STRATHY SOUTH WIND FARM

Landscape & Visual Review (T39 Layout)

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1. Introduction

- 1.1.1 In 2007, SSE Generation Limited (hereafter referred to as 'the Applicant') submitted an application to the Energy Consents and Deployment Unit (ECDU) of the Scottish Government (07/00263/S36SU) for consent under section 36 of the Electricity Act 1989 (and deemed planning permission), for a wind farm known as Strathy South, located near Strathy, in Sutherland (hereafter referred to as the Original 2007 Scheme).
- 1.1.2 An Environmental Impact Assessment (EIA) was undertaken in relation to the proposed wind farm in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (the 'EIA Regulations'), as amended, and an Environmental Statement (hereafter referred to as 'the 2007 ES') was submitted alongside the application. The 2007 application remained undetermined pending receipt of additional environmental information as requested by stakeholders in relation to a number of specific matters arising through the application consultation process.
- 1.1.3 To address these matters and to further reduce environmental impact, the Applicant made modifications to the Original 2007 Scheme and, in September 2012, confirmed its intention to produce an ES Addendum for the modified scheme (hereafter referred to as 'the Modified 2013 Scheme'). Therefore, an ES Addendum was prepared on behalf of the applicant by SSE Renewables Developments (UK) Ltd to address the issues raised by consultees and to report on the changes to the environmental assessment resulting from the modifications made to the scheme. Much of the assessment reported within the 2007 ES was still relevant to the Modified 2013 Scheme. The 2013 ES Addendum chapters reported how the modifications to the Original 2007 Scheme affected the conclusions of the 2007 ES (if at all).
- The 2013 ES Addendum was submitted to ECDU in July 2013 and the Modified 2013 Scheme layout is 114 presented in Figure 1 of this report. Further consultation has been undertaken with the consultees following submission, in particular with The Highland Council (THC), Scottish Natural Heritage (SNH) and the Ministry of Defence (MoD). THC considered the proposals at its North Planning Application Committee on 10 June 2014. The planning officer's recommendation was "Raise no objection (subject to the removal of 8 turbines)". Furthermore, the report concludes "There are some significant adverse impacts to taken into account with the application, but the development is also considered to be acceptable on many of the specific criteria set out in the Development Plan. The impact of the project is also reversible in that permission is being sought for a period of 25 years after which time the infrastructure can be removed and the site largely restored to open moorland. The removal of over 1,000ha of non-native woodland and significant peat land restoration is seen as a significant benefit. The application is one that can be seen as being located and sited such that it will not be significantly detrimental overall, either individually or cumulatively with other operational onshore wind farms. The application, with the exception of the matters highlighted above (SNH objection re the SPA on two bird species) is one which is seen to otherwise accord with the policies of the Council's Development Plan. The application is therefore one which on a planning balance basis should be supported."
- 1.1.5 Following this, the Committee determined that THC's response to this consultation was "to object to the application on the basis of the concerns highlighted in the objections raised by Scottish Natural Heritage, thereby the proposal was contrary to the Council's Highland-wide Local Development Plan, Policies 57 (Natural, Built and Cultural Heritage) and 67 (Renewable Energy)."
- 1.1.6 The Applicant confirmed to ECDU in July 2014 that it wished Scottish Ministers to move to determination of the application which will necessitate, under the terms of Paragraph 2(2) of Schedule 8 to the Electricity Act 1989, Scottish Ministers to call a public inquiry. As confirmed in correspondence from the Applicant's planning consultants to the Directorate for Planning and Environmental Appeals, the Applicant has reduced the scale of the project by 8 turbines and is seeking consent for a 39 turbine wind farm. This report has been prepared to provide details on the environmental effects of a reduction in turbine numbers from 47 (as presented in the Modified 2013 Scheme) to a 39 turbine scheme (hereafter referred to as the "T39 layout"). This layout involves the deletion of eight turbines (T51, T55, T62, T63, T68, T73, T74 and T76 refer to figure 2: Layout) in order to address certain matters raised by consultees, in particular SNH and MoD.

- 1.1.7 The matters raised by consultees relate to ecological designations and species and to the ability of the RAF to conduct low flying operations. No statutory consultee objections relating to potential impacts on landscape character or visual amenity have been received as a result of the 2007 ES or the 2013 ES Addendum.
- 1.1.8 The aim of this report is to review the conclusions of the 2013 ES Addendum for Chapters A8 (Landscape Character) and A9 (Visual Amenity) and to assess whether there has been any change to the significance of the predicted environmental effects as a consequence of the T39 Layout. Any such changes are described within this report.

2. Development Description

- 2.1.1 The proposed development is detailed in Chapter A4: Development Description of the 2013 ES Addendum. The proposed development consists of the following key elements:
 - Wind turbines:
 - Foundations and hard standing;
 - Access track and site tracks;
 - Stream crossings;
 - Cabling;
 - Anemometer masts;
 - Control building/Switching station;
 - Welfare building;
 - Lay down areas; and
 - · Borrow pits.
- 2.1.2 In terms of assessing any potential change of impacts on designated and non-designated landscapes and on visual amenity, the relevant design change associated with the T39 Layout is the deletion of eight turbines from the Modified 2013 Scheme.
- 2.1.3 Associated reductions to the track layout, watercourse crossings and hardstanding, while considered to represent reductions in potential landscape character impact, would not be material to the changing character of the landscape in the context of the overall scale of the development proposed. Turbine scale would not change and, while overall turbine numbers would be reduced, the perceived scale of the site, and the development as a whole, would not be altered when comparing layouts.

2.2 Turbines

- 2.2.1 The T39 Layout would see the removal of eight turbines from the Modified 2013 Scheme: T51, T55, T62, T63, T68, T73, T74 and T76 (refer to Figure 2).
- 2.2.2 The National Grid References (NGR) for the turbines proposed for retention are presented in Table 1.

Table 1: Turbine Locations

Turbine Number	X Co-ordinate	Y Co-ordinate
1	280619	953031
2	281155	952737
4	280687	952437
6	281205	952237
8	280675	951871
9	281141	951618
10	280139	951650
11	280653	951295

Turbine Number	X Co-ordinate	Y Co-ordinate
13	280144	951050
15	281058	950872
17	280598	950707
18	281049	950334
19	280030	950461
20	280413	950162
22	279973	949829
24	280781	949792
26	280279	949361
28	279786	949085
29	279022	950112
30	279413	949703
33	279165	949159
35	277397	949254
36	278217	949225
39	277866	949638
41	277431	949983
42	278375	949964
43	278763	949581
45	278263	950529
46	278855	950613
49	277856	951064
47	278555	951001
50	278264	951400
52	277806	951652
57	278737	951687
56	278297	951962
61	279119	952086
69	278372	953507
70	278683	953059
72	279165	953538

2.2.3 As set out in Section A4.2.4: Micrositing of Chapter A4: Development Description, it is proposed that an allowance of up to 50m would be permissible for turbines and infrastructure.

3. Effects of Design Change on Conclusions of the 2013 ES Addendum

- 3.1.1 The purpose of this section of the report is to provide an understanding of how the environmental effects arising from the T39 Layout compare with those described in the 2013 ES Addendum for the Modified 2013 Scheme. In addition, this section provides consideration of the cumulative effects in relation to relevant cumulative wind farms.
- 3.1.2 This report provides a means of comparing potential impacts from previous assessment and so does not seek to reassess based on updated guidance such as revised Wild Land Area mapping, GLVIA3 and SNH visualisations guidance. This approach was agreed following discussion between the Applicant and consultees, including THC and SNH.
- 3.1.3 THC was also consulted regarding the baseline scenario for cumulative assessment and the selection of relevant viewpoints.

3.2 Landscape Character

- 3.2.1 The T39 Layout incorporates deletions to turbines and associated track which have the potential to alter the impacts assessed and presented in Chapter A8: Landscape Character of the 2013 ES Addendum. This section is intended to report the implications of these changes if any, to describe any updated landscape character impacts and to assess any potential significant effects and compare them to those arising from the Modified 2013 Scheme.
- 3.2.2 The study area for this review is unchanged from the 2007 ES and the 2013 ES Addendum. This allows for a direct comparison of the assessments. The 2007 ES and the 2013 ES Addendum assessed potential impacts on non-designated and designated landscapes within a 15km detailed study area from the site boundary.
- 3.2.3 At the time of preparing the 2013 ES Addendum, this study area included the following three designated areas for assessment:
 - Kyle of Tongue National Scenic Area (NSA);
 - Bens Griam and Loch nan Clar Special Landscape Area (SLA); and
 - Farr Bay, Strathy and Portskerra SLA.
- 3.2.4 The detailed study area also identified the following non-designated Landscape Character Zones (LCZs) for assessment:
 - Upland Plateau with Raised Bogs LCZ;
 - Rocky Coast with Bays LCZ;
 - River Strathy Valley LCZ;
 - Strath Halladale LCZ;
 - Strathnaver LCZ;
 - Broad Upland Basin LCZ; and
 - Landmark Peaks and Foothills LCZ.

Changes in Impact Arising from the T39 Layout

3.2.5 As stated above, although the number of turbines would reduce as a result of the T39 Layout, the perceived scale of the proposal, when appreciated in full from the study area, would be largely

unchanged. The main change in impact therefore is likely to result from changes in extent of the designated and non-designated landscapes which are potentially affected.

Designated Area

- 3.2.6 When comparing ZTVs for the Modified 2013 Scheme and the T39 Layout (refer to Figures 5, 6 & 7), at one of the three designated areas (Ben Griam and Loch nan Clar SLA), the T39 Layout would result in no change to the extent of area potentially affected. At the other two designated areas (the Kyle of Tongue NSA and the Farr Bay, Strathy and Portskerra SLA) the T39 Layout would result in minor reductions in the extent of designated area potentially affected.
- 3.2.7 The 2013 ES Addendum found that a potential significant impact would result at the Ben Griam and Loch nan Clar SLA (Moderate). Given the lack of change at this SLA noted above, it is assessed that this would be unchanged as a result of the T39 Layout.
- 3.2.8 Although there are minor reductions in the extent of other designated areas potentially affected by the T39 Layout, it is assessed that potential impacts at these would not be sufficient to change the potential significance of impact.
- 3.2.9 The assessed impact on designated areas within the 15km detailed study area would therefore be unchanged from the 2013 ES Addendum as a result of the proposed T39 Layout.

Landscape Character Zones

- 3.2.10 A comparison of ZTVs for the Modified 2013 Scheme and the T39 Layout (refer to Figure 7) has found that a reduction in the extent of areas potentially affected would result at all of the LCZs as a result of the proposed reduction in turbine numbers. Changes would generally be minor but the most notable reductions would be found at the Upland Plateau with Raised Bogs LCZ and the Strathnaver LCZ.
- 3.2.11 In the case of the Upland Plateau with Raised Bogs LCZ, reductions in affected extent would occur in small areas throughout the character zone. Given the extent of the area which would continue to be affected by the T39 Layout, there would be no change in the assessed potential impact.
- 3.2.12 At the Strathnaver LCZ, there would be a reduction in the extent potentially affected but not overall noticeability. There would be no change in assessment at this location.
- 3.2.13 The assessed impact on landscape character zones within the 15km detailed study area would therefore be unchanged from the 2013 ES Addendum as a result of the proposed T39 Layout.

Cumulative Assessment

- 3.2.14 A review of the status of sites included in the 2013 ES Addendum CLVIA was undertaken in August 2014 and it was found that four sites had either been withdrawn from planning or refused consent during the intervening period from submission of the Addendum in July 2013. A further two sites contained in the 2013 ES Addendum assessment had changed status from Application to Consented. In addition to the sites contained in the 2013 ES Addendum CLVIA, eight sites had since entered the planning system at Application, Appeal Pending or Consented stages in the planning process.
- 3.2.15 However, having looked at the proposed locations for these sites, the majority would potentially add to existing clusters of development along the A9, near Dounreay and east of Thurso and Creag Riabhaich would appear as a standalone site. At approximate distances varying between 25km and 55km from Strathy South Wind Farm, it is considered unlikely that they would significantly alter the potential impacts associated with the existing clusters which have previously been identified and assessed.
- 3.2.16 Focus is therefore on the design changes of neighbouring sites (Strathy North and Strathy Wood), as has been done using VP1 (Ben Griam Beg), VP4 (Strathy), VP9 (Bettyhill Viewpoint) and VP13 (East of

Melvich) and the colouring of turbines at Strathy North and Strathy Wood Wind Farms, rather than to revisit the CLVIA contained in the 2013 ES Addendum. This approach was agreed during consultation with The Highland Council. Commentary on these viewpoints is presented at Paragraphs 3.4.2 to 3.4.8 below.

Conclusion

3.2.17 While the T39 Layout would result in reduction in the extent of designated and non-designated landscape potentially affected by turbine visibility, these would not alter the overall perceived scale of the proposed development or any of the assessed landscape impacts identified in the 2013 ES Addendum.

3.3 Visual Assessment

3.3.1 The T39 Layout incorporates deletions to turbines and associated track which have the potential to alter the impacts assessed and presented in Chapter A9: Visual Assessment of the 2013 ES Addendum. This section is intended to report the implications of these changes, if any, to describe any updated visual effects, to assess any potential significant impacts and compare them to those arising from the Modified 2013 Scheme.

Viewpoint Selection

- 3.3.2 For ease of comparison, the viewpoints presented here are those included in the 2013 ES Addendum. These were selected and agreed with THC and SNH in advance of the 2013 ES Addendum preparation and are shown on Figures 5, 6 and 7.
- 3.3.3 It was also agreed that, for VP4 (Strathy), VP9 (Bettyhill Viewpoint) and VP13 (East of Melvich), proposed turbines from both Strathy Wood and Strathy North Wind Farms would be shown in different colours alongside Strathy South Wind Farm turbines, in order to illustrate the potential relationships between these three neighbouring developments. This approach has been repeated for this review and more recent consultation with THC has led to VP1 (Ben Griam Beg) also being presented in this way. When carrying this out, the design information used for Strathy Wood Wind Farm has been updated in line with the most recent information available from the THC online planning portal.

Changes in Impact Arising from the T39 Layout

VP1 - View from Ben Griam Beg

- 3.3.4 Refer to Figures 8 and 9.
- 3.3.5 Compared to the Modified 2013 Scheme, the horizontal spread of the T39 Layout would be unchanged. T39 Layout would however result in an improved composition resulting from less clashing and stacking of blades and turbines at the centre of the view. There would be no change to the proposed development's potential to screen or obscure any key landscape elements, including the skyline.
- 3.3.6 Despite the improvement in composition noted above, impacts would remain unchanged from those reported in the 2013 ES Addendum.

VP3 - View from A836 near Borgie

- 3.3.7 Refer to Figures 10 and 11.
- 3.3.8 The T39 Layout would result in a minor reduction in horizontal spread to the left of the view when compared to the Modified 2013 Scheme. The removal of turbines would result in some of the most prominent turbines being taken out of this view and this would open up some gaps in the view but without

altering the overall perception of the proposed development. There would be no change in the degree of screening or obstruction of landscape elements when compared to the Modified 2013 Scheme.

3.3.9 Despite changes noted above, potential impacts from this viewpoint would be unchanged from those reported in the 2013 ES Addendum.

VP4 - View from Strathy

- 3.3.10 Refer to Figures 12 and 13.
- 3.3.11 The removal of turbines in the T39 Layout would result in the horizontal spread to the right of the view decreasing, and not extending beyond the extent of Strathy North. There would be no change in the spread to the left when compared to the Modified 2013 Scheme. The perceived spacing of the proposed development is unlikely to be changed in the context of Strathy North. The perceived screening or obstruction of the landscape elements would not be changed in the context of Strathy North.
- 3.3.12 Impacts resulting at this viewpoint would be unchanged from those reported in the 2013 ES Addendum.

VP5 - View from Achargary

- 3.3.13 Refer to Figures 14 and 15.
- 3.3.14 The horizontal spread of the proposed development would reduce as a result of the T39 Layout when compared to the Modified 2013 Scheme. Also, the scale of turbine elements visible above the skyline would reduce when compared to the Modified 2013 Scheme. However, two prominent sets of rotor tips would be visible. Due to the reduction in numbers of turbine tips visible there would be an increase in the gaps between turbine blades visible and a minor reduction in coherence of the scheme.
- 3.3.15 Despite changes noted above, potential impacts from this viewpoint would be unchanged from those reported in the 2013 ES Addendum.

VP8 - View from Bothy at Strathy Loch

- 3.3.16 Refer to Figures 16 and 17.
- 3.3.17 The extent of visibility from this viewpoint, for both the Modified 2013 Scheme and the T39 Layout, is such that there would be no change in the reported impacts.

VP9 - View from Bettyhill Viewpoint

- 3.3.18 Refer to Figures 18 and 19.
- 3.3.19 The T39 Layout would result in the most prominent turbines being removed from this view and so, while the horizontal spread would be unchanged when compared to the Modified 2013 Scheme, spacing between turbines and composition would improve.
- 3.3.20 Post-construction impacts from this viewpoint would reduce from Moderate-Substantial to Moderate. Impacts during construction would remain unchanged.

VP13 - View from east of Melvich

- 3.3.21 Refer to Figures 20 and 21.
- 3.3.22 To the right of view, the horizontal spread of the T39 Layout would reduce when compared to the Modified 2013 Scheme. However, it is unlikely that this would be perceptible at this distance. Spacing would

improve slightly but this is also unlikely to be perceptible. There would be no change in respect of screening or obstruction.

3.3.23 Impacts resulting at this viewpoint would be unchanged from those reported in the 2013 ES Addendum.

VP15 - View from Lednagullin

- 3.3.24 Refer to Figures 22 and 23.
- 3.3.25 There would be no view from this location of either the Modified 2013 Scheme or the T39 Layout.

VP16 - View from Syre Lodge

- 3.3.26 Refer to Figures 24 and 25.
- 3.3.27 The T39 Layout would result in their being no view of turbines at Strathy South from this location. The assessed impact would therefore reduce from Negligible to No View.

Conclusion

- 3.3.28 The T39 Layout would result in the removal of several turbines and alterations to the horizontal spread, composition and perception of the proposed development from several viewpoints. These changes would result in a change of identified impacts at two of the viewpoints assessed: VP9 Bettyhill Viewpoint (from Moderate-Substantial to Moderate which would therefore remain as a significant impact) and VP16 Syre Lodge (from Negligible to No View which would not be significant). Cumulative Assessment
- 3.3.29 As explained above, the cumulative assessment for potential impacts on landscape character and visual amenity is focussed on the design changes of neighbouring sites, using VP4, VP9 and VP13 and the colouring of turbines at Strathy North and Strathy Wood wind farms. This is similar to the approach agreed with statutory consultees when preparing the 2013 ES Addendum.

VP1 - Ben Griam Beg

- 3.3.30 This viewpoint was not included as part of the cumulative assessment for the 2013 ES Addendum but was recommended for inclusion in this review as a result of further consultation with THC. The relevant visualisation (refer to Figure 9) shows that turbines at Strathy South would appear closer to the viewpoint than those at Strathy North and Strathy Wood. In terms of horizontal spread, those applied for at Strathy Wood would extend development to the right of view and those at Strathy South would extend to the left when compared to those consented at Strathy North. Despite this spread, all turbines would appear at a similar scale to one another, would be located within the same landscape character type and would not dominate, or encroach onto the setting of, Ben Griam Beg.
- 3.3.31 The resulting cumulative impact of these three developments would be Slight-Moderate.

VP4 - View from Strathy

- 3.3.32 The visualisation from this viewpoint (refer to Figure 13) shows that all turbines from the T39 Layout would appear behind those of the consented Strathy North development and those applied for at Strathy Wood. Turbine spacing and scale would not appear at odds with either of these developments. The three developments would appear reasonably well together above a low point in the horizon although it is noted that turbine tips from Strathy Wood extend further to the left of view, above slopes leading to the adjoining plateau.
- 3.3.33 The resulting cumulative impact of these three developments would be Neutral. This is unchanged from the 2013 ES Addendum.

VP9 - View from Bettyhill Viewpoint

3.3.34 While highlighted as a potentially important viewpoint from which to consider the combined impacts of Strathy South, Strathy North and Strathy Wood, only Strathy South would be visible from this location (refer to Figure 19). There is therefore no cumulative impact concerning the neighbouring developments at this location.

VP13 - View from east of Melvich

- 3.3.35 The visualisation from this viewpoint (refer to Figure 21) shows that turbines from the three neighbouring developments would be seen above a low point in the landscape, between a distant hill and the slope rising towards the interior plateau. Of these schemes, Strathy South would extend furthest inland but would not intrude on the containing slope. The scale and spacing of the developments would match well when viewed from this location.
- 3.3.36 The resulting cumulative impact of these three developments would be Neutral. This is unchanged from the 2013 ES Addendum.

Conclusion

3.3.37 It is not possible to compare potential cumulative effects at VP1 (Ben Griam Beg) as this was not included as a cumulative viewpoint in the 2013 ES Addendum. However, potential cumulative effects here as a result of the T39 Layout would not be significant. At the other VPs, there would be no change to the cumulative assessment.

4. Conclusions

- 4.1.1 The T39 Layout would result in a reduction in turbine numbers at the site: 39 rather than 47. Associated reductions to the track layout, watercourse crossings and hardstanding, while considered to represent reductions in potential landscape character impact, would not be material to the changing character of the landscape in the context of the overall scale of the development proposed. Turbine scale would not change and, while overall turbine numbers would be reduced, the perceived scale of the site, and the development as a whole, would not be altered when comparing layouts.
- 4.1.2 While the T39 Layout would result in reduction in the extent of designated and non-designated landscape potentially affected by turbine visibility, these would not alter the overall perceived scale of the proposed development or any of the assessed landscape impacts identified in the 2013 ES Addendum.
- 4.1.3 The T39 Layout would result in alterations to the horizontal spread, composition and perception of the proposed development from several viewpoints. These changes would result in a change of identified impacts at two of the viewpoints assessed: VP9 Bettyhill Viewpoint (from Moderate-Substantial to Moderate which would therefore remain as a significant impact) and VP16 Syre Lodge (from Negligible to No View which would not be significant).
- 4.1.4 Other than the potential changes in impact noted above, the findings of Chapters A8 (Landscape Character) and A9 (Visual Amenity) of the 2013 ES Addendum would remain unchanged.