

Chapter 4: Llanbadarn Fynydd Wind Farm. Errata

The derived ETSU-R-97 day time and night time noise limits are incorrect within the SEI (February 2013) for the Lower Foel non-stakeholder residential property. The limits included within the SEI were based upon the complete raw noise and wind data set and not the filtered dataset used for all other locations.

Original (February 2013 SEI) and corrected data is included in the relevant tables and charts as shown below. The corrected data does not change the findings of the assessment of either Llanbadarn Fynydd or the cumulative assessment.

Table 4.7 ETSU Derived Noise Limits and Predicted Turbine Noise Levels (L_{A90,10min}) – Lower Foel

Location	Factor	Standardised Wind Speed at 10 m Height (ms-1)									
		4	5	6	7	8	9	10	11	12	13
Lower Foel - Original	Quiet Daytime Limit	40.0	40.0	40.9	42.3	43.9	45.5	47.4	49.4	51.6	54.0
	Night-time Limit	43.0	43.0	43.0	43.0	43.1	45.1	47.4	49.9	52.7	55.8
	Turbine Noise Level	28.5	31.5	33.2	33.4	33.5	33.9	34.2	34.8	35.9	36.0
Lower Foel - REVISED	Quiet Daytime Limit	40.0	40.0	40.0	40.0	40.0	41.5	43.3	45.3	47.5	49.9
	Night-time Limit	43.0	43.0	43.0	43.0	43.0	43.0	43.5	46.1	49.0	52.1
	Turbine Noise Level	28.5	31.5	33.2	33.4	33.5	33.9	34.2	34.8	35.9	36.0

Table 4.8 Differences between Predicted Turbine Levels and Noise Limits

Location	Period	Standardised Wind Speed at 10 m Height (ms-1)									
		4	5	6	7	8	9	10	11	12	13
Lower Foel - Original	day	-11.5	-8.5	-7.7	-8.9	-10.4	-11.6	-13.2	-14.6	-15.7	-18.0
	night	-14.5	-11.5	-9.8	-9.6	-9.6	-11.2	-13.2	-15.1	-16.8	-19.8
Lower Foel - REVISED	day	-11.5	-8.5	-6.8	-6.6	-6.5	-7.6	-9.1	-10.5	-11.6	-13.9
	night	-14.5	-11.5	-9.8	-9.6	-9.5	-9.1	-9.3	-11.3	-13.1	-16.1

Table 4.10 Cumulative Headroom Assessment

Receptor	a	b	c	d	Revised Headroom
	Llanbadarn Fynydd	Combined	Difference = b-a	Lowest Relative Day or Night Headroom From Table 4.8	
Lower Foel - original	36	40.3	4.3	7.7	3.4
Lower Foel - REVISED	36	40.3	4.3	6.5	2.2

Table 4.11 Lower Foel Assessment – Llanbadarn Fynydd and Neuadd-Goch – REVISED TABLE

Scheme		Standardised Wind Speed at 10 m Height (ms-1)									
		4	5	6	7	8	9	10	11	12	
Llanbadarn and Neuadd-Goch combined	Turbine Level	32.3	36.9	38.7	39.4	39.5	39.6	39.7	39.8	40.2	
	day limit	40	40	40	40	40	41.5	43.3	45.3	47.5	
Llanbadarn Fynydd	night limit	43	43	43	43	43	43	43.5	46.1	49	
	day limit	40	40	40	40	43	46	49	49	49	
Neuadd-Goch	night limit	43	43	43	43	43	47	53	53	53	
	day	7.7	3.1	1.3	0.6	0.5	1.9	3.6	5.5	7.3	
Difference between combined turbine level and scheme noise limits		night	10.7	6.1	4.3	3.6	3.5	3.4	3.8	6.3	8.8
Neuadd-Goch	day	7.7	3.1	1.3	0.6	3.5	6.4	9.3	9.2	8.8	
	night	10.7	6.1	4.3	3.6	3.5	7.4	13.3	13.2	12.8	



Appendix 4.5 - Analysed Baseline Dataset Charts 1 and 2

Chart 1 : Lower Foel
Quiet Daytime Predicted Noise Levels and Noise Limit

