

COLLISION RISK ASSESSMENT

Sheet 1 - Input data

used in overall collision risk sheet
 used in migrant collision risk sheet
 used in single transit collision risk sheet or extended model

used in available hours sheet
 used in large array correction sheet
 not used in calculation but stated for reference

	Units	Value	Data sources
Bird data			
Species name		Sandwich Tern	
Bird length	m	0.41	
Wingspan	m	1.00	
Flight speed	m/sec	10.3	
Nocturnal activity factor (1-5)		1	
Flight type, flapping or gliding		flapping	

Data sources

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bird survey data													
Daytime bird density	birds/sq km	0	0	0	0	0	0	0	0	0	0	0	0
Proportion at rotor height	%	0.0%											
Proportion of flights upwind	%	50.0%											

Data sources

	Units	Value	Data sources
Birds on migration data			
Migration passages	birds	0 0 0 0 364210 0 0 0 0 0 0 0 0	
Width of migration corridor	km	3	
Proportion at rotor height	%	8%	
Proportion of flights upwind	%	50.0%	

Units Value Data sources

Windfarm data			
Name of windfarm site			
Latitude	degrees	57.50	
Number of turbines		3	
Width of windfarm (proportion)	km	0.7	
Tidal offset	m	0	

Units Value Data sources

	Units	Value	Data sources
Turbine data			
Turbine model		16MW turbine	
No of blades		3	
Rotation speed	rpm	12	
Rotor radius	m	122.5	
Hub height	m	142.5	
Monthly proportion of time operational	%	90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90%	
Max blade width	m	8.500	
Pitch	degrees	30	

Avoidance rates used in presenting results	95.00%
	98.00%
	99.00%
	99.50%

Data sources (if applicable)

