Cullerin Range Wind Farm Survey

August 2012

Totals and percentages for 0-10+ from Cullerin Range Wind Farm.

23 respondents out of 100 surveys delivered. A 23 % response rate

Question 1. 0-10+km How many people reside at your house?

 $\mathbf{65}$ residents in total reside in the $\mathbf{23}$ households.

13 households with a total of 41 residents said they were affected

1 household with a total of 1 resident said **not affected** as deaf. * *See methods and results* Experiences TV interference.

1 household with a total of 3 residents answered **yes and no to being affected**, experiences TV and radio interference but did not know if from turbines. They were affected when working outside as twirling of the turbines was annoying. * *See method and results*

8 households with a total of **20** residents were not affected by noise, shadow flicker or EMI's

Question 2. 0-10+km Are any of your household affected/impacted by the Cullerin Range Wind Farm?

Yes 36 (55.4%) **No** 29 (44.6%)

if we included the 4 residents who are affected by EMI and annoyance whilst working outside this would raise the percentage of those affected to:

Yes 40 (61.5%) and lower the not affected to **No** 25 (38.5%)

Question 3. 0-10+km Does the wind farm generate shadow flickering?

Yes 9 (39.1%) **No** 14 (60.9%)

Question 4. 0-10+km

(i) Does the flickering annoy anyone in your home?

Yes 2 (8.6%) **No** 21 (91.4%)

(ii) What happens?

Startling, annoying. Outside the home creates a danger when riding horses as horse perceive shadow flicker as solid objects.

Question 5. 0-10+km

(i) Does the wind farm affect your household watching television or listening to the radio or other electronic devices?

Yes 15 (65.2%) **No** 8 (34.8%)

(ii) What happens?

15 (65.2%) TV freezes, on bad days doesn't start again, electronic noise, static, snowy, pixilates, no reception or limited reception, shadow effect, interference

- 4 (17.3%) No radio reception, static, poor radio reception
- 1 (4.3%) Aircraft radio signal interfered with.

Question 6. 0-10+km

(i) Does the wind farm generate noise disturbance during the day?

Yes 13 (56.5%) **No** 10 (44.5%)

if deaf resident's home was counted the figures would be:

Yes 14 (60.8%) **No** 9 (39.2%)]

(ii)How does it disturb your household during the day?

Upsetting, annoying, strange noises, continuous thud, thud, feeling of pressure, difficulty to work outside, difficult to hear in paddocks, fatigued, loud noises, noisy, nuisance, irritating noise, headaches

Question 7. 0-10+km

(i) Does the wind farm generate noise disturbance during the night?

Yes 13 (56.5%) **No** 10 (44.5%)

if deaf resident's home was counted the figures would be:

Yes 14 (60.8%) **No** 9 (39.2%)]

(ii) How does it disturb your household during the night?

Continual sound, whirring sounds, loud noise

Question 8. 0-10+km

(i) Are there any particular conditions that create more noise disturbance?

Yes 5 (21.7%) **No** 18 (78.3%)

(ii) What happens?

Noise can vary greatly more audible in lower strength winds nearer to the ground level, can be very noisy in still conditions, more noise in hot humid conditions, noisy in fog and cloudy conditions, more wind more noise, very noisy when very windy.

Question 9. 0-10+km

(i) Is your households sleep disturbed?

Yes 13 (56.5%) **No** 10 (43.5%)

(ii) How many nights per week?

Most said it was variable but usually between 3 to 7 nights a week with an average of 4 to 5 nights a week.

(iii) How are your household disturbed?

Can't get to sleep, no sleep, kept awake, broken sleep, impossible to get a good nights sleep, woken and can't get back to sleep, woken in a panic state, woken gasping for air, feeling of pressure, not getting enough sleep, too tired to work, high blood pressure, depression, stressed out, nausea, fatigue, balance impairment, blurred vision, ulcers, headaches

Question 10. 0-10+km At present how would you describe the impact of noise on your household?

Seriously affected 10 (66.7%) Moderately affected 3 (20%)

Slightly affected **o**

Not affected **2 (13.3%)** (one household occupied by one resident who is deaf, has

been told of day time noise at residence)

Question 11. 0-10+km

If the turbines were not operated at night (10pm to 7am) would you describe the people in your home as:

Seriously affected 2 (13.3%)
Moderately affected 6 (40%)
Slightly affected 4 (26.7%)

Not affected **3 (20%)** (one household occupied by one resident who is deaf, has

been told of night time noise at residence)

Question 12. 0-10+km

Inside which line on the map is your residence located?

$$0-1 \text{ km}$$
 $1-2 \text{ km}$ $2-4 \text{ km}$ $4-5 \text{ km}$ $5-7.5 \text{ km}$ $7.5-10 \text{ km}$ $10+ \text{ km}$ 0 5 7 2 3 3

Total and percentages for 0-7.5 km from Cullerin Range Wind Farm

Question 1. 0 - 7.5 km How many people reside at your house?

50 residents in total reside in the **17** households.

- 13 households with a total of 41 residents said they were affected
- 1 household with a total of 1 resident said **not affected** as deaf. * *See methods and results* Experiences TV interference.
- 1 household with a total of 3 residents answered **yes and no to being affected**, experiences TV and radio interference but did not know if from turbines. They were affected when working outside as twirling of the turbines was annoying. * *See method and results*
- 2 households with a total of 5 residents were not affected by noise, shadow flicker or EMI's

Question 2. 0 - 7.5 km Are any of your household affected/impacted by the Cullerin Range Wind Farm?

Yes 36 (72%) **No** 14 (28%)

if we included the 4 residents who are affected by EMI and annoyance whilst working outside this would raise the percentage of those affected to:

Yes 40 (80%) and lower the not affected to No 10 (20%)

Question 3. 0 - 7.5km Does the wind farm generate shadow flickering?

Yes 9 (52.9%) **No** 8 (47.1%)

Question 4. 0 - 7.5km

(i) Does the flickering annoy anyone in your home?

Yes 2 (11.8%) **No** 15(88.2%)

(ii) What happens?

Startling, annoying. Outside the home creates a danger when riding horses as horse perceive shadow flicker as solid objects.

Question 5. 0 - 7.5km

(i) Does the wind farm affect your household watching television or listening to the radio or other electronic devices?

Yes 15 (88.2%) **No** 2 (11.8%)

(ii) What happens?

15 (88.2%) TV freezes, on bad days doesn't start again, electronic noise, static, snowy, pixilates, no reception or limited reception, shadow effect, interference

- 4 (23.5%) No radio reception, static, poor radio reception
- 1 (5.8%) Aircraft radio signal interfered with.

Question 6. 0-7.5km

(i) Does the wind farm generate noise disturbance during the day?

Yes 13 (76.5%) **No** 4 (23.5%)

if deaf resident's home was counted the figures would be:

Yes 14 (82.4%) **No** 3 (17.6%)

(ii) How does it disturb your household during the day?

Upsetting, annoying, strange noises, continuous thud, thud, feeling of pressure, difficulty to work outside, difficult to hear in paddocks, fatigued, loud noises, noisy, nuisance, irritating noise, headaches

Question 7. 0-7.5km

(i) Does the wind farm generate noise disturbance during the night?

Yes 13 (76.5%) **No** 4 (23.5%)

if deaf resident's home was counted the figures would be:

Yes 14 (82.4%) **No** 3 (17.6%)

(ii) How does it disturb your household during the night?

Continual sound, whirring sounds, loud noise

Question 8. 0-7.5km

(i) Are there any particular conditions that create more noise disturbance?

Yes 5 (29.4%) **No** 12 (70.6%)

(ii) What happens?

Noise can vary greatly more audible in lower strength winds nearer to the ground level, can be very noisy in still conditions, more noise in hot humid conditions, noisy in fog and cloudy conditions, more wind more noise, very noisy when very windy.

Question 9. 0-7.5km

(i) Is your households sleep disturbed?

Yes 13 (76.5%) **No** 4 (23.5%)

(ii) How many nights per week?

Most said it was variable but usually between 3 to 7 nights a week with an average of 4 to 5 nights a week.

(iii) How are your household disturbed?

Can't get to sleep, no sleep, kept awake, broken sleep, impossible to get a good nights sleep, woken and can't get back to sleep, woken in a panic state, woken gasping for air, feeling of pressure, not getting enough sleep, too tired to work, high blood pressure, depression, stressed out, nausea, fatigue, balance impairment, blurred vision, ulcers, headaches

Question 10. 0-7.5km At present how would you describe the impact of noise on your household?

Seriously affected 10 (66.7%) Moderately affected 3 (20%)

Slightly affected **o**

Not affected **2 (13.3%)** (one household occupied by one resident who is deaf, has been told of day time noise at residence)

Question 11. 0-7.5km

If the turbines were not operated at night (10pm to 7am) would you describe the people in your home as:

Seriously affected 2 (13.3%)
Moderately affected 6 (40%)
Slightly affected 4 (26.7%)

Not affected **3 (20%)** (one household occupied by one resident who is deaf, has

been told of night time noise at residence)

Question 12. 0-7.5km

Inside which line on the map is your residence located?

0-1 km 1-2 km 2-4 km 4-5 km 5-7.5 km

0 5 7 2 3

Total and percentages for 0 -5 km from Cullerin Range Wind Farm

14 of the respondents were within 5km of the wind farm. (**60**% of all households that responded)

Question 1. 0-5 km How many people reside at your house?

- 11 households with 34 residents said they were affected
- 1 household with 1 resident said they were **not affected** as deaf. *See method and results*. *Experiences TV interference*
- 1 household with a total of 3 residents answered **yes and no to being affected**, TV and radio interference but did not know if from turbines. They were affected when working outside as twirling of the turbines was annoying. *See method and results
- 1 household with 3 residents said they were **not affected** by noise, shadow flicker or EMI's

Question 2. 0-5 km Are any of your household affected/impacted by Cullerin Range Wind Farm?

Yes 31 (75.6%) **No** 10 (24.9%)

if we included the 4 residents who are affected by EMI and annoyance whilst working outside this would raise the percentage of those affected to:

Yes 35 (85.4%) **No** 6 (14.6%)

Question 3. 0- 5 km Does the wind farm generate shadow flickering?

Yes 8 (57%) **No** 6 (43%)

Question 4. 0 - 5 km

(i) Does the flickering annoy anyone in your home?

Yes 2 (14.2%) **No** 12 (85.8%)

(ii) What happens?

Startling, annoying. Outside the home creates a danger when riding horses as horse perceive shadow flicker as solid objects.

Question 5. 0 - 5 km

(i) Does the wind farm affect your household watching television of listening to the radio or other electronic devices?

Yes 13 (92.8%) No 1 (7.2%)

(ii) What happens?

- **13** (92.8%) TV freezes, on bad days doesn't start again, electronic noise, static, snowy, pixilates, no reception or limited reception, shadow effect, interference
- **3** (21.4%) No radio reception, static, poor radio reception
- 1 (7.1%) Aircraft radio signal interfered with.

Question 6. 0 - 5 km

(i) Does the wind farm generate noise disturbance during the day?

Yes 11 (78.5%) **No** 3 (21.5%)

if deaf resident's home was counted the figures would be:

Yes 12 (85.7%) **No** 2 (14.3%)

(ii) How does it disturb your household during the day?

Upsetting, annoying, strange noises, continuous thud, thud, feeling of pressure, difficulty to work outside, difficult to hear in paddocks, fatigued, loud noises, noisy, nuisance, irritating noise, headaches

Question 7. 0-5 km

(i) Does the wind farm generate noise disturbance during the night?

Yes 11 (78.5%) **No** 3 (21.5%)

if deaf resident's home was counted the figures would be:

Yes 12 (85.7%) No 2 (14.3%)

(ii) How does it disturb your household during the night?

Continual sound, whirring sounds, loud noise

Question 8. 0-5 km

(i) Are there any particular conditions that create more noise disturbance?

Yes 5 (35.7%) **No** 9 (64.3)

(ii) What happens?

Noise can vary greatly more audible in lower strength winds nearer to the ground level, can be very noisy in still conditions, more noise in hot humid conditions, noisy in fog and cloudy conditions, more wind more noise, very noisy when very windy.

Question 9. 0 - 5 km

(i) Is your households sleep disturbed?

Yes 11 (78.5%) **No** 3 (21.5%)

(ii) How many nights per week?

Most said it was variable but usually between 3 to 7 nights a week with an average of 4 to 5 nights a week.

(iii) How are your household disturbed?

Can't get to sleep, no sleep, kept awake, broken sleep, impossible to get a good nights sleep, woken and can't get back to sleep, woken in a panic state, woken gasping for air, feeling of pressure, not getting enough sleep, to tired to work, high blood pressure, depression, stressed out, nausea, fatigue, balance impairment, blurred vision, ulcers, headaches

Question 10. 0-5 km At present how would you describe the impact of noise on your household?

Seriously affected 8 (66.7%)
Moderately affected 3 (25%)

Slightly affected **o**

Not affected **1 (8.3%)** (one household occupied by one resident who is deaf, has

been told of day time noise exists at residence)

Question 11. 0- 5+km If the turbines were not operated at night (10pm to 7am) would you describe the people in your home as:

Seriously affected 2 (16.6%) Moderately affected 4 (33.3%) Slightly affected 3 (25%)

Not affected 3 (25%) (one household occupied by one resident who is deaf, has

been told of night time noise exist at residence)

Question 12. 0-10+km Inside which line on the map is your residence located?

$$0-1 \text{ km}$$
 $1-2 \text{ km}$ $2-4 \text{ km}$ $4-5 \text{ km}$
 $\mathbf{0}$ $\mathbf{5}$ $\mathbf{7}$ $\mathbf{2}$

Total and percentages for 0- 4km from the Cullerin Range Wind Farm

12 of the respondents where within 4km of the wind farm. (52.1% of all households that responded)

Question 1. 0-4km

How many people reside at your house?

- 9 households with 28 residents said they were affected
- 1 household with 1 resident said they were **not affected** as deaf. *See method and results Experiences TV interference
- 1 household with a total of 3 residents answered **yes and no to being affected**, TV and radio interference but did not know if from turbines. They were affected when working outside as twirling of the turbines was annoying. * See method and results
- 1 household with 3 residents said they were **not affected** by noise, shadow flicker or EMI's

Question 2. 0-4km Are any of your household affected/impacted by Cullerin Range Wind Farm?

if we included the 4 residents who are affected by EMI and annoyance whilst working outside this would raise the percentage of those affected to:

Yes 29 (82.9%) **No** 6 (17.1%)

Question 3. 0-4km Does the wind farm generate shadow flicker?

Yes 8 (66.6%) No 4 (33.3%)

Question 4. 0-4km

(i) Does the flickering annoy anyone in your home?

Yes 2 (16.6%) **No** 8 (83.4%)

(ii) What happens?

Startling, annoying. Outside the home creates a danger when riding horses as horse perceive shadow flicker as solid objects.

Question 5. 0-4km

(i) Does the wind farm affect your household watching television or listening to the radio or other electronic devices?

Yes 11 (91.7%) No 1 (8.3%)

(ii) What happens?

- **11 (91.7%)** TV freezes, on bad days doesn't start again, electronic noise, static, snowy, pixilates, no reception or limited reception, shadow effect interference
- **2 (16.6%)** No radio reception, static, poor radio reception
- 1 (8.3%) Aircraft radio signal interfered with

Question 6. 0-4km

(i) Does the wind farm generate noise disturbance during the day?

Yes 9 (75%) **No** 3 (25%)

if deaf resident's home was counted the figures would be:

Yes 10 (80%) No 2 (20%)

(ii) How does it disturb you household during the day?

Upsetting, annoying, strange noises, continuous thud, thud, feeling of pressure, difficulty to work outside, difficult to hear in paddocks, fatigued, loud noises, noisy, nuisance, irritating noise, headaches

Question 7. 0-4km

(i) Does the wind farm generate noise disturbance during the night?

Yes 9 (75%) **No** 3 (25%)

if deaf resident's home was counted the figures would be:

Yes 10 (80%) **No** 2 (20%)

(ii) How does it disturb your household during the night?

Continual sound, whirring sounds, loud noise

Question 8. 0-4km

(i) Are there any particular conditions that create more noise disturbance?

Yes 5 (41.6%) **No** 7 (58.4%)

(ii) What happens?

Noise can vary greatly more audible in lower strength winds nearer to the ground level, can be very noisy in still conditions, more noise in hot humid conditions, noisy in fog and cloudy conditions, more wind more noise, very noisy when very windy

Question 9. 0-4km Is your households sleep disturbed?

Yes 9 (75%) **No** 3 (25%)

Question 10. 0-4km At present how would you describe the impact of noise on your household?

Seriously affected 7 (70%) Moderately affected 2 (20%)

Slightly affected **o**

Not affected **1 (10%)** (one household occupied by one resident who is deaf, has

been told of day time noise at residence)

Question 11. 0-4km If the turbines were not operated at night (10pm to 7am) would you describe the people in your home as:

Seriously affected 2 (20%) Moderately affected 4 (40%) Slightly affected 1 (10%)

Not affected **3 (30%)** (one household occupied by one resident who is deaf, has

been told of day time noise at residence)

Question 12. 0-4km Inside which line on the map is your residence located?

0-1km 1-2km 2-4km **0 5** 7