VOLUME 1: CHAPTER 14 – SUMMARY OF EFFECTS

Figures

There are no figures associated with this Chapter

Appendices

Appendix 14.1: Schedule of Mitigation Measures

14. SUMMARY OF EFFECTS

14.1 Introduction

14.1.1 The findings of the environmental impact assessment (EIA) for the Proposed Development are presented within the technical assessments contained within **Chapters 6 to 13** within **Volume 1** of this EIA Report. The significance of these effects has been assessed using criteria defined in the topic chapters. Unless stated otherwise in the technical assessments, the significance of effects has been categorised as **major**, **moderate**, **minor** or **negligible**, with effects assessed as being of '**major**' or '**moderate**' considered to be **significant** effects in the context of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations').

14.1.2 Mitigation measures have been identified to prevent, reduce or remedy any potentially significant adverse environmental effects identified where practicable, beyond that already taken into account as standard best practice (i.e. embedded mitigation) (e.g. the Construction Environment Management Plan (CEMP)). Such embedded mitigation measures will be implemented during detailed design, construction and / or operation of the Proposed Development. Each technical chapter of this EIA Report details the additional measures recommended to mitigate any identified significant effect, and a summary of all the recommended mitigation measures (embedded and additional) is provided in **Appendix 14.1: Schedule of Mitigation Measures**. Any remaining effects following implementation of available mitigation measures are known as 'residual effects'.

14.1.3 The purpose of this Chapter is to provide a summary of the likely predicted effects as a result of the Proposed Development identified within the technical chapters **(Chapters 6 to 13)** of this EIA Report, before and after the implementation of additional mitigation measures. This summary is provided in **Table 14.1**.

Table 14.1: Likely Effects

Topic / Receptor	Effect Significance (Pre-Mitigation)	Additional Mitigation	Residual Effects and Significance (Post Mitigation)
Chapter 6: Landscape and Visual			
Landscape Character			
Local Landscape Zones (LLZ) LLZ 1 – LLZ 3	No significant effects during construction or operation.	N/A	No significant residual effects.
	No significant cumulative effects during operation.	N/A	No significant cumulative residual effects during operation.
Designated and Protected Landscapes			
Braes of Means Special Landscape Area (SLA); and Clachnaben and Forest of Birse SLA.	No significant effects during construction or operation.	N/A	No significant residual effects.
	No significant cumulative effects during operation	N/A	No significant cumulative residual effects during operation.
Visual Receptors (Buildings, Routes and Outdoor Locations)			
Building-based Receptors (B1 - B4)	B1: Moderate Adverse and Significant effects during construction (no significant effects during operation) B3: Moderate Adverse and Significant effects during construction (no significant effects during operation) All other receptors (B2 and B4) no significant effects during construction or operation.	N/A	**B1: Moderate Adverse and Significant residual effects during construction** (no significant residual effects during operation). **B3: Moderate Adverse and Significant residual effects during construction** (no significant residual effects during operation). All other receptors (B2 and B4) no significant residual effects.
	B1 – B4: No significant cumulative effects during operation.	N/A	No significant cumulative residual effects (B1 – B4) during operation.

Topic / Receptor	Effect Significance (Pre-Mitigation)	Additional Mitigation	Residual Effects and Significance (Post Mitigation)
Route Receptors (R1 – R5)	R1: Moderate Adverse and Significant effects during construction (no significant effects during operation). All other receptors (R2-R5) no significant effects during construction or operation.	N/A	**R1: Moderate Adverse and Significant residual effects during construction** (no significant residual effects during operation). All other receptors (R2 – R5) no significant residual effects.
	R1 – R5: No significant cumulative effects during operation.	N/A	No significant cumulative residual effects (R1 – R5) during operation.
Outdoor Receptors (O1)	No significant effects during construction or operation.	N/A	No significant residual effects.
	No significant cumulative effects during operation.	N/A	No significant cumulative residual effects during operation.
Chapter 7: Ecology			
Nature Conservation Designations			
Shoolbraid / Belhangie Woods Ancient Woodland	Moderate Adverse and Significant effects during construction or operation.	Compensatory Planting to compensate for the loss of ancient woodland on site. The details of the compensatory planting areas would be determined post-consent within a compensatory planting plan.	No significant residual effects during construction or operation.
Habitats			
Other broadleaved woodland; Other Scot's Pine woodland; Dwarf shrub heath; and Blanket bog.	No significant effects during construction or operation.	Other broadleaved woodland: Riparian Planting Other Scot's Pine woodland: Compensatory planting of native conifer woodlands. Blanket bog: Restoration of remaining degraded habitat. Off-site biodiversity enhancement opportunities would be explored within the Aberdeenshire Council area to compensate for the effects on habitats lost and further enhance habitats to achieve	No significant residual effects during construction or operation.

Topic / Receptor	Effect Significance (Pre-Mitigation)	Additional Mitigation	Residual Effects and Significance (Post Mitigation)
		an overall biodiversity net gain and beneficial impact overall.	
	No significant in combination cumulative effects during construction or operation.	N/A	No significant in combination cumulative residual effects during construction or operation.
Protected Species			
Scottish Wildcat; Bats – disturbance to roosting bats; and Badger.	No significant effects during construction or operation.	Undertake pre-construction surveys. Implementation of Species Protection Plans (SPP's) for Scottish Wildcat, Bats and Badgers. Additional measures to be brought into the final Scottish Wildcat SPP: • Engagement with Saving Wildcats to obtain and share data on collared wildcats to further aid detailed design. • Targeted camera trapping of key areas of infrastructure. • If wildcat dens are identified during camera trapping or pre-construction surveys, disturbance buffers to be determined and timing restrictions confirmed. • Appropriate licencing procedures (if required) Additional measures for Bats: • Application of disturbance protection buffers for access tracks that are in close proximity to potential bat roosts.	No significant residual effects during construction or operation.
	No significant in combination cumulative effects during construction or operation.	N/A	No significant in combination cumulative residual effects during construction or operation.
Chapter 8: Ornithology			

Topic / Receptor	Effect Significance (Pre-Mitigation)	Additional Mitigation	Residual Effects and Significance (Post Mitigation)
Goshawk; Peregrine; Golden Plover (wider area population); and Black Grouse.	No significant effects during construction or operation.	By way of a precautionary approach, bird diverters would be installed along a section of the OHL closest to areas where higher conservation value species are more active. Specific pre-construction survey to confirm the presence of target species within areas of Forestry and Land Scotland (FLS) land prior to construction. To be discussed and agreed with NatureScot and FLS.	No significant residual effects during construction or operation.
	No significant in combination cumulative effects.	N/A	No significant in combination cumulative residual effects.
Chapter 9: Geology, Hydrology and Hydrogeology			
Peat and Carbon Rich Soil; Surface Water and Groundwater Quality; Surface and Groundwater Flow; Flood Risk; and Designated Sites, Drinking Water Protected Areas and Private Water Supplies.	No significant effects during construction or operation.	Confirmatory water quality monitoring	No significant residual effects during construction or operation.
	No significant cumulative effects during construction or operation.	N/A	No significant cumulative residual effects during construction or operation.
Chapter 10: Cultural Heritage			
Non-designated Cultural Heritage Assts (Assets 1 – 18)	Asset 1h (boundary stone wall): Moderate Adverse and significant effects during construction (no significant effects during operation). Asset 2 (triangulation marker): Moderate Adverse and significant effects during construction (no significant effects during operation). Asset 3 (triangulation pillar): Moderate Adverse and significant effects	*During Construction* The remains of Asset 1h (boundary stone wall); Asset 4 (a cottage with associated remains) and Asset 11 (building with enclosure) would be marked out with a suitable standoff buffer to be agreed with Aberdeenshire Council Archaeology Service (ACAS) for avoidance during the construction phase. These assets would be identified by placement of high visibility markers facing	No significant residual effects during construction or operation.

Topic / Receptor	Effect Significance (Pre-Mitigation)	Additional Mitigation	Residual Effects and Significance (Post Mitigation)
	during construction (no significant effects during operation). Asset 11 (building with enclosure): Moderate Adverse and significant effects during construction (no significant effects during operation). Potential for buried undiscovered archaeology: Moderate Adverse and significant during construction (no significant effects during operation). All other non-designated heritage assets, no significant effects during construction or operation.	the working area, ensuring implementation of an archaeological exclusion zone, providing effective protection of these features during the construction phase. The upstanding / visual remains of Asset 2 (triangulation marker) and Asset 3 (triangulation pillar) should be avoided during construction works. Where proposed access tracks intersect Asset 12 (enclosure) north-west of Bogiuran, it should be routed through an existing gate or through broken or less well preserved sections of bank where possible, with disturbance to the enclosure bank kept to a minimum. Any upgrade works (i.e. road widening) required along the existing access track where it passes the site of Asset 13 (former building), should be kept to the opposite edge side of the heritage asset. The Applicant would seek to agree the scope of the archaeological watching brief(s) with ACAS in advance of construction works with the agreed scope of work confirmed in a Written Scheme of Investigation (WSI) signed off prior to commencement of construction works, including enabling works. If new archaeologically significant discoveries are made during archaeological monitoring, and it is not possible to preserve the discovered remains in situ, provision would be made for the excavation of any archaeological deposits encountered, where deemed necessary by ACAS. This provision would include the consequent production of written reports on the findings, with post-excavation analysis and publication of the results of	

Topic / Receptor	Effect Significance (Pre-Mitigation)	Additional Mitigation	Residual Effects and Significance (Post Mitigation)
		the works, where appropriate. Post-construction monitoring would be carried out to: • check that marking out of heritage assets has been effective and that none of the heritage assets have been disturbed by construction works; and • check that all markers have been removed from heritage assets following completion of the Proposed Development. *During Operation* Construction of any temporary access tracks for required maintenance would take into account the construction phase mitigation (listed above).	
	No significant cumulative effects during construction or operation.	N/A	No significant cumulative residual effects during operation.
Designated Heritage Assets Scheduled Monument: Cairn o'mount, cairns; and Category C Listed Building: Brawliemuir Farmhouse	No significant effects during construction or operation.	N/A	No significant residual effects during construction or operation.
	No significant cumulative effects during operation.	N/A	No significant cumulative residual effects during operation.
Chapter 11: Forestry			
Direct Loss of Forest Resource Commercial (coniferous); Broadleaved woodland; and Ancient Woodland)	No significant effects during construction or operation.	The Applicant is committed to making arrangements to plant off-site the equivalent area of permanent woodland loss (46.46 hectares) as compensatory planting.	No significant residual effects during construction or operation.
	No significant cumulative effects during construction or operation.		No significant cumulative residual effects during construction or operation.
Indirect Effects from Management Felling	No significant effects during construction or operation.	Any felling would require approval through an amendment of the Mearns Forest Landscape	No significant residual effects during construction or operation.

Topic / Receptor	Effect Significance (Pre-Mitigation)	Additional Mitigation	Residual Effects and Significance (Post Mitigation)
		Management Plan (LMP) or Felling Licence Application (FLA) with the approval of Scottish Forestry.	
Chapter 12: Socio-Economic, Tourism and Recreation			
Construction			
Socio-economic	No significant effects during construction or operation.	N/A	No significant residual effects during construction or operation.
	Moderate Beneficial and Significant cumulative effects during construction. No significant cumulative effects during operation.		**Moderate Beneficial and Significant** cumulative residual effects during construction. No significant cumulative residual effects during operation.
Tourism and Recreation	No significant effects during construction or operation.	Outdoor Access Management Plan	No significant residual effects during construction or operation.
	No significant cumulative effects during construction or operation.		No significant cumulative residual effects during construction or operation.
Chapter 13: Traffic and Transport			
Users and Residents of the B966 and C7K roads	No significant effects during construction or operation.	*During Construction* Construction Traffic Management Pan (CTMP) (including a Site Worker Travel Plan). Road Condition Survey. Outdoor Access Management Plan. *During Operation* Maintenance of Site entrance roads.	No significant residual effects during construction or operation.

Topic / Receptor	Effect Significance (Pre-Mitigation)	Additional Mitigation	Residual Effects and Significance (Post Mitigation)
	No significant cumulative effects during construction or operation.		No significant cumulative residual effects during construction or operation.

14.2 Effect Interactions

14.2.1 As defined in Section 5.5 of **Chapter 5: EIA Process and Methodology**, effect interactions can occur when the combined or synergistic effects caused by the combination of a number of effects on a particular receptor may collectively cause a more significant effect than individually. A theoretical example is the culmination of disturbance from dust, noise, vibration, artificial light, human presence and visual intrusion on sensitive fauna (e.g. certain bat species) adjacent to a construction site. Such effect interactions have been considered where relevant within the specialist topic chapters of this EIA Report.

14.2.2 Whilst there is potential for localised effect interactions due to the combination of construction traffic and changes to visual amenity at some building based, route and outdoor receptor locations, any such interaction would be temporary, intermittent and short-term. When considering the residual environmental effects for each technical topic within this EIA Report, no effect interactions have been identified that could result in an increase to the predicted effect.