

Chapter 17: Summary of Residual Effects

17. SUMMARY OF RESIDUAL EFFECTS.....	1
17.1. INTRODUCTION.....	1

17. Summary of Residual Effects

17.1. Introduction

- 17.1.1. This chapter provides a summary of the findings of the EIA for the Proposed Varied Development compared with the 2021 EIAR for the Consented Development (**Table 17.1** below).

Table 17.1: Comparative Environmental Assessment Summary

Technical Chapter	Proposed Varied Development vs Consented Development Summary	New or Intensified Significant Residual Effect?
Chapter 5: Landscape & Visual	<p>Summary tables detailing Landscape and Visual Effects and comparisons between effects reported in the 2021 EIAR vs the predicted effects of the Proposed Varied Development are provided in Chapter 5, Tables 5.8 - 5.10.</p> <hr/> <p><i>Landscape</i></p> <p>The landscape assessment has found that while there would be localised increases in effect within all LCTs, significant effects would be limited to LCTs where significant effects were previously identified. While the extent of significant effects within WLA 34 would increase, the overall effect on the WLA as a whole is considered to remain not significant, and there would not be an increase in effect within other designated and protected landscapes. Individually these are considered to represent material changes to the effects experienced by these receptors. However, when viewed in the context of the overall scheme they represent a small change to the overall effects.</p> <hr/> <p><i>Visual Receptors</i></p> <p>The majority of the identified receptors in the study area would experience very similar effects from the 2 schemes, although there would be increased visual effects from 7 Viewpoints (VPs) and 4 Residential receptors:</p> <p>These VPs would be clustered within 10km of the Site. Within approximately 5km, the VPs along Glencassley Road (VP 11 and 12), within Rosehall (VP6) and from near Inveroykel Forest (VP16) would see a noticeable increase to the height of the turbines compared to the Consented Development. They would be seen in relatively close proximity above the eastern glen side. Within 10km, the VPs directly overlooking Loch Shin (VP9 and VP14) would also experience a noticeable increase in visibility of the turbines. The taller turbines would extend the horizontal spread of the development which would appear less contained by the surrounding landform. There would also be an increased level of effect from VP20 where the turbines would become more perceptible, although this would not lead to a significant level of effect</p> <p>There would be increased effects ratings for 4 receptor groups within 10km of the Site. These include the village of Rosehall and the receptors on the eastern side of Loch Shin with direct views across towards the</p>	<p>No change – significant effects for same LCTs as predicted for Consented Development.</p> <hr/> <p>Increased effects from 7 viewpoints and 4 residential receptors.</p>

Site. There would be a noticeable increase in the size of the turbines from these receptors compared to the Consented Development and an increase in the horizontal spread, particularly from the cluster overlooking Loch Shin.

The assessment of turbine lighting reports that the effects of lighting seven turbines, would be significant from three LCTs, WLA 34, five viewpoints, five residential receptor locations and three routes. A reduction in these effects may be achieved through further consultation with CAA on appropriate lighting mitigation measures.

Although further reduction in effects may be achieved through lighting mitigation solutions, significant effects on 3 LCTs, WLA34, 5 VPs, and 3 routes.

Cumulative Effects

Although not directly comparable, increased cumulative effects are anticipated from two of the included viewpoints VP12 - Glencassley road by Langwell Hill and VP20 – Cul Mòr (not previously assessed). The turbines would become more perceptible / noticeable from both of these VPs, this is not anticipated to lead to a significant level of effect.

Increased effects from 2 viewpoints.

Chapter 6: Ecology

The assessment has demonstrated that the effects identified for peatlands for the Proposed Varied Development were comparable to those identified for the Consented Development: prior to mitigation measures both the Proposed Varied Development and Consented Development are predicted to have a Significant Effect on peatland habitats; however, implementation of appropriate Habitat Management and Deer Management Plans provides a beneficial effect and improves the significance of effect in both cases to minor (beneficial).

The Proposed Varied Development has been designed to avoid areas of highest ecological sensitivity were possible, instead affecting peatland that it is in a modified or degraded condition. Mitigation and compensation measures secured through planning conditions for the Consented Development, including a detailed Construction Environmental Management Plan, Peat Management Plan, Habitat Management Plan and Deer Management Plan, remain appropriate and effective for the Proposed Varied Development.

A BNG assessment at +15% above baseline provides confidence that the Proposed Development will achieve demonstrably positive effects for biodiversity, in accordance with NPF4 Policy 3, and the site will be left in a measurably better state than beforehand.

No Change

Predicted effects on other protected species such as otter, water vole, and bats remain negligible or not significant for the Proposed Varied Development due to embedded mitigation and the absence of new significant impacts arising from the varied elements.

Cumulative effects with other nearby developments have been considered and are not anticipated to differ materially from those previously assessed for the Consented Development, given the similarity in the scale and nature of impacts and the enhanced mitigation proposals.

In summary, with the implementation of embedded and secured mitigation, compensation, and enhancement measures, the Proposed Varied Development is not expected to result in any new or materially different significant adverse ecological effects compared to the Consented Development. The proposals align with best practice guidance and statutory policy, ensuring that biodiversity conservation and restoration are integral to the development lifecycle.

Chapter 7: Ornithology

No significant effects on any IOFs were predicted for the Consented Development (**Chapter 7, Table 7.6**).

No Change

Based on the larger air gap for the Proposed Varied Development compared with the Consented Development, no golden plover or dunlin flights were considered to be at-risk. Therefore, these species were scoped out of the revised CRM and predicted collision risk for the Proposed Varied Development is lower than for the Consented Development.

Largely due to the increased air gap, the revised CRM for the Proposed Varied Development also predicted lower golden eagle and greenshank mortality rates and some flight activity that would previously be at-risk from the Consented Development turbines would be below PCH for the Proposed Varied Development turbines.

As revised collision risk effects on all IOFs re-assessed were lower for the Proposed Varied Development compared with the Consented Development, in HRA terms, the potential for LSEs on the qualifying interests of the Caithness and Sutherland Peatlands SPA will be lower. Therefore, the conclusions in **Technical Appendix 9.2 of the 2021 EIAR** that there would be no adverse effects on the integrity of the SPA remain valid.

The potential for significant effects on greenshank and golden eagle due to collision risk was considered to be negligible for many of the developments included in the cumulative assessment, and in many cases flight activity was too low for CRM to be merited.

It is considered that the Magnitude of Change to the Caithness and Sutherland Peatlands SPA breeding greenshank population due to cumulative collision risk from the Proposed Varied Development would be Negligible, which would result in a **Moderate/Minor** effect, which is not significant in EIA terms.

It is considered that the Magnitude of Change to the Caithness and Sutherland Peatlands SPA breeding golden eagle population due to cumulative collision risk from the Proposed Varied Development would be Slight, which would result in a **Moderate** effect, which is not significant in EIA terms.

Chapter 8: Hydrology & Hydrogeology	The mitigation measures presented in the 2021 EIAR report (see Chapter 8, Table 8.2) remain wholly applicable for the Proposed Varied Development. No additional mitigation measures are required. The proposed amendments to the Consented Development do not change the findings of Chapter 10 of the 2021 EIA Report and no new or increased significant effects have been identified.	No Change
Chapter 9: Geology & Carbon Balance	<p>There has been no change to baseline conditions from the Consented Development. The assessment of effects for the Proposed Varied Development is the same as the Consented Development for all receptors during construction. All peat can be beneficially reused on-site and in accordance with the principles detailed within the Peat Management Plan Technical Appendix 11.3 of the 2021 EIAR, with no surplus materials (waste). The potential impact on peat and carbon rich soils is unchanged from the Consented Development EIAR (not significant).</p> <p>The impacts to geological receptors during operation is unchanged from the Consented Development EIAR (not significant). During decommissioning, the impacts are predicted to be of the same or lesser magnitude to the construction phase, with resultant effects being the same or lesser significance (not significant).</p>	No Change
Chapter 10: Cultural Heritage & Archaeology	<p>A moderate effect on the setting of Dail Langwell Broch (SM1852), which is significant in EIA terms, has been assessed for both the Consented Development and the Proposed Varied Development.</p> <p>The cumulative impact on the setting of the Dail Langwell broch resulting from the Proposed Varied Development in combination with the Allt An Tuir Wind Farm will be no greater than predicted for the Proposed Development alone, being of moderate magnitude, and resulting in an adverse effect of moderate significance (significant in EIA terms). Although the Proposed Varied Development will introduce a notable change to this monument's setting, the key setting aspects, and their capacity to inform and convey cultural significance, would be adequately retained such that the integrity of its setting would not be significantly compromised.</p> <p>All other effects on the settings of heritage assets within the Outer Study Area are assessed as being of no greater than minor significance (not significant in EIA terms). There are no predicted increases in effects as a result of the Proposed Varied Development compared to the Consented Development, and no additional significant effects are predicted.</p>	No Change

Chapter 11: Traffic & Transport	The significance of likely effects remains as assessed in the 2021 EIAR and no significant effects would arise as a result of the Proposed Varied Development	No Change
Chapter 12: Socio- Economics, Recreation & Tourism	No change to Consented Development. The Socio-economic report establishes that the Applicant's approach, and commitments in the framework of the Proposed Varied Development, have the potential to create positive economic impact in the Highlands and for Scotland.	No Change
Chapter 13: Noise & Vibration	<p>The significance of noise effects is unchanged from that of the Consented Development. Operational noise levels would be within the consented noise limit, and effects would remain not significant.</p> <p>The cumulative operational noise effects of the Proposed Varied Development and Allt an Tuir Renewable Energy Park have been considered by examination and replication of the modelling of the Consented Development that was carried out for the All an Tuir EIA. Through this, it was confirmed that adequate allowance had been made within that EIA of the effects of both the Consented and Varied Development. Therefore, the Varied Development would not result in any additional significant cumulative effect and cumulative operational noise effects are considered to be not significant.</p>	No Change
Chapter 14: Aviation & Radar	<p>The Consented Development 2021 EIAR identified a minor and not significant effect in relation to the turbines as physical obstructions to civil aircraft and helicopter operations and to military low flying operations flying under VFR, subject to the agreement of an appropriate aviation lighting scheme with the MoD. Aviation lighting consisting of MoD accredited infra-red aviation lighting was recommended for the Consented Development, and a planning condition (27) was imposed on that basis.</p> <p>The increased height of the Proposed Varied Development turbines necessitates visible aviation lighting. The cranes used in construction will reach approximately the same height of the turbine nacelles and will therefore also be a physical obstruction. The impact magnitude is therefore considered to be major (significant) for civil aircraft and helicopter operations and to military low flying operations.</p> <p>The Aviation Lighting Assessment (Technical Appendix 15.2) sets out the proposed visible and Infra-Red (IR) aviation lighting scheme which aims to minimise potential landscaping and visual impacts (covered further in Chapter 5: Landscape and Visual). The Applicant expects that a planning condition will be imposed similar to the one imposed for the Consented Development and will seek formal approval from the CAA and MoD on the lighting scheme. The turbine locations, heights and altitudes will be provided to stakeholders so that they can</p>	No Change

be marked on the relevant aeronautical charts and the CAA will be notified of the Proposed Varied Development and any proposed cranes.

Following the implementation of the revised mitigation measures, a **minor** and **not significant** effect is predicted upon civil aircraft and military aircraft flying under VFR, which remains the same as the effects of the Consented Development.

**Chapter 15:
Other Issues**

Due to the increase in turbine height for the Proposed Varied Development, shadow flicker effects were verified and it is concluded that no significant effects are predicted (no change from Consented Development).

No Change

Due to the absence of woodland-level impact, it is concluded that these works do not constitute woodland removal under Scottish Forestry definitions. On this basis compensatory planting is not deemed to be required.

No assessment of any other issues was deemed to be required.
