

## **A9. VISUAL IMPACT**

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### **A9.1 INTRODUCTION**

The design of the proposed Viking Wind Farm has changed since the Section 36 application and its associated Environmental Statement were submitted in May 2009. The intention of this Addendum Chapter is not to re-present the 2009 Environmental Statement (2009 ES) Chapter 9 and accompanying drawings with amendments, but instead to assess and highlight how the design changes would alter the original findings of that Chapter. For this reason it must be read in conjunction with the Visual Impact Chapter of the 2009 ES.

Before reading this chapter, please first read Addendum Chapter A1, the Introduction, and Chapter A4, the Development Description. Failure to read these two chapters carefully may lead to a misunderstanding of the assessment work described in this chapter. Furthermore, because this addendum chapter is not intended to provide a complete new assessment of the issues, but instead provides a discussion of the effects of the work which has taken place since the 2009 ES was submitted, it must be read in conjunction with the visual impact chapter of the 2009 Environmental Statement.

For full details of the proposed design changes please refer to Addendum Chapter A4.

### **A9.2 CONSULTATION RESPONSES**

For a description of and commentary on comments by Scottish Natural Heritage (SNH) relevant to both landscape character and visual impact, please see Chapter A8, Landscape Character, Section A8.2, and also Appendix A9.3.

### **A9.3 CHANGES IN THE POLICY CONTEXT**

For a description of and commentary on policy changes relevant to both landscape character and visual impact please see Chapter A8, Landscape Character, Section A8.3.

### **A9.4 CHANGES IN METHODOLOGY**

In the 2009 EIA the landscape methodology, as described in Chapter 9, Section 9.4 of the 2009 ES, Was based upon the Guidelines for Landscape and Visual Impact Assessment (GLVIA), Second Edition, 2002. There have been no changes in the methodology of the Landscape Character Assessment since then.

### **A9.5 CHANGES IN BASELINE CONDITIONS**

There have been no significant changes in the baseline conditions.

## **A9.6 CHANGES IN THE PROPOSED WIND FARM**

The assumed design and management proposals of the 2009 layout which have the potential to result in impacts upon the visual amenity of the study area were described in the 2009 ES in Chapter 8, Section 8.6.1(b) and these general principles have not changed. However, twenty-three turbines, approximately 14 km of tracks, a number of primary and secondary borrow-pit areas of search, two anemometers and a construction compound have since been removed from the proposed wind farm design; please see Addendum Chapter A4 for further details. This would reduce the number of visible elements of the proposals in the landscape and views from some receptors. Reducing the number of visible elements would reduce the magnitude of change experienced by a receptor. The level of reduction would be dependant on a number of other factors such as distance, extent of view etc. However, despite these localised beneficial changes, because of the scale of the proposals, the overall landscape and visual assessments have not changed dramatically in their findings.

## **A9.7 CHANGES IN AGREED MITIGATION**

The assessment presented in the 2009 ES took into account primary mitigation measures related to site selection and the design of the layout (see 2009 ES Chapter 3, Site Selection; Chapter 4, Development Description; and Chapter 9, Section 9.6, Mitigation, for more details). The visual constraints which were applied to the siting and design of the layout as presented in the 2009 ES have been carried through into the revised layout, as presented within this Addendum. The findings of the Landscape and Visual Impact Assessments and feedback from consultation with SNH have influenced changes to the layout, as described in Addendum Chapter A4.

Please see Chapter A8, Landscape Character in relation to the mitigation of both landscape character and visual impacts.

Mitigation in relation to construction activities is now explicitly referred to in the Site Environmental Management Plan (SEMP), in Appendix A14.6. The SEMP embraces principles such as reinstating track verges, borrow-pits, temporary site compounds and turbine bases with in-situ peat "topsoil" and reducing double-width tracks to single width on completion, all of which would progressively mitigate adverse landscape and visual effects arising from construction during the operational period. However, the changes do not alter the conclusions in respect of significance of impact contained within the 2009 ES and as amended by this Addendum.

## **A9.8 CHANGES IN THE IMPACT ASSESSMENT**

This section outlines changes in the assessment of impacts on visual amenity resulting from the alterations to the proposed wind farm. The assessment of visual impacts reported in the 2009 ES was carried out in accordance with GLVIA methodology and was explained in Chapter 9, Section 9.4 of the 2009 ES. The visual assessment was far more comprehensive than most similar contemporary exercises, reviewing not just the viewpoints, chosen and agreed with SNH and SIC, but also every potential receptor potentially obtaining a view, mostly within 15km of the periphery of the proposals, being the area within which potential significant impacts would occur. For this reason the visual impact assessment tables in Appendix 9.1 of the 2009 ES reviewed over five hundred

viewpoint, building, routeway and outdoor site receptors and receptor locations in turn for their name, location, context, nature of main view, angle and nature of change experienced, distance to and number of turbines visible (i.e. proportion of development within view), sensitivity to change, magnitude of change and impact assessment, both during construction and operation (these two terms are described and expanded in Section 8.6.1(b) of the 2009 ES). In addition their locations and impact assessments were illustrated in the 2009 ES in Figures 9.2.1 to 9.2.11. Significant visual effects were summarised in the Conclusion, Section 9.7,3 of Chapter 9 in the 2009 ES. Where amended in relation to the 2010 Addendum, they are summarised in Table A9.1 below, superseding Table 9.4 of the 2009 ES.

The alterations to the layout of the proposed scheme would reduce the number of visible elements within a large number of views in the study area. Usually, the changes would result in fewer elements of the proposed wind farm affecting the visual amenity of a given area, compared with the 2009 proposals. However, these changes would not necessarily result in a reduction of the predicted level or significance of impacts - for example by reducing an impact assessed to be "moderate adverse" to one of "slight adverse". Therefore, *only receptors where the changes to the scheme would result in a change in the level of impact are described in detail here*. See Figures A9.2.1, A9.2.5, A9.2.7 and A9.2.12 for the locations of the affected visual receptors, superseding the equivalent figures in the 2009 ES.

Figure A9.1 shows the blade-tip ZTV for the revised layout and Figures A9.3.6a, b & c, A9.3.18a & b and A9.3.23a & b show wireframes and photomontages from the viewpoints presented within the ES, *but only where a change in impact level is predicted*. Appendix A9.1 shows a revised assessment of visual impacts for those receptors which would experience a differing level of impact from those presented within the 2009 ES. The changes resulting in the revised impact assessments are detailed below.

For comparison with the results of the original assessment, please see the 2009 ES Appendix 9.1, Visual Impact Tables.

(a) **Viewpoint Receptors (see Figure A.9.2.1)**

*Viewpoint 6 – View from Lunna House (receptor 171)*

A number of turbines have been deleted from the centre of the main view from this viewpoint. This effectively clears the centre of this view, reducing the magnitude of change and therefore visual impact. The predicted visual impact upon this viewpoint has therefore been downgraded from **Moderate/Substantial** to **Moderate**.

*Viewpoint 18 – View from Firth / Mossbank*

The assessment of this viewpoint was presented in the 2009 ES as **Negligible**. However, following consultation with SNH the assessed impact level was upgraded to **Slight**.

Nine turbines that would have been visible from this viewpoint have been deleted. However, these changes are not considered to result in a change in the predicted visual impact, which therefore remains **Slight**.

Viewpoint 23 – View from Hillswick

A number of turbines visible from this viewpoint have been deleted. This reduces the potential visibility of the proposals to only a small number of blade tips, thereby reducing the magnitude of change and impact. The predicted visual impact upon this viewpoint is therefore reduced from **Moderate** (which is considered significant) to **Slight/Moderate** (which is not considered to be significant).

Viewpoint 27 – View from A970 south of Cunningsburgh

One turbine blade tip (N146) would have been visible from this viewpoint in the 2009 proposal, and therefore a **Negligible** impact was predicted.

This turbine has been deleted from the layout. The visual impact upon the viewpoint has therefore been downgraded from **Negligible** to **No View**.

(b) **Residential and Outdoor Receptors**

Receptor 137 – Hill Cottage (on the B9076 south of Scatsta Airport), see Figure A9.2.5

Eight proposed turbines visible from this location have been deleted, including several that would have had the largest impact. The deletion of these turbines reduces the predicted magnitude of change from **Medium** to **Low/Medium** and the impact from **Slight** to **Negligible/Slight**.

Receptor 145 – Uphouse (on the north shore of Colla Firth), see Figure A9.2.5

Two turbines would have been visible from this location as a result of the 2009 proposals, and a **Negligible** impact was predicted. Both of these turbines have been deleted from the layout and therefore the impact rating has been downgraded to **No View**.

Receptor 160 – Souther House (off the A968, approximately two kilometres south of the head of Dales Voe), see Figure A9.2.5

Eight turbines, a track, a construction compound and a borrow pit that would have been visible from this location have been deleted. These alterations reduce the predicted magnitude of change and therefore visual impact. The visual impact upon this receptor has therefore been downgraded from **Moderate/Substantial** to **Moderate**.

Receptor 249 – Lochs (on the B9075, 300 m south of junction with the B9071), see Figure A9.2.7

Eleven turbines and a section of track that would have been visible from this location have been deleted. Eight distant turbines would now be visible from this location and the predicted magnitude of change is reduced. This results in a reduction of predicted visual impact from **Slight/Moderate** to **Slight**.

Receptor 250 – North Tararet (on the B9075, 400 m south of junction with the B9071), see Figure A9.2.7

Fourteen turbines and a section of track that would have been visible from this location have been deleted. Fourteen distant turbines would now be visible from this location and

the predicted magnitude of change is reduced. This results in a reduction of predicted visual impact from **Slight/Moderate** to **Slight**.

Receptor 251 – South Tararet (on the B9075, 600 m south of junction with the B9071), see Figure A9.2.7

Twelve turbines and a section of track that would have been visible from this location have been deleted. Eleven distant turbines would now be visible from this receptor and the magnitude of predicted change is reduced. This results in a reduction of predicted visual impact from **Slight/Moderate** to **Slight**.

Receptor 272 – Newing (on the B9075 one kilometre north of Skellister), see Figure A9.2.7

In the 2009 proposals a track adjacent to this receptor was to be used for access and a borrow pit was also proposed in an adjacent area. These have both been deleted from the revised scheme. As a result the predicted level of magnitude of change and impact during construction is reduced. The impact during construction was predicted to be **Moderate** (and therefore significant) within the 2009 ES. This is reduced to **Slight** (and therefore not significant) for the revised scheme. The long term (operational) impact is reduced from **Slight** to **Negligible**.

(c) **Route Receptors**

Receptor BR10 - B9075 (South Nesting) between Brettabister and Catfirth (including NCR1 and NSCR), see Figure A9.2.12

As with receptor 272, above, a track adjacent to this receptor was to have been used for access and a borrow pit was also proposed in an adjacent area. These have both been deleted from the revised scheme and therefore the predicted level of magnitude of change and impact during construction is reduced. The impact during construction was predicted to be **Moderate/Substantial** within the 2009 ES. This is reduced to **Moderate** (but still significant) for the revised scheme.

(d) **Cumulative Landscape and Visual Impact Assessment**

Cumulative effects would be as reported in the 2009 ES.

## **A9.9 SUMMARY AND CONCLUSIONS**

The revised (2010) design would lead to beneficial changes to a large number of views from assessed viewpoints and other assessed receptors compared with the 2009 proposals. However, the changes would be relatively minor for the majority of receptors. Therefore the *assessed level and/or significance* of visual impact due to the proposed wind farm has changed in twelve cases, as described above and summarised in Table A9.1, below.

**Table A9.1 Summary of Visual Impacts**

Receptors	Construction				Operation			
	Significant			Not Significant	Significant			Not Significant
	Substantial	Moderate/ Substantial	Moderate	Negligible to Slight/ Moderate	Substantial	Moderate/ Substantial	Moderate	Negligible to Slight/ Moderate
Viewpoints	8	8 (9)	4	23 (22)	8	8 (9)	3	24 (23)
Buildings/ Outdoor	460	209 (210)	295	2526 (2525)	460	208 (209)	271 (270)	2551
Roads (including National Cycle Routes, the North Sea Cycle Route and local cycle routes)	2	4 (5)	5 (4)	17	2	4	5	17
Ferries	1	2	1	4	1	2	1	4
Walking Routes	1	1	2	16	1	1	2	16
<b>Total</b>	<b>472</b>	<b>224 (227)</b>	<b>307 (306)</b>	<b>2586 (2584)</b>	<b>472</b>	<b>223 (225)</b>	<b>282 (281)</b>	<b>2612 (2611)</b>

(Numbers in brackets show the results of the 2009 assessment where they differ from those presented within this addendum.)

As shown in Table A9.1, above, four viewpoint receptors, seven residential receptors and one route receptor would experience a change in the level of predicted visual impact compared with that stated in the 2009 ES. Two of these twelve receptors (viewpoint 23 (Hillswick) and receptor 272 (Newing)) would experience a reduction of impact from a level that is considered significant (i.e. moderate and above) to one considered not significant. This latter reduction in significance would be during construction only, as long term impacts were already considered to be slight (and therefore not significant) within the 2009 ES.

## A9.10 REFERENCES

Landscape Sensitivity and Capacity Study for Wind Farm Development on the Shetland Islands (*LUC for Shetland Islands Council, March 2009*)

Scottish Planning Policy (SPP) (*February 2010*)