

18 Summary of Residual Effects

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18 Summary of Residual Effects

18.1 Introduction

- 18.1.1 **Tables 18.1** and **18.2** provide a quick reference to each of the significant residual environmental effects identified in the technical sections of the EIA Report, as well as a cross reference to the relevant mitigation measures identified.
- 18.1.2 **Table 18.3** provides a summary of the cumulative effects of the Proposed Development in combination with other proposed, consented and operation developments within the area.

Table 18-1 Summary of Residual Effects – Construction and Decommissioning/Restoration Phases

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
5. Landscape and Visual						
It is considered that landscape and visual effects during construction and decommissioning will be significantly lesser than those during operation due to their temporary, short term nature. Therefore, assessment of operational effects are considered to cover the impact of the development as a whole, which are detailed below in Table 18.2 .						
6. Ornithology						
Bluemull and Colgrave Sounds SPA: disturbance and displacement of red-throated diver	International	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Non-significant	Adverse
Fetlar SPA: disturbance and displacement of dunlin and great skua	International	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Non-significant	Adverse
East Mires SSSI: disturbance and displacement of moorland breeding birds	National	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Non-significant	Adverse
Hascosay SSSI: disturbance and displacement of dunlin	National	Adverse	Timing of works or pre-construction check for nesting	Negligible	Non-significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
			birds. Exclusion zones during breeding season.			
North Fetlar SSSI: disturbance and displacement of great skua	National	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Non-significant	Adverse
Lamb Hoga SSSI: disturbance and displacement of dunlin and great skua	National	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Non-significant	Adverse
Greylag Goose disturbance and displacement.	Site	Adverse	Timing of works or pre-construction check for nesting birds.	Negligible	Non-significant	Adverse
Red-throated diver disturbance and displacement.	International	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Locally significant		Adverse
Curlew disturbance and displacement.	National	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Locally significant		Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Dunlin disturbance and displacement.	National	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Locally significant		Adverse
Golden plover disturbance and displacement.	National	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Locally significant		Adverse
Redshank disturbance and displacement.	Local	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Non-significant	Adverse
Ringed Plover disturbance and displacement.	Local	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Non-significant	Adverse
Snipe disturbance and displacement.	Regional	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Locally significant		Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Great skua disturbance and displacement.	County	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Locally significant		Adverse
Arctic skua disturbance and displacement.	County	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Locally significant		Adverse
Merlin disturbance and displacement.	Regional	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Locally significant		Adverse
7. Ecology and Nature Conservation						
Construction						
Permanent loss of habitat: U5a and U6a unimproved acid grassland	Low impact, significant on Local area scale	Adverse	Design iteration; micro-siting; implementation of CEMP, including HMP	Barely perceptible, not significant on Local scale	Non-significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Temporary loss of habitat: U5a and U6a unimproved acid grassland	Barely perceptible, not significant on Local area scale	Adverse	Design iteration; micro-siting; implementation of CEMP, including HMP	Barely perceptible, not significant on Local scale	Non-significant	Adverse
Permanent loss of habitat: blanket bog	Medium impact, significant on National area scale	Adverse	Design iteration; micro-siting; implementation of CEMP, including HMP; off-set mitigation through compensation by restoration of off-site areas	Long-term low impact, significant on National area scale	Significant	Adverse
Temporary loss of habitat: blanket bog	Barely perceptible, not significant	Adverse	Design iteration; micro-siting; implementation of CEMP, including HMP; exclusion of livestock	Barely perceptible, not significant at a Local area scale	Non-significant	Adverse
Standing and running water - habitat loss	Barely perceptible, not significant	Adverse	Design iteration; micro-siting; implementation of CEMP, including HMP	Barely perceptible, on a Local scale	Non-significant	Adverse
Otter - disturbance	Barely perceptible, immediate, very temporary significant (locally)	Adverse	Implementation of CEMP, with particular reference to a SWMP and pollution controls; use of low noise plant and low vibration construction techniques	Barely perceptible, immediate, very temporary significant (locally)	Non-significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Otter – mortality (vehicles, construction works)	Low impact, significant on a Local area scale	Adverse	Implementation of CEMP,	Barely perceptible, on a Local scale	Non-significant	Adverse
Fish – mortality (pollution)	Unlikely, not significant	Adverse	Implementation of CEMP, with particular reference to a SWMP and pollution controls	No impact	Non-significant	N/A
8. Noise						
Construction						
Noise from on-site construction activities	Neutral	Adverse	Implementation of CEMP.	Neutral	Non-significant	Adverse
Change in road traffic noise due construction traffic	Neutral	Adverse	Appropriate scheduling of site deliveries and controls on idling vehicles.	Neutral	Non-significant	Adverse
Decommissioning						
Noise from on-site construction activities	Neutral	Adverse	Implementation of CEMP.	Neutral	Non-significant	Adverse
9. Cultural Heritage						
Construction						

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Potential partial damage to former road from Heatherdale to Cullivoe (Site 148)	Negligible	Adverse	Implementation of programme of archaeological works	Negligible	Non-significant	Adverse
Damage to hitherto unknown archaeological remains	Minor	Adverse	Implementation of programme of archaeological works	Negligible	Non-significant	Adverse
Decommissioning						
No effects are anticipated to Cultural Heritage during decommissioning						
10. Geology, Peat, Hydrology and Hydrogeology						
Construction						
<i>Erosion / Sedimentation</i>						
Water Quality	Minor to Moderate	Adverse	Monitoring, HCoW and ECoW advice and management Drainage Statement, Appendix 3.1 Scottish Water agreed mitigation and contingency plan, Appendix 10.6.	Minor to Minor/ Moderate, Minor/Moderate for the Gossa Water DWPA due to its sensitivity.	Non-significant	Adverse
Drainage Alteration	Minor to Minor/Moderate	Adverse	No specific additional mitigation required	Minor to Minor/Moderate Minor/Moderate for the Gossa	Non-significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
				Water DWPA due to its sensitivity.		
Peat Disturbance	Minor to Moderate	Adverse	Monitoring, HCoW and ECoW advice and management Drainage Statement, Appendix 3.1	Minor	Non-significant	Adverse
Peat Slide	Minor to Moderate	Adverse	Investigate and manage drains in areas susceptible to peat slide, monitoring and geotechnical risk register, site specific stability analysis using more accurate data after final design and install catch nets in moderate risk areas Drainage Statement, Appendix 3.1	Minor	Non-significant	Adverse
<i>Pollution</i>						
Water Quality	Minor to Moderate Moderate for the Gossa Water DWPA due to its sensitivity.	Adverse	Monitoring, HCoW and ECoW advice and management Drainage Statement, Appendix 3.1 Scottish Water agreed mitigation and contingency plan, Appendix 10.6.	Minor to Minor/ Moderate, Minor/Moderate for the Gossa Water DWPA due to its sensitivity.	Non-significant to Significant Non-significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
<i>Natural Drainage Alteration</i>						
Watercourse Crossings	Minor	Adverse	Bottomless culverts, arches or single span crossing with otter passage to allow Brown trout, salmonid, European Eel and otter passage. Appropriately designed for 1:200year flood event, flood risk assessment for main crossings and CAR licence application from SEPA.	Minor	Non-significant	Adverse
Watercourse Diversions	Moderate to Major	Adverse	Further detailed investigation and detailed design. Drainage Statement, Appendix 3.1 Appropriately designed diversion channel to replicate habitat	Moderate	Significant	Adverse
Bog Pools and waterbodies	Minor to Major	Adverse	Further detailed investigation and detailed design. Peatland restoration plan and HMP.	Minor to Moderate, Moderate where the excavation of bog pools cannot be avoided and are classified as Oligiotrophic and Dystrophic standing water habitats in the Ecology Chapter 10.	Non-significant to Significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Peat Slide	Minor to Moderate	Adverse	Further detailed investigation, modelling and detailed design, monitoring, geotechnical register, good practice and installation of catch nets in Moderate risk areas.	Minor	Non-significant	
<i>Geological Alteration</i>						
Disturbance of peat	Minor to Major	Adverse	Implementation of PMP demonstrates peat excavated can be appropriately reused on site for dressing and restoration of borrow pits. Further detailed investigation and detailed design. Peat restoration plan and HMP.	Minor to Major Major, where excavation of Annex I deep peat cannot be avoided	Non-significant to Significant	Adverse
Peat Slide	Minor to Moderate	Adverse	Further detailed investigation, modelling and detailed design, monitoring, geotechnical register, good practice and installation of catch nets in Moderate risk areas.	Minor	Non-significant	Adverse
Decommissioning						
<i>Erosion / Sedimentation</i>						

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Water Quality	Minor to Moderate	Adverse	Monitoring, HCoW and ECoW advice and management Drainage Statement for decommissioning Scottish Water mitigation and contingency plan for decommissioning	Minor to Minor/ Moderate, Minor/Moderate for the Gossa Water DWPA due to its sensitivity.	Non-significant	Adverse
Drainage Alteration	Minor to Minor/Moderate	Adverse	Monitoring, HCoW and ECoW advice and management Drainage Statement for decommissioning Scottish Water mitigation and contingency plan for decommissioning	Minor to Minor/Moderate Minor/Moderate for the Gossa Water DWPA due to its sensitivity.	Non-significant	Adverse
Peat Disturbance	Minor	Adverse	Good practice, standard mitigation and ongoing monitoring.	Minor	Non-significant	Adverse
Peat Slide	Minor	Adverse	Good practice, standard mitigation and ongoing monitoring.	Minor	Non-significant	Adverse
<i>Pollution</i>						
Water Quality	Minor to Moderate Moderate for the Gossa Water DWPA	Adverse	Monitoring, HCoW and ECoW advice and management Drainage Statement for decommissioning	Minor to Minor/ Moderate, Minor/Moderate for the Gossa	Non-significant to Significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
	due to its sensitivity.		Scottish Water mitigation and contingency plan for decommissioning	Water DWPA due to its sensitivity.		
<i>Geological Alteration</i>						
Disturbance of peat	Minor	Beneficial	Further excavation of peat is not anticipated, and any removal of infrastructure will focus on peat restoration and improvement	Minor	Non-significant	Beneficial
11. Traffic and Transport						
Construction						
Severance to users of Old Cullivoe Road / CPPY04 resulting from HGV traffic movements	Major	Adverse	Implementation of CTMP, application of speed limits, AIL movements controlled through TMP, traffic management on Old Cullivoe Road and at site access junctions, restricted delivery hours, segregation from construction traffic	Moderate	Significant	Adverse
Amenity of pedestrians (cyclists and horse riders) using Old Cullivoe Road / CPPY04 resulting from HGV traffic movements	Major	Adverse	Implementation of CTMP, application of speed limits, AIL movements controlled through TMP, traffic management on Old Cullivoe Road and at site access junctions, restricted delivery hours,	Moderate	Significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
			segregation from construction traffic			
Fear and Intimidation affecting pedestrians (cyclists and horse riders) using Old Cullivoe Road / CPPY04	Major	Adverse	Implementation of CTMP, application of speed limits, AIL movements controlled through TMP, traffic management on Old Cullivoe Road and at site access junctions, restricted delivery hours, segregation from construction traffic	Moderate	Significant	Adverse
Decommissioning						
Effects will be similar to those identified during the construction period. However, as traffic flows are anticipated to be lower they are anticipated to be less significant						
12. Socio-Economic, Tourism and Recreation						
Socio-Economics						
Effects on employment in Shetland (regional) during development and construction of the Proposed Development.	Moderate	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Moderate	Significant	Beneficial

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Effects on employment in Scotland (regional) during development and construction of the Proposed Development.	Moderate	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Moderate	Significant	Beneficial
Induced effects on employment during construction of the Proposed Development in Shetland.	Negligible	N/A	No mitigation proposed as no significant effects predicted.	Negligible	Non-Significant	N/A
Induced effects on employment during construction of the Proposed Development in Scotland.	Negligible	N/A	No mitigation proposed as no significant effects predicted.	Negligible	Non-Significant	N/A
Effects on capital expenditure in Shetland (regional) during construction of the Proposed Development.	Moderate	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Moderate	Significant	Beneficial
Effects on capital expenditure in Scotland (national) during construction of the Proposed Development.	Minor	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Minor	Non-Significant	Beneficial
Socio-economic effects during the decommissioning phase of the Proposed Development.	Minor	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Minor	Non-Significant	Beneficial

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Tourism and Recreation						
The effects on Core Path CPPY04 identified within the site during construction of the Proposed Development.	Moderate	Adverse	Access Route Plan to be required by Planning Condition.	Negligible	Non-Significant	Adverse
The effects on Core Paths identified within the Study Area during the construction of the Proposed Development.	Negligible	Adverse	No mitigation proposed as no significant effects predicted.	Negligible	Non-Significant	Adverse
The effects on NCN1 identified within the Study Area during the construction of the Proposed Development.	Moderate	Adverse	Access Route Plan to be required by Planning Condition.	Negligible	Non-Significant	Adverse
The effects on accommodation receptors during construction of the Proposed Development.	Minor	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Minor	Non-Significant	Beneficial
The effects on Core Paths CPPY04 identified within the site during decommissioning of the Proposed Development.	Minor	Adverse	Access Route Plan to be required by Planning Condition.	Minor	Non-Significant	Adverse
Overall effects on the local area during the decommissioning phase of the Development.	Negligible	Adverse	No mitigation proposed as no significant effects predicted.	Negligible	Non-Significant	Adverse
Land-use						

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
The effects on the land-use within the site and immediate vicinity during the construction of the Development.	Negligible	Adverse	No mitigation proposed as no significant effects predicted.	Negligible	Non-Significant	Adverse
The effects on the land-use within the site and immediate vicinity during the decommissioning phase of the Proposed Development.	Negligible	Adverse	No mitigation proposed as no significant effects predicted.	Negligible	Non-Significant	Adverse
Wider Economic Benefits						
Increased construction opportunity in the wider supply chain.	Minor	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Minor	Non-Significant	Beneficial
13. Aviation and Radar						
Presence of tall cranes	Minor	Adverse	Lighting and informing Aviation Stakeholders	Minor	Non-Significant	Adverse
14. Shadow Flicker						
No effects anticipated during construction or decommissioning						
15. Telecommunication						
No effects anticipated during construction or decommissioning						

Table 18-2 Summary of Residual Effects - Operation

Description of Effect		Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
		Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
5. Landscape and Visual							
Landscape							
LCA A3 Ronas Hill	Moderate	Adverse	Mitigation is embedded in the design of the layout and the turbine height and colour to be used. No screening measures are proposed as they would not be appropriate within the Shetland landscape.	Moderate–	Not significant	Adverse	
LCA A4 Unst Uplands	Locally Major/Moderate from Valla Field Elsewhere no greater than Moderate	Adverse		Locally Major/Moderate from Valla Field Elsewhere no greater than Moderate	Significant	Adverse	
LCA B1 Yell Peatland	Major/Moderate within 3km Moderate within 3-5km Elsewhere no greater than Moderate/Minor	Adverse		Major/Moderate within 3km - Moderate within 3-5km – Elsewhere no greater than Moderate/Minor	Significant	Adverse	
					Not significant		
					Not significant		

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
LCA E3 Coastal Crofting and Grazing Lands	Major/Moderate Elsewhere no greater than Moderate	Adverse		Major/Moderate Elsewhere no greater than Moderate	Significant Not significant	Adverse
LCA E4 Unst Coastal Crofting	Moderate	Adverse		Moderate	Not significant	Adverse
LCA G1 Coastal Edge	Moderate	Adverse		Moderate	Not significant	Adverse
CCA 12, Bluemull Sound	Moderate Elsewhere no greater than Minor	Adverse		Moderate Elsewhere no greater than Minor	Not significant Not significant	Adverse
CCA 14, Colgrave Sound	Moderate	Adverse		Moderate	Not significant	Adverse
CCA 18, Gloup Breckon	Major/Moderate	Adverse		Major/Moderate -	Significant	Adverse
CCA 19, Hermaness	Major/Moderate locally south of Wood Wick Elsewhere Minor	Adverse		Major/Moderate locally south of Wood Wick Elsewhere Minor	Significant Not significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
CCA 21, Whalefirth	Major/Moderate	Adverse		Major/Moderate	Significant	Adverse
CCA 24, North Roe Coast	Locally Moderate from the Point of Fethaland and North West Roe Elsewhere no greater than Minor	Adverse		Locally Moderate from the Point of Fethaland and North West Roe Elsewhere no greater than Minor	Not significant	Adverse
CCA 27, Yell Sound	Moderate from the north western extent of the CCA Minor or None Elsewhere	Adverse		Moderate from the north western extent of the CCA Minor or None Elsewhere	Not significant	Adverse
Belmont House, GDL	Major/Moderate	Adverse		Major/Moderate	Significant	Adverse
Brough Lodge, GDL	Major/Moderate	Adverse		Major/Moderate	Significant	Adverse
Visual - Settlements						
Southern Cluster: Sellafirth; Cunnister.	Major	Adverse		Major	Significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Eastern Cluster: Stronganess; Cullivoe; Greenbank.	Major/Moderate	Adverse	Mitigation is embedded in the design of the layout and the turbine height and colour to be used. No screening measures are proposed as they would not be appropriate within the Shetland landscape.	Major/Moderate	Significant	Adverse
North Eastern Cluster: Haa of Houlland; Midbrake; North and South Brough; Breckon.	Major/Moderate	Adverse		Major/Moderate	Significant	Adverse
Northern Cluster: Gloup; The Kirks	Major	Adverse		Major	Significant	Adverse
Belmont	Major/Moderate	Adverse		Major/Moderate	Significant	Adverse
Westing Cluster: Burragarth; Underhoull; Houllnan; Westing; Newgord.	Major/Moderate	Adverse		Major/Moderate	Significant	Adverse
Mid Yell	Moderate	Adverse		Moderate	Not significant	Adverse
Burra Voe	Moderate	Adverse		Moderate	Not significant	Adverse
Visual - Viewpoints						
1. Tittyans Hill, Yell	Walkers – Major Crofters – Major/Moderate	Adverse	Mitigation is embedded in the design of the layout and the turbine height and colour to be used.	Walkers Crofters – Major/Moderate	Significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
2. Fishermen's Memorial, Gloup	Residents / Walkers / Visitors – Major Crofters – Major/Moderate	Adverse	No screening measures are proposed as they would not be appropriate within the Shetland landscape.	Residents / Walkers / Visitors – Major Crofters – Major/Moderate	Significant	Adverse
3. Haa of Houlland	Residents, Major/ Moderate	Adverse		Residents, Major/ Moderate	Significant	Adverse
4. Cullivoe	Residents, Major/ Moderate	Adverse		Residents, Major/ Moderate	Significant	Adverse
5. Sands of Breckon	Visitors, Major/ Moderate	Adverse		Visitors, Major/ Moderate	Significant	Adverse
6. A968 / NCR1 Colvister	Road Users - Major / Moderate Cyclists - Major	Adverse		Road Users - Major / Moderate – Significant Cyclists – Major	Significant	Adverse
7. Cunnister, Basta Voe	Residents, Major	Adverse		Residents, Major	Significant	Adverse
8. Nev of Stuis, Yell	Walkers, Major	Adverse		Walkers, Major – Significant	Significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
9. Belmont House, Unst	Visitors, Major/ Moderate	Adverse		Visitors, Major/ Moderate	Significant	Adverse
10. Westing, Unst	Residents, Major/ Moderate	Adverse		Residents, Major/ Moderate	Significant	Adverse
11. Grimster, Whale Firth, Yell	Residents, Minor	Adverse		Residents, Minor	Not significant	Adverse
12. Brough Lodge, Fetlar	Visitors, Major / Moderate	Adverse		Visitors, Major / Moderate	Significant	Adverse
13. A968 / NCR1, middle Yell	Road Users – Moderate/Minor Cyclists – Moderate	Adverse		Road Users – Moderate/Minor Cyclists – Moderate	Not significant	Adverse
14. Wood Wick, Unst	Walkers, Major / Moderate	Adverse		Walkers, Major / Moderate	Significant	Adverse
15. B9081, Hill of Reafirth	Road Users, Moderate	Adverse		Road Users, Moderate	Not significant	Adverse
16. Point of Fethaland, North Roe	Walkers, Major / Moderate	Adverse		Walkers, Major / Moderate	Significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
17. Loch of Houllsquey, North Roe	Walkers, Major / Moderate	Adverse		Walkers, Major / Moderate	Significant	Adverse
18. Hermaness Hill	Walkers, Moderate	Adverse		Walkers, Moderate	Not significant	Adverse
19. Settlement at Burra Voe, A970, North Roe	Residents - Moderate Road Users – Moderate/Minor	Adverse		Residents – Moderate Road Users – Moderate/Minor	Not significant	Adverse
20. Ronas Hill	Major/ Moderate	Adverse		Major/ Moderate	Significant	Adverse
21. A968 / NCR 1 Hill of Swinster	Road Users – Minor Cyclists – Moderate/ Minor	Adverse		Road Users – Minor Cyclists – Moderate/ Minor	Not significant	Adverse
6. Ornithology						
Bluemull and Colgrave Sounds: displacement of red-throated diver	International significance	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Not significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Fetlar: displacement of dunlin and great skua	International significance	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Not significant	Adverse
East Mires SSSI: displacement of moorland breeding birds	National significance	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Not significant	Adverse
Hascosay SSSI: displacement of dunlin	National significance	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Not significant	Adverse
North Fetlar SSSI: displacement of great skua	National significance	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Not significant	Adverse
Lamb Hoga SSSI: displacement of dunlin and great skua	National significance	Adverse	Timing of works or pre-construction check for nesting birds. Exclusion zones during breeding season.	Negligible	Not significant	Adverse
Red-throated diver displacement.	International	Adverse	Enhancement of lochans on- and off-site to provide breeding opportunities for potentially displaced birds.	Local	Significant	Adverse
Curlew displacement.	County	Adverse	Habitat management on- and off-site to retain local population density.	Local	Significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Dunlin displacement.	Local	Adverse	Habitat management on- and off-site to retain local population density	Site	Significant	Adverse
Golden displacement.	Local	Adverse	Habitat management on- and off-site to retain local population density	Site	Significant	Adverse
Redshank displacement.	Local	Adverse	Habitat management on- and off-site to retain local population density	Site	Significant	Adverse
Snipe displacement.	County	Adverse	Habitat management on- and off-site to retain local population density	Local	Significant	Adverse
Great skua displacement.	Local	Adverse	N/A	Local	Significant	Adverse
7. Ecology and Nature Conservation						
Hydrological change – cable routes in blanket bog	Long-term less than Local, not significant	Adverse	Design iteration; micro-siting; implementation of CEMP, including HMP	Barely perceptible	Not significant	Adverse
Degradation and disturbance of habitat: blanket bog	Long-term medium impact, significant on a National area scale	Adverse	Design iteration; micro-siting; implementation of CEMP, including HMP; off-set mitigation through compensation by restoration of off-site areas	Low level impact, at a National area	Significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Otter - disturbance	No significant impact	n/a	Operational method statements, operator awareness	None	n/a	n/a
Fish – maintenance mortality	Unlikely, not significant	Neutral	Operational method statements, operator awareness	None	n/a	n/a
8. Noise						
Noise from operational wind turbines	Neutral	Adverse	None proposed.	Neutral	Not significant	Adverse
Noise from non-turbine fixed plant	Neutral	Adverse	None proposed.	Neutral	Not significant	Adverse
9. Cultural Heritage						
Effect on setting of Burgi Geos, promontory fort (Site 1)	Moderate	Adverse	N/A	Moderate	Significant	Adverse
Effect on settings of Sites 2, 4, 7, 21, 28, 39, 40, 41, 61, 66, 67, 68, 75,8 and 81	Minor /Moderate	Adverse	N/A	Minor /Moderate	Not significant	Adverse
Effect on settings of Sites 3, 5, 10, 12-15, 17, 18, 27, 29, 37, 39, 42, 45, 46, 48, 49, 52	Minor	Adverse	N/A	Minor	Not significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Effect on settings of Sites 9, 19, 20, 31, 32, 36, 43,47,54-58, 70	Negligible	Adverse	N/A	Negligible	Not significant	Adverse
10. Geology, Peat, Hydrology and Hydrogeology						
Erosion /Sedimentation						
Water quality	Minor	Adverse	Good practice and standard mitigation. Drainage Statement, Appendix 3.1 Scottish Water agreed mitigation and contingency plan, Appendix 10.6.	Minor	Not significant	Adverse
Pollution	Minor	Adverse	Good practice and standard mitigation. Drainage Statement, Appendix 3.1 Scottish Water agreed mitigation and contingency plan, Appendix 10.6.	Minor	Not significant	Adverse
<i>Natural Drainage Alteration</i>						
Alteration of natural drainage patterns	Minor	Adverse	Good practice and standard mitigation.	Minor	Not significant	Adverse
Flood Risk	Minor	Adverse	Good practice and standard mitigation.	Minor	Not significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
<i>Geological Alteration</i>						
Disturbance of peat	Minor	Adverse	Good practice and standard mitigation. Peat restoration plan and HMP.	Minor	Not significant	Adverse
Peat Slide	Minor	Adverse	Good practice, standard mitigation and ongoing monitoring.	Minor	Not significant	Adverse
11. Traffic and Transport						
No effects anticipated						
12. Socio-Economic, Tourism and Recreation						
Socio-Economics						
Effects of community benefit on the Northern Isles (local) during operation of the Proposed Development.	Minor	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Minor	Not significant	Beneficial
Effects on employment in Shetland (regional) during operation of the Proposed Development.	Minor	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Minor	Not significant	Beneficial

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Effects on employment in Scotland (national) during operation of the Proposed Development.	Minor	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Minor	Not significant	Beneficial
Effects on operational expenditure in Shetland (regional) during the operational phase of the Proposed Development.	Minor	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Minor	Not significant	Beneficial
Effects on operational expenditure in Scotland (national) during the operational phase of the Proposed Development.	Minor	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Minor	Not significant	Beneficial
Tourism and Recreation						
The effects on accessibility to the site during the operational phase of the Proposed Development.	Negligible	Adverse	No mitigation proposed as no significant effects predicted.	Negligible	Not significant	Adverse
The effects on Core Paths identified within the site and Study Area during the operational phase of the Proposed Development.	Negligible	Adverse	No mitigation proposed as no significant effects predicted.	Negligible	Not significant	Adverse
The effect on the number of tourists visiting the North Isles during the	Negligible	Adverse	No mitigation proposed as no significant effects predicted.	Negligible	Not significant	Adverse

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
operational phase of the Proposed Development.						
The effects on tourist attractions in Yell during the operational phase of the Proposed Development.	Negligible	Adverse	No mitigation proposed as no significant effects predicted.	Negligible	Not significant	Adverse
The effects on local tourist attractions during the operational phase of the Proposed Development.	Negligible	Adverse	No mitigation proposed as no significant effects predicted.	Negligible	Not significant	Adverse
Land-use						
The effects on the land-use within the site and immediate vicinity during the operational phase of the Development.	Negligible	Adverse	No mitigation proposed as no significant effects predicted.	Negligible	Not significant	Adverse
Wider Economic Benefits						
£30.0 million of community funding in the local area over the lifetime of the Proposed Development.	Minor	Beneficial	No mitigation proposed as no significant adverse effects predicted.	Minor	Not significant	Beneficial
Reinvesting the revenue into the Shetland economy through the consortium and community councils.	Negligible	Beneficial	No mitigation proposed as no significant effects predicted.	Negligible	Not significant	Beneficial
13. Aviation and Radar						

Description of Effect	Significance of Potential Effect		Mitigation Measure	Significance of Residual Effect		
	Significance	Beneficial/ Adverse		Significance	Significant	Beneficial/ Adverse
Effect on MOD TPS-77 Air Defence Radar at Saxa Vord	Moderate	Adverse	Radar Mitigation Scheme	Minor	Not significant	Adverse
14. Shadow Flicker						
Shadow Flicker effects on 7 nearby residential receptors	Not significant	Adverse	Implementation of a Shadow Flicker Protocol to be agreed with SIC.	No effect	n/a	n/a
15. Telecommunication						
Effects on telecommunication	No effect	n/a	None required	No effect	n/a	n/a

Table 18-3 Cumulative Effects

Receptor	Description of Effect	Cumulative Developments	Significance of Cumulative Effect		
			Significance	Significant	Beneficial/ Adverse
5. Landscape and Visual					
Cumulative landscape and visual effects have been included in the baseline for assessment of operational effects, outlined in Table 18.2 above, as the key other wind farms with which interaction will occur are built or are consented.					
6. Ornithology					
Red-throated diver	Disturbance, displacement and collision mortality	Garth, Beaw Field, Viking, Gremista and Mossy Hill	Local	Significant	Adverse
Curlew			Local	Significant	Adverse
Whimbrel			Negligible	Not-significant	Adverse
Dunlin			Local	Significant	Adverse
Golden plover			Local	Significant	Adverse
Snipe			Local	Significant	Adverse
Great skua			Local	Significant	Adverse
Merlin			Local	Significant	Adverse
7. Ecology and Nature Conservation					

Receptor	Description of Effect	Cumulative Developments	Significance of Cumulative Effect		
			Significance	Significant	Beneficial/ Adverse
Habitats	Habitat loss and degradation	Garth and Hill of Lussetter.	No effects	n/a	n/a
Otters and fish	Disturbance and mortality		No effects	n/a	n/a
8. Noise					
Cumulative noise effects have been included in the baseline for assessment of operational effects, outlined in Table 18.2 above, as per best practice guidance.					
9. Cultural Heritage					
Buried archaeological remains	Damage to buried remains and associated deposits	Garth Wind Farm, Beaw Field Wind Farm.	Negligible	Not-significant	Adverse
Cumulative Effect on Sites 4, 7, 8, 21, 28, 40	Changes to setting	Garth Wind Farm, Beaw Field Wind Farm.	Minor/moderate	Not-significant	Adverse
Cumulative Effect on Sites 2, 39 and 41	Changes to setting	Garth Wind Farm, Beaw Field Wind Farm.	Minor	Not-significant	Adverse
Cumulative Effect on Sites 80 and 81	Changes to setting	Garth Wind Farm, Beaw Field Wind Farm.	Negligible	Not-significant	Adverse
10. Geology, Peat, Hydrology and Hydrogeology					

Receptor	Description of Effect	Cumulative Developments	Significance of Cumulative Effect		
			Significance	Significant	Beneficial/ Adverse
No cumulative impacts are anticipated as a result of the other wind farm developments on Shetland					
11. Traffic and Transport					
No cumulative impacts are anticipated as a result of this Proposed Development as no other significant developments that would impact on the Study Area are anticipated to be under construction (the main period of traffic generation) within the same timescale					
12. Socio-Economic, Tourism and Recreation					
Northern Isles	Socio-economic effects e.g. increased employment	All wind farm developments	Minor	Not-significant	Beneficial
Outdoor recreational and tourism facilities	Visual impacts	Garth Wind Farm	Negligible	Not-significant	Adverse
Rough grazing upland areas	Land-use alteration	All wind farm developments	Negligible	Not-significant	Adverse
13. Aviation and Radar					
MOD TPS-77 Air Defence Radar at Saza Vord	Impact on the performance of the radar	Beaw Wind Farm	Minor	Not-significant	Adverse
14. Shadow Flicker					

Receptor	Description of Effect	Cumulative Developments	Significance of Cumulative Effect		
			Significance	Significant	Beneficial/ Adverse
Receptors 1-7	Shadow flicker	Tulac, Uphouse, SW Cullivoe Hall, Niaroo, Dalsetter, Innhouse and Garth	No effect	n/a	n/a
15. Telecommunication					
Telecommunication infrastructure	No effect	Other wind farm developments	No effect	n/a	n/a