

Non-Technical Summary

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1. Executive Summary

1.1. Preface

- 1.1.1. In 2023, SSE Generation Limited (hereafter referred to as 'the Applicant') secured approval under Section 36 of the Electricity Act 1989 ('the 1989 Act') and deemed planning permission for the construction and operation of Achany Extension Wind Farm ('the Consented Development'). The Consented Development comprises up to 18 Wind Turbine Generators (WTGs), all at blade tip heights of up to 149.9 metres (m) and associated ancillary infrastructure.
- 1.1.2. The Applicant proposes a variation to the Consented Development (under Section 36c of the 1989 Act). The Applicant is also seeking a direction under Section 57(2) of the Town and Country Planning (Scotland) Act 1997 (as amended) (the 1997 Act) to vary the deemed planning permission granted in respect of the Consented Development. The proposed changes to the Consented Development are referred to in the application as 'the Proposed Varied Development'.
- 1.1.3. This document is the Non-Technical Summary (NTS) of the Environmental Impact Assessment (EIA) Report which accompanies the S36C application for the Proposed Varied Development. The NTS summarises the key findings of the EIA which has been undertaken to assess the change in potential impacts from the construction, operation and decommissioning of the Proposed Varied Development compared to the Consented Development.
- 1.1.4. The EIA Report comprises 6 volumes, including two sub-volumes:
- Volume 1: Non-Technical Summary
 - Volume 2: Main Report
 - Volume 3: Figures
 - Volume 3a: Visualisations (NatureScot)
 - Volume 3b: Visualisations (The Highland Council)
 - Volume 4: Technical Appendices
- 1.1.5. The application is supported by a Planning Statement, a Pre-Application Consultation (PAC) Report, and a Socio-Economic Report.
- 1.1.6. A hard copy of both the EIA Report and the original 2021 EIA Report and 2022 Additional Information Report (AIR) will be made available for public viewing during the application's consultation period at the following locations:
- The Highland Council HQ – Glenurquhart Road, Inverness, IV3 5NX
 - Carnegie Library – Bonar Bridge IV24 3EA; and
 - Lairg Library – The Main St, Lairg, IV27 4DD

1.1.7. Hard copies of the NTS are available free of charge from:

Achany Extension Wind Farm S36C Application

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- SSE Generation Limited (contact: SSE Generation Ltd, FAO Onshore Development Team, 1 Waterloo Street, Glasgow, G2 6AY or OWSBSupport@sse.com)
- Hard copies of the EIA Report and further information may be obtained by arrangement for £1,500 per copy, or £15 per disk/USB memory stick copy.

1.1.8. The documents will also be available for viewing online at:

- the Scottish Government ECU planning portal:
<https://www.energyconsents.scot/ApplicationSearch.aspx>;
- The Highland Council (THC) planning portal:
<https://wam.highland.gov.uk/wam/>; and
- The Applicant's website: <https://www.sserenewables.com/onshore-wind/in-development/achany-extension/>.

1.1.9. Any public representations to the application may be submitted via the ECU website at www.energyconsents.scot/Register.aspx; by email to the Scottish Government, Energy Consents Unit mailbox at representations@gov.scot; or by post to the Scottish Government, Energy Consents Unit, 4th Floor, 5 Atlantic Quay, 150 Broomielaw, Glasgow, G2 8LU, identifying the proposal and specifying the grounds for representation.

1.1.10. The Applicant will advertise the submission of the application in the local and national press (The Herald, The Edinburgh Gazette and the Northern Times) and on the dedicated project website. The advert will state the deadline for submitting representations to Scottish Ministers.

1.2. Need for the Proposed Variation

1.2.1. Following receipt of Section 36 consent and deemed planning permission for the Consented Development, the Applicant reviewed the commercial feasibility of the site and concluded that it was not viable under current settings. A project appraisal was then undertaken which identified that:

- The increase in tip height would substantially increase the energy yield from the Consented Development, thus improving the commercial viability of the project;
- Re-orientation of certain hardstands and minor track re-alignments could optimise the site layout and reduce required track length, resulting in associated environmental benefits;
- The Varied Development would make an even greater contribution to the achievement of legally binding UK and Scottish Government net-zero targets.

1.2.2. The Applicant therefore seeks to vary the Consented Development to improve the overall commercial viability of the site and maximises its contribution to Scotland's renewable energy targets.

1.3. The Proposed Variations

1.3.1. In summary, the Applicant is proposing to:

- Increase the maximum tip height of all turbines from 149.9m to 200m to increase the electricity generated from the site and maximise the renewable energy benefits;
- Alter the maximum nominal rotor diameter of all turbines from 136m to 138m as required for updated candidate turbines;
- Increase hardstanding size to meet technology and engineering requirements for the use of taller turbines (and some minimal hard stand repositioning to mitigate environmental impact); and
- Make minor adjustments to access tracks to reduce the required length, reduce the project's impact on peatland and align with proposed hardstands movements.

1.4. The Site

1.4.1. The Site boundary for the Proposed Varied Development remains the same as the Consented Development (see **Figure 1.1: Site Location Plan**).

1.4.2. The Site is located on the Glencassley Estate, near Lairg. It is situated north west of the operational Achany Wind Farm, and would utilise the existing access from operational Achany, which connects to the A839 east of Invercassley and Rosehall.

1.4.3. The site is located within the southern fringes of the Reay-Cassley Wild Land Area (WLA34), and adjoins to the Caithness and Sutherland Peatlands Special Area of Conservation (SAC) to the east and north east.

1.5. The Applicant

1.5.1. The Applicant is part of SSE Renewables, a leading developer, owner and operator of onshore and offshore wind farms in the UK and Ireland, with a vision to make renewable energy the foundation of a zero-carbon world. Part of the FTSE-listed SSE plc, the Applicant's strategy is to drive the transition to a low-carbon future through the world class development, construction and operation of their fleet of onshore and offshore wind energy generation sites, and flexible hydro.

1.5.2. SSE Renewables operates one of the largest onshore wind energy fleets in the UK and Ireland, with almost 5GW of installed green energy capacity and another 2GW in construction. Their vision is to be a leading renewables company in a net-zero world with the aim of increasing their renewable energy output by ~40% over the next 2 years. SSE Renewables continues to progress development options for new onshore wind farms and extensions to existing wind farms and is well placed to take advantage of any future opportunities as they emerge.

2. Description of Proposed Varied Development

2.1.1. The Consented Development Site Layout is shown on **Figure 1.2**, and the Proposed Varied Development layout is shown on **Figure 1.3**. The Varied Development vs Consented Development layouts are shown together on **Figure 1.4**.

2.1.2. The Proposed Varied Development would include the following key components:

- 18 WTGs each with a maximum tip height of 200m and nominal rotor diameter of up to 138m, and associated crane pads;
- Crane hardstanding and associated laydown area at each WTG location;
- On site access tracks (of which approximately 13.4km are new access tracks and approximately 6.6km are existing tracks where upgrades may be required to facilitate delivery of the WTG components);
- A new on-site substation, welfare building and store;
- Potential extension to the existing operations building at Achany Wind Farm to accommodate additional staff;
- A network of underground cabling to connect each WTG to the on-site substation;
- A LiDAR unit to collect meteorological and wind speed data, and associated hard stand; and
- Any associated ancillary works required.

2.1.3. In addition to the permanent components, the construction phase would comprise the following temporary facilities:

- Site compound areas, including welfare facilities, site cabins, storage and parking;
- Batching plant facilities for temporary concrete batching plants;
- Temporary telecommunications infrastructure; and
- Borrow pits, comprising both new and the reworking of a borrow pit used previously for Achany Wind Farm.

2.1.4. The table below summarises the differences between the Consented Development and the Proposed Varied Development.

Table 1: Changes to Consented Development

S36 Consent Annex 1 Description of Development	S36C Description of Development Amendments Proposed for the Proposed Varied Development Application
18 turbines each with a maximum blade tip height of up to 149.9m	18 turbines each with a maximum blade tip height of up to 200m.
Crane hardstandings for each turbine	The size of the hardstands has increased to reflect the requirements of a larger WTG.

S36 Consent Annex 1 Description of Development	S36C Description of Development Amendments Proposed for the Proposed Varied Development Application
An onsite substation	Transformer configuration is expected to change, requiring an updated indicative design drawing. Either no change to substation platform size, or a small reduction.
Access Tracks	Optimisation of onsite access tracks, including a reduction in total length.
No turning heads	Addition of eight turning heads to accommodate turbine supplier delivery requirements
Infra-red lighting solution	A new Aviation Lighting Solution to be agreed with consultees that reflects the requirement for increased tip height triggering the need for visible aviation lighting.

3. Site selection and design evolution

3.1. Site selection

- 3.1.1. The site boundary remains as per the one described for the Consented Development (**Figure 1.1**). The criteria used in the initial assessment to determine the suitability of the Site for the Consented Development and the subsequent design process, including alternatives considered and site layout evolution, are described in the 2021 EIA Report for the Consented Development.
- 3.1.2. The decision by the Scottish Ministers in 2023 to grant Section 36 consent and deemed planning permission for the Consented Development has established the suitability of the Site for a large-scale wind farm.

3.2. Design Evolution

- 3.2.1. The Applicant has sought to maintain close alignment between the final design of the Proposed Varied Development and the Consented Development (refer to **Figure 1.4**), ensuring that changes are limited to those necessary to enhance viability or reduce environmental effects.
- 3.2.2. Where slight changes to the track alignments have been necessary for the Proposed Varied Development, an iterative design process has been followed to refine the layout, with changes supplemented, where appropriate, by supplementary field-based surveys, including peat probing and visual impact assessments.
- 3.2.3. Upon receipt of the ECU Scoping Opinion in August 2025, and after hosting two sets of public exhibitions in June and August 2025, adjustments were made to the scope of the EIA. In response to comments, geology was included for assessment, additional peat probing was committed to, and socio-economic and noise assessments were added.
- 3.2.4. Detailed information on the design evolution can be found in Volume 2 – Chapter 2 of the EIA Report.

3.3. EIA methodology

- 3.3.1. As the Applicant is seeking to vary a consented scheme, a comparative EIA Report is required to compare the likely significant effects arising from the Proposed Varied Development against those identified in the 2021 EIA Report and 2022 AIR for the Consented Development. This information is presented in the executive summary within each EIA Report technical chapter and drawn together in EIA Report Chapter 17: Summary of Residual Effects.
- 3.3.2. The scope of the EIA was informed by an EIA Scoping Opinion provided by the Scottish Government Energy Consents Unit (ECU) in consultation with consultees including The

Highland Council (THC), NatureScot, Scottish Environment Protection Agency (SEPA), Historic Environment Scotland (HES) and other consultees.

3.3.3. The Scoping Opinion scoped in the following technical assessments:

- Landscape and Visual Impact
- Ecology
- Ornithology
- Hydrology & Hydrogeology
- Geology & Carbon Balance
- Cultural Heritage & Archaeology
- Noise & Vibration
- Aviation & Radar

4. Summary of technical and comparative assessments

4.1. Landscape and Visual Impact

Introduction

- 4.1.1. The landscape and visual impact assessment (LVIA) considers the potential for the Proposed Varied Development to result in material changes to the effects identified for the Consented Development. The focus of the assessment is on identifying material change, particularly with respect to the receptors for which significant effects have been previously identified.

Landscape Effects

- 4.1.2. The assessment of landscape effects considered the potential effects on: Landscape Character Types (LCTs) identified by NatureScot; National Scenic Areas (NSAs); Wild Land Areas (WLAs); and Special Landscape Areas (SLAs). The assessment considered any changes to the landscape baseline since the assessment of the Consented Development.
- 4.1.3. The majority of effects on landscape character, landscape designations and other protected landscapes resulting from the Proposed Varied Development would not be significant. Significant effects are anticipated to occur within a relatively localised area up to around 10km from the Proposed Varied Development, largely confined to the site itself, areas within Glen Cassley, and across the elevated plateau moorland to the east and west of Glen Cassley, affecting two LCTs: LCT 135: Rounded Hills, Caithness and Sutherland; and LCT 142: Strath – Caithness and Sutherland. The Proposed Varied Development would not lead to a notable increase in effects on landscape character from that identified for the Consented Development.
- 4.1.4. The assessment found that there would be some localised not significant effects on the eastern periphery of the Assynt – Coigach NSA. It concluded that the effects of the Proposed Varied Development would be broadly similar to the Consented Development and there would be no increased level of significant effects on the NSA. No change is predicted to the level of effect identified for the Ben Klibreck and Loch Choire SLA as a result of the Proposed Varied Development compared to the Consented Development.
- 4.1.5. The Proposed Varied Development would be located within the southern tip of WLA 34. Reay – Cassley, and significant landscape effects across the plateau areas to the east and west of Glen Cassley would also lead to some significant effects on a localised area within the southern part of the WLA, although a not significant effect was identified for the WLA as whole. Although the affected area would be slightly increased, this is consistent with the effects identified for the Consented Development.

Visual Effects

- 4.1.6. Visual receptors considered in the assessment, included a selection of the representative viewpoints, residential receptors, and routes considered for the Consented Development. The assessment identified there would be increased effects from 7 of the 15 included viewpoints. The increased effects 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.
- 4.1.7. 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 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 properties looking westward over Loch Shin.
- 4.1.8. While some route receptors may experience slight increases in effects, these would not result in a change to the ratings identified for the Consented Development. Significant effects were identified for 3 routes and localised parts of another route.

Cumulative Effects

- 4.1.9. A Cumulative Landscape and Visual Impact Assessment (CLVIA) considered effects in relation to the presence of other wind farms visible from the same receptors. The cumulative baseline of application and scoping sites reflects the situation as of 18 July 2025.
- 4.1.10. The CLVIA identified few additional significant effects in relation to the Proposed Varied Development compared to the assessment on the basis of the current baseline, and in some areas effects which would be slightly reduced. Although not directly comparable, the cumulative landscape effects identified for the Proposed Varied Development were broadly consistent with those identified for the Consented Development. While there would be some increased areas of effect these would be largely tempered by the increase influence of the cumulative baseline sites. There would be no significant cumulative effects to any NSAs, SLAs or sites included on the Inventory of Gardens and Designed Landscapes. Increased effects were identified for 3 visual receptors. Of these, one would experience an increased spread of localised significant effects, the other increased effects would be not significant. Overall, cumulative landscape and visual effects would remain relatively localised, with the majority of significant effects occurring

within 10km of the Proposed Varied Development. This is consistent with the findings of the CLVIA for the Consented Development.

Lighting Assessment

- 4.1.11. 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. This is largely due to the absence of artificial light within the study area and receptors which would therefore generally be more sensitive to this type of change. It was therefore concluded that the inclusion of lighting on the seven turbines included in the strategic lighting scheme would result in significant effects during low light conditions and the hours of darkness. However, the Applicant proposes to engage with aviation stakeholders to agree a lighting solution which may result in a reduced visual effect.

Summary

- 4.1.12. Overall, the LVIA has concluded that the Proposed Varied Development would result in a limited number of increased significant effects on landscape character and visual amenity, affecting relatively localised parts of the landscape and visual resource up to 10km, and locally to 12.5km from the site. As with the Consented Development significant effects were identified for a range of residential, recreational and route-based visual receptors in areas to the north-east of Loch Shin, around Rosehall and Glen Cassley and recreational users within a localised part of the upland area to the west of Glen Cassley, and would result in some increased influence of wind turbines on the landscape character within parts of Glen Cassley, the upland plateau areas to either side of it, and a localised part of WLA 34, Reay – Cassley. Outwith these areas, landscape and visual effects would not be significant. There would be no significant effects to the Assynt – Coigach NSA or Ben Klibreck and Loch Choire SLA as a whole.
- 4.1.13. Visible lighting on the seven turbines included in the strategic lighting scheme would result in significant effects during low light conditions and the hours of darkness. However, the Applicant proposes to engage with aviation stakeholders to agree a lighting final solution which may result in a reduced visual effect and mitigation measures to reduce the potential effects of turbine lighting are included within the strategic lighting proposal. These include: automatic dimming in conditions of good meteorological visibility; vertical directional intensity mitigation; and a reduced lighting scheme through project-specific agreement from the CAA for only cardinal or specific turbines to be lit.
- 4.1.14. Although there would be some slight increases in anticipated effects, the findings of assessment of the Proposed Varied Development are broadly consistent with the findings assessment of the Consented Development.

4.2. Ecology

- 4.2.1. The likely effects of the construction and operation of the Proposed Varied Development to Important Ecological Features (IEFs) have been assessed and compared against those predicted for the Consented Development. Only peatland habitats were identified as an IEF whose effect may differ from those predicted for the Consented Development. Effects to all other previously identified IEFs were determined to remain as previously predicted for the Consented Development.
- 4.2.2. An assessment of the effects to peatland habitats has been completed, informed by a robust baseline derived from comprehensive desk studies and field surveys previously undertaken for the Consented Development.
- 4.2.3. The ecological baseline comprises predominantly upland habitats including wet dwarf shrub heath, blanket bog, and wet heath/blanket bog mosaics, which are recognised as priority habitats under relevant UK and Scottish legislation and planning policy. Designated sites of international and national importance, such as the Caithness and Sutherland Peatlands SAC and River Oykel SAC, lie adjacent to or near the Site, however it is determined that the effect of the Proposed Varied Development to these would not differ from that of the Consented Development.
- 4.2.4. The assessment has demonstrated that the effects identified for peatlands for the Proposed Varied Development were comparable to those identified for the Consented Development, and a beneficial (not significant) residual effect was identified for the Proposed Consented Development after additional mitigation and compensation measures were considered. Furthermore, the Proposed Varied Development has been designed to avoid areas of highest ecological sensitivity where possible, instead affecting peatland that it is in a modified or degraded condition.
- 4.2.5. 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. These measures aim to minimise construction impacts, ensure protection of key species and habitats, and deliver net positive biodiversity outcomes in line with NPF4 requirements.
- 4.2.6. 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.
- 4.2.7. 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.
- 4.2.8. 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.

- 4.2.9. 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.

4.3. Ornithology

- 4.3.1. This Ornithology chapter of the EIA Report assesses the likely significant effects of the Proposed Varied Development with respect to ornithology.
- 4.3.2. The ornithological impact assessment (OIA) = considers only likely changes to the conclusions of the Consented Development. Where there is unlikely to be a change to effects to any of the Important Ornithological Features (IOFs) previously considered, these are scoped out of the OIA for the Proposed Varied Development.
- 4.3.3. No significant effects on IOFs were identified for the Consented Development, either alone or cumulatively. Updated desk study data were obtained in September 2025 and, based on this information and the baseline established for the 2021 EIAR, it is considered that the assessment of effects of the Consented Development alone on previously identified IOFs will largely remain unchanged for the Proposed Varied Development.
- 4.3.4. However, as collision risk will change due to the alteration of turbine height and associated geometry, revised Collision Risk Modelling (CRM) has been completed to inform a revised assessment of potential collision risk arising from the Proposed Varied Development. Additionally, given that new collision risk data are available from other developments, the cumulative collision risk has also been re-assessed for relevant IOFs.
- 4.3.5. Four species were scoped into the CRM completed for the Consented Development, namely golden plover (*Pluvialis apricaria*), dunlin (*Calidris alpina*), greenshank (*Tringa nebularia*) and golden eagle (*Aquila chrysaetos*). However, as the minimum air gap (the distance from the ground to the lowest turbine blade sweep) for the Proposed Varied Development is larger than that for the Consented Development, all golden plover and dunlin flights recorded during baseline surveys were below potential collision height (PCH). Therefore, these two species were scoped out of the updated CRM for the Proposed Varied Development, which included greenshank and golden eagle only.
- 4.3.6. Collision risk to all four species is predicted to be lower for the Proposed Varied Development compared to the Consented Development, which will result in a minor reduction in the magnitude of collision risk effects, which will remain non-significant in EIA terms.

- 4.3.7. All four species are qualifying features of the adjacent Caithness and Sutherland Peatlands Special Protection Area (SPA) and Ramsar site, while all except golden eagle are also notified features of the adjacent Grudie Peatlands Site of Special Scientific Interest (SSSI). As such, there will be a minor reduction in the magnitude of effects on features of these designated sites. No adverse effects on site integrity are predicted for the Proposed Varied Development, which is consistent with the conclusions of the Habitats Regulations Appraisal (HRA) completed for the Consented Development.
- 4.3.8. No additional IOFs were considered to be at increased risk of collision mortality due to the change in turbine parameters, such as increased tip height, for the Proposed Varied Development.
- 4.3.9. An updated cumulative collision risk assessment has also been completed for greenshank and golden eagle, using the revised CRM results for the Proposed Varied Development and CRM results from other developments in the surrounding area. No significant cumulative effects were identified for either species.
- 4.3.10. Although no significant effects on IOFs were predicted for either the Consented Development or the Proposed Varied Development, mitigation and enhancement measures for breeding wader species delivered via the Habitat Management Plan (HMP) and secured through planning conditions for the Consented Development remain appropriate and effective for the Proposed Varied Development.

4.4. Hydrology and Hydrogeology

- 4.4.1. The 2021 EIAR found that, subject to implementation of appropriate mitigation measures, managed through the Construction Environment Management Plan (CEMP), Pollution Prevention Plan (PPP), and adherence to regulatory guidance, there would be no significant effects on the hydrology and hydrogeology of the Site associated with construction, operation or decommissioning of the Proposed Development.
- 4.4.2. The proposed amendments to the Consented Development do not change the findings of the 2021 EIAR and the good practice measures detailed therein remain wholly applicable and relevant to the Proposed Varied Development.
- 4.4.3. The significance of likely effects therefore remains as assessed in the 2021 EIAR and no significant effects would arise as a result of the Proposed Varied Development. No further or additional site investigation or monitoring, over and above that identified in the 2021 EIAR, is required.

4.5. Geology, Soils, and Peat

- 4.5.1. An assessment has been undertaken of the potential effects on geology and peat during the construction, operation and decommissioning phases of the Proposed Varied Development. A revised Carbon Balance Assessment has also been undertaken.

- 4.5.2. The bedrock beneath the Site comprises Altnaharra Psammite Formation, with Leucogranite igneous plutons and Lewisianoid Gneiss Complex outcrops in the south-east. Superficial deposits where present, comprise peat, Glacial Till and Alluvium. The peatland identified is predominantly Class 2 with areas of Class 1, according to NatureScot's Carbon and Peatlands Map, 2016.
- 4.5.3. Several detailed peat depth surveys have been undertaken across the Site in support of the Consented Development, and these have been augmented with additional data gathered in 2025 in support of the Proposed Varied Development.
- 4.5.4. Peat has been avoided where possible by the Consented Development. Peat surveys confirmed the average peat depth across the Site to be 0.6m. A site-specific Peat Landslide and Hazard Risk Assessment (PLHRA) undertaken at the Site for the Consented Development has confirmed that there is negligible to low likelihood of a peat landslide at the proposed turbine locations and associated infrastructure for the Proposed Varied Development.
- 4.5.5. Updated excavation and reuse volumes have been calculated for the Proposed Varied Development. This concluded that all excavated peat would be re-used and relocated in accordance with the Consented Development EIA Report Outline Peat Management Plan.
- 4.5.6. Most of the peatland onsite has been confirmed as modified peat, with localised areas of near natural, actively eroding and drained peatland. The Proposed Varied Development avoids areas classified as near natural peatland, taking other onsite constraints into consideration.
- 4.5.7. There are no designated areas of protection located within the Site, including Geological Conservation Review (GCR) sites. According to the Zetica website, the Site is within a low bomb risk area.
- 4.5.8. The net emissions of carbon dioxide from the Proposed Varied Development are expected to be 129,919 tonnes of CO₂e, with a payback time of 3.3 years.
- 4.5.9. The proposed amendments to the Consented Development do not change the findings of the 2021 EIAR and the good practice measures detailed therein remain wholly applicable and relevant to the Proposed Varied Development.
- 4.5.10. The significance of likely effects therefore remains as assessed in the 2021 EIAR and 2022 AIR and no significant effects would arise as a result of the Proposed Varied Development.

4.6. Cultural Heritage and Archaeology

- 4.6.1. As there are no proposed changes to the Proposed Varied Development site boundary, turbine positions or the majority of the design layout from that assessed for the

Consented Development, no change was predicted to the direct (physical) impact on any heritage asset within the site boundary and therefore these were not reassessed. An assessment of the effect of the Proposed Varied Development on the settings of Scheduled Monuments, Listed Buildings, and Inventory Historic Battlefields within 10km of the Site boundary was undertaken. An assessment of the cumulative effects on the setting of these assets during operation of the Proposed Varied Development in combination with other developments in the study area was also undertaken.

- 4.6.2. Assessment of the operational impacts of the Proposed Varied Development on the settings of heritage assets within 10km of the Proposed Development Site Boundary has resulted in the identification of one effect of **moderate** significance (significant in EIA terms). 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).
- 4.6.3. A **moderate** impact on the setting of Dail Langwell Broch (**SM1852**), resulting in an adverse effect of **moderate** significance, has been identified. The asset's key relationship with the River Cassley and surrounding river valley would remain appreciable, and the ability to understand its strategic and defensive position would not be diminished as a result of the Proposed Varied Development.
- 4.6.4. Although the Proposed Varied Development will introduce a notable change to this monument's setting, it would remain possible to experience, appreciate, and understand the broch's cultural significance. It is therefore considered that the key setting aspects of Dail Langwell Broch, and their capacity to inform and convey cultural significance, would be adequately retained such that the integrity of their settings would not be significantly compromised.
- 4.6.5. The possibility of cumulative effects has been assessed. No additional significant cumulative effects were identified, and the impact on the setting of Dail Langwell Broch (**SM1852**) remains assessed as **moderate**, resulting in an adverse effect of **moderate** significance.
- 4.6.6. 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.

4.7. Traffic and Transport

- 4.7.1. As the Proposed Varied Development uses the same delivery routes, access points, and general construction approach as the Consented Development, the significance of likely effects remains as assessed in the 2021 EIAR and therefore no significant effects would arise as a result of the Proposed Varied Development.
- 4.7.2. This approach was accepted through pre-application scoping consultation and therefore the effects on traffic and transport were not reassessed.

4.8. Socio-Economics, Recreation and Tourism

- 4.8.1. Effects on socio-economics, recreation and tourism were scoped out of the EIA on the grounds that the increased construction and delivery requirements of the Proposed Varied Development would increase the positive impacts previously identified in the 2021 EIAR for the Consented Development.
- 4.8.2. Although scoped out of the EIA, to align with Policy 11c of National Planning Policy 4 (NPF4), the Applicant has provided a standalone Socio-Economic Report as a supporting document to the application. The 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.

4.9. Noise and Vibration

- 4.9.1. The Proposed Varied Development relates to an increase in tip height of the proposed turbines from 149.9m to up to 200m, compared to the Consented Development, and a minor increase in the maximum rotor diameter from 136m to 138m. Maximum noise emission levels are therefore unlikely to change significantly and there would be no change to construction or decommissioning activities or locations.
- 4.9.2. While no change was predicted, an assessment of predicted noise levels for the Proposed Varied Development has been carried out in relation to the consented development's conditioned noise limit for comparative purposes.
- 4.9.3. An updated cumulative assessment was also undertaken for the Proposed Varied Development in relation to the recent submission of an application for the proposed Allt an Tuir Renewable Energy Park.
- 4.9.4. The operational noise assessment considered the worst-case of four potential turbine models and concluded that the Proposed Varied Development would comply with the Consented Development's conditioned noise limit.
- 4.9.5. Examination of the Allt an Tuir cumulative noise assessment and additional noise modelling confirmed that sufficient allowance had been made for the Consented Development and Proposed Varied Development's noise effects. Therefore, no update to the Proposed Varied Development's cumulative assessment is required.
- 4.9.6. In conclusion, operational noise effects, including cumulative effects, are considered to be **not significant**.

4.10. Aviation and Radar

- 4.10.1. The potential impacts and effects of the Proposed Varied Development on aviation and radar infrastructure during the construction, operation, and decommissioning phases

was undertaken. The proposed mitigation measures to reduce the impacts of the Proposed Varied Development and good practice measures are also identified.

- 4.10.2. The Consented Development 2021 EIAR previously 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 Visual Flight Rules (VFR). 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.
- 4.10.3. However, due to the increased height of the Proposed Varied Development turbines, visible aviation lighting will be required. The cranes used in construction will reach approximately the same height of the turbine nacelles and will therefore also be a physical obstruction and require temporary lighting during construction.
- 4.10.4. The initial assessment of effects for the Proposed Varied Development concluded an impact magnitude change to **major (significant)** for civil aircraft and helicopter operations and to military low flying operations. However, following implementation of a proposed visible and Infra-Red (IR) aviation lighting scheme (which also aims to minimise potential landscaping and visual impacts), a **minor** and **not significant** effect is predicted for aviation interests, which remains the same as the effects of the Consented Development.
- 4.10.5. 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 be marked on the relevant aeronautical charts and the CAA will be notified of the Proposed Varied Development and any proposed cranes.

4.11. Other Issues

- 4.11.1. All 'Other Issues' were scoped out of the EIA on account of there being no change to the previous assessment for the Proposed Varied Development. For shadow flicker and forestry, a review was undertaken to provide confirmation.
- 4.11.2. Due to the increase in turbine height for the Proposed Varied Development, a review of the shadow flicker findings were verified and this concluded that, as with the Consented Development, no significant effects are predicted.
- 4.11.3. Due to the absence of woodland-level impact, it is concluded that the works do not constitute woodland removal under Scottish Forestry definitions. On this basis compensatory planting is not deemed to be required and no further assessment was required.
- 4.11.4. No further assessment of effects of 'other issues' was undertaken.

5. Summary of Mitigation Measures and Residual Effects

- 5.1.1. Chapter 16 of the EIA Report contains a schedule of mitigation measures which will be used as part of the implementation of the Proposed Varied Development. The schedule remains mostly unchanged from the schedule submitted for the Consented Development. A revised aviation lighting scheme is required to address the requirement for visible lighting and mitigation measures are expected to be agreed with the CAA.
- 5.1.2. Chapter 17 of the EIA Report describes the Summary of Residual Effects of the Proposed Varied Development, which has been carried out in accordance with regulatory requirements and guidance on good practice. The findings of the surveys undertaken, in addition to consultation, have informed the design process and assessment. Design modifications and pre-construction, construction and operational mitigation have been implemented to remove and reduce significant adverse effects.
- 5.1.3. With the exception of visual effects, there is no change to the significance of residual effects on any environmental aspect assessed within the EIA Report for the Proposed Varied Development compared to the Consented Development.
- 5.1.4. With regards visual effects, the majority of the identified receptors in the study area would experience very similar effects from the two schemes, although there would be increased visual effects from 7 Viewpoints (VPs) and 4 Residential receptors.
- 5.1.5. In terms of cumulative visual effects, there would also be increased effects from 2 VPs where the turbines would become more perceptible / noticeable however this is not anticipated to lead to a significant level of effect.
- 5.1.6. 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.

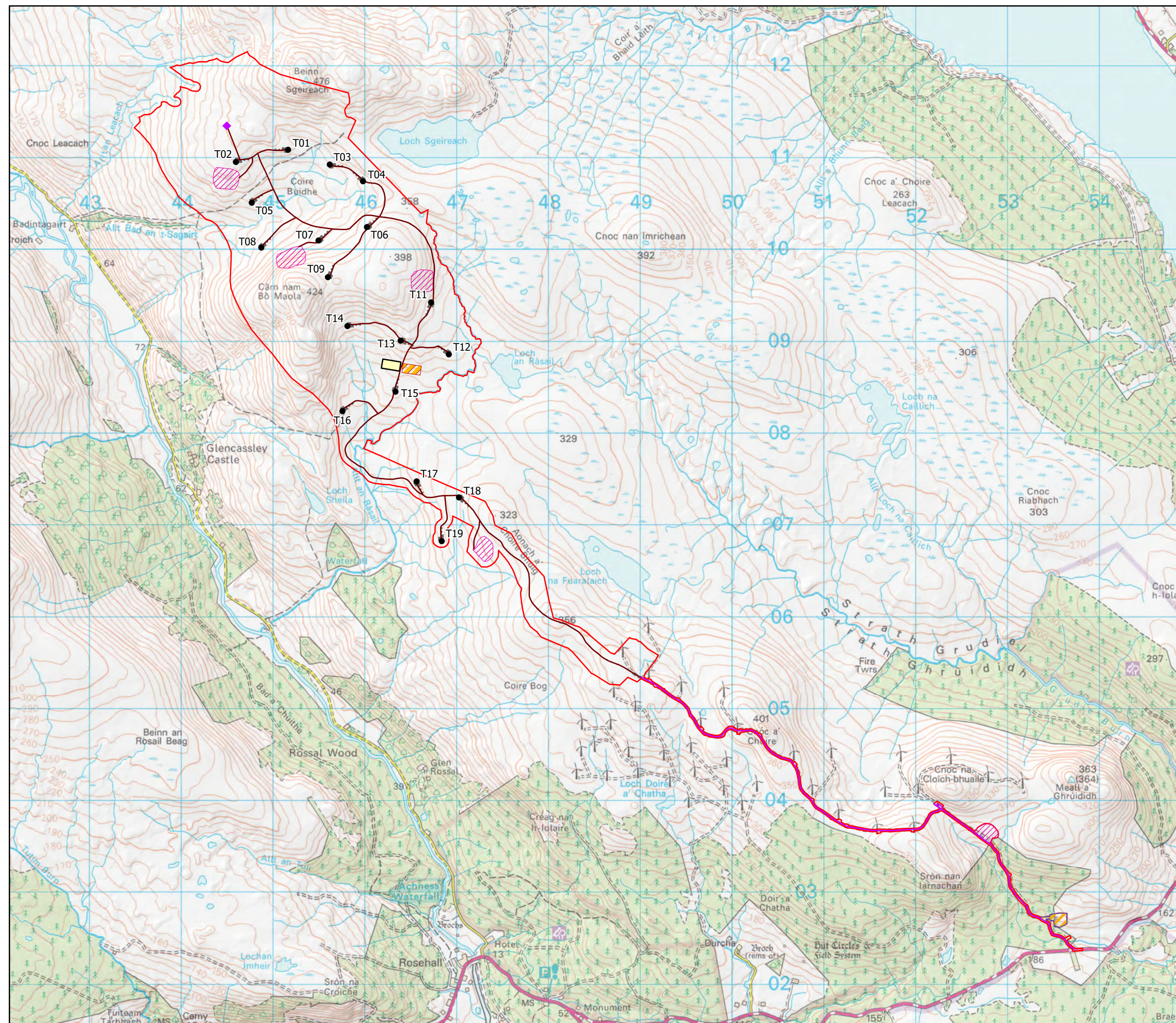
6. Next Steps

- 6.1.1. The ECU will consider the Section 36C application and the findings of the EIA. As part of the decision making process, the ECU will consult a number of consultees including the Highland Council, NatureScot and SEPA, and will consider all representations received from other parties including members of the public.
- 6.1.2. Any public representations to the application may be submitted via the ECU website at www.energyconsents.scot/Register.aspx; by email to the Scottish Government, Energy Consents Unit mailbox at representations@gov.scot; or by post to the Scottish Government, Energy Consents Unit, 4th Floor, 5 Atlantic Quay, 150 Broomielaw, Glasgow, G2 8LU, identifying the proposal and specifying the grounds for representation.



**Achany Extension Wind Farm
S36C Varied Development EIA Report**





Key

- Site Boundary
- Turbine Layout
- LiDAR
- Access Track
- Existing Access Track
- Borrow Pit
- Hardstand
- Temporary Construction Compound, Security, Storage And Batching Plant
- Extension To Existing Operations Building
- Substation, Welfare Facility And Store
- Temporary Construction Compound, Security And Storage

Scale 1:40,000 @ A3

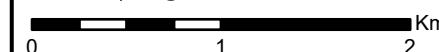


Figure 1.2
Consented Site Layout Plan

Achany Extension Wind Farm
S36C Varied Development EIA Report

- Key**
- Site Boundary
 - Proposed Development Turbine
 - LiDAR
 - Existing Access Track
 - Access Track
 - Borrow Pit
 - Hardstand
 - Turning Head
 - Temporary Construction Compound, Security, Storage And Batching Plant
 - Extension To Existing Operations Building
 - Substation, Welfare Facility And Store
 - Temporary Construction Compound, Security And Storage

Scale 1:36,000 @ A3

0 1 2 Km

N

Figure 1.3
Proposed Varied Development
Layout Plan

Achany Extension Wind Farm
S36C Varied Development EIA Report



Key

- Site Boundary
- Proposed Varied Development Layout
- S36C Consented Layout**
 - Turbine Location
 - LiDAR Location
 - Consented Layout
 - Temporary Construction Compound, Security, Storage And Batching Plant
 - Substation, Welfare Facility And Store
 - Consented Borrow Pit Search Area
 - Consented Layout 50m Micrositing Buffer

Scale 1:25,000 @ A3

0 0.5 1 Km

N

Figure 1.4
Varied Development vs Consented
Development Layout

Achany Extension Wind Farm
S36C Varied Development EIA Report

