Technical Appendix 10.4: Propagation Height & Valley Effect

10.4.1 To model the propagation of noise between each proposed turbine and residential property in accordance with the IoA GPG the mean propagation height has to be calculated in order to determine whether the correction specified by the guidance for propagation over a concave ground profile, or where the ground falls away significantly between the source and receiver, is applicable.

10.4.2 Instances where the threshold specified by the IoA GPG is exceeded, and 3 dB(A) has therefore been added to the noise level predicted by the ISO 9613-2 propagation model due to that specific turbine at that specific property, are highlighted in Table 10.4.1.

Table 10.4.1 – Instances where Ground Correction Applied

House ID	T1	T2	T3	T4	T5	T6	T7
H1	3	0	0	0	0	3	0
H2	0	0	0	0	0	3	0
H3	0	0	0	0	0	0	0
H4	3	3	0	0	0	0	3
H5	0	0	0	0	0	0	0
H6	0	0	0	0	0	0	0
H7	3	0	0	0	0	0	3
H8	0	0	0	0	0	0	0
H9	0	0	0	0	0	0	0
H10	3	3	3	3	3	3	3
H11	3	0	0	0	0	0	3
H12	0	0	0	0	0	0	0
H13	0	0	0	0	0	0	0
H14	3	0	0	0	0	3	0
H15	0	3	3	0	3	3	3

Cells highlighted grey for turbine and house locations where correction applied