715000000039379: 1000 kW BONUS - Asp	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
221	570715000000039386: 1000 kW BONUS - Asp	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
222	570715000000176180: 3000 kW SIEMENS - Kvistrup Hgd. G	Siemens	SWT-3.0-101-3.000	3.000	101	79,5	EMD	Level 0 - Calcu-lated - Std. 107dB - 4-2016 rev4	104,5	107	91,7	94,8
223	570715000000176517: 3000 kW SIEMENS - Kvistrup Hgd. G	Siemens	SWT-3.0-101-3.000	3.000	101	79,5	EMD	Level 0 - Calcu-lated - Std. 107dB - 4-2016 rev4	104,5	107	91,7	94,8
224	570715000000176524: 3000 kW SIEMENS - Gimsing	Siemens	SWT-3.0-101-3.000	3.000	101	79,5	EMD	Level 0 - Calcu-lated - Std. 107dB - 4-2016 rev4	104,5	107	91,7	94,8
225	570715000002018785: 5000 kW Ukendt - Struer	Niras	Modelmølle-5.600	5.600	160	84	USER	Kopi fra Vestas 5,6 Level 0 - Measured - Mode 0 - 01-2019	103,6	104,9	92,8	94,3
226	570715000002018792: 5000 kW Ukendt - Struer	Niras	Modelmølle-5.600	5.600	160	84	USER	Kopi fra Vestas 5,6 Level 0 - Measured -	103,6	104,9	92,8	94,3

								Mode 0 - 01-2019				
227	570715000002018808: 5000 kW Ukendt - Struer	Niras	Modelmølle-5.600	5.600	160	84	USER	Kopi fra Vestas 5,6 Level 0 - Measured - Mode 0 - 01-2019	103,6	104,9	92,8	94,3
228	571313134700402300: 3075 kW Vestas Wind Systems A/S - Vejrum	VESTAS	V112-3.075	3.075	112	84	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
229	571313134700402317: 3075 kW Vestas Wind Systems A/S - Vejrum	VESTAS	V112-3.075	3.075	112	84	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
230	571313134700402324: 3075 kW Vestas Wind Systems A/S - Vejrum	VESTAS	V112-3.075	3.075	112	84	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
231	571313134700402331: 3075 kW Vestas Wind Systems A/S - Vejrum	VESTAS	V112-3.075	3.075	112	84	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
232	570715000000059582: 1500 kW NEG Micon - Vedersø	NEG MICON	NM64C/1500-1.500/400	1.500	64	68	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
233	570715000000059599: 1500 kW NEG Micon - Vedersø	NEG MICON	NM64C/1500-1.500/400	1.500	64	68	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
234	570715000000059605: 1500 kW NEG Micon - Vedersø	NEG MICON	NM64C/1500-1.500/400	1.500	64	68	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
235	570715000000059612: 1500 kW NEG Micon - Vedersø	NEG MICON	NM64C/1500-1.500/400	1.500	64	68	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
236	570715000000059629: 1500 kW NEG Micon - Vedersø	NEG MICON	NM64C/1500-1.500/400	1.500	64	68	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
237	570715000000059636: 1500 kW NEG Micon - Vedersø	NEG MICON	NM64C/1500-1.500/400	1.500	64	68	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
238	570715000000059643: 1500 kW NEG Micon - Vedersø	NEG MICON	NM64C/1500-1.500/400	1.500	64	68	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
239	570715000000063930: 1500 kW NEG Micon - Tim	NEG MICON	NM64C/1500-1.500/400	1.500	64	68	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
240	570715000000063947: 1500 kW NEG Micon - Tim	NEG MICON	NM64C/1500-1.500/400	1.500	64	68	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
241	570715000000063954: 1500 kW NEG Micon - Tim	NEG MICON	NM64C/1500-1.500/400	1.500	64	68	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9

242	570715000000063978: 850 kW Vestas Wind Systems A/S - Holmsland klit	VESTAS	V52-850	850	52	49	USER	Kildestyrke taget fra SWECO rapport: Miljømåling – Ekstern Støj: Bekendtgørelse nr. 1736	98,4	99,5	81,3	83,1
243	570715000000083648: 2300 kW SIEMENS - No	Siemens	SWT-2.3-93-2.300	2.300	92,6	80	EMD	Level 0 - SWT-2.3-93 Rev.4. 105.4dB(A)	103,8	105,4	92,4	93,7
244	570715000000083655: 2300 kW SIEMENS - No	Siemens	SWT-2.3-93-2.300	2.300	92,6	80	EMD	Level 0 - SWT-2.3-93 Rev.4. 105.4dB(A)	103,8	105,4	92,4	93,7
245	570715000000083730: 2300 kW SIEMENS - No	Siemens	SWT-2.3-93-2.300	2.300	92,6	80	EMD	Level 0 - SWT-2.3-93 Rev.4. 105.4dB(A)	103,8	105,4	92,4	93,7
246	570715000000087189: 1800 kW Vestas Wind Systems A/S - Brejning	VESTAS	V90-1.800	1.800	90	80	USER	2MW fra Miljøstyrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
247	570715000000087196: 1800 kW Vestas Wind Systems A/S - Brejning	VESTAS	V90-1.800	1.800	90	80	USER	2MW fra Miljøstyrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
248	570715000000087202: 1800 kW Vestas Wind Systems A/S - Brejning	VESTAS	V90-1.800	1.800	90	80	USER	2MW fra Miljøstyrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
249	570715000000087219: 1800 kW Vestas Wind Systems A/S - Brejning	VESTAS	V90-1.800	1.800	90	80	USER	2MW fra Miljøstyrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
250	570715000000090899: 3000 kW Vestas Wind Systems A/S - Nysogn	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
251	570715000000090905: 3000 kW Vestas Wind Systems A/S - Nysogn	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
252	570715000000090912: 3000 kW Vestas Wind Systems A/S - Nysogn	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
253	570715000000090929: 3000 kW Vestas Wind Systems A/S - Strandgårde Gam	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
254	570715000000090936: 3000 kW Vestas Wind Systems A/S - Strandgårde Gam	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
255	570715000000146398: 3075 kW Vestas Wind Systems A/S - Sdr. Lem	VESTAS	V112-3.075	3.075	112	94	USER	Kopi af SWT 3.0 108	104,6	107	91,7	93,8
256	570715000000146411: 3075 kW Vestas Wind Systems A/S - Sdr. Lem	VESTAS	V112-3.075	3.075	112	94	USER	Kopi af SWT 3.0 108	104,6	107	91,7	93,8
257	570715000000146428: 3075 kW Vestas Wind Systems A/S - Sdr. Lem	VESTAS	V112-3.075	3.075	112	94	USER	Kopi af SWT 3.0 108	104,6	107	91,7	93,8
258	570715000000146435: 3075 kW Vestas Wind Systems A/S - Sdr. Lem	VESTAS	V112-3.075	3.075	112	94	USER	Kopi af SWT 3.0 108	104,6	107	91,7	93,8
259	570715000000146442: 3075 kW Vestas Wind Systems A/S - Sdr. Lem	VESTAS	V112-3.075	3.075	112	94	USER	Kopi af SWT 3.0 108	104,6	107	91,7	93,8

260	570715000000146459: 3075 kW Vestas Wind Systems A/S - Sdr. Lem	VESTAS	V112-3.075	3.075	112	94	USER	Kopi af SWT 3.0 108	104,6	107	91,7	93,8
261	570715000000146480: 3075 kW Vestas Wind Systems A/S - Velling	VESTAS	V112-3.075	3.075	112	94	USER	Kopi af SWT 3.0 108	104,6	107	91,7	93,8
262	570715000000146497: 3075 kW Vestas Wind Systems A/S - Velling	VESTAS	V112-3.075	3.075	112	94	USER	Kopi af SWT 3.0 108	104,6	107	91,7	93,8
266	570715000000976124: 3300 kW Vestas Wind Systems A/S - sdr. Lem	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
267	571313134803289907: 5600 kW Vestas Wind Systems A/S - Ringkøbing-Skjern	VESTAS	V150-5.6-5.600	5.600	150	125	EMD	Level 0 - Measured - Mode 0 - 01-2019	103,8	104,9	93	94,4
268	571313134803289914: 5600 kW Vestas Wind Systems A/S - Ringkøbing-Skjern	VESTAS	V150-5.6-5.600	5.600	150	125	EMD	Level 0 - Measured - Mode 0 - 01-2019	103,8	104,9	93	94,4
275	571313134808514516: 3000 kW SIEMENS - Videbæk	Siemens	SWT-3.0-101-3.000	3.000	101	89,5	EMD	Level 0 - Calculated - Std. 107dB - 4-2016 rev4	104,8	107	92	94,8
276	571313134808514615: 3000 kW SIEMENS - Videbæk	Siemens	SWT-3.0-101-3.000	3.000	101	89,5	EMD	Level 0 - Calculated - Std. 107dB - 4-2016 rev4	104,8	107	92	94,8
277	571313134808514714: 3000 kW SIEMENS - Videbæk	Siemens	SWT-3.0-101-3.000	3.000	101	89,5	EMD	Level 0 - Calculated - Std. 107dB - 4-2016 rev4	104,8	107	92	94,8
278	571313134808514813: 3000 kW SIEMENS - Videbæk	Siemens	SWT-3.0-101-3.000	3.000	101	89,5	EMD	Level 0 - Calculated - Std. 107dB - 4-2016 rev4	104,8	107	92	94,8
279	571313134808514912: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
280	571313134808515018: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
281	571313134808515117: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
282	571313134808515216: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
283	571313134808515315: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
284	571313134808515414: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
285	571313134808515513: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
286	571313134808515612: 3300 kW Vestas Wind Systems A/S - No	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7

287	571313134808515711: 3300 kW Vestas Wind Systems A/S - No	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
288	571313134808515810: 3300 kW Vestas Wind Systems A/S - No	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
289	571313134808515919: 3300 kW Vestas Wind Systems A/S - No	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
290	571313134808516015: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
291	571313134808516114: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
292	571313134808516213: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
293	571313134808516312: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
294	571313134808516411: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
295	571313134808516510: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
296	571313134808516619: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
297	571313134808516718: 3300 kW Vestas Wind Systems A/S - Degneboligen Øl	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
298	571313134808516817: 3300 kW Vestas Wind Systems A/S - No	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
299	571313134808516916: 3300 kW Vestas Wind Systems A/S - No	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
3.300 kW - Vestas - Volder Mark	571313134700402690: 3300 kW Vestas Wind Systems A/S - Ramme	VESTAS	V117-3.3 Grid-Streame-3.300	3.300	117	91,5	USER	SWT-3.6-120	107,4	108	98,7	98,1
3.300 kW - Vestas - Volder Mark	571313134700402676: 3300 kW Vestas Wind Systems A/S - Ramme	VESTAS	V117-3.3 Grid-Streame-3.300	3.300	117	91,5	USER	SWT-3.6-120	107,4	108	98,7	98,1
3.300 kW - Vestas - Volder Mark	571313134700402669: 3300 kW Vestas Wind Systems A/S - Ramme	VESTAS	V117-3.3 Grid-Streame-3.300	3.300	117	91,5	USER	SWT-3.6-120	107,4	108	98,7	98,1
3.300 kW - Vestas - Volder Mark	571313134700402706: 3300 kW Vestas Wind Systems A/S - Ramme	VESTAS	V117-3.3 Grid-Streame-3.300	3.300	117	91,5	USER	SWT-3.6-120	107,4	108	98,7	98,1
3.300 kW - Vestas - Volder Mark	571313134700402683: 3300 kW Vestas Wind Systems A/S - Ramme	VESTAS	V117-3.3 Grid-Streame-3.300	3.300	117	91,5	USER	SWT-3.6-120	107,4	108	98,7	98,1

3.300 kW - Vestas - Volder Mark	571313134700402713: 3300 kW Vestas Wind Systems A/S - Ramme	VESTAS	V117-3.3 Grid-Streame-3.300	3.300	117	91,5	USER	SWT-3.6-120	107,4	108	98,7	98,1
3.600 kW - Siemens - Bøvling	570715000000087028: 3600 kW SIEMENS - Bøvling	Siemens	SWT-3.6-107-3.600	3.600	107	80	USER	Level 0 - Calculated - Std. 108dB - 04-2016 (inkl. lavfrekvent)	107,4	108	96,3	98,7
3.600 kW - Siemens - Bøvling	570715000000087042: 3600 kW SIEMENS - Bøvling	Siemens	SWT-3.6-107-3.600	3.600	107	80	USER	Level 0 - Calculated - Std. 108dB - 04-2016 (inkl. lavfrekvent)	107,4	108	96,3	98,7
3.600 kW - Siemens - Bøvling	570715000000087035: 3600 kW SIEMENS - Bøvling	Siemens	SWT-3.6-107-3.600	3.600	107	80	USER	Level 0 - Calculated - Std. 108dB - 04-2016 (inkl. lavfrekvent)	107,4	108	96,3	98,7
300	571313134808517012: 3300 kW Vestas Wind Systems A/S - No	VESTAS	V112-3.3 Grid-streame-3.300	3.300	112	94	USER	Kopi af Level 0 - Calculated - Std. 106dB - 04-2016	105,8	106	94,8	95,7
301	571313134808517418: 3000 kW Vestas Wind Systems A/S - Nysogn	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
302	571313134808517517: 3000 kW Vestas Wind Systems A/S - Nysogn	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
303	571313134808517616: 3000 kW Vestas Wind Systems A/S - Nysogn	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
304	571313134808517715: 3000 kW Vestas Wind Systems A/S - Nysogn	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
305	571313134808517814: 3000 kW Vestas Wind Systems A/S - Nysogn	VESTAS	V90-3.000	3.000	90	80	USER	Kopi af SWT 3.0 108	104,2	107	91,3	93,8
306	571313134890184260: 3600 kW Vestas Wind Systems A/S - Sdr Lem	VESTAS	V117-3.6-3.600	3.600	117	91,5	EMD	Mode PO1-0S - Measured - Mode PO1-0S. No serrations - 08-2018	107,4	109,6	95,8	98,1
307	571313134890188473: 2200 kW Vestas Wind Systems A/S - Ringkøbing-Skjern	Niras	Modelmølle-2.000	2.000	90	89,5	USER	2MW fra Miljøstyrelsen vejledning nr. 51	104,8	106,7	92,9	95,2
308	570715000000031212: 600 kW Vestas Wind Systems A/S - Vestervig	VESTAS	V42-600	600	42	40,5	USER	600 kW fra Miljøstyrelsens vejledning nr. 51	100	101,1	89,3	90,8
309	570715000000031403: 600 kW Vestas Wind Systems A/S - Vestervig	VESTAS	V42-600	600	42	45	USER	600 kW fra Miljøstyrelsens vejledning nr. 51	100	101,1	89,3	90,8
310	570715000000031878: 600 kW Vestas Wind Systems A/S - Kobberø by	VESTAS	V42-600	600	42	45	USER	600 kW fra Miljøstyrelsens vejledning nr. 51	100	101,1	89,3	90,8
311	570715000000083426: 2000 kW Vestas Wind Systems A/S - Gettrup	VESTAS	V80-2.0MW offshore-2.000	2.000	80	67	USER	Miljømåling - Ekstern Støj, Dokumentation af støj fra vindmøller ved Prøvestenen - T3	102,6	104,6	89	91,5

312	570715000000083440: 2000 kW Vestas Wind Systems A/S - Gettrup	VESTAS	V80-2.0MW off-shore-2.000	2.000	80	67	USER	Miljømåling - Ekstern Støj, Dokumentation af støj fra vindmøller ved Prøvestenen - T3	102,6	104,6	89	91,5
313	570715000000083457: 2000 kW Vestas Wind Systems A/S - Gettrup	VESTAS	V80-2.0MW off-shore-2.000	2.000	80	67	USER	Miljømåling - Ekstern Støj, Dokumentation af støj fra vindmøller ved Prøvestenen - T3	102,6	104,6	89	91,5
314	570715000000083471: 2000 kW Vestas Wind Systems A/S - Gettrup	VESTAS	V80-2.0MW off-shore-2.000	2.000	80	67	USER	Miljømåling - Ekstern Støj, Dokumentation af støj fra vindmøller ved Prøvestenen - T3	102,6	104,6	89	91,5
315	570715000000083488: 2000 kW Vestas Wind Systems A/S - Gettrup	VESTAS	V80-2.0MW off-shore-2.000	2.000	80	67	USER	Miljømåling - Ekstern Støj, Dokumentation af støj fra vindmøller ved Prøvestenen - T3	102,6	104,6	89	91,5
316	570715000000083495: 2000 kW Vestas Wind Systems A/S - Gettrup	VESTAS	V80-2.0MW off-shore-2.000	2.000	80	67	USER	Miljømåling - Ekstern Støj, Dokumentation af støj fra vindmøller ved Prøvestenen - T3	102,6	104,6	89	91,5
4.300 kW - Siemens - Bøvling	571313134700404441: 4300 kW SIEMENS - Bøvling	Siemens	SWT-DD-130-4.300	4.300	130	99,5	USER	Mode 0-0S - Measured - Mode 0-0S, no serrations - 04-2018	106,5	106,8	93,4	92,8
5.000 kW - Siemens - Rysensten	571313134700404458: 5000 kW Siemens Wind Power A/S - Rysensten Hgd	Siemens Gamesa	SG 5.0-132 MkII-5.000	5.000	132	127,5	USER	Kopi fra Vestas 5.6 Level 0 - Measured - Mode 0 - 01-2019	103,8	104,9	93	94,4
6.000 kW - Alrum/Tim	571313134808513519: 6000 kW Siemens Wind Power A/S - Tim	Siemens Gamesa	SG 6.0-170-6.200	6.200	170	89	USER	SG 6.0-155, taget fra Miljøgodkendelse for møller Øst for Blåhøj, -1dB bredspektret fra VVM ved Tim, Lavfrekvent justere ifm mail fra Siemens	104	104	96,1	95,2
6.000 kW - Alrum/Tim	571313134808513618: 6000 kW Siemens Wind Power A/S - Tim	Siemens Gamesa	SG 6.0-170-6.200	6.200	170	89	USER	SG 6.0-155, taget fra Miljøgodkendelse for møller Øst for Blåhøj, -1dB bredspektret fra VVM ved Tim, Lavfrekvent justere ifm mail fra Siemens	104	104	96,1	95,2

6.000 kW - Alrum/Tim	571313134808512710: 6000 kW Siemens Wind Power A/S - Den nordlige d	Siemens Gamesa	SG 6.0-170-6.200	6.200	170	89	USER	SG 6.0-155, taget fra Miljøgodkendelse for møller Øst for Blåhøj, -1dB bredspektret fra VVM ved Tim, Lavfrekvent justere ifm mail fra Siemens	104	104	96,1	95,2
6.000 kW - Alrum/Tim	571313134808513410: 6000 kW Siemens Wind Power A/S - Tim	Siemens Gamesa	SG 6.0-170-6.200	6.200	170	89	USER	SG 6.0-155, taget fra Miljøgodkendelse for møller Øst for Blåhøj, -1dB bredspektret fra VVM ved Tim, Lavfrekvent justere ifm mail fra Siemens	104	104	96,1	95,2
6.000 kW - Alrum/Tim	571313134808513717: 6000 kW Siemens Wind Power A/S - Tim	Siemens Gamesa	SG 6.0-170-6.200	6.200	170	89	USER	SG 6.0-155, taget fra Miljøgodkendelse for møller Øst for Blåhøj, -1dB bredspektret fra VVM ved Tim, Lavfrekvent justere ifm mail fra Siemens	104	104	96,1	95,2
6.000 kW - Alrum/Tim	571313134808513311: 6000 kW Siemens Wind Power A/S - Tim	Siemens Gamesa	SG 6.0-170-6.200	6.200	170	89	USER	SG 6.0-155, taget fra Miljøgodkendelse for møller Øst for Blåhøj, -1dB bredspektret fra VVM ved Tim, Lavfrekvent justere ifm mail fra Siemens	104	104	96,1	95,2
6.600 kW - Siemens - Lemvig	571313134700404526: 6600 kW Siemens Wind Power A/S - Lemvig	Siemens Gamesa	SG 6.0-155-6.600	6.600	155	115	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
73	570715000000039102: 1000 kW BONUS - Vinding	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrelsens vejledning nr. 51	100,7	102,9	91,7	93,9
74	570715000000039119: 1000 kW BONUS - Vinding	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrelsens vejledning nr. 51	100,7	102,9	91,7	93,9
75	570715000000039126: 1000 kW BONUS - Vinding	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrelsens vejledning nr. 51	100,7	102,9	91,7	93,9
750 kW - NEG Micon - Fjaltring S	570715000000038228: 750 kW NEG Micon - Fjaltring	MICON	M1500-750/175	750	44	40,4	USER	Taget fra Støjkatalog over ældre Vindmøller i Danmark og miljøstyrelsens vejledning nr. 51	97,7	98,5	91,9	92,9

750 kW - NEG Micon - Fjaltring S	570715000000038235: 750 kW NEG Micon - Fjaltring	MICON	M1500-750/175	750	44	40,4	USER	Taget fra Støjkatalog over ældre Vindmøller i Danmark og miljøstyrelsens vejledning nr. 51	97,7	98,5	91,9	92,9
750 kW - NEG Micon - Fjaltring S	570715000000038242: 750 kW NEG Micon - Fjaltring	MICON	M1500-750/175	750	44	40,4	USER	Taget fra Støjkatalog over ældre Vindmøller i Danmark og miljøstyrelsens vejledning nr. 51	97,7	98,5	91,9	92,9
76	570715000000039133: 1000 kW BONUS - Vinding	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrelsens vejledning nr. 51	100,7	102,9	91,7	93,9
77	571313134808514219: 3075 kW Vestas Wind Systems A/S - Heden Timring	VESTAS	V112-3.075	3.075	112	94	USER	Kopi af SWT 3.0 108	104,6	107	91,7	93,8
78	571313134808514318: 3075 kW Vestas Wind Systems A/S - Heden Timring	VESTAS	V112-3.075	3.075	112	94	USER	Kopi af SWT 3.0 108	104,6	107	91,7	93,8
79	571313134808514417: 3075 kW Vestas Wind Systems A/S - Heden Timring	VESTAS	V112-3.075	3.075	112	94	USER	Kopi af SWT 3.0 108	104,6	107	91,7	93,8
80	570715000000037924: 500 kW Vestas Wind Systems A/S - Nees	VESTAS	V39-500	500	39	40,5	USER	Vestas V39-500	98,6	99,3	93,2	95,6
81	570715000000038273: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
82	570715000000038280: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
83	570715000000038297: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
84	570715000000038303: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
85	570715000000038310: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
86	570715000000038327: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
87	570715000000038334: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
88	570715000000038341: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
89	570715000000038358: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
90	570715000000038365: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
91	570715000000038372: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
92	570715000000038389: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
93	570715000000038396: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7

94	570715000000038402: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
95	570715000000038419: 600 kW Vestas Wind Systems A/S - Bur	VESTAS	V44-600	600	44	50	USER	Vestas V44-600	99,4	100	93,3	95,7
96	570715000000038617: 750 kW NEG Micon - Gørding	MICON	M1500-750/175	750	44	50	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
97	570715000000038624: 750 kW NEG Micon - Gørding	MICON	M1500-750/175	750	44	50	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
98	570715000000038631: 750 kW NEG Micon - Gørding	MICON	M1500-750/175	750	44	50	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
99	570715000000039331: 1000 kW BONUS - Idom	BONUS	1.0 MW-1.000/200	1.000	54,2	47,8	USER	1.000-2.000 kW, Fra Miljøstyrel-sens vejledning nr. 51	100,7	102,9	91,7	93,9
Mølle 01 - Hvide sande havn	570715000000152740: 3075 kW Vestas Wind Systems A/S - Holmsland Klit	VESTAS	V112-3.075	3.075	112	88	USER	Kildestyrke taget fra Grontmij raspport: Miljø-måling – Ekstern Støj: Bekendtgø-relse nr. 1518 (Mølle 01), 2012	101,8	103	90,9	92,9
Mølle 02 - Hvide sande havn	570715000000152757: 3075 kW Vestas Wind Systems A/S - Holmsland Klit	VESTAS	V112-3.075	3.075	112	88	USER	Kildestyrke taget fra Grontmij raspport: Miljø-måling – Ekstern Støj: Bekendtgø-relse nr. 1518 (Mølle 02), 2012	103,3	105,6	91,3	96
Mølle 03 - Hvide Sande havn	570715000000152764: 3075 kW Vestas Wind Systems A/S - Holmsland Klit	VESTAS	V112-3.075	3.075	112	88	USER	Kildestyrke taget fra Grontmij raspport: Miljø-måling – Ekstern Støj: Bekendtgø-relse nr. 1518 (Mølle 03), 2012	103,5	104,8	92,8	93,8
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (671)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (669)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (670)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (672)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (668)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5

Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (674)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (667)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (673)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (675)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (676)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (666)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (658)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (659)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (657)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (662)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (656)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (664)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (665)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (663)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (660)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Nord	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (661)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (690)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (689)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5

Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (688)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (691)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (687)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (686)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (694)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (692)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (693)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (678)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (679)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (677)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (696)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (695)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (680)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (684)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (685)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (683)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (681)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5
Vesterhav Syd	Siemens SWT-8.0-167 8000 167.0 !O! nav: 109,0 m (TOT:192,5 m) (682)	Siemens	SWT-8.0-167-8.000	8.000	167	109	USER	Kopi af SWT-8.0-167 | Fra EMD Vesterhav Syd	108,4	111,7	93,9	98,5

Appendix 02: Source data, Danish Environmental Agency

6 m/s:									
Fre-kvens, Hz	**0 - 100 kW**	**100 - 300 kW**	**300 - 600 kW**	**600 kW**	**660 kW**	**750 kW**	**750 kW - 1 MW**	**1 - 2 MW**	**2 MW**
10	27,8	30,1	39,3	44,4	48,5	40,4	37,8	37,6	50,8
12,5	32,4	35,3	43,8	48,4	52,3	45,5	40,9	44,1	54,5
16	37,8	41,2	48,8	52,8	56,1	48,5	47,7	50,3	58,6
20	41,5	46,4	53,3	56,9	59,7	54,8	52,9	57,1	62,3
25	47,0	52,1	57,7	60,3	65,4	66,0	58,1	62,1	66,2
31,5	51,7	57,3	63,0	66,5	68,3	68,1	62,0	65,7	69,7
40	56,9	60,9	66,9	68,2	71,7	70,9	67,5	70,2	74,0
50	60,7	69,1	72,1	73,6	75,5	74,6	72,6	75,2	77,6
63	64,5	69,7	73,3	74,9	80,9	78,5	73,0	78,9	80,5
80	67,3	73,8	77,4	78,5	81,9	81,9	76,9	81,4	82,5
100	66,2	76,9	84,9	82,1	83,2	84,1	81,3	83,9	84,4
125	68,4	79,7	84,3	83,8	87,2	87,0	82,0	86,3	88,5
160	71,2	82,1	86,3	84,9	86,8	87,1	85,8	87,4	87,5
200	74,9	88,9	86,7	86,6	88,0	88,8	88,5	89,3	88,5
250	77,9	92,2	88,7	88,1	89,2	90,1	86,8	89,0	91,3
315	85,3	86,5	88,5	88,5	90,1	89,1	87,5	89,6	93,0
400	81,5	92,5	88,4	89,9	92,0	88,4	88,7	88,8	92,2
500	81,9	90,1	88,0	89,6	91,7	90,9	90,5	88,6	94,5
630	85,1	89,2	89,9	89,8	93,0	89,6	91,4	89,5	94,8
800	83,0	87,9	88,0	89,5	92,5	89,6	90,8	89,5	94,8
1000	82,3	87,3	88,7	88,7	92,8	88,1	90,3	87,8	96,5
1250	81,7	87,2	89,2	87,8	91,9	88,1	90,2	88,8	93,3
1600	83,4	85,6	88,8	87,7	90,8	87,5	90,2	89,0	92,8
2000	80,6	85,7	87,4	86,7	89,6	88,2	87,1	88,2	92,0
2500	77,7	83,8	86,2	85,9	88,7	88,1	86,8	87,8	90,8
3150	76,6	83,3	85,1	84,3	87,3	88,1	87,5	86,7	89,7
4000	75,1	82,3	83,7	85,3	85,7	86,8	86,7	84,7	88,3
5000	73,7	77,7	81,1	81,9	81,1	84,4	84,3	82,8	85,5
6300	70,7	74,6	82,9	79,2	75,9	80,6	80,3	80,3	81,5
8000	61,9	71,3	80,6	75,3	72,0	77,9	75,4	77,1	76,8
10000	52,8	68,1	76,5	70,8	69,6	74,0	68,6	75,1	69,6
L_{WA}	**93,3**	**100,0**	**100,1**	**100,0**	**102,6**	**101,0**	**101,0**	**100,7**	**104,8**
L_{WALF}	75,4	85,4	90,4	89,3	91,9	91,9	88,9	91,7	92,9

8 m/s:									
Fre-kvens, Hz	**0 - 100 kW**	**100 - 300 kW**	**300 - 600 kW**	**600 kW**	**660 kW**	**750 kW**	**750 kW - 1 MW**	**1 - 2 MW**	**2 MW**
10	34,4	31,6	42,4	46,8	51,1	37,3	42,6	42,3	50,2
12,5	38,2	36,8	46,8	50,5	54,6	43,5	46,4	47,8	54,4
16	42,2	42,5	51,6	54,6	57,8	51,6	52,5	53,0	59,0
20	47,0	47,8	56,0	58,3	61,8	57,8	58,2	59,4	63,2
25	49,3	53,4	60,3	61,8	67,0	66,5	63,5	65,9	67,7
31,5	53,9	58,5	65,4	66,9	68,7	69,3	67,5	70,9	71,5
40	58,0	62,3	69,3	68,7	72,3	73,3	71,3	75,7	76,1
50	62,0	70,3	74,3	74,0	76,2	77,3	76,8	77,8	80,7
63	65,5	71,1	75,7	76,4	80,6	80,6	77,9	81,2	83,6
80	67,7	75,0	79,3	80,0	82,3	83,0	80,8	84,1	85,8
100	68,2	78,5	83,8	83,6	84,1	84,9	83,6	86,9	87,6
125	70,0	81,2	86,7	85,4	87,7	87,3	85,6	88,3	90,2
160	72,4	83,6	88,3	86,5	87,2	88,4	88,5	89,0	89,5
200	75,6	90,5	89,8	88,4	88,5	90,7	92,0	91,4	89,9
250	78,9	93,7	91,2	89,4	90,1	91,3	89,7	91,1	92,7
315	86,1	87,7	90,7	89,2	90,4	90,6	91,8	91,9	94,2
400	82,3	93,5	89,9	90,8	92,4	89,6	92,7	90,4	94,0
500	83,1	90,8	90,3	91,0	92,3	92,5	92,9	91,0	95,7
630	87,2	89,9	92,6	90,9	93,4	91,4	93,6	91,6	96,1
800	86,1	88,8	91,0	90,0	93,0	91,1	93,1	91,4	96,0
1000	85,5	88,5	92,0	89,3	93,0	89,5	92,2	90,3	97,2
1250	84,8	88,4	92,7	89,0	92,2	89,5	91,8	90,6	95,6
1600	84,5	86,8	91,8	88,7	91,1	90,6	93,7	91,2	95,5
2000	82,2	86,9	90,0	87,8	89,8	90,0	90,7	90,6	95,4
2500	80,5	85,0	88,8	86,6	88,8	90,9	90,7	89,4	94,8
3150	78,5	84,6	88,2	86,0	87,6	91,0	90,9	89,0	93,4
4000	76,2	83,6	86,3	85,2	85,6	89,4	89,0	87,7	91,1
5000	74,8	79,0	83,4	82,5	82,4	87,3	86,6	85,0	88,7
6300	72,8	75,9	84,2	80,9	78,7	83,3	82,8	82,8	84,2
8000	63,8	72,6	82,5	77,0	73,5	79,5	77,8	79,6	78,2
10000	57,4	69,4	77,7	72,1	68,6	75,0	71,0	76,6	72,9
L_{WA}	**95,1**	**101,1**	**102,7**	**101,1**	**103,0**	**102,8**	**103,9**	**102,9**	**106,7**
$L_{WA,LF}$	76,6	86,9	91,9	90,8	92,4	92,9	91,9	93,9	95,2

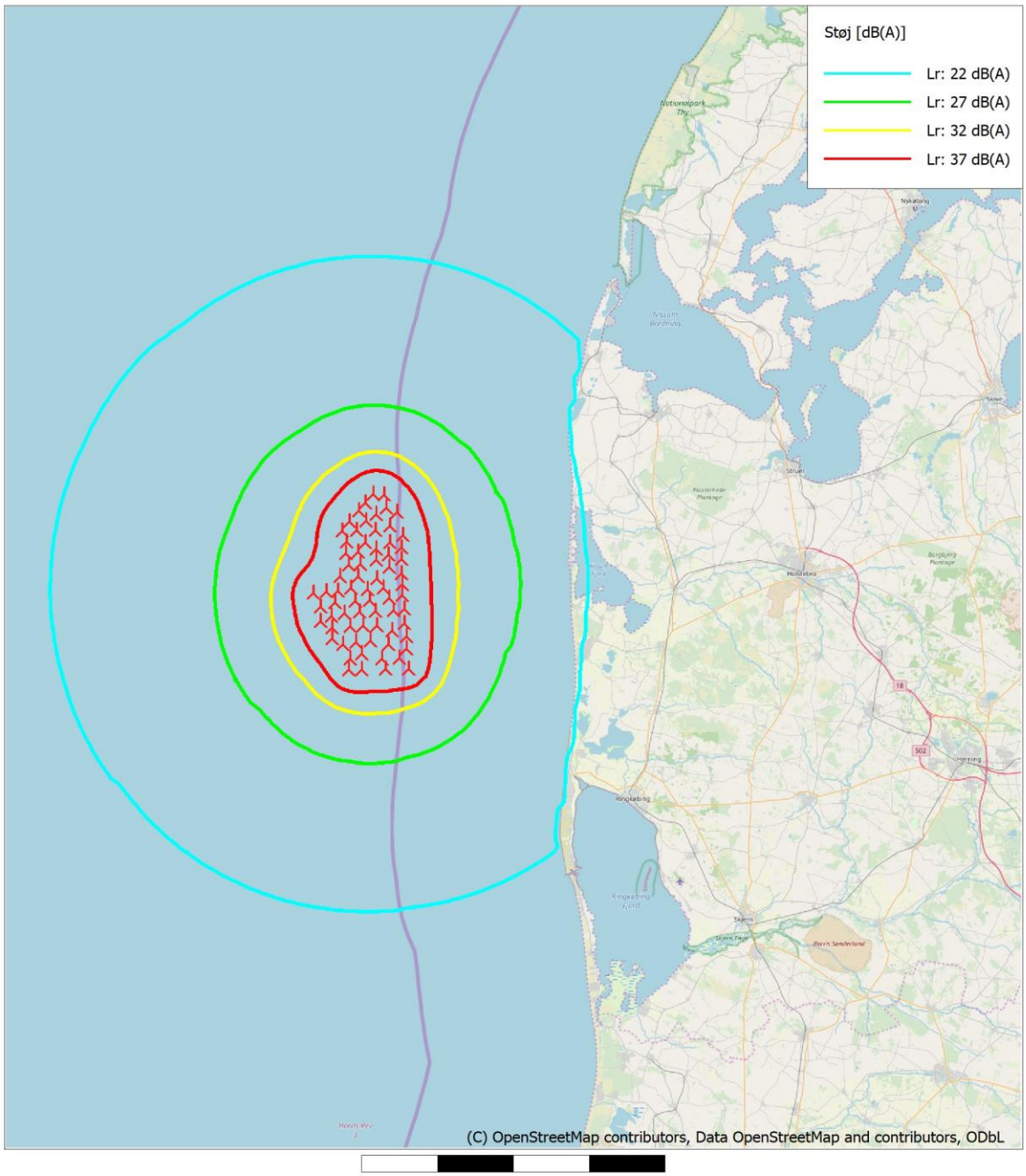
Appendix 03: Noise Map – Thor OWF alone, Broadband noise, 6m/s, Residential Area

Projekt:
THOR_Havvindmøllepark

Brugerlicens:
Niras
Ceres Allé 3
DK-8000 Aarhus C
+45 8732 3232
Jesper Konnerup / jek@niras.dk
Beregnet:
26-07-2023 15:34/3.5.587

DECIBEL - Kort 6,0 m/s

Beregning: Thor - Bredspektret - Siemens



0 10 20 30 40 km

Kort: EMD OpenStreetMap , Udskriftsmålestok 1:750.000, Kortcentrum ETRS-TMzn Pan-European Transverse Mercator (UTM)-ETRS89 Zone: 32 Øst: 440.093 Nord: 6.246.982
Ny vindmølle

Støjberegningsmetode: Dansk 2019. Vindhastighed: 6,0 m/s
Højde over havoverflade fra aktivt linie objekt

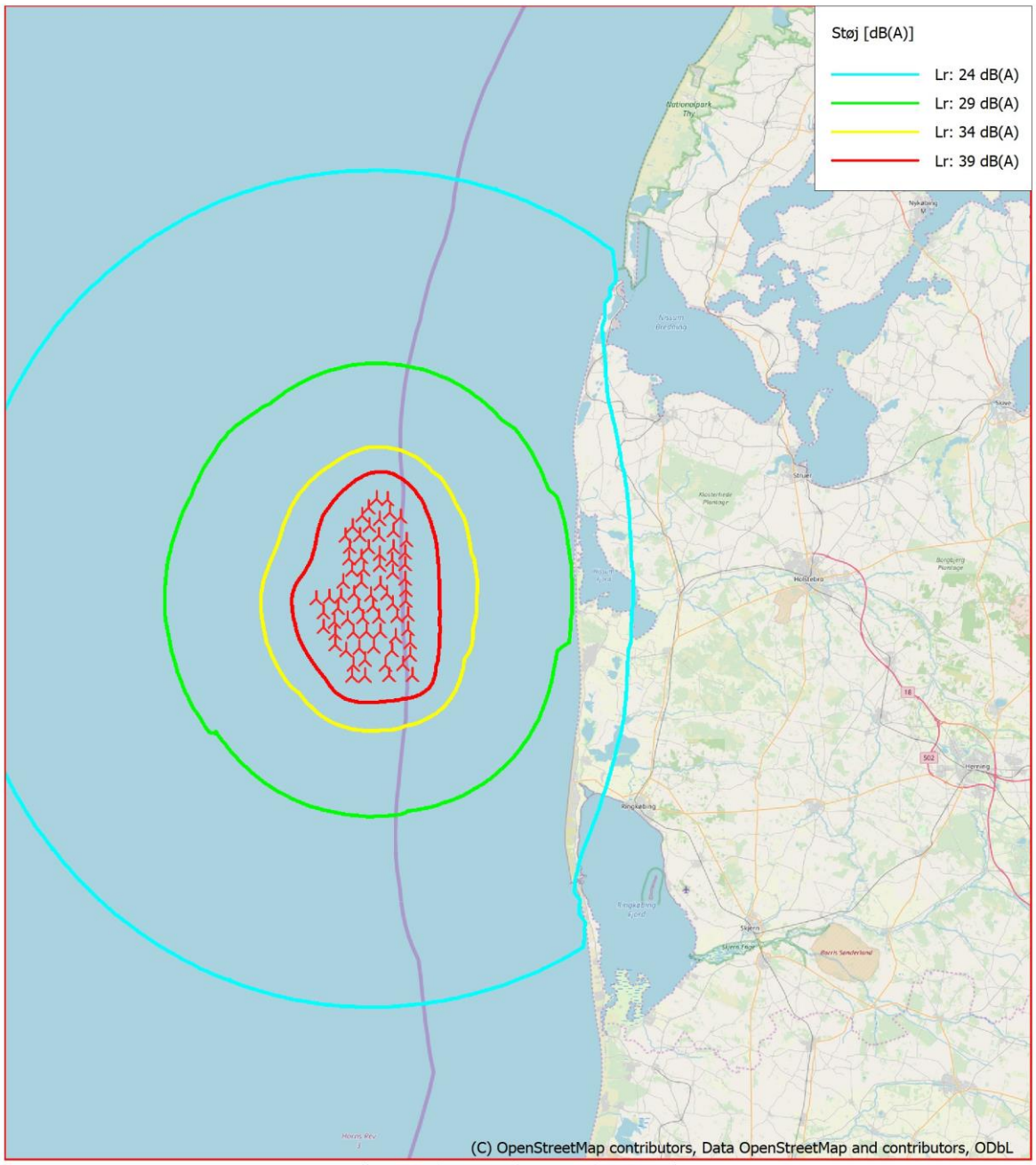
Appendix 04: Noise Map – Thor OWF, Broadband noise, 8m/s, Residential Area

Projekt:
THOR_Havvindmøllepark

Brugerlicens:
Niras
Ceres Allé 3
DK-8000 Aarhus C
+45 8732 3232
Jesper Konnerup / jek@niras.dk
Beregnet:
26-07-2023 15:34/3.5.587

DECIBEL - Kort 8,0 m/s

Beregning: Thor - Bredspektret - Siemens



0 10 20 30 40 km

Kort: EMD OpenStreetMap , Udskriftsmålestok 1:750.000, Kortcentrum ETRS-TMzn Pan-European Transverse Mercator (UTM)-ETRS89 Zone: 32 Øst: 440.093 Nord: 6.246.982

Ny vindmølle

Støjberegningsmetode: Dansk 2019. Vindhastighed: 8,0 m/s
Højde over havoverflade fra aktivt linie objekt

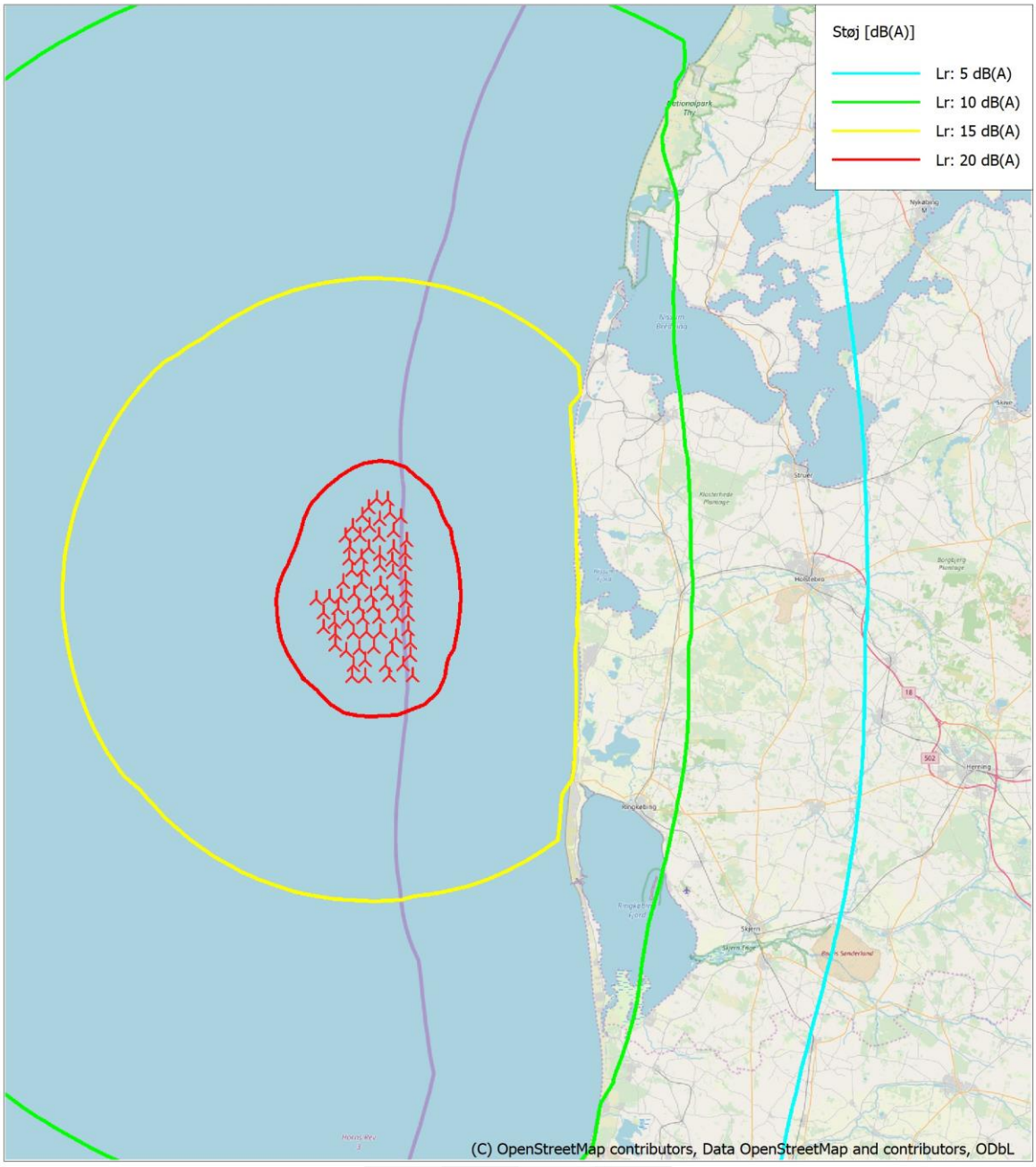
Appendix 05: Noise Map – Thor OWF, Low frequency noise, 8m/s, Residential area

Projekt:
THOR_Havvindmøllepark

Brugerlicens:
Niras
Ceres Allé 3
DK-8000 Aarhus C
+45 8732 3232
Jesper Konnerup / jek@niras.dk
Beregnet:
26-07-2023 08:48/3.5.587

DECIBEL - Kort 8,0 m/s Standardbygninger

Beregning: Thor - Lavfrekvent - Siemens



Kort: EMD OpenStreetMap , Udskriftsmålestok 1:750.000, Kortcentrum ETRS-TMzn Pan-European Transverse Mercator (UTM)-ETRS89 Zone: 32 Øst: 440.093 Nord: 6.246.982

Ny vindmølle

Støjberegningsmetode: Dansk lavfrekvens 2019. Vindhastighed: 8,0 m/s Standardbygninger
Højde over havoverflade fra aktivt linie objekt

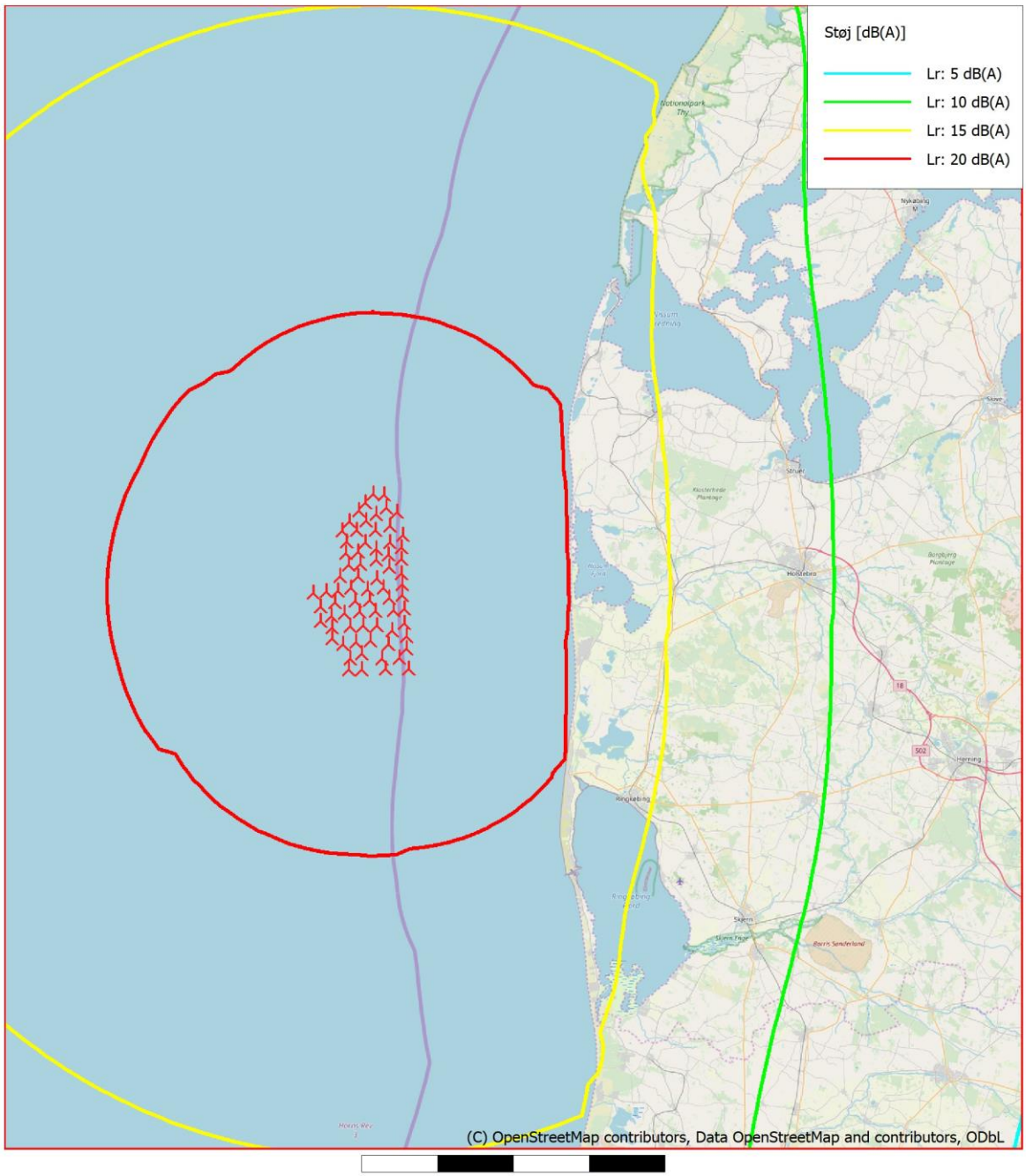
Appendix 06: Noise Map – Thor OWF, Low frequency noise, 8m/s, Cottage area

Projekt:
THOR_Havvindmøllepark

Brugerlicens:
Niras
Ceres Allé 3
DK-8000 Aarhus C
+45 8732 3232
Jesper Konnerup / jek@niras.dk
Beregnet:
26-07-2023 08:48/3.5.587

DECIBEL - Kort 8,0 m/s Sommerhusområder

Beregning: Thor - Lavfrekvent - Siemens



0 10 20 30 40 km

Kort: EMD OpenStreetMap , Udskriftsmålestok 1:750.000, Kortcentrum ETRS-TMzn Pan-European Transverse Mercator (UTM)-ETRS89 Zone: 32 Øst: 440.093 Nord: 6.246.982

Ny vindmølle

Støjberegningsmetode: Dansk lavfrekvens 2019. Vindhastighed: 8,0 m/s Sommerhusområder
Højde over havoverflade fra aktivt linie objekt

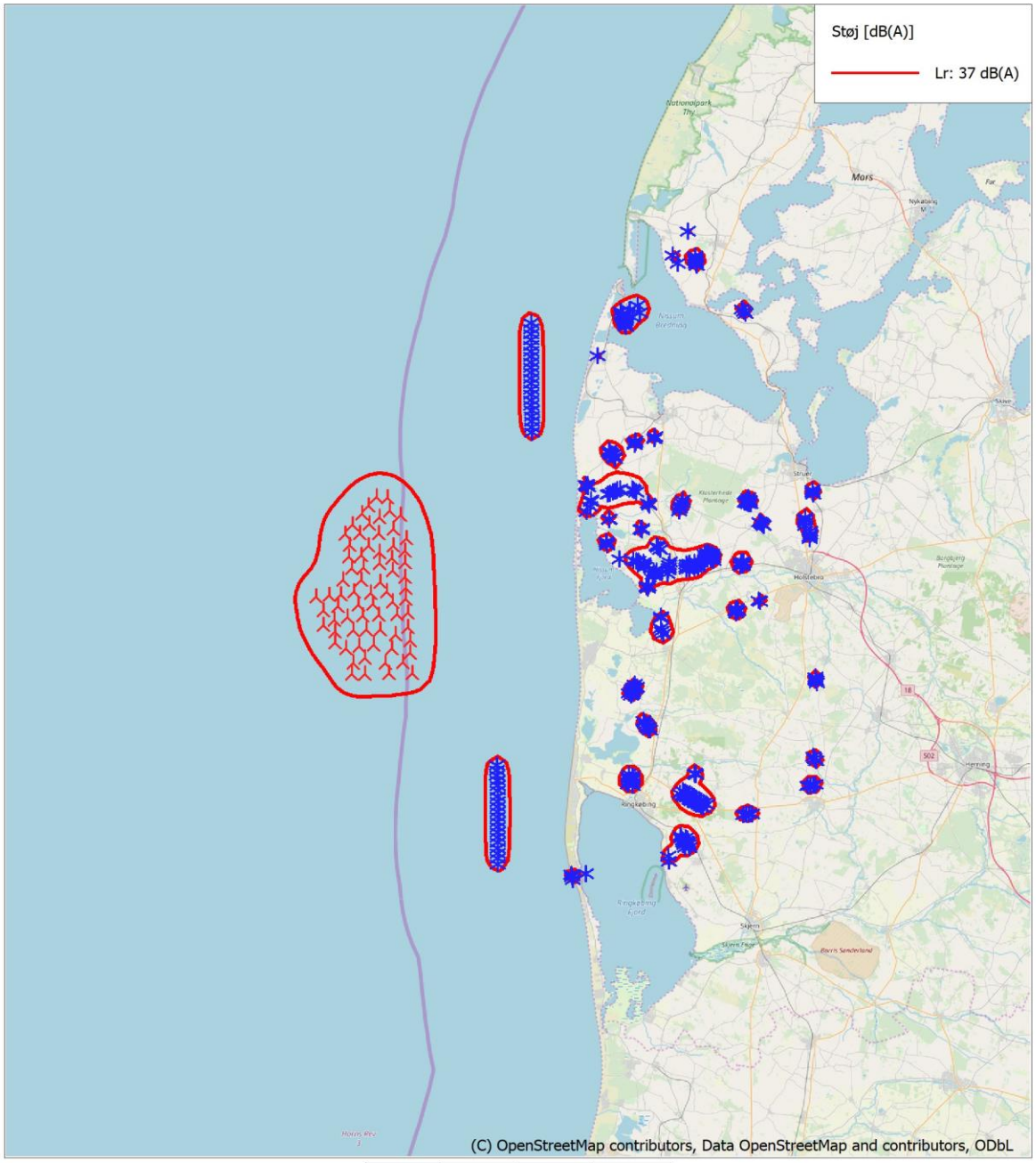
Appendix 07: Noise Map – Accumulated (Thor OWF), Broadband noise, 6m/s, Residential area

Projekt:
THOR_Havvindmøllepark

Brugerlicens:
Niras
Ceres Allé 3
DK-8000 Aarhus C
+45 8732 3232
Jesper Konnerup / jek@niras.dk
Beregnet:
30-06-2023 22:28/3.5.587

DECIBEL - Kort 6,0 m/s

Beregning: Akk Thor - Bredspektret - Siemens



0 10 20 30 40 km

Kort: EMD OpenStreetMap , Udskriftsmålestok 1:750.000, Kortcentrum ETRS-TMzn Pan-European Transverse Mercator (UTM)-ETRS89 Zone: 32 Øst: 440.093 Nord: 6.246.982

Ny vindmølle Eksisterende vindmølle

Støjberegningsmetode: Dansk 2019. Vindhastighed: 6,0 m/s
Højde over havoverflade fra aktivt linie objekt

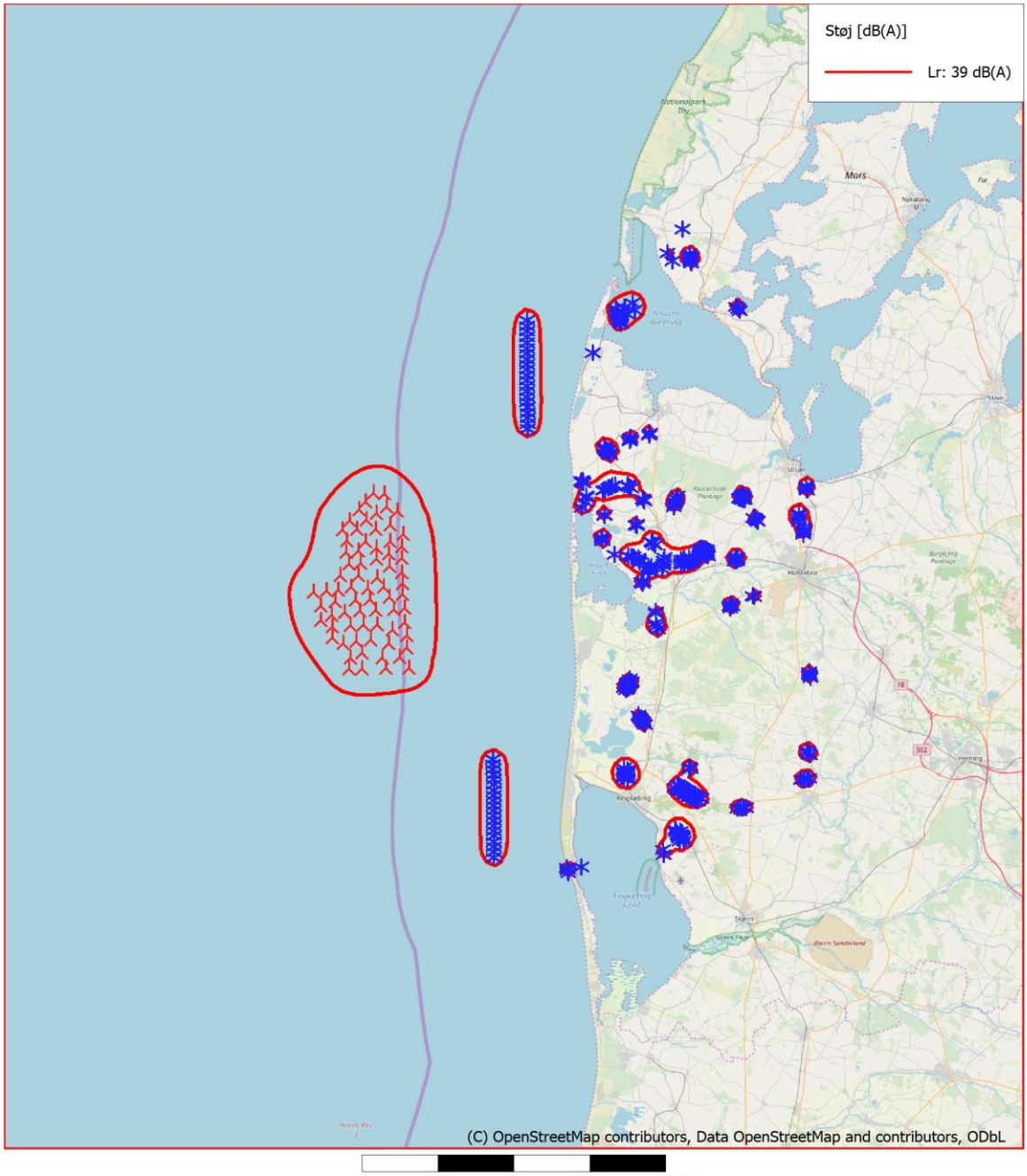
Appendix 08: Noise Map – Accumulated (Thor OWF), Broadband noise, 8m/s, Residential area

Projekt:
THOR_Havvindmøllepark

Brugerlicens:
Niras
Ceres Allé 3
DK-8000 Aarhus C
+45 8732 3232
Jesper Konnerup / jek@niras.dk
Beregnet:
30-06-2023 22:28/3.5.587

DECIBEL - Kort 8,0 m/s

Beregning: Akk Thor - Bredspektret - Siemens



0 10 20 30 40 km

Kort: EMD OpenStreetMap , Udskriftsmålestok 1:750.000, Kortcentrum ETRS-TMzn Pan-European Transverse Mercator (UTM)-ETRS89 Zone: 32 Øst: 440.093 Nord: 6.246.982

Ny vindmølle Eksisterende vindmølle

Støjberegningsmetode: Dansk 2019. Vindhastighed: 8,0 m/s
Højde over havoverflade fra aktivt linie objekt

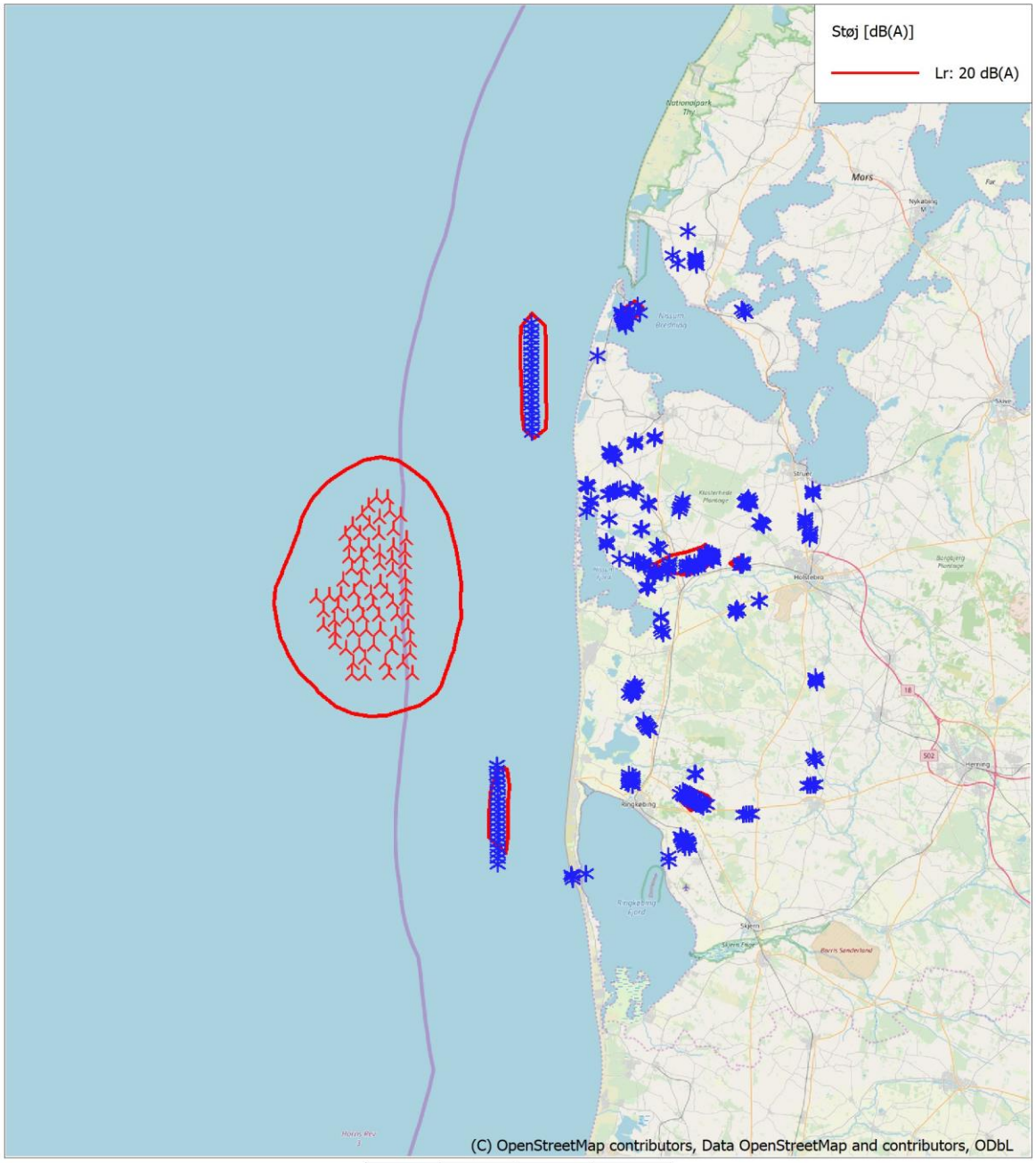
Appendix 09: Noise Map – Accumulated (Thor OWF), Low frequency noise, 8m/s, Residential area

Projekt:
THOR_Havvindmøllepark

Brugerlicens:
Niras
Ceres Allé 3
DK-8000 Aarhus C
+45 8732 3232
Jesper Konnerup / jek@niras.dk
Beregnet:
25-07-2023 17:40/3.5.587

DECIBEL - Kort 8,0 m/s Standardbygninger

Beregning: Akk Thor - Lavfrekvent - Siemens



0 10 20 30 40 km

Kort: EMD OpenStreetMap , Udskriftsmålestok 1:750.000, Kortcentrum ETRS-TMzn Pan-European Transverse Mercator (UTM)-ETRS89 Zone: 32 Øst: 440.093 Nord: 6.246.982

Ny vindmølle Eksisterende vindmølle

Støjberegningsmetode: Dansk lavfrekvens 2019. Vindhastighed: 8,0 m/s Standardbygninger
Højde over havoverflade fra aktivt linie objekt

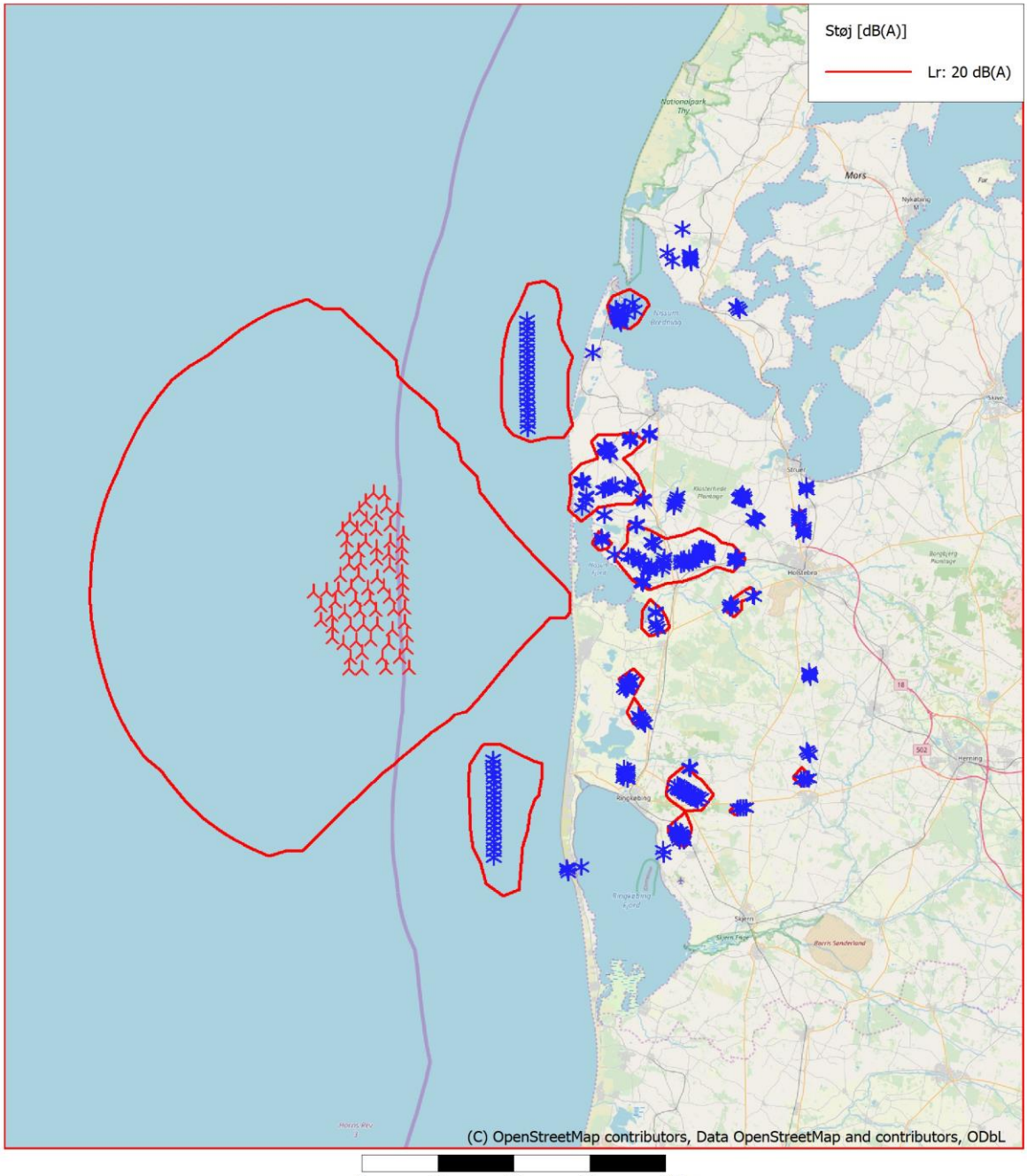
Appendix 10: Noise Map – Accumulated (Thor OWF), Low frequency noise, 8m/s, Cottage Area

Projekt:
THOR_Havvindmøllepark

Brugerlicens:
Niras
Ceres Allé 3
DK-8000 Aarhus C
+45 8732 3232
Jesper Konnerup / jek@niras.dk
Beregnet:
25-07-2023 17:40/3.5.587

DECIBEL - Kort 8,0 m/s Sommerhusområder

Beregning: Akk Thor - Lavfrekvent - Siemens



0 10 20 30 40 km

Kort: EMD OpenStreetMap , Udskriftsmålestok 1:750.000, Kortcentrum ETRS-TMzn Pan-European Transverse Mercator (UTM)-ETRS89 Zone: 32 Øst: 440.093 Nord: 6.246.982

Ny vindmølle Eksisterende vindmølle

Støjberegningsmetode: Dansk lavfrekvens 2019. Vindhastighed: 8,0 m/s Sommerhusområder
Højde over havoverflade fra aktivt linie objekt