

Appendix H East site records

Audio record analysis for the East site

Table 40 Wind turbine generator wind speed and direction for diary return records, East site

No.	Resident	Neighbours	Date	Start time	End time	Wind speed at the nearest wind turbine generator	
						Speed, m/s	Direction, deg
1	Yes	No	13/4/2013	04:00	N/A	14.8	321.2
2	No	Yes	13/4/2013	08:00	11:00	9.6–16.1	303.1–315.5
3	No	Yes	13/4/2013	19:30	N/A	7.7	286.1
4	No	Yes	14/4/2013	05:00	5:30	4.8	279.7
5	No	Yes	14/4/2013	08:30	09:30	4.9	266.8
6	No	Yes	14/4/2013	20:30	22:00	3.0–6.3	171.7–200.3
7	No	Yes	16/4/2013	7:00	9:00	6.1	108.1
8	No	Yes	16/4/2013	21:15	N/A	6.0	108.4
9	No	Yes	17/4/2013	08:00	N/A	6.7	67.4
10	No	Yes	17/4/2013	17:50	N/A	7.6	109.6
11	No	Yes	20/4/2013	07:00	10:30	9.0–16.5	46.5 – 56.6
12	Yes	No	24/4/2013	05:00	N/A	10.9	282.9
13	Yes	No	26/4/2013	04:30	08:15	5.4–8.9	263.5–290.7
14	No	Yes	27/4/2013	04:30	08:15	15.0	328.0
15	Yes	Yes	27/4/2013	07:00	N/A	18.0	323.6
16	No	Yes	27/4/2013	17:30	N/A	15.9	311.1
17	Yes	No	27/4/2013	21:00	N/A	18.5	317.5
18	No	Yes	28/4/2013	20:45	N/A	4.7	232.4
19	No	Yes	29/4/2013	21:35	N/A	8.0	79.4
20	Yes	No	30/4/2013	02:00	03:30	5.4–8.8	49.3–60.1
21	No	Yes	10/5/2013	0:00	N/A	10.3	42.6
22	No	Yes	11/5/2013	22:30	N/A	9.0	308.6
23	No	Yes	12/5/2013	19:05	N/A	14.6	250.0
24	No	Yes	12/5/2013	19:55	20:05	12.5	262.9
25	No	Yes	12/5/2013	20:30	21:00	10.5	264.5

No.	Resident	Neighbours	Date	Start time	End time	Wind speed at the nearest wind turbine generator	
						Speed, m/s	Direction, deg
26	No	Yes	12/5/2013	21:30	N/A	13.0	258.8
27	Yes	Yes	13/5/2013	07:00	N/A	13.3	248.4
28	No	Yes	13/5/2013	10:20	10:30	6.7	237.8
29	No	Yes	13/5/2013	20:00	N/A	11.7	262.4
30	Yes	Yes	14/5/2013	08:15	10:30	9.7–14.9	286.7–297.1
31	Yes	No	14/5/2013	11:30	N/A	13.9	274.6
32	No	Yes	14/5/2013	20:50	N/A	11.8	267.4
33	No	Yes	14/5/2013	22:10	N/A	12.2	261.6
34	Yes	No	15/5/2013	07:00	N/A	12.6	252.9
35	No	Yes	15/5/2013	07:30	09:30	11.9	252.7
36	Yes	Yes	15/5/2013	19:00	N/A	8.3	256.1
37	No	Yes	29/5/2013	0700	10:00	12.4–14.7	338.3–343.4
38	No	Yes	29/5/2013	11:45	N/A	7.2	339.1
39	No	Yes	29/5/2013	21:30	N/A	8.9	24.7
40	No	Yes	30/5/2013	07:30	12:00	5.9	31.9
41	No	Yes	30/5/2013	14:00	N/A	7.1	343.3
42	No	Yes	30/5/2013	22:30	N/A	11.7	355.7
43	No	Yes	31/5/2013	13:30	N/A	9.8	299.8
44	No	Yes	31/5/2013	21:00	N/A	10.2	342.1
45	No	Yes	01/6/2013	08:00	09:00	15.5–20.8	300.0–305.3
46	No	Yes	01/6/2013	21:00	N/A	9.0	172.8
47	No	Yes	02/6/2013	07:00	N/A	8.4	190.5
48	No	Yes	06/6/2013	13:40	N/A	13.8	292.2
49	No	Yes	06/6/2013	15:00	N/A	11.0	296.1
50	No	Yes	06/6/2013	18:15	N/A	13.7	299.6
51	No	Yes	06/6/2013	22:00	N/A	16.2	294.1
52	No	Yes	07/6/2013	06:00	06:15	13.5–14.3	221.7– 22.4
53	No	Yes	07/6/2013	7:00	9:00	9.4	218.2
54	No	Yes	08/6/2013	12:00	N/A	3.5	9.0

Table 41 Acoustic descriptors and audio records analysis for diary return records, East site

No.	Outside					Spectrum shape	Audio records (inside/Outside where available)
	L _{Aeq} dB(A)	L _{Ceq} dB(C)	L _{Ceq} – L _{Aeq}	L _{pA,LF} , dB(A)	DEFRA		
1	39.0	64.0	25.0	31.4	0%	Negative	Rain noise
2	41.7–56.6	59.8–70.1	8.6–22.0	27.2–49.8	0%	Negative	Wildlife, rain noise
3	43.0	66.6	23.6	33.9	0%	Negative	Rain, wind noise
4	18.4–19.0	34.7–35.5	15.6–17.1	9.9–10.0	100%	Negative	No audio recordings
5	41.7–45.3	42.3–56.3	0.6–12.0	13.6–26.8	80%	Negative	Bird, high wind noise
6	28.4–31.8	41.2–45.6	10.7–20.8	14.4–21.6	100%	Negative	Dog barking
7	34.5–52.8	36.4–51.2	–1.6–8.5	7.2–22.1	100%	Negative	Wind, tree, and bird noise
8	28.4	41.6	13.2	12.1	100%	Negative	No audio recordings
9	48.2	47.0	-1.2	11.9	100%	Negative	Bird noise
10	46.9	51.6	4.7	18.8	100%	Negative	Wind, bird noise. Pulsing not evident
11	33.0–53.1	38.9–55.1	–1.3–16.5	9.2–23.7	71%	Negative	Wildlife noise
12	24.2	48.1	23.9	17.0	100%	Negative	No audio recordings
13	22.2–54.2	45.1–53.1	–1.4–26.9	16.3–22.0	73%	Negative	No audio recordings
14	20.7–54.0	39.4–54.1	–0.9–23.2	11.2–23.0	80%	Negative	No audio recordings
15	36.6	48.4	11.8	18.3	100%	Negative	No audio recordings
16	45.4	68.3	22.8	35.7	0%	Negative	No audio recordings
17	47.2	63.8	16.6	30.9	0%	Negative	No audio recordings
18	35.3	46.2	10.9	18.5	100%	Negative	No audio recordings
19	31.9	43.1	11.2	14.3	100%	Negative	No audio recordings
20	22.5–27.2	45.4–48.0	20.8–23.3	15.7–18.1	100%	Negative	No audio recordings

No.	Outside					Spectrum shape	Audio records (inside/Outside where available)
	L _{Aeq} dB(A)	L _{Ceq} dB(C)	L _{Ceq} - L _{Aeq}	L _{pA,LF} dB(A)	DEFRA		
21	24.7	34.0	9.4	14.4	100%	Negative	No audio recordings
22	49.2	68.9	19.7	35.9	0%	Negative	No audio recordings
23	50.8	70.4	19.7	37.6	0%	Negative	No audio recordings
24	49.8–49.8	68.0–68.1	18.2–18.3	34.4–34.5	0%	Negative	No audio recordings
25	47.0–48.0	65.8–67.5	17.8–20.5	33.5–34.5	0%	Negative	No audio recordings
26	47.7	66.8	19.1	33.8	0%	Negative	No audio recordings
27	47.7	65.3	17.5	31.9	100%	Negative	No audio recordings
28	47.6	63.2	15.6	29.8	0%	Negative	No audio recordings
29	37.2	56.6	19.4	24.2	0%	Negative	No audio recordings
30	40.1–52.3	61.9–72.5	11.2–25.0	29.3–40.0	0%	Negative	No audio recordings
31	51.0	76.2	25.2	44.0	0%	Negative	No audio recordings
32	38.9	57.0	18.2	25.3	0%	Negative	No audio recordings
33	43.4	64.1	20.7	31.7	0%	Negative	No audio recordings
34	61.7	80.6	18.8	48.1	0%	Negative	No audio recordings
35	52.2–62.6	69.9–81.4	16.0–19.1	37.1–50.3	0%	Negative	No audio recordings
36	41.8	58.7	16.9	26.9	0%	Negative	No audio recordings
37	32.5–54.7	42.3–55.2	-0.6–9.8	13.9–27.1	25%	Negative	Wildlife noises
38	54.3	64.3	10.0	44.4	0%	Negative	Truck, machinery, wildlife noise

No.	Outside					Spectrum shape	Audio records (inside/Outside where available)
	L _{Aeq} dB(A)	L _{Ceq} dB(C)	L _{Ceq} - L _{Aeq}	L _{pA,LF} dB(A)	DEFRA		
39	25.5	36.9	11.4	14.8	100%	50Hz and 100Hz peak	Flyover, machinery noise
40	63.0–58.9	45.8–66.1	-1.0–14.1	15.1–45.2	56%	Negative	Wind, tree noise. Human activities and light rain
41	36.9	55.0	18.1	29.5	0%	Negative	Engine noise, bird noise and livestock
42	28.3	49.9	21.6	22.6	0%	Negative	Rain noise, ringing telephone
43	43.4	63.0	19.6	31.9	0%	Negative	Rain noise
44.	33.5	44.6	11.1	18.9	100%	Negative	Rain noise
45	55.7–60.6	78.2–83.9	21.4–23.3	47.9–54.2	0%	Negative	Very heavy rains, strong winds
46	58.9	77.5	18.5	45.6	0%	Negative	Rain noise
47	39.3	54.4	15.1	22.4	100%	Negative	Rain noise
48	51.2	74.4	23.3	42.7	0%	Negative	No audio recordings
49	44.8	67.3	22.5	36.6	0%	Negative	Wind noise
50	43.3	65.6	22.3	33.2	0%	Negative	Strong wind, wildlife noise
51	55.4	79.5	24.1	48.5	0%	Negative	Rain, wind noise
52	55.3	71.9	16.5	39.5	0%	Negative	Rain, wind noise
53	46.0	59.6	13.6	28.4	0%	Negative	Wind noise
54	42.9	47.5	4.6	24.4	0%	Negative	Wildlife noise, mechanical engine noise