

Maria Suder Hornbek

GAB
 Støj Peter Hansens Have

Fra: Lene Blichfeldt Fogh Jerlach
Sendt: 3. marts 2009 08:49
Til: Magnus Klamer Jørgensen; Jørgen Nielsen
Emne: VS: Peter Hansens Have og vindmøller ved Kappel
Vedhæftede filer: Noise 0209 With area for recreation purpose - 3 WTG 5.0-8.0 MW.pdf; Noise 0209 With area for recreation purpose - 7 WTG 5.0-8.0 MW.pdf

Til orientering og til sagen.

Hilsen Lene

Fra: Heinemeier, Jørgen [mailto:johei@ros.mim.dk]
Sendt: 3. marts 2009 08:30
Til: Andersen, Peter Koch; Pedersen, Steen; Lene Blichfeldt Fogh Jerlach
Emne: VS: Peter Hansens Have og vindmøller ved Kappel

Til orientering forud for dagens møde

Med venlig hilsen

Jørgen Heinemeier

Fra: Tove Kjær Hansen [mailto:tovha@dongenergy.dk]
Sendt: 2. marts 2009 16:07
Til: Heinemeier, Jørgen
Cc: Steffen Andersen
Emne: FW: Peter Hansens Have og vindmøller ved Kappel

Hej Jørgen - vedlagt beregninger som viser konsekvenserne af, at Peter Hansens have udlægges til rekreativt område med skærpede støjgrænser

Med venlig hilsen

Tove Kjær Hansen
 Enviromental Planner
 DONG energy, Renewabels
 Planning and Enviroment
 A C Meyers Vænge 9
 2450 København SV

Mobil: +45 99557642

Mail: tovha@dongenergy.dk

From: Paul B. Sørensen
Sent: Monday, March 02, 2009 10:49 AM
To: Tove Kjær Hansen
Subject: RE: Peter Hansens Have og vindmøller ved Kappel

Hej Tove

Jeg har lagt Peter Hansens have samt området syd for denne ind som rekreativt område og foretaget en støjbergrning med alle 7 møller. Haven skal ligge uden for det gule område, hvilket den ikke gør.

Ligeledes vedlagt en beregning med kun mølle 3+4+5 på de planlagte placeringer. Ved kun 3 møller ligger haven mv.

16-07-2009

uden for en støjbelastning på 37 dB(A) ved vind på 6 m/s. Områdestatus "Rekreativ område"

Venlig Hilsen / Best regards
DONG Energy
Paul B. Sørensen
Direct / Mobile Phone: +45 9955 2847
E-mail: paubs@dongenergy.dk

From: Tove Kjær Hansen
Sent: Thursday, February 26, 2009 3:21 PM
To: Paul B. Sørensen
Subject: FW: Peter Hansens Have og vindmøller ved Kappel

Hej paul - hermed kort over Peter Hansens have med de arealer som han vil have udlagt til rekreativt område

Med venlig hilsen

Tove Kjær Hansen
Environmental Planner
DONG energy, Renewables
Planning and Environment
A C Meyers Vænge 9
2450 København SV

Mobil: +45 99557642
Mail: tovha@dongenergy.dk

From: Jørgen Nielsen [<mailto:joeni@lolland.dk>]
Sent: Thursday, February 26, 2009 1:14 PM
To: Tove Kjær Hansen
Cc: Lene Blichfeldt Fogh Jerlach; Trine Kristoffersen
Subject: VS: Peter Hansens Have og vindmøller ved Kappel

Fra: Jørn Ernst Johansen
Sendt: 26. februar 2009 13:09
Til: Jørgen Nielsen
Emne: SV: Peter Hansens Have og vindmøller ved Kappel

Hej Jørgen
Hermed kortbilag m.v..

mvh Jørn

Fra: Jørgen Nielsen
Sendt: 25. februar 2009 10:03
Til: Jørn Ernst Johansen
Emne: VS: Peter Hansens Have og vindmøller ved Kappel

Hej Jørn

Har du et kort du kan maile til mig

Vh Jørgen

Fra: Tove Kjær Hansen [mailto:tovha@dongenergy.dk]

Sendt: 24. februar 2009 11:50

Til: Jørgen Nielsen

Emne: Peter Hansens Have og vindmøller ved Kappel

Hej Jørgen - jeg er netop blevet opmærksom på, at Byrådet i november har besluttet at Peter Hansens have skal have status som rekreativt område/turistattraktion i den nye kommuneplan (byrådsmødet 27/11 2008). Det betyder jo, at vi vil skulle overholde de lave støjgrænser for vindmøllerne også i området syd for Vesternæsvej. Det kan betyde ret meget for, hvor mange vindmøller vi kan placere. Har du evt. et kort hvor området med den nye status er indtegnet?

Med venlig hilsen

Tove Kjær Hansen
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Project: **Kappel Noise 11 2008**
 Description: **Map shows noise by 6 m/s windspeed**

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 Vindkraftanalyse/PAUBS
 Calculated: 02/03/2009 10:30/2.6.0.235

DECIBEL - Main Result

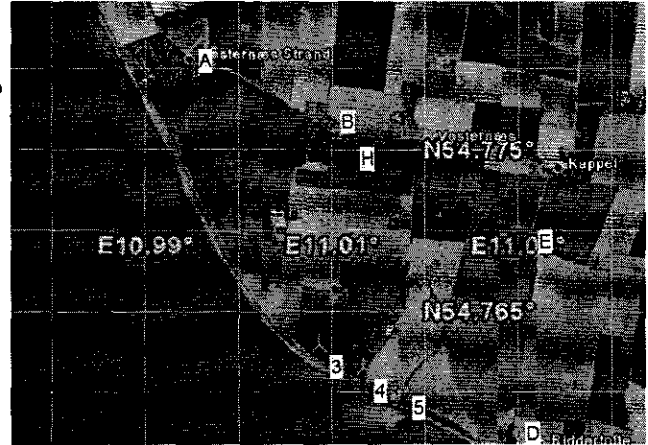
Calculation: Noise 0209 - 5 WTG 5.0-8.0 MW

DANISH RULES FOR NOISE CALCULATION.

The calculation is based on the "Bekendtgørelse nr. 1518 af 14. dec 2006" from the Danish Environmental Agency.

The noise impact from WTGs are not allowed to exceed the following limits: (Wind speeds in 10 m height)

- 1) At outdoor areas maximum 15 m from neighbor settlements in the open land.
 - a) 44 db(A) at wind speed 8 m/s.
 - b) 42 db(A) at wind speed 6 m/s.
 - 2) At outdoor areas in residential or recreational areas.
 - a) 39 db(A) at wind speed 8 m/s in residential areas.
 - b) 37 db(A) at wind speed 6 m/s in residential areas.
- If a WTG has pure tones in the noise emission, a penalty of 5 dB is added.



Scale 1:50,000

New WTG

Noise sensitive area

WTGs

UTM WGS84 Zone: 32		Z	Row data/Description	Valid	WTG type Manufact.	Type-generator	Power, rated	Rotor diameter	Hub height	Noise data Creator Name	First wind speed	LwaRef [dB(A)]	Last wind speed	LwaRef [dB(A)]	Pure tones	Octave data	
East	North																
UTM WGS84 Zone: 32		[m]				[kW]	[m]	[m]			[m/s]	[dB(A)]	[m/s]	[dB(A)]			
3	629,227	6,070,250	1.5	DF160/8000	Yes	DONG FUTURE 160/8000-8,000	8,000	160.0	110.0	USER	Level 0 - guaranteed - 110.3oct.dB(A) - 02/2009	6.0	109.1	8.0	110.3	No	Yes
4	629,538	6,070,096	0.0	DF140/6000	Yes	DONG FUTURE 140/6000-6,000	6,000	140.0	100.0	USER	Level 0 - guaranteed - 109.2 oct.dB(A) - 02/2009	6.0	109.0	8.0	109.2	No	Yes
5	629,807	6,069,988	0.0	DF126/5000	Yes	REpower 5 M-6,000	5,000	126.0	93.0	USER	Level 0 - guaranteed - 108.6 oct.dB(A) - 02/2009	6.0	107.4	8.0	108.6	No	Yes

Calculation Results

Sound Level

Noise sensitive area No.	Name	UTM WGS84 Zone: 32			Emission height [m]	Wind speed [m/s]	Demands Noise [dB(A)]	Sound Level From WTGs [dB(A)]	Demands fulfilled ? Noise
		East	North	Z					
A	Sommerhuse	628,295	6,072,016	0.0	1.5	6.0	37.0	31.5	Yes
A						8.0	39.0	33.1	Yes
B	Ålehoved Nord	629,264	6,071,714	3.4	1.5	6.0	42.0	35.4	Yes
B						8.0	44.0	36.9	Yes
D	Ved Riddertofte	630,556	6,069,672	2.5	1.5	6.0	42.0	40.1	Yes
D						8.0	44.0	41.5	Yes
E	Gottesgabe	630,613	6,070,997	5.0	1.5	6.0	42.0	36.7	Yes
E						8.0	44.0	38.2	Yes
H	Områdestatus "Rekreativ område"	629,388	6,071,534	4.4	1.5	6.0	37.0	36.9	Yes
H						8.0	39.0	38.4	Yes

Distances (m)

WTG		3	5	4
NSA				
A		1997	2530	2289
B		1464	1810	1643
D		1449	813	1102
E		1574	1291	1404
H		1282	1587	1442

Project: Kappel Noise 11 2008	Description: Map shows noise by 6 m/s windspeed	Printed/Page: 02/03/2009 10:31 / 2
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DECIBEL - Assumptions for noise calculation

Calculation: Noise 0209 - 5 WTG 5.0-8.0 MW

Noise calculation model:

Danish 2007

Wind speed:

6.0 m/s - 8.0 m/s, step 2.0 m/s

Terrain reduction:

1.5 dB(A) Onshore

Meteorological coefficient, C0:

0.0 dB

Type of demand in calculation:

1: WTG noise is compared to demand (DK, DE, SE, NL etc.)

Noise values in calculation:

All noise values are mean values (Lwa) (Normal)

Pure tones:

Pure tone penalty are added to demand: 5.0 m/s

Height above ground level, when no value in NSA object:

1.5 m Don't allow override of model height with height from NSA object

Deviation from "official" noise demands. Negative is more restrictive, positive is less restrictive.:

0.0 dB(A)

Octave data required

Air absorption

	63	125	250	500	1,000	2,000	4,000	8,000
[dB/km]	[dB/km]	[dB/km]	[dB/km]	[dB/km]	[dB/km]	[dB/km]	[dB/km]	[dB/km]
	0.1	0.4	1.0	2.0	3.6	8.8	29.0	104.5

WTG: DONG FUTURE 160/8000 8000 160.0 !O!

Noise: Level 0 - guaranteed - 110.3oct.dB(A) - 02/2009

Source Source/Date Creator Edited
PAUBS 03/02/2009 USER 03/02/2009 12:35

Status	Wind speed [m/s]	LwA,ref [dB(A)]	Pure tones	Octave data							
				63	125	250	500	1000	2000	4000	8000
From Windcat	6.0	109.1	No	89.8	95.7	100.5	104.2	104.5	99.6	94.0	83.3
From Windcat	8.0	110.3	No	93.4	98.4	102.6	105.2	105.3	100.4	94.1	83.9

WTG: REpower 5 M 5000 126.0 !O!

Noise: Level 0 - guaranteed - 108.6 oct.dB(A) - 02/2009

Source Source/Date Creator Edited
PAUBS 03/02/2009 USER 03/02/2009 12:27

Status	Wind speed [m/s]	LwA,ref [dB(A)]	Pure tones	Octave data							
				63	125	250	500	1000	2000	4000	8000
From Windcat	6.0	107.4	No	88.1	94.0	98.8	102.5	102.8	97.9	92.3	81.6
From Windcat	8.0	108.6	No	91.7	96.7	100.9	103.5	103.6	98.7	92.4	82.2

WTG: DONG FUTURE 140/6000 6000 140.0 !O!

Noise: Level 0 - guaranteed - 109.2 oct.dB(A) - 02/2009

Source Source/Date Creator Edited
PAUBS 03/02/2009 USER 03/02/2009 12:35

Status	Wind speed [m/s]	LwA,ref [dB(A)]	Pure tones	Octave data							
				63	125	250	500	1000	2000	4000	8000
From Windcat	6.0	108.0	No	88.7	94.6	99.4	103.1	103.4	98.5	92.9	82.2
From Windcat	8.0	109.2	No	92.3	97.3	101.5	104.1	104.2	99.3	93.0	82.8

NSA: Sommerhuse-A

Predefined calculation standard Residential areas

Imission height(a.g.l.): Use standard value from calculation model

Project:

Kappel Noise 11 2008

Description:

Map shows noise by 6 m/s windspeed

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Vindkraftanalyse/PAUBS

Calculated:

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DECIBEL - Assumptions for noise calculation**Calculation:** Noise 0209 - 5 WTG 5.0-8.0 MW**Noise demand:**6.0 [m/s] 8.0 [m/s]
37.0 dB(A) 39.0 dB(A)**Distance demand:**0.0 m**NSA:** Alehoved Nord-B**Predefined calculation standard:**Open land**Imission height(a.g.l.):**Use standard value from calculation model**Noise demand:**6.0 [m/s] 8.0 [m/s]
42.0 dB(A) 44.0 dB(A)**Distance demand:**0.0 m**NSA:** Ved Riddertoft-D**Predefined calculation standard:**Open land**Imission height(a.g.l.):**Use standard value from calculation model**Noise demand:**6.0 [m/s] 8.0 [m/s]
42.0 dB(A) 44.0 dB(A)**Distance demand:**0.0 m**NSA:** Gottesgabe-E**Predefined calculation standard:**Open land**Imission height(a.g.l.):**Use standard value from calculation model**Noise demand:**6.0 [m/s] 8.0 [m/s]
42.0 dB(A) 44.0 dB(A)**Distance demand:**0.0 m**NSA:** Områdestatus "Rekreativ område"-H**Predefined calculation standard:**Residential areas**Imission height(a.g.l.):**Use standard value from calculation model**Noise demand:**6.0 [m/s] 8.0 [m/s]
37.0 dB(A) 39.0 dB(A)**Distance demand:**0.0 m

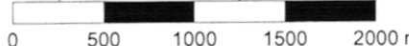
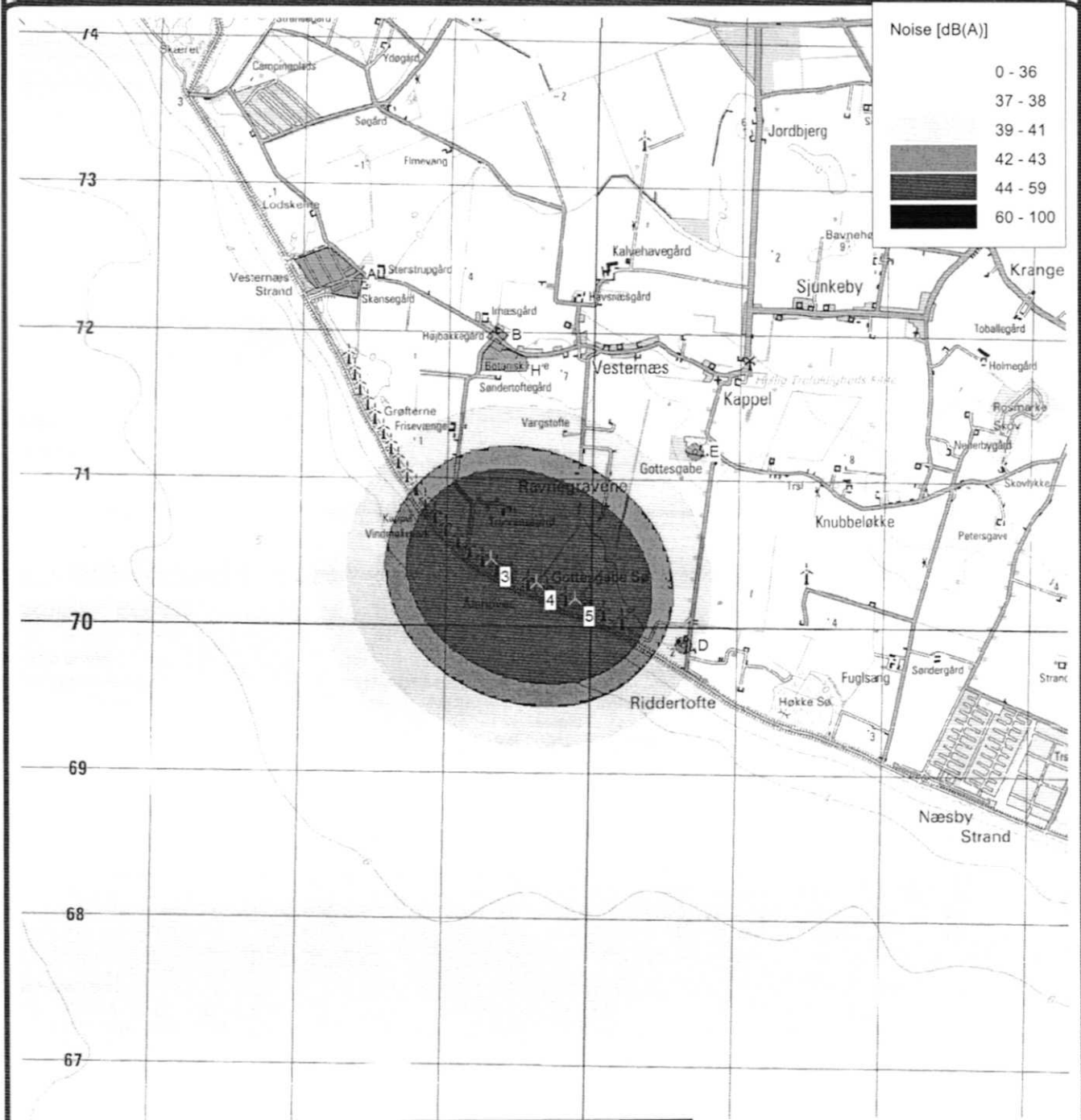
Project:
Kappel Noise 11 2008

Description:
Map shows noise by 6 m/s windspeed

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DECIBEL - KMS map: DISC01.IT

Calculation: Noise 0209 - 5 WTG 5.0-8.0 MW File: DISC01.IT



Map: Dannemare 1411 III, Print scale 1:40,000, Map center UTM WGS 84 Zone: 32 East: 629,517 North: 6,070,119
Noise calculation model: Danish 2007. Wind speed: 6.0 m/s

▲ New WTG ■ Noise sensitive area
37.0 dB(A) 39.0 dB(A) 42.0 dB(A) 44.0 dB(A) 60.0 dB(A)
 Height above sea level from active line object