Appendix 7.B
Cumulative Noise: Predicted Turbine Noise Levels at Receptors

The individual contributions of each of the considered proposed, consented and operational wind developments at each of the assessed noise sensitive receptors are detailed in Tables B.1 to B.8. Predicted noise levels are presented at standardised 10m height wind speeds (V_{10}) between 3 and 12 ms^{-1}.

Table 7.B1   R1 – Meikle Hill – Wind Farm Noise Contributions

Wind Development	Predicted noise levels at receptor, dB LA90									
	3	4	5	6	7	8	9	10	11	12
South Kyle Wind Farm	25.2	25.2	28.6	32.1	33.5	34.0	33.7	33.5	33.5	33.5
Pencloe Wind Farm	12.6	12.6	17.3	19.5	20.0	20.0	20.0	20.0	20.0	20.0
Windy Standard Wind Farm	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Windy Standard (Extension)	11.4	11.4	14.5	17.3	19.0	19.9	19.9	20.6	20.6	20.6
Afton Wind Farm	3.8	3.8	7.6	14.6	14.6	15.4	16.2	17.0	17.0	17.0
Benbrack Wind Farm	9.5	10.4	14.2	18.9	20.9	21.4	21.4	21.4	21.4	21.4
High Lane Farm	n/a	n/a	n/a	n/a	1.2	1.7	2.1	1.0	0.2	-0.2
Enoch Hill Wind Farm	**20.1**	**21.0**	**24.8**	**29.5**	**31.5**	**32.0**	**32.0**	**32.0**	**32.0**	**32.0**
Cumulative levels	**26.9**	**27.1**	**30.6**	**34.4**	**36.0**	**36.5**	**36.4**	**36.3**	**36.3**	**36.3**
* n/a where predicted noise levels <0.1dB										

Table 7.B2   R2 – Nith Cottage – Wind Farm Noise Contributions

Wind Development	Predicted noise levels at receptor, dB LA90									
	3	4	5	6	7	8	9	10	11	12
South Kyle Wind Farm	24.1	24.1	27.5	31.0	32.4	32.9	32.6	32.4	32.4	32.4
Pencloe Wind Farm	12.4	12.4	17.1	19.3	19.8	19.8	19.8	19.8	19.8	19.8
Windy Standard Wind Farm	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
Windy Standard (Extension)	11.0	11.0	14.1	16.9	18.6	19.5	19.5	20.2	20.2	20.2
Afton Wind Farm	3.7	3.7	7.5	14.5	14.5	15.3	16.1	16.9	16.9	16.9
Benbrack Wind Farm	8.9	9.8	13.6	18.3	20.3	20.8	20.8	20.8	20.8	20.8
High Lane Farm	n/a	n/a	n/a	n/a	1.6	2.1	2.5	1.4	0.6	0.2
Enoch Hill Wind Farm	**18.3**	**19.2**	**23.0**	**27.7**	**29.7**	**30.2**	**30.2**	**30.2**	**30.2**	**30.2**
Cumulative levels	**25.7**	**25.9**	**29.5**	**33.2**	**34.8**	**35.3**	**35.1**	**35.0**	**35.0**	**35.0**
* n/a where predicted noise levels <0.1dB										

Table 7.B3   R3 – Maneight – Wind Farm Noise Contributions

Wind Development	Predicted noise levels at receptor, dB LA90									
	3	4	5	6	7	8	9	10	11	12
South Kyle Wind Farm	22.3	22.3	25.7	29.2	30.6	31.1	30.8	30.6	30.6	30.6
Pencloe Wind Farm	13.1	13.1	17.8	20.0	20.5	20.5	20.5	20.5	20.5	20.5
Windy Standard Wind Farm	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
Windy Standard (Extension)	11.2	11.2	14.3	17.1	18.8	19.7	19.7	20.4	20.4	20.4
Afton Wind Farm	4.2	4.2	8.0	15.0	15.0	15.8	16.6	17.4	17.4	17.4
Benbrack Wind Farm	8.3	9.2	13.0	17.7	19.7	20.2	20.2	20.2	20.2	20.2
High Lane Farm	n/a	n/a	n/a	0.4	2.9	3.4	3.8	2.7	1.9	1.5
Enoch Hill Wind Farm	**20.7**	**21.6**	**25.4**	**30.1**	**32.1**	**32.6**	**32.6**	**32.6**	**32.6**	**32.6**
Cumulative levels	**25.3**	**25.7**	**29.3**	**33.2**	**34.9**	**35.4**	**35.3**	**35.2**	**35.2**	**35.2**
* n/a where predicted noise levels <0.1dB										

Table 7.B4   R4 – Knockburnie – Wind Farm Noise Contributions

Wind Development	Predicted noise levels at receptor, dB LA90									
	3	4	5	6	7	8	9	10	11	12
South Kyle Wind Farm	20.3	20.3	23.7	27.2	28.6	29.1	28.8	28.6	28.6	28.6
Pencloe Wind Farm	15.3	15.3	20.0	22.2	22.7	22.7	22.7	22.7	22.7	22.7
Windy Standard Wind Farm	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
Windy Standard (Extension)	11.7	11.7	14.8	17.6	19.3	20.2	20.2	20.9	20.9	20.9
Afton Wind Farm	5.7	5.7	9.5	16.5	16.5	17.3	18.1	18.9	18.9	18.9
Benbrack Wind Farm	6.9	7.8	11.6	16.3	18.3	18.8	18.8	18.8	18.8	18.8
High Lane Farm	n/a	n/a	2.6	6.8	9.3	9.8	10.2	9.1	8.3	7.9
Enoch Hill Wind Farm	**20.7**	**21.6**	**25.4**	**30.1**	**32.1**	**32.6**	**32.6**	**32.6**	**32.6**	**32.6**
Cumulative levels	**24.7**	**25.1**	**28.7**	**32.7**	**34.4**	**34.9**	**34.8**	**34.8**	**34.8**	**34.8**
* n/a where predicted noise levels <0.1dB										

Table 7.B5   R5 – Dalleagles – Wind Farm Noise Contributions

Wind Development	Predicted noise levels at receptor, dB LA90									
	3	4	5	6	7	8	9	10	11	12
South Kyle Wind Farm	19.3	19.3	22.7	26.2	27.6	28.1	27.8	27.6	27.6	27.6
Pencloe Wind Farm	16.6	16.6	21.3	23.5	24.0	24.0	24.0	24.0	24.0	24.0
Windy Standard Wind Farm	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Windy Standard (Extension)	11.9	11.9	15.0	17.8	19.5	20.4	20.4	21.1	21.1	21.1
Afton Wind Farm	6.7	6.7	10.5	17.5	17.5	18.3	19.1	19.9	19.9	19.9
Benbrack Wind Farm	6.3	7.2	11.0	15.7	17.7	18.2	18.2	18.2	18.2	18.2
High Lane Farm	2.1	2.7	5.3	9.5	12.0	12.5	12.9	11.8	11.0	10.6
Enoch Hill Wind Farm	**20.2**	**21.1**	**24.9**	**29.6**	**31.6**	**32.1**	**32.1**	**32.1**	**32.1**	**32.1**
Cumulative levels	**24.4**	**24.8**	**28.5**	**32.4**	**34.0**	**34.5**	**34.4**	**34.4**	**34.4**	**34.4**
* n/a where predicted noise levels <0.1dB										

Table 7.B6   R6 – Dalleagles Terrace – Wind Farm Noise Contributions

Wind Development	Predicted noise levels at receptor, dB LA90									
	3	4	5	6	7	8	9	10	11	12
South Kyle Wind Farm	18.9	18.9	22.3	25.8	27.2	27.7	27.4	27.2	27.2	27.2
Pencloe Wind Farm	17.1	17.1	21.8	24.0	24.5	24.5	24.5	24.5	24.5	24.5
Windy Standard Wind Farm	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
Windy Standard (Extension)	12.0	12.0	15.1	17.9	19.6	20.5	20.5	21.2	21.2	21.2
Afton Wind Farm	7.1	7.1	10.9	17.9	17.9	18.7	19.5	20.3	20.3	20.3
Benbrack Wind Farm	6.1	7.0	10.8	15.5	17.5	18.0	18.0	18.0	18.0	18.0
High Lane Farm	3.2	3.8	6.4	10.6	13.1	13.6	14.0	12.9	12.1	11.7
Enoch Hill Wind Farm	**19.0**	**19.9**	**23.7**	**28.4**	**30.4**	**30.9**	**30.9**	**30.9**	**30.9**	**30.9**
Cumulative levels	**24.0**	**24.3**	**28.0**	**31.8**	**33.3**	**33.8**	**33.7**	**33.8**	**33.8**	**33.8**
* n/a where predicted noise levels <0.1dB										

Table 7.B7   R7 – Brochloch – Wind Farm Noise Contributions

Wind Development	Predicted noise levels at receptor, dB LA90									
	3	4	5	6	7	8	9	10	11	12
South Kyle Wind Farm	17.4	17.4	20.8	24.3	25.7	26.2	25.9	25.7	25.7	25.7
Pencloe Wind Farm	22.9	22.9	27.6	29.8	30.3	30.3	30.3	30.3	30.3	30.3
Windy Standard Wind Farm	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
Windy Standard (Extension)	12.4	12.4	15.5	18.3	20.0	20.9	20.9	21.6	21.6	21.6
Afton Wind Farm	10.1	10.1	13.9	20.9	20.9	21.7	22.5	23.3	23.3	23.3
Benbrack Wind Farm	5.3	6.2	10.0	14.7	16.7	17.2	17.2	17.2	17.2	17.2
High Lane Farm	9.0	9.6	12.2	16.4	18.9	19.4	19.8	18.7	17.9	17.5
Enoch Hill Wind Farm	**17.4**	**18.3**	**22.1**	**26.8**	**28.8**	**29.3**	**29.3**	**29.3**	**29.3**	**29.3**
Cumulative levels	**25.7**	**25.8**	**29.8**	**33.0**	**34.1**	**34.4**	**34.4**	**34.5**	**34.4**	**34.4**
* n/a where predicted noise levels <0.1dB										

Table 7.B8   R8 – Laglaff – Wind Farm Noise Contributions

Wind Development	Predicted noise levels at receptor, dB LA90									
	3	4	5	6	7	8	9	10	11	12
South Kyle Wind Farm	17.0	17.0	20.4	23.9	25.3	25.8	25.5	25.3	25.3	25.3
Pencloe Wind Farm	24.2	24.2	28.9	31.1	31.6	31.6	31.6	31.6	31.6	31.6
Windy Standard Wind Farm	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
Windy Standard (Extension)	12.5	12.5	15.6	18.4	20.1	21.0	21.0	21.7	21.7	21.7
Afton Wind Farm	10.6	10.6	14.4	21.4	21.4	22.2	23.0	23.8	23.8	23.8
Benbrack Wind Farm	5.0	5.9	9.7	14.4	16.4	16.9	16.9	16.9	16.9	16.9
High Lane Farm	11.6	12.2	14.8	19.0	21.5	22.0	22.4	21.3	20.5	20.1
Enoch Hill Wind Farm	**16.4**	**17.3**	**21.1**	**25.8**	**27.8**	**28.3**	**28.3**	**28.3**	**28.3**	**28.3**
Cumulative levels	**26.3**	**26.5**	**30.6**	**33.5**	**34.5**	**34.8**	**34.8**	**34.8**	**34.8**	**34.8**
* n/a where predicted noise levels <0.1dB										