Craig Watch Wind Farm

Supplementary Environmental Information – Volume 1: Main Report

November 2024

Chapter 1: Introduction

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1 Chapter 1: Introduction

1.1 Background

1.1.1 In June 2022, Craig Watch Wind Farm Limited ('the Applicant') submitted an application for consent (including deemed planning permission) under Section 36 of the Electricity Act 1989[1] to Scottish Ministers to construct and operate a wind farm and associated infrastructure with a generation capacity of greater than 50 megawatts (MW), referred to as Craig Watch Wind Farm, located approximately 8 km south of Dufftown, Moray in Scotland.

1.1.2 The application (ECU reference: ECU00002177) ('the application') comprised of up to 11 wind turbines with a maximum blade tip height of up to 200 metres (m) and associated infrastructure with generation capacity of greater than 50 megawatts (MW) ('the Proposed Development'). The application was accompanied by an Environmental Impact Assessment (EIA) Report (hereafter referred to as 'the 2022 EIA Report') which was prepared in accordance with The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) (herein referred to as the 'EIA Regulations'). The 2022 EIA Report was prepared to meet the requirements of Schedule 4 of the EIA Regulations and the Institute of Environmental Management and Assessment (IEMA) Quality Mark Criteria.

1.2 Purpose of this Supplementary Environmental Information (SEI) Report

1.2.1 Regulation 19 of the EIA Regulations makes provision for the preparation of Supplementary Information (SI) where further work has been done to address additional information requested by the determining authority (which may also be done on behalf of statutory consultees).

1.2.2 This SEI Report has been prepared to address:

- Site layout amendments including a reduction in the total number of turbines from 11 turbines to 10 (removal of turbine T9) in response to post-submission consultation with Historic Environment Scotland (HES); a change to the layout and location of the proposed substation and construction compound in response to landowner requirements; and removal of the proposed Battery Energy Storage Unit (BESS) as discussed further in **Chapter 2**; and
- Information requests from consultees during the statutory application consultation period. A summary of the consultation responses to application ECU00002177 and the Applicant's response is included within each technical chapter of this SEI Report.

1.2.3 It is intended that this SEI Report is read in conjunction with the 2022 EIA Report, and together both documents ensure all relevant information is available to Scottish Ministers and consultees when considering the application.

1.2.4 Unless otherwise stated in this SEI Report, the content of the 2022 EIA Report remains valid.

1.3 Other Planning Documents

1.3.1 A standalone updated Planning Statement has also been submitted alongside this SEI Report to detail Policy changes, including a review of the adopted National Planning Framework 4 (NPF4), the new Onshore Wind Policy Statement, draft Energy Strategy and a review of the renewable energy policy provisions with reference to the Climate Change Committee (CCC) reports and Scottish emission reduction targets published in December 2022.

1.4 The Supplementary Environmental Information Process and Presentation

1.4.1 The 2022 EIA Report chapters have been reviewed to identify the need to update and replace content in light of the Site layout changes and additional information requested. Where a chapter or assessment does not need to be updated, supplemented or replaced, no changes have been made as it is not the intention

[1] Electricity generation projects below 50 MW are authorised under the Town and Country Planning (Scotland) Act, 1997. Those over 50 MW are authorised under Section 36 of the Electricity Act, 1989

of this SEI to repeat information contained within the 2022 EIA Report that remains valid. This is the case for the Hydrology, Hydrogeology and Geology and Shadow Flicker assessments.

1.4.2 This SEI Report includes the following Chapters:

- Chapter 1: Introduction;
- Chapter 2: Changes to Proposed Development;
- Chapter 3: Landscape and Visual Impact Assessment (LVIA);
- Chapter 4: Cultural Heritage;
- Chapter 5: Ecology;
- Chapter 6: Ornithology;
- Chapter 7: Traffic and Transport;
- Chapter 8: Noise;
- Chapter 9: Aviation; and
- Chapter 10: Socioeconomics.

1.5 Statement of Competence

1.5.1 The information presented in this SEI Report has been prepared by the same team of competent experts involved in the production of the 2022 EIA Report. The information contained is considered to be substantive information for the purposes of the EIA Regulations. It will therefore be published and publicly advertised as additional information in terms of Regulation 20 of the EIA Regulations and as outlined below. This will open a further round of consultation on the application whereby comments will be sought from consultees and members of the public.

1.6 Copies of the SEI

1.6.1 This SEI Report lodged in support of the application will be available for viewing on the Scottish Government portal at www.energyconsents.scot. An application website is available to view at https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00002177.

1.6.2 This SEI Report will be advertised as follows:

- on the application website (www.craigwatch.co.uk);
- once in the Huntly Express, the Press & Journal, the Northern Scot, the Banffshire Journal, the Banffshire Herald and the Banffshire Advertiser; and
- once in the Edinburgh Gazette.

1.6.3 This SEI Report will be made available for viewing at Dufftown Library, 26 Balvenie St, Dufftown, Keith AB55 4AB.

1.7 Commenting on the SEI

1.7.1 Any representations in relation to this SEI Report can be submitted via the Energy Consents Unit 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 of representation.

1.7.2 Written or emailed representations should be dated, clearly stating the name (in block capitals), full return email and postal address of those making representations. Only representations sent by email to representations@gov.scot will receive acknowledgement.

1.7.3 All representations should be received not later than the date falling 30 days from the date of the last published notice, although Ministers may consider representations received after this date. Any

subsequent additional information which is submitted by the Applicant will be subject to further public notice in this manner, and representations to such information will be accepted as per this notice.

1.7.4 This SEI Report is available in other formats if required. For details including costs contact:

Kirsty Clarke
Statkraft UK Ltd
The Garment Factory
10 Montrose Street
Glasgow
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Chapter 2: Changes to Proposed Development

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2 Chapter 2: Changes to Proposed Development

2.1 Introduction

2.1.1 This chapter provides a description of the changes to the Proposed Development from that presented in the 2022 EIA Report and is supported by the following updated technical appendices provided in **Volume 3**:

- **Technical Appendix 2.1: Forestry;**
- **Technical Appendix 2.2: Peat Depth Survey Results;**
- **Technical Appendix 2.3: Peat Landslide Hazard and Risk Assessment;**
- **Technical Appendix 2.4: Outline Peat Management Plan;** and
- **Technical Appendix 2.5: Carbon Balance.**

2.2 Changes to Proposed Development

2.2.1 The Proposed Development has been amended and would comprise up to 10 turbines of a maximum tip height of 200 m, along with associated amended infrastructure, arranged as illustrated on **Figure 2.1.**

2.2.2 **Table 2.1** summarises the key changes to the Proposed Development from the 2022 EIA Report.

Table 2.1 – Changes to Proposed Development

Proposed Development Element	2022 EIA Report	2023 SEI Report	Summary of Variations
Number of Turbines	11	10	Removal of turbine T9.
Tip Height	200 m	200 m	No change.
Hub Height	122.5 m	118.5 m	Reduction by 4 m.
Rotor Diameter	155 m	163 m	Increase by 8 m.
New Access Track Length	7.2 km	6.85 km	Removal of 0.5 km of track associated with turbine T9 and addition of 0.15 km track associated with new substation location
Turbine Capacity	6 – 7 MW	7.2 MW	Increase in turbine capacity.
Battery Energy Storage Unit	Included	Removed	Removal of BESS and 27.4 MW.
Turbine Foundations & Hardstanding's	Temporary infrastructure land take (per turbine): 5.2 hectares (ha). Permanent infrastructure land take (per turbine): 2.2 ha.	Temporary infrastructure land take (per turbine): 3.7 ha. Permanent infrastructure land take (per turbine): 2.9 ha	Temporary land take decrease of 1.5 ha (per turbine). Permanent land take increase of 0.7 ha (per turbine).
Substation	Permanent land take: 0.85 (ha). The substation compound would take up an area of approximately 8,500 m² (170 m x 50 m).	Permanent land take: 1.65 (ha). The substation compound would take up an area of approximately 16,537.5 m² (175 m x 94.5 m) New Location (See **Figure 2.1**).	New Location (See **Figure 2.1**) and increase of footprint (see **Figure 2.2**). Increase in substation area and permanent land take of 0.8 ha.
Construction Compound		New location for Construction Compound A and new Construction Compound C included (See **Figure 2.1**).	New location for Construction Compound A and new Construction Compound C included (See **Figure 2.1**).

2.3 Project Description

Wind Turbines and Turbine Layout

2.3.1 The turbine coordinates of the proposed turbines are set out in **Table 2.2** and remain the same as the 2022 EIA Report except for the removal of turbine T9.

Table 2.2 – Turbine Locations

Turbine Number	Easting	Northing
1	337646	834471
2	337964	834056
3	338322	834426
4	338385	835034
5	338763	834664
6	338723	835353
7	339154	835115
8	339062	835738
10	339393	836115
11	339779	836354

Land Take

2.3.2 The Site area will remain the same as outlined in the 2022 EIA Report, approximately 1,074 ha (**Figure 2.1**). Within this area the permanent land take would be approximately 0.82%, compared to 0.52% reported in the 2022 EIA Report.

Table 2.3 – Summary of Approximate Temporary and Permanent Land Take

Project Element	Temporary (m^2)	Permanent (m^2)
Turbines, Crane Pads and Laydown Areas	29,492	37,261
Met Mast	N/A	625
On-site Access Tracks (New)	N/A	33,792
Substation	N/A	16,538
Temporary Construction Compound A	5,000	N/A
Temporary Construction Compound B	2,500	N/A
Temporary Construction Compound C	2,500	N/A
Borrow Pit Search Area	28,800	N/A
Total Land Take	**68,292**	**88,216**

Turbine Lighting

2.3.3 As reported in the 2022 EIA Report the Proposed Development would require visible aviation lighting under the current Civil Aviation Authority (CAA) policy statement[1]. A reduced lighting scheme has been submitted and approved by the CAA. As part of the reduced turbine lighting scheme T1, 2, 4, 5, 8 and 11 would be illuminated, by a 2000 candela light on the nacelle. There would be no. 32 candela lights in the mid-tower positions. Further detail is provided in **Chapter 10: Aviation and Telecommunications**.

Standard Mitigation and Working Methods during Construction

Watercourse Crossings

2.3.4 The number and type of watercourse crossings required as part of the Proposed Development remains unchanged from that outlined in the 2022 EIA Report.

Private Water Supplies (PWS)

2.3.5 The risk of potential impact to PWS as a result of the Proposed Development remains unchanged from that outlined in the 2022 EIA Report.

Peat Management

2.3.6 The detailed peat surveys across the Site have identified that approximately 35,870 m^3 of peat would be excavated as part of the construction activities associated with the Proposed Development, compared to 35,000 m^3 reported in the 2022 EIA Report. The updated **Technical Appendix 2.4: Outline Peat Management Plan (PMP)** outlines how peat would be recovered, managed and reused within the Site.

Peat Slide Risk

2.3.7 The updated **Technical Appendix 2.3: Peat Landslide Hazard and Risk Assessment (PLHRA)** provides further technical information on the likely risk and hazards associated with peat instability, and

[1] CAA Policy and Guidelines on Wind Turbines, CAP 764 (Draft June 2020)

the proposed standard mitigation and working methods that would be implemented during construction to seek to avoid adverse effects associated with peat instability.

Carbon

2.3.8 The carbon assessment for the Proposed Development has been updated in **Technical Appendix 2.5**. This concludes that the Proposed Development would 'pay back' the carbon emissions associated with its construction, operation and decommissioning in a 2 year period.

Chapter 3: Landscape and Visual Amenity

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3 Landscape and Visual Amenity

3.1 Introduction

3.1.1 This chapter reports on any changes to likely significant effects with respect to Landscape and Visual receptors associated with the construction, operation and decommissioning of the Proposed Development changes as outlined in **Chapter 2: Changes to Proposed Development**. Where there is no change to the 2022 EIA Report this is stated.

3.1.2 This chapter is supported by the following figures:

- Volume 2a: Figures and 2b: Visuals
  - **Figure 3.1: Topography;**
  - **Figure 3.2: Landuse;**
  - **Figure 3.3a: Landscape Character;**
  - **Figure 3.3b: Landscape Character with Blade Tip Zone of Theoretical Visibility (ZTV);**
  - **Figure 3.4a: Landscape Designations and Classifications;**
  - **Figure 3.4b: Landscape Designations and Classifications with Blade Tip ZTV;**
  - **Figure 3.5a: Transportation Routes and Recreational Routes;**
  - **Figure 3.5b: Transportation Routes and Recreational Routes with ZTV;**
  - **Figure 3.6a: Blade Tip ZTV;**
  - **Figure 3.6b: Blade Tip ZTV (20 km Zoom);**
  - **Figure 3.6c: Blade Tip/Hub Height ZTV Comparison;**
  - **Figure 3.7a: Cumulative Context;**
  - **Figures 3.7b – 3.7z: Cumulative ZTVs;**
  - **Figure 3.8: Viewpoint Location Plan:**
  - **Figure 3.9a – 3.9d: Viewpoint 1: Minor Road, Deveron Valley;**
  - **Figure 3.10a – 3.10d: Viewpoint 2: Haugh of Glass;**
  - **Figure 3.11a – 3.11d: Viewpoint 3: Corsemaul Drive, Dufftown;**
  - **Figure 3.12a – 3.12d: Viewpoint 4: A941 north of Dufftown;**
  - **Figure 3.13a – 3.13d: Viewpoint 5: Ben Aigan;**
  - **Figure 3.14a – 3.14d: Viewpoint 6: Ben Rinnes;**
  - **Figure 3.15a – 3.15d: Viewpoint 7: Corryhabbie Hill;**
  - **Figure 3.16a – 3.16d: Viewpoint 8: Little Geal Charn;**
  - **Figure 3.17a – 3.17d: Viewpoint 9: The Buck;**
  - **Figure 3.18a – 3.18d: Viewpoint 10: Tap o'Noth;**
  - **Figure 3.19a – 3.19d: Viewpoint 11: Meikle Balloch Hill;**
  - **Figure 3.20a – 3.20d: Viewpoint 12: B9016 at Aultmore;**
  - **Figure 3.21a – 3.21d: Viewpoint 13: A920 near Wester Bodylair;**
  - **Figure 3.22a – 3.22d: Viewpoint 14: Mither Tap View Point**
  - **Figure 3.23a – 3.23d: Viewpoint 15: Clashmash Hill;**
  - **Figure 3.24a – 3.24d: Viewpoint 16: A941 near The Grouse Inn Public House;**
  - **Figure 3.25a – 3.25d: Viewpoint 17: Cromdale Hills;**
  - **Figure 3.26a – 3.26d: Viewpoint 18: Auchindoune Castle;** and
  - **Figure 3.27a – 3.27d: Viewpoint 19: A941 near Cabrach**

3.2 Assessment Methodology and Significance Criteria

Scope of Assessment

3.2.1 The scope of the assessment is unchanged from the 2022 EIA Report, consistent with NatureScot guidance[1]. With regards to cumulative developments considered in the assessment, the developments included are those that are the subject of a formal registered planning application or appeal. However, a number of developments that are at scoping were also included at the request of NatureScot.

Consultation

3.2.2 **Table 3.1** summarises the post-submission consultation responses received regarding Landscape and Visual matters and provides information on where and/ or how they have been addressed in this assessment.

Table 3.1 – Landscape and Visual Consultation Responses

Consultee and Date	Issue Raised	Response/Action Taken
Aberdeenshire Council – Environmental Planners 13/07/2022	Aberdeenshire's response to the Proposed Development concludes: *"(1) The scale of turbines proposed is too big for the scale of topography and existing landscape features at site.* *(2) The specification of turbines is notably different to these already seen in the area at Clashindarroch and Dorenell in terms of size and possibly operation which is an issue of desirable visual coordination.* *(3) The proposed development will make a significant contribution to perceived cumulative effects in an area of Aberdeenshire previously identified as having no capacity for this scale of wind energy development.* *With any Nature Scot (SNH) consultation on this application with regards to landscape and visual issues, in principle their advice takes precedence over this consultation response."*	Noted. There are no plans to vary the tip height of the proposed turbines from that in the 2022 EIA Report. Consequently, the findings of the 2022 EIAR remain unchanged. **Section 3.8** of this chapter provide commentary on the cumulative effects of the Proposed Development, with particular regard to design consistency and the emerging pattern of development.
NatureScot (NS) 12/10/2022	NatureScot's response to the Proposed Development concludes that: *"Whilst the proposal would significantly affect the Dark Skies SLQ of the CNP, our view is that the significance of the effects are not of a degree that they would damage the unity or soundness of the CNP and consequently would not affect its integrity. Craig Watch wind farm would therefore not merit a NatureScot objection."*	Noted. The Proposed Development would not materially alter the findings of Technical Appendix 5.8: Lighting Assessment, Volume 2 of the 2022 EIAR.
Cairngorms National Park Authority (CNP) 11/11/2022	Cairngorms National Park Authority response to the Proposed Development concludes: *"As context, reference is made to the September 2022 decision notice for now consented Garbet wind farm, which is located adjacent to the proposed Craig Watch wind farm and would have a similar pattern of lighting visibility. The Reporter for the Garbet appeal accepted that the visual impact would not be significant", and that "there would be no significant effect on the Cairngorms National Park due to the distance from the turbines and there would be no visibility of the proposed development from all three dark sky discovery sites" (paragraphs 38 and 39 of the decision notice).* *While each application should be judged on its own merits, this provides useful context for consideration of lighting effects that would be caused by the Craig Watch proposal."*	Noted. The Proposed Development (and removal of turbine T9) are not expected to increase the effects on the CNP. Consequently, no significant effects on the special qualities or integrity of the CNP are anticipated. This is discussed in **Section 3.7**.

Method of Baseline Characterisation

Desk Study

3.2.3 The desk study undertaken for the assessment is unchanged from the 2022 EIAR.

Field Study

3.2.4 The field study undertaken for the assessment is unchanged from the 2022 EIAR.

Illustrative Materials

3.2.5 In order to verify the outcome of the Proposed Development as described in **Chapter 2: Changes to Proposed Development**, updated visualisations have been provided in Volume 2b.

Criteria for the Assessment of Effects

Criteria for Assessing the Sensitivity of Receptors

3.2.6 The criteria for assessing the sensitivity of receptors is unchanged from the 2022 EIAR.

Criteria for Assessing the Magnitude of Change

3.2.7 The criteria for assessing the magnitude of change is unchanged from the 2022 EIAR.

Criteria for Assessing Cumulative Effects

3.2.8 The criteria for assessing cumulative effects is unchanged from that applied in the 2022 EIAR.

Criteria for Assessing Significance

3.2.9 The criteria for assessing the significance of effects is unchanged from those given in the 2022 EIAR.

Limitations and Assumptions

3.2.10 There are no changes to the limitation and assumptions as set out in the 2022 EIA Report.

3.3 Policy Context

3.3.1 Changes in planning policy of relevance to the LVIA that have occurred since the production of the 2022 EIA Report are set out below.

National Policy

3.3.2 The main change in policy terms relates to the replacement of Scottish Planning Policy (SPP) and the National Planning Framework (NPF) 3 and adoption of the NPF4.

3.3.3 NPF4 Policy 11L Energy Policy Outcomes are identified as: *"expansion of renewable, low carbon and zero emission technologies".*

3.3.4 For convenience, the policy wording is set out below:

- *"a) Development proposals for all forms of renewable, low-carbon and zero emissions technologies will be supported. These include:*
    - *wind farms including repowering, extending, expanding and extending the life of existing wind farms;*
    - *enabling works, such as grid transmission and distribution infrastructure;*
    - *energy storage, such as battery storage and pumped storage hydro;*
    - *small scale renewable energy generation technology;*
    - *solar arrays;*
    - *proposals associated with negative emissions technologies and carbon capture; and*
    - *proposals including co-location of these technologies.*
- *b) Development proposals for wind farms in National Parks and National Scenic Areas will not be supported.*
- *c) Development proposals will only be supported where they maximise net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities.*

[1] NatureScot and the Countryside Agency (2002) Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity

- *d) Development proposals that impact on international or national designations will be assessed in relation to Policy 4.*
- *e) In addition, project design and mitigation will demonstrate how the following impacts are addressed:*
    - *impacts on communities and individual dwellings, including, residential amenity, visual impact, noise and shadow flicker;*
    - *significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable;*
    - *public access, including impact on long distance walking and cycling routes and scenic routes;*
    - *impacts on aviation and defence interests including seismological recording;*
    - *impacts on telecommunications and broadcasting installations, particularly ensuring that transmission links are not compromised;*
    - *impacts on road traffic and on adjacent trunk roads, including during construction;*
    - *impacts on historic environment;*
    - *effects on hydrology, the water environment and flood risk;*
    - *biodiversity including impacts on birds;*
    - *impacts on trees, woods and forests;*
    - *proposals for the decommissioning of developments, including ancillary infrastructure, and site restoration;*
    - *the quality of site restoration plans including the measures in place to safeguard or guarantee availability of finances to effectively implement those plans; and*
    - *cumulative impacts."*

3.3.5 The intent of the policy is clearly the expansion of renewable energy, through encouragement, promotion and facilitation of this type of development. This is reflected in the specified role of Local Development Plans (LDPs) in respect of which local planning authorities are expected to realise the full potential for electricity from renewable sources.

3.3.6 The last part of Paragraph e (ii) of Policy 11 makes it clear and recognises that in terms of significant landscape and visual impacts, such impacts are to be expected for some forms of renewable energy. This is a very different starting point compared to the position that was contained in SPP.

3.3.7 NPF4 Policy 4: Natural Places states that development proposals which, by virtue of their type, location or scale will have an "unacceptable" impact on the natural environment will not be supported. However, whilst the Landscape and Visual Assessment (LVIA) for the Proposed Development identifies localised significant adverse landscape and visual effects, the threshold of being "unacceptable" is a high bar and is not to be equated with "significant". As policy 11e(ii) recognises, significant landscape and visual impacts are to be expected for some forms of renewable energy, and localised impacts have been considered acceptable on balance with planning policy and in the context of material benefits associated with developments. Policy 4, Paragraph d) deals with local landscape designations and contains a different policy approach to that within the former SPP, stating that:

- *"Development proposals that affect a site designated as …a local landscape area in the LDP will only be supported where:*
- *Development will not have significant adverse effects on the integrity of the area or the qualities for which it has been identified; or*
- *Any significant adverse effects on the integrity of the area are clearly outweighed by social, environmental or economic benefits of at least local importance".*

3.3.8 The policy now follows a similar construct to that which deals with national level designations. The first limb of the policy refers to significant effects on the "integrity" of the area or "the qualities" for which it has been identified.

3.3.9 The second limb of Policy 4, Part d) provides that development proposals that affect a site designated as a local landscape area in the LDP (an Special Landscape Area (SLA) in the case of the Proposed Development) will only be supported where any significant adverse effects on the integrity of the area are clearly outweighed by social, environmental or economic benefits of at least local importance. It must be noted that this is a new policy provision, reflecting the wider NPF4 policy that adverse effects (including

adverse landscape and visual effects outside of a designated area) must be balanced against the benefits of a proposed development.

3.3.10 In determining the effects on the integrity of designations it has been necessary to establish what integrity means. NatureScot's (2020) draft Note on the Legislative and Policy Framework for National Parks and National Scenic Areas (CD09.010) provides a useful starting point and identifies two considerations:

- *"Objectives of the Designation: Which is taken to represent the general safeguard, conservation and enhancement of the interests for which the area has been designated."; and*
- *Overall integrity, which is taken to mean the wholeness of the area, the unity or soundness of the whole being unimpaired, recognising that the entire area of the designation is valued and adverse effects to part of it could be damage to the unity or soundness of the whole."*

3.3.11 Paragraph 11 of NatureScot's draft Note states that:

"A significant effect on a special landscape quality or several qualities does not inevitably compromise the designation's objectives and/or integrity. Neither is any such compromise dependent on an extensive area or large number of special landscape qualities being significantly affected. Compromise requires consideration of the nature of the locations affected, their qualities, and contribution to the wider designation."

3.3.12 Of the designated landscapes assessed, none are considered to be affected to the degree where significant adverse effects identified would undermine the integrity or special qualities of the designations, which is a key tenet of NPF4 Policy 4.

3.3.13 In respect of Wild Land the second half of NPF4 Policy 4, paragraph g) states that:

"Buffer zones around wild land will not be applied, and effects of development outwith wild land areas will not be a significant consideration."

3.3.14 This is clearly pertinent to the Proposed Development which is located outwith a Wild Land Area.

Regional and Local Policy

Aberdeenshire Local Development Plan (2023)

3.3.15 Since submission of the 2022 EIA Report Aberdeenshire Council have adopted the Aberdeenshire Local Development Plan (ALDP) 2023 (adopted on the 13th of January 2023). The ALDP sets out the policies the council will use for assessing planning applications. It sets out exactly where development is expected to take place over the next five years, and beyond up to 2028 (with the exception of the area covered by the Cairngorms National Park boundary).

3.3.16 A number of landscape related policies have been subject to minor re-wording since the 2017 ALDP and are included in **Table 3.2**.

Table 3.2 – Aberdeenshire Local Development Plan Policies

Policy	Policy Content (of relevance to the LVIA[2])
E2 – Landscape	E2.1 *"We will refuse development that causes unacceptable effects through its scale, location or design on key characteristics, natural landscape elements, features or the composition or quality of the landscape character as defined in the Landscape Character Assessments produced by NatureScot. These impacts can be either alone or cumulatively with other recent developments. A Landscape and Visual Impact Assessment (LVIA) may be required to assess the effects of change on a landscape that could be experienced should a development proposal be approved. Appropriate mitigation should be identified."*
C2 – Renewable Energy	C2.1 *"We will support renewable energy developments, including solar, wind, biomass (energy from biological material derived from living, or recently living organisms) and hydro-electricity projects, as well as energy storage projects, which are in appropriate sites and of the appropriate design. Assessment of the acceptability of such developments will take account of any effects on: socio-economic aspects; renewable energy targets; greenhouse gas emissions; communities; landscape and visual aspects; natural heritage; carbon rich soils; the historic environment; tourism and recreation; aviation, defence, telecommunications and broadcasting interests; road traffic; hydrology; and opportunities for energy storage. We treat biomass schemes as industrial processes suitable for business land. These may be hazardous developments through their impact on air quality. This support is not at the expense of other policies regarding Natural Heritage, the Historic Environment and Protecting Resources."* C2.3 *"All wind farms must be appropriately sited and designed and avoid unacceptable environmental effects, taking into account the cumulative effects of existing and approved wind turbines. All wind turbines sites must be appropriate for use in perpetuity at the scale being proposed."*

[2] Where policy text is not applicable to the LVIA, this has been omitted in Table 3.2.

Policy	Policy Content (of relevance to the LVIA[2])
E2 – Landscape	E2.1 *"We will refuse development that causes unacceptable effects through its scale, location or design on key characteristics, natural landscape elements, features or the composition or quality of the landscape character as defined in the Landscape Character Assessments produced by NatureScot. These impacts can be either alone or cumulatively with other recent developments. A Landscape and Visual Impact Assessment (LVIA) may be required to assess the effects of change on a landscape that could be experienced should a development proposal be approved. Appropriate mitigation should be identified."*
	C2.4 *"Turbines must not compromise health and safety or adversely affect aircraft or airfields (including radar and air traffic control systems, flight paths and Ministry of Defence low flying areas) and/or telecommunications. Unacceptable significant adverse effects on the amenity of dwellinghouses, such as from noise, or on tourism and recreation interests including core paths and other established routes used for public walking, riding or cycling, or to protected species should also be avoided.*

3.3.17 It is noted, however, that the 2023 ADLP was written to accord with NPF3, which has since been superseded by NPF4. It is understood that work on a replacement plan for 2028 is currently underway that will reflect the provisions of the current national policy. Details of the status and weight to be given to the 2023 ADLP is provided in the Planning Statement.

3.4 Baseline

3.4.1 The baseline findings remain essentially unchanged from those highlighted in the 2022 EIAR. However, there have been a number of changes to the cumulative context as described in **Table 3.3**. Those schemes subject to changed status or newly included are highlighted in bold. **Figure 3.7a**, shows the location of each of the cumulative schemes listed.

3.4.2 The principal changes to the cumulative context concern sites within 10 km of the Proposed Development and comprise:

- The consenting of the Garbet and Clashindarroch II arrays (which have 190 m and 178.5 m maximum blade tip heights, respectively); and
- Inclusion of scoping stage Dorenell Extension (which is currently proposed with a 200 m maximum blade tip height).

3.4.3 Whilst the consented schemes have been given added weight in planning due to their greater certainty, less weight is given to the Dorenell Extension due to the lesser certainty associated with this development.

3.4.4 It is apparent from the updated list of wind farms in **Table 3.3** that there is demonstrably some acceptance of taller turbines in the vicinity of the Proposed Development, including locations within the same landscape character type as the Proposed Development (i.e. LCT 292 Open Upland).

3.4.5 The move towards larger turbines is considered an inevitability, reflecting advances in technology, changes in policy priorities, and the climate emergency. It is also the case that differences in the size and layout of neighbouring wind farms is an established facet of the emergent pattern of development in the area and across much of Scotland.

Table 3.3 - Post-Submission Cumulative Context

Wind Farm Site Name	No. of Turbines	Max Blade Tip (m)	Status as of July 2024
Aultmore Wind Farm Variation	13	110	In Planning
Berry Burn	29	100	Operational
Berry Burn Extension	9	149.9	Consented
Bogenlea Farm	1	93.5	Operational
Boynide Airfield	7	100.5	Operational
Boyndie Airfield Extension	1	100.5	Operational
Brackenhills Farm (resubmission)	1	99.5	Consented
Cairds Hill Wind Farm (Edintore Extension)	4	180	In Planning
Carin Duhie Variation	16	110	Consented
Cairnborrow Resubmission	5	100	Operational

Cairnhill	3	84	Operational
Cairnmore	3	81	Operational
Cairnton	1	98.14	Operational
Castle of Auchry Farm	3	74	Operational
Clash Gour	48	149.5	Consented
Clashindarroch	18	110	Operational
Clashindarroch Extension	22	13 – 200 9 - 180	In Planning
Clashindarroch II	14	180	Consented
Cloffrickford (Hill of Skilmafilly)	3	92.5	Operational
Cornabo	3	74	In Planning
Courtstone Methlick	1	93.5	Operational
Culvie Hill	1	79.6	Operational
Deuchries Huntly	3	100	Operational
Deuchries Windfarm Aberchirder (extension)	1	119	Consented
Deuchries Windfarm Aberchirder (extension)	2	119	Consented
Dorenell	59	126	Operational
Dorenell Extension	98	200	Scoping
Dummuie	7	75	Operational
Easter Melrose	3	79	Operational
Easter Tolmauds	2	79.6	Operational
Edintore Wind Farm	6	125	Operational
Edintore Extension	7	150	Scoping
Followsters Newmill	1	77	Consented
Garbet	7	200	Consented
Garralhill Newmill	1	74	Consented
Gawnsmoss Cluster (at Cairnhill Banff)	3	80	Operational
Glens of Foudland	20	78	Operational
Gordonstown Hill	5	100	Operational
Greenhill	2	98.14	Operational
Greenmyres Drumblade Huntly	1	84	Operational
Haddo	2	74	Operational
Hill of Balquhindachy Methlick Ellon extension	2	75	Operational
Hill of Carlincraig	2	99.5	Consented
Hill of Easterton	4	75	Operational
Hill of Fiddes	3	102	Operational
Hill Of Glaschyle	12	99.5	Operational
Hill of Petty	4	67	Consented

Hill of Towie	21	100	Operational
Hill of Towie II	16	125	Consented
Hunthill	3	66.7	Consented
Hunthill Extension	1	66.7	Consented
Kellas	8	110	Operational
Kellas Drum	8	6 – 185 m 2 – 150m	In Planning
Kildrummy	8	93	Operational
Kirkton Farm Wind Cluster	3	100	Operational
Little Byth	3	80	Operational
Lurg Hill	5	130	Consented
Mains of Auchinderran	3	79.6	Operational
Mains of Hatton	3	79.6	Operational
Meikle Camaloun	1	74	Operational
Meikle Hill	6	126.5	Consented
Meikleton of Ardonald	1	135	Consented
Midtown of Glass	1	79	Operational
Milton of Fisherie	2	99.5	Operational
Mountwest Wind Cluster (resubmission) Land At Mains Of Cairnbrogie Oldmeldrum Inverurie	~~3~~ 4	77	Consented
Muirake	2	99.5	Operational
Myreton	3	74	Operational
Netherton Fisherford Inverurie	1	77	Consented
Netherton of Windyhills	2	92.5	Operational
Paul's Hill	28	100	Operational
Pauls Hill II	7	149.9	Consented
Riverstone Kinnoir Huntly	1	54	Operational
Rothes I	22		Operational
Rothes II	18	125	Operational
Rothes III	29	225	Consented
Shielburn Farm	3	98.14	Operational
Skelmonae Methlick Ellon	4	74	Operational
St Johns Wells	3	79	Operational
St Johns Wells Extension	3	80	Operational
Strath of Brydock	2	99.5	Operational
Strath of Brydock Extension	1	100	Operational
Tom Nan Clach (redesign)	13	125	Operational
Tom Nan Clach Extension	7	150	In Planning

Upper Ardgrain Ellon	3	74	Operational
Upper Wheedlemont Farm	2	81	Operational
West Knock Farm	3	79.6	Operational
Yonderton Wind Cluster	2	98.14	Operational

3.5 Assessment of Likely Effects

Potential Construction Effects

3.5.1 The assessment of potential construction effects remains essentially unchanged from the assessment in the 2022 EIA Report. However, the omission of Turbine T9 and associated infrastructure, and the repositioning of the proposed substation compound in a relatively low lying and enclosed position in an area of forestry would result in a slight reduction in overall construction effects.

Potential Operational Effects

3.5.2 Operational effects are anticipated to be largely unchanged from the assessment within the 2022 EIA Report. However, the omission of turbine T9, would provide for a slight qualitive improvement to the landscape and visual effect of the Proposed Development, but not a material difference. Similarly, the repositioning of the proposed substation compound into a more enclosed and lower lying position within forestry would further reduce the visibility and impact of this feature.

Potential Decommissioning Effects

3.5.3 Potential decommissioning effects were scoped out of the LVIA in the 2022 EIA Report, since these effects would occur at the cessation of the operational phase of the Proposed Development at which stage the related processes and restoration procedures may have changed from those currently deployed. The decommissioning procedures are likely to be of a similar nature to the construction phase, however of a shortened duration and to result in at least a partial reversal of the operational effects.

3.6 Mitigation

Mitigation During Construction

3.6.1 There is no change to the recommended mitigation during construction as set out in the 2022 EIA Report.

Mitigation During Operation

3.6.2 There is no change to the recommended mitigation during operation as set out in the 2022 EIA Report.

Mitigation During Decommissioning

3.6.3 There is no change to the recommended mitigation during decommissioning as set out in the 2022 EIA Report.

3.7 Assessment of Residual Effects

Residual Construction Effects

Landscape Fabric

3.7.1 Whilst some reductions in impacts on landscape fabric would be associated with the Proposed Development, no material changes to the residual construction effects predicted in the 2022 EIA Report are anticipated and so no significant effects on landscape fabric are anticipated as a result of the Proposed Development.

Landscape Character

3.7.5 The removal of turbine T9 and associated infrastructure, and repositioning of the proposed substation would result in a similar magnitude of impact and residual effects as predicted in the 2022 EIA Report. Consequently, no significant effects on landscape character are anticipated during the construction of the Proposed Development.

Landscape Designations

3.7.2 The Proposed Development would contribute to a slight magnitude of impact and Moderate (non-significant) effect on the neighbouring designated areas, such as on the Ben Rinnes SLA and the Deveron Valley (Aberdeenshire) SLA, where the visual disturbance associated with the Proposed Development would constitute a minor, relatively short-lived distraction from sections of the SLA and CNP.

Consequently, no significant effects on designated landscapes are anticipated during the construction of the Proposed Development.

Visual Amenity

3.7.3 The construction of the Proposed Development would wholly represent a temporary and relatively short duration impact on the amenity of Dufftown, and negligible from those more distant receptor locations such as the A920, A941, B9009, Unnamed Deveron Valley Road and several Core Paths, equating to a temporary Moderate to Moderate/ Minor effect on visual amenity, which would not be considered significant. This remains consistent with the 2022 EIA Report.

Residual Operational Effects

3.7.4 There is no material change to the predicted residual operational effects predicted in the 2022 EIA Report. There would, however, be some minor qualitative improvements on the character of the landscape and visual amenity associated with the omission of turbine T9 and repositioning of the proposed substation compound.

Landscape Fabric

3.7.5 The residual operational effects on the landscape fabric of the Site are unchanged from the 2022 EIA Report.

Landscape Character

3.7.6 The residual operational effects on landscape character would be unchanged from the 2022 EIA Report. Consequently, localised significant effects would still occur in the following Landscape Character Types (LCTs):

- LCT 292 – Open Upland;
- LCT 32 – Farmed and Wooded River Valleys;
- LCT 27 – Farmed Moorland Edge;
- LCT 28 – Outlying Hills and Ridges;
- LCT 289 – Upland Farmed Valleys; and
- LCT 294 – Upland Valleys.

3.7.7 Additionally, as with the findings of the 2002 EIA Report, significant in-addition and in-combination cumulative effects arising from the Proposed Development will still be experienced in:

- LCT 123 – Smooth Rounded Hills; and
- LCT 291 – Open Rolling Moorland.

Landscape Designations

3.7.8 Similarly, as above, the Proposed Development would not materially change the overall levels of effects experienced from those designated landscapes from the 2022 EIA Report.

3.7.9 Whilst significant effects are predicted in parts of the Ben Rinnes SLA and the Deveron Valley (Aberdeenshire) SLA such effects would not constitute a significant effect on the overall integrity of these regionally important landscapes. Importantly, this is a key consideration in respect of Policy 4 and 11 of NPF4.

3.7.10 The Cairngorms National Park would, despite the proposed amendments to the 2022 scheme experience some significant in-combination cumulative effects as a result of the emergent pattern of wind energy developments (including existing, consented and proposed developments), rather that the Proposed Development. However, such effects are not considered to affect the key special qualities for the CNP to the degree, or geographical extent, as to undermine the integrity of the CNP.

Visual Amenity

3.7.11 The Proposed Development provides some qualitative improvement in respect of visual amenity from residential receptors within the settlement of Dufftown, users along the A920, A941, B9009, Unnamed Deveron Valley Road and a series of Core Paths, this would however, not result in a material change to the levels of visual effects predicted in the 2022 EIA Report. Consequently, the significant visual effect identified in the 2022 EIA Report would remain unchanged.

Viewpoint Assessment

3.7.12 The removal of turbine T9 would not result in a material change to the level of effects on the character or visual amenity of the study area that were reported in the 2022 EIA Report.

Viewpoint 1 – Minor Road, Deveron Valley

3.7.13 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.9a - 3.9d**. The removal of turbine T9 would narrow the overall proportion of the view occupied by the Proposed Development, thereby providing a qualitive improvement to the balance of the scheme.

3.7.14 However, this improvement would be insufficient to materially change the **Major** (significant) effects on the landscape character and visual amenity of receptors at this viewpoint location. Similarly, the Proposed Development would be seen in the context of consented Garbet as well as the in-planning Clashindarroch II and Clashindarroch Extension turbines and would continue to pose a **Major** (significant) effect.

3.7.15 The inclusion of the consented Garbet scheme, as well and the in-planning Clashindarroch II and Clashindarroch Extension would, however, increase the in-combination cumulative effects of wind energy development to **Major** (significant), with wind energy development becoming a defining feature of the landscape and view from this viewpoint.

Viewpoint 2 – Haugh of Glass

3.7.16 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.10a - 3.10d**. Whilst the removal of turbine T9 would reduce the overall visibility of the Proposed Development from this viewpoint, its omission would have very little impact on the level of effect on the landscape character and visual amenity at this viewpoint, the residual effects would remain Moderate (not significant).

3.7.17 With the inclusion of the consented Garbet and in-planning Clashindarroch, the residual in-addition cumulative effects would remain **Major/ Moderate**. The Proposed Development, along with the existing, consented, in-planning and proposed wind farms would contribute to a **Major/ Moderate** (significant) in-combination effect from this viewpoint.

Viewpoint 3 – Corsemaul Drive, Dufftown

3.7.18 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.11a - 3.11d**. The removal of turbine T9 would not be apparent in views from this viewpoint location, therefore the significance of effects remain unchanged from the 2022 EIA Report.

3.7.19 There would be no difference to the cumulative context from this viewpoint. On this basis the residual cumulative effects on the landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 4 – A941 north of Dufftown

3.7.20 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.12a - 3.12d**. The removal of turbine T9 would not be apparent in views from this viewpoint location, therefore the significance of effects remain unchanged from the 2022 EIA Report.

3.7.21 With exception of the in-planning Clashindarroch Extension, there would be no differences to the cumulative context from this viewpoint. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 5 – Ben Aigan

3.7.22 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.13a - 3.13d**. The removal of turbine T9 would not be immediately apparent from this viewpoint location, therefore the significance of effects remain unchanged from the 2022 EIA Report.

3.7.23 The key change to the cumulative context at this viewpoint is the change in status of the Clashindarroch Extension to 'in-planning'. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 6 – Ben Rinnes

3.7.24 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.14a - 3.14d**. The removal of turbine T9 would not be immediately apparent from this viewpoint location, therefore the significance of effects remain unchanged from the 2022 EIA Report.

3.7.25 The key change to the cumulative context at this viewpoint is the change in status of the Clashindarroch Extension to 'in-planning'. residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 7 – Corryhabbie Hill

3.7.26 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.15a - 3.15d**. The removal of turbine T9 would narrow the proportion of the view occupied by the Proposed Development, thereby providing a qualitive improvement to the extent of the overall Proposed Development. However, this improvement would be insufficient to materially lessen the Moderate (not significant) effects on the landscape character and visual amenity of receptors at this viewpoint location.

3.7.27 The main change to the cumulative context is a change in status of the Clashindarroch Extension scheme from scoping to 'in-planning. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 8 – Little Geal Charn

3.7.28 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.16a - 3.16d**. As with Viewpoint 7, the removal of turbine T9 would narrow the proportion of the view occupied by the Proposed Development thereby equating to a slight qualitive improvement to the overall appearance of the Proposed Development. However, this improvement would be insufficient to materially lessen the Moderate (not significant) effects on the landscape character and visual amenity of receptors at this viewpoint location.

3.7.1 The main change to the cumulative context is a change in status of the Clashindarroch Extension scheme from scoping to 'in-planning. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 9 – The Buck

3.7.2 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.17a - 3.17d**. Given that the Proposed Development does not entail additional turbines, increased turbine tip heights or the repositioning of turbines, the findings remain unchanged from the 2022 EIA Report.

3.7.3 The main change to the cumulative context is a change in status of the Clashindarroch Extension scheme from scoping to 'in-planning. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 10 – Tap o'Noth

3.7.4 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.18a - 3.18d**. The removal of turbine T9 would not be apparent from this viewpoint location, therefore the significance of effects remain unchanged from the 2022 EIA Report.

3.7.5 With exception of the in-planning Clashindarroch Extension, there would be no differences to the cumulative context from the viewpoint. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 11 – Meikle Balloch Hill

3.7.6 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.19a - 3.19d**. The removal of turbine T9 would narrow the overall proportion of the view occupied by the Proposed Development, thereby providing a qualitive improvement to the balance of the scheme. However, this improvement would be insufficient to materially lessen the Moderate (not significant) effects on the landscape character and visual amenity of receptors at this viewpoint location.

3.7.7 The main change to the cumulative context is a change in status of the Clashindarroch Extension scheme from scoping to 'in-planning. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 12 – B9016 at Aultmore

3.7.8 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.20a - 3.20d**. The removal of turbine T9 would simplify the array and reduce the degree of overlapping rotors, however this would not reduce the prominence or extent of the view that would be occupied by the development. Therefore, the significance of effects remain unchanged from the 2022 EIA Report.

3.7.9 The key change to the cumulative context is a change in status of the Clashindarroch Extension scheme from scoping to 'in-planning. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 13 – A920 near Wester Bodylair

3.7.10 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.21a - 3.21d**. Whilst the removal of T9 would be evident at this viewpoint, the significance of effects remain unchanged from the 2022 EIA Report.

3.7.11 The main change to the cumulative context is a change in status of the Clashindarroch Extension scheme from scoping to 'in-planning. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 14 – Mither Tap View Point

3.7.12 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.22a - 3.22d**. The removal of turbine T9 would have limited effect on the overall appearance of the Proposed Development from this viewpoint, therefore the significance of effects remain unchanged from the 2022 EIA Report.

3.7.13 The key change to the cumulative context is a change in status of the Clashindarroch Extension scheme from scoping to 'in-planning. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 15 – Clashmach Hill

3.7.14 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.23a - 3.23d**. The removal of turbine T9 would have little effect on the prominence of the Proposed Development, therefore the significance of effects remain unchanged from the 2022 EIA Report.

3.7.15 The main change to the cumulative context is a change in status of the Clashindarroch Extension scheme from scoping to 'in-planning. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 16 – A941 near Public House

3.7.16 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.24a - 3.24d**. The removal of turbine T9 would have a slight qualitative improvement of the Proposed Development; however, this would be insufficient to lessen or ameliorate the **Major** (significant) effect on the landscape character and visual amenity of receptors from this viewpoint location.

3.7.17 The key change to the cumulative context is a change in status of the Clashindarroch Extension scheme from scoping to 'in-planning. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 17 – Cromdale Hills

3.7.18 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.25a - 3.25d**. The removal of turbine T9 would not be immediately apparent from this viewpoint location, therefore the significance of effects remain unchanged from the 2022 EIA Report.

3.7.19 The change to the cumulative context is a change in status of the Clashindarroch Extension scheme from scoping to 'in-planning. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 18 – Auchindoun Castle (on approach)

3.7.20 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.26a - 3.26d**. Given that the Proposed Development does not entail additional turbines, increased overall tip height or the repositioning of the turbines, the significance of effects remain unchanged from the 2022 EIA Report.

3.7.21 The main change to the cumulative context is the changed status of the Garbet scheme from in-planning to a consented development, and increase turbines size. Additionally, the Hill of Towie II development has gained consented, however this development would be fully screened from the viewpoint location as shown in **Figure 3.26d**. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

Viewpoint 19 – A941 Upper Howbog near Cabrach

3.7.22 The Proposed Development is displayed in the visuals and wirelines in **Figures 3.27a to 3.27d**. Given that the Proposed Development does not entail additional turbines, increased turbine tip heights or the repositioning of turbines, the significance of effects remain unchanged from the 2022 EIA Report.

3.7.23 The main change to the cumulative context is a change in status of the Clashindarroch Extension scheme from scoping to 'in-planning. Residual cumulative effects on landscape character and visual amenity both in terms of in-addition and in-combination effects remain unchanged from the 2022 EIA Report.

3.8 Cumulative Effect Assessment

3.8.1 **Table 3.3** outlines the updated cumulative context since the 2022 EIA Report. The principal changes include:

- The newly consented status of the Berry Burn Extension, Cairn Duhie Variation, Clash Gour, Clashindarroch II, Garbet, Hill of Carlingcraig, Hunthill Extension and Rothes III; and
- The inclusion of the in - scoping Dorenell Extension, updated in-planning Clashindarroch Extension and Aultmore schemes.

3.8.2 The majority of operational wind farms within Morayshire are between 100 m – 126 m in height. However, recent consented development includes turbines of 130 m – 149.9 m. The trend within the study area is for turbines to increase in size with recent applications comprising turbine heights up to 225 m in height. It is certainly the case that development in the vicinity of the Site, including consented developments, show a progression to larger turbines, and a mixing of different turbine sizes in neighbouring wind farms is an established part of the emergent development pattern.

3.8.3 A comparison between the 2022 EIA Report suggests that there would be no material change to the level of in-addition cumulative effects attributed to the Proposed Development in conjunction with the existing and consented wind farms or when the in-planning developments are taken into consideration.

3.8.4 There would be however, an overall minor increase to the predicted in-combination effects, this is caused by the consenting of a number of new wind energy developments, alongside the inclusion Clashindarroch Extension and Aultmore development that would if consented, form new prominent features within the landscape.

3.9 Summary

3.9.1 This chapter reports on any changes to likely significant effects with respect to Landscape and Visual receptors associated with the construction, operation and decommissioning of the Proposed Development changes as outlined in **Chapter 2.**

3.9.2 The assessment of the Proposed Development is based upon the same scope and methodology as used in the 2022 EIA Report.

3.9.3 In undertaking the assessment of the Proposed Development there has been some change in the cumulative context, this reflects the newly consented status of the Berry Burn Extension, Cairn Duhie Variation, Clash Gour, Clashindarroch II, Garbet, Hill of Carlingcraig, Hunthill Extension and Rothes III, and the inclusion of the in -scoping Dorenell Extension, updated in-planning Clashindarroch Extension and Aultmore schemes.

3.9.4 The removal of turbine T9 and the reduction in overall hub height would represent some qualitive improvements to the overall appearance of the Proposed Development, however this improvement would not result in a material change to the level of effects on landscape character or visual amenity of the study area as reported in the 2022 EIA Report.

3.9.5 Another change since the submission 2022 EIA Report is the adoption of NPF4 which provides extra weight to the climate emergency and provides an updated strategic and policy context for planning decisions. Of particular note for consideration of landscape and visual effects are Policy 4 and 11, which provide a balanced approach to consider the effects of such developments and also sets out the appropriate focus of judging the acceptability of Proposed Development, especially in respect of what are considered localised significant effects on landscape character and landscape designations, particularly in light of the qualitive benefits of the Proposed Development.

3.9.6 Additionally, since the 2022 EIA Report, there has been an update to the Moray Wind Energy Landscape Sensitivity Study which provides key updates to landscape character types. The update is intended to inform strategic planning for wind energy development and to provide information that can assist in the evaluation of specific development proposals. Of particular note is the update to the host LCT (Open Uplands and Settled Glens LCT), the key findings of the sensitivity assessment are that there is an emphasis on larger turbines which currently comprise commercial wind energy development. New developments are more likely to be proposed closer to the edges of these uplands and therefore in closer proximity to more sensitive landscapes such as settled valleys.

Table 3.4– Summary of Potential Significant Effects of the Proposed Development

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/Residual Effect
Construction			
Potential significant effects on landscape fabric	Phased felling and construction and reinstatement/ replanting, to limit the geographical extent of disturbance at any given time and to ensure rapid establishment of replacement planting and landscaping. Felling and replanting requirements are set out in **Technical Appendix 2.1: Forestry.** Effective management of the construction project, using experienced contractors and measures set out in Technical Appendix 2.1: Outline CEMP of the 2022 EIA Report.	Forest Management Plan to deliver the forestry felling and replanting in **Technical Appendix 2.1: Forestry**. Forestry Management Plan to be delivered as a condition of consent. The CEMP would be finalised and delivered as condition of consent.	Moderate, adverse (not significant)
Potential significant effects on landscape character	Phased felling and construction and reinstatement/ replanting, to ensure rapid establishment of	Forest Management Adoption of siting and design priorities, as	Moderate, adverse (not significant)

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/Residual Effect
	replacement planting and landscaping. Relatively short duration of construction activities. Effective management of the construction project, using experienced contractors and measures set out in Technical Appendix 2.1: Outline CEMP of the 2022 EIA Report..	described in the 2022 EIA Report.	
Potential significant effects on designated landscapes	All working areas would be restricted as far as practicable to the specified areas and demarcated to keep affected areas to a minimum and prevent incursion of Site plant into non-construction locations. Material storage/ temporary stockpiles would be retained for the shortest duration practicable and would be sited to avoid visual intrusion to neighbouring receptor locations, with particular regard to avoidance of sky-lining such features in views from sensitive landscapes such as Glen Rinnes. Location of borrow pit selected to minimise the visibility of these elements from external receptor locations. The revised substation site was selected to take advantage of a forested location downslope of the summit of Brown Hill in an upland location set back from the edge of Glen Deveron.	Adoption of siting and design priorities, as described in the 2022 EIA Report.	Moderate, adverse (not significant)
Potential significant effects on visual amenity	Location of temporary construction compounds were considered to minimise the effects on the character and visual amenity of neighbouring receptor locations, including scattered residential properties and communities by placing compounds within forested areas and/or in low lying enclosed positions on the eastern side of Garbert Hill. Material storage/ temporary stockpiles would be retained for the shortest duration practicable and would be sited to avoid visual intrusion to neighbouring receptor locations, with particular regard to avoidance of sky-lining such features in views in views from neighbouring low-lying receptor locations such as the valley landscape to the south of the Site (the route of the A941), or the sensitive landscapes of Glen Rinnes, Glen Fiddich and the Deveron Valley. Location of borrow pit selected to minimise the visibility of these elements from external receptor locations. The profile of the final excavation void would also be carefully considered to avoid unsightly exposed faces and the formation of a steeply graded rim.	Adoption of siting and design priorities, as described in 2022 EIA Report.	Moderate, adverse (not significant)

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/Residual Effect
	The revised substation site was selected to take advantage of a forested location downslope of the summit of Brown Hill in an upland location set back from the edge of Glen Deveron.		
Cumulative Construction Effects			
Cumulative construction effects on landscape fabric as well as landscape character and amenity of the Site	None	None	Not significant
Operation			
Potential significant effects on landscape fabric relating to loss of characteristic land cover	Replacement planting to meet the requirements set out in **Technical Appendix 2.1: Forestry.** .	Forest Management Plan to deliver the forestry felling and replanting in **Technical Appendix 2.1: Forestry**. Forestry Management Plan to be delivered as a condition of consent.	None. Not significant.
Effects on landscape character	Careful siting and design of the Proposed Development in accordance with mitigation set out in 2022 EIA Report. Aviation lighting on turbines to be operated in accordance with mitigation set out in Technical Appendix 5.8: Lighting Assessment of the 2022 EIA Report.	Adoption of siting and design priorities, as described in the 2022 EIA Report.	Of the 13 LCTs assessed, significant adverse residual effects were predicted in parts of the following LCTs: • LCT 292 – Open Upland (Major adverse); • LCT 32 – Farmed and Wooded River Valleys (Major adverse); • LCT 27 – Farmed Moorland Edge (Major/ Moderate adverse); • LCT 28 – Outlying Hills and Ridges (Major adverse); • LCT 288 – Upland Farmland (Turbine Lighting effects only during hours of darkness/ when lit); • LCT 289 – Upland Farmed Valleys (Major/ Moderate adverse); and • LCT 294 – Upland Valleys (Major adverse).
Effects on Landscape Designations and Classifications	Careful siting and design of the Proposed Development in accordance with mitigation set out in 2022 EIA Report. Aviation lighting on turbines to be operated in accordance with mitigation set out in Technical Appendix 5.8: Lighting Assessment of the 2022 EIA Report.	Adoption of siting and design priorities, as described in the 2022 EIA Report.	Of the designations and landscape classifications assessed, significant adverse residual effects were predicted in parts of the following: • Ben Rinnes SLA (Major/ Moderate adverse); and • Deveron Valley SLA (Aberdeenshire) (Major adverse). It should be noted that none were considered to undermine the integrity of either designation.
Effects on the amenity of settlements	Careful siting and design of the Proposed Development in accordance with mitigation set out in 2022 EIA Report. Aviation lighting on turbines to be operated in accordance with mitigation set out in Section 5 of Technical Appendix 5.8: Lighting Assessment of the 2022 EIA Report.	Adoption of siting and design priorities, as described in the 2022 EIA Report.	Localised significant adverse residual effects were predicted in parts of Dufftown (Major/ Moderate adverse). Such effects are not anticipated to be ubiquitous or pervasive in each settlement.

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/Residual Effect
Transportation Routes	Careful siting and design of the Proposed Development in accordance with mitigation set out in 2022 EIA Report. Aviation lighting on turbines to be operated in accordance with mitigation set out in Section 5 of Technical Appendix 5.8: Lighting Assessment of the 2022 EIA Report.	Adoption of siting and design priorities, as described in the 2022 EIA Report.	Of the routes assessed, significant adverse effects were predicted on discrete sections of the following highways: • A920 (Major adverse); • A941 (Major/ Moderate adverse); • B9009 (Major/ Moderate adverse); and • Local road to east of the Site (Major/ Moderate adverse).
Recreational Routes	Careful siting and design of the Proposed Development in accordance with mitigation set out in 2022 EIA Report. Aviation lighting on turbines to be operated in accordance with mitigation set out in Section 5 of Technical Appendix 5.8: Lighting Assessment of the 2022 EIA Report.	Adoption of siting and design priorities, as described in the 2022 EIA Report.	No nationally or regionally important recreational routes would be significantly affected. However, significant adverse effects were predicted on parts of the following Core Paths which are of local importance: • SP03 (Major/ Moderate adverse); • SP04 (Major/ Moderate adverse); and • SP30 (Major adverse).
Cumulative Operational Effects			
Potential significant cumulative effects on landscape fabric relating to loss of characteristic land cover	None	None	None. Not significant.
Effects on landscape character	Careful siting and design of the Proposed Development in accordance with mitigation set out in 2022 EIA Report. Aviation lighting on turbines to be operated in accordance with mitigation set out in Section 5 of Technical Appendix 5.8: Lighting Assessment of the 2022 EIA Report.	Adoption of siting and design priorities, as described in the 2022 EIA Report.	Of the 13 LCTs assessed, significant adverse residual cumulative effects were predicted in parts of the following LCTs: • LCT 292 – Open Upland (Major adverse); • LCT 32 – Farmed and Wooded River Valleys (Major adverse); • LCT 27 – Farmed Moorland Edge (Major/ Moderate adverse); • LCT 28 – Outlying Hills and Ridges (Major adverse); • LCT 123 – Smooth Rounded Hills - Major/ Moderate adverse); • LCT 289 – Upland Farmed Valleys (Major/ Moderate adverse); • LCT 290 Upland Moorland and Forestry (Major/ Moderate adverse); • LCT 294 – Upland Valleys (Major adverse); and • LCT 291 - Open Rolling Upland (Major adverse).
Effects on Landscape Designations and Classifications	Careful siting and design of the Proposed Development in accordance with mitigation set out in 2022 EIA Report. Aviation lighting on turbines to be operated in accordance with mitigation set out in Section 5 of Technical Appendix 5.8: Lighting	Adoption of siting and design priorities, as described in the 2022 EIA Report.	Of the designations and landscape classifications assessed, significant adverse residual cumulative effects were predicted in parts of the following: • Ben Rinnes SLA (Major/ Moderate adverse); and

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/Residual Effect
	Assessment of the 2022 EIA Report.		• Deveron Valley SLA (Aberdeenshire) (Major adverse). Significant adverse cumulative in-combination effects were predicted across some areas of the CNP (Major/ Moderate adverse). It should be noted that none were considered to affect the integrity of either designation.
Effects on the amenity of settlements	Careful siting and design of the Proposed Development in accordance with mitigation set out in 2022 EIA Report. Aviation lighting on turbines to be operated in accordance with mitigation set out in Section 5 of Technical Appendix 5.8: Lighting Assessment of the 2022 EIA Report.	Adoption of siting and design priorities, as described in the 2022 EIA Report.	Localised significant adverse residual cumulative effects were predicted in parts of Dufftown (Major/ Moderate adverse). Such effects are not anticipated to be ubiquitous or pervasive in the settlement.
Transportation Routes	Careful siting and design of the Proposed Development in accordance with mitigation set out in 2022 EIA Report Aviation lighting on turbines to be operated in accordance with mitigation set out in Section 5 of Technical Appendix 5.8: Lighting Assessment of the 2022 EIA Report.	Adoption of siting and design priorities, as described in the 2022 EIA Report.	Of the routes assessed, significant adverse cumulative effects were predicted on discrete sections of the following highways: • A920 (Major adverse); • A941 (Major/ Moderate adverse); • B9009 (Major/ Moderate adverse); and • Local road to east of the Site (Major/ Moderate adverse).
Recreational Routes	Careful siting and design of the Proposed Development in accordance with mitigation set out in 2022 EIA Report. Aviation lighting on turbines to be operated in accordance with mitigation set out in Section 5 of Technical Appendix 5.8: Lighting Assessment of the 2022 EIA Report.	Adoption of siting and design priorities, as described in the 2022 EIA Report.	No nationally or regionally important recreational routes would be significantly affected. However, significant adverse residual cumulative effects were predicted on parts of the following Core Paths which are of local importance: • SP03 (Major/ Moderate adverse); • SP04 (Major/ Moderate adverse); and • SP30 (Major adverse).

3.10 Glossary and Abbreviations

Abbreviation	Expanded Term
ALDP	Aberdeenshire Local Development Plan
LCTs	Landscape Character Types
LDPs	Local Development Plans
LVIA	Landscape and Visual Assessment
NPF3	National Planning Framework 3
NPF4	National Planning Framework 4
SPP	Scottish Planning Policy
SLA	Special Landscape Area
ZTV	Zone of Theoretical Visibility

Terminology	Definition
Analysis (Landscape)	The process of breaking the landscape down into its component parts to understand how it is made up.
Analysis (Visual)	The process of identifying the nature of visibility in an area, which is determined through topographic analysis.

Assessment (Landscape)	An umbrella term for description, classification and analysis of landscape.
Baseline	The landscape and visual character of the study area as it exists at the commencement of the assessment process – i.e. prior to the development proposal under consideration.
Classification	A process of sorting the landscape into different types using selected criteria, but without attaching relative values to the different types of landscape.
Classified Landscape	Includes non-designated valued landscapes such as Gardens and Designed Landscapes and Wild Land Areas.
Constraints Map	Map showing the location of important resources and receptors that may form constraints to development.
Countryside	The rural environment and its associated communities (including the coast).
Cumulative Effects	Effects arising from the additional changes to the landscape or visual character caused by a development when seen in conjunction with other developments (associated with it or separate to it).
Digital Terrain Model (DTM)	Computer generated 3-dimensional model based on aerial survey of ground surface (e.g. Ordnance Survey Profile data). Often utilised as a basis for visibility modelling over large areas.
Digital Surface Model (DSM)	Computer generated 3-dimensional model based on aerial survey of ground surface, tree canopies, built structures etc.). Often utilised as a basis for visibility modelling where the effects of intervening structure and/or vegetation need to be incorporated.
Effect	The result of an impact on a landscape or visual receptor.
Element	A component part of the landscape (e.g. roads, hedgerows, woods).
Geographic Information System	Computerised data base of geographical information that can easily be updated and manipulated.
Key Characteristics	The elements of the landscape and/or their inter relationship which form the defining components of the landscape.
Impact	The change arising for a landscape or visual receptor as a result of some form of alteration to the baseline.
Landcover	Combination of land use and vegetation that covers the land surface.
Landform	See Topography.
Landscape	Human perception of the land conditioned by knowledge and identity with a place.
Landscape Capacity	An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors. The degree to which a particular landscape character type or area is capable of is able to accommodate change without unacceptable adverse effects on its character. Capacity is likely to vary according to the type and nature of the changes being proposed. The capacity of the landscape is derived from a combination of Landscape Character Sensitivity, Visual Sensitivity and Landscape Value.
Landscape Character	The distinctive and recognisable patter of the key constituent elements and features of a landscape that makes it distinct from other landscapes and how this is perceived by people. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement. It creates the particular sense of place in different areas of the landscape.
Landscape Character Type	A landscape type will have broadly similar patterns of geology, landform, soils, vegetation land use, settlement and field pattern discernible in maps and field survey records.
Landscape Fabric	Physical elements of the landscape or development site.
Landscape Impact	The change in the elements, characteristics, qualities and overall character of the landscape as a result of development.
Landscape Effect	The consequence of change in the elements, characteristics, qualities and overall character of the landscape as a result of development. These effects can be positive, neutral or negative.
Landscape Quality (or Condition)	Based on judgments about the physical state and condition of the landscape and about its intactness. Also relates to the state of repair of individual features and elements which make up character in any one place.
Landscape Resource	The combination of elements that contribute to landscape context, character and value.
Landscape Sensitivity (to a specific type of change)	The extent to which a landscape can accept change of a particular type and scale and is assessed in relation a particular type of development. Based on a combination of susceptibility and value.

Landuse	The primary use of land, including both rural and urban activities.
Landscape Value	The relative value or importance attached to a landscape (often as a basis for designation or recognition), which expresses commonly held national or local perception of its quality, special qualities and/or scenic beauty, tranquillity or wildness and cultural associations.
Magnitude of landscape Impact	A measure of the amount of change to the landscape that would occur as a result of proposed development, generally based on the scale or degree of change to the landscape resource, the nature of the effect and its duration. This is based on a combination of largely quantifiable parameters, such as the distance to the proposed development, visible extent, degree of contrast with context, extent to which the development would be visible, and the duration of an impact.
Magnitude of Visual Impact	A measure of the amount of change to the visual context that would occur as a result of a proposed development. This is generally based on the scale of change to the view with respect to the loss or addition of features in the view and changes in its composition, including the proportion of the view that would be occupied by the proposed development; the degree of contrast or integration of any new features of changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale, mass, line, height, colour and texture; duration and nature of the change, whether temporary or permanent, transient or persistent, the angle of view in relation to the main activity of the receptor(s); distance of the viewpoint from the proposed development; and extent of the area over which the changes would be visible.
Methodology	The specific approach and techniques used for a given study.
Mitigation Measures	Measures including any process, activity or design process to avoid, reduce, remedy or compensate for adverse landscape and visual impacts of a development. Mitigation can also apply to the amelioration of existing adverse effects associated with existing developments/features in the landscape.
Receptor	Physical landscape resource, special interest or individual or group experiencing view liable to change as a result of the proposed development.
Receptor Location	Location occupied by identified receptors.
Residual Effects	Effect of development after mitigation proposals are taken into account.
Scoping	The process of identifying likely significant effects of a development on the environment – which may be carried out in a formal or informal way.
Significant Effect	An effect which is considered by the assessor to be “significant” in terms of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 which require the identification of significant effects.
Visual Amenity	Particular composition of landscape elements that contribute to a view, or views.
Visibility Analysis	The process of identifying theoretical (based on digital modelling) and/or actual predicted areas from where any given development may be seen.
Visual Effect	The consequence of change in the appearance of the landscape as a result of development, which may be beneficial or adverse.
Viewshed	The extent of potential visibility to or from a specific area or feature.
Visualisation	Computer generated simulation or photomontage or other technique to illustrate how the proposed development would appear. Presented either as a wireline image (outline of the development) or as a photomontage which merges a rendered version of the development into a photograph of the view/landscape.
Zone of Theoretical Visibility (ZTV) or Viewshed	The area predicted to have views of a proposed development on the basis of a digital terrain model or digital surface model, which may/may not take account of landcover features.

Chapter 4: Cultural Heritage

Contents

4 Cultural Heritage

4.1 Introduction

4.1.1 This chapter reports on any changes to likely significant effects with respect to Cultural Heritage associated with the construction, operation and decommissioning of the Proposed Development changes as outlined in Chapter 2: Changes to Proposed Development. Where there is no change to the 2022 EIA Report this is stated.

4.1.2 This chapter is supported by the following figures and technical appendices:

- Volume 2a: Figures and 2b: Visuals
  - Figure 4.1: Designated and Non-designated Assets within the Site and 1 km Study Area;
  - Figure 4.1a: Non-designated Assets within the Site and 1 km Study Area;
  - Figure 4.1b: Designated and Non-designated Assets within the Site and 1 km Study Area;
  - Figure 4.1c: Designated and Non-designated Assets within the Site and 1 km Study Area;
  - Figure 4.1d: Designated and Non-designated Assets within the Site and 1 km Study Area;
  - Figure 4.2: Designated Cultural Heritage Assets within 5 km and 10 km of the Site;
  - Figure 4.4: Non-designated Cultural Assets with the Potential for Direct Impacts;
  - Figure 4.5: Non-designated Cultural Assets with HMP and Compensatory Planting Areas;
  - Figure 4.7a-f: Cultural Heritage: Jock's Hill (view including Auchindoun Castle);
  - Figure 4.8a-f: Cultural Heritage: Auchindoun Castle (on approach);
  - Figure 4.9a-f: Cultural Heritage: Auchindoun Castle (from southern entrance);
  - Figure 4.10a-d: Cultural Heritage: Balvenie Castle;
  - Figure 4.11a-f: Cultural Heritage: Tap o'Noth;
  - Figure 4.12a-f: Cultural Heritage: Auchindoun Castle;
  - Figure 4.13 a-h: Cultural Heritage: Craig Dorney;
  - Figure 4.14: Cultural Heritage: Deveron Valley at entrance to Mill of Lynebain (wireline); and
  - Figure 4.15: Deveron Valley between Belcherrie and Greenloan
- Volume 3: Technical Appendices
  - Technical Appendix 4.1: Heritage Assets Gazetteer.

4.1.3 Figure 6.3: Extract from the 1872 Ordnance Survey Map, of the 2022 EIAR has not required an update as a result of the updated Proposed Development. Techncial Appendices 6.2 Settings Assessment; Technical Appendix 6.3: Plates; and Technical Appendix 6.4: Consultation Material have also not required an update as a result of the updated Proposed Development.

4.2 Assessment Methodology and Significance Criteria

Scope of Assessment

4.2.1 The scope of the assessment is unchanged from the 2022 EIA Report. However, the assessment methodology used has been updated to reflect changes in policy wording resulting from the adoption of National Planning Framework (NPF) 4[1]. The revised methodology is set out under Criteria for Assessment of Effects and Criteria for Assessment of Signicance, below.

Consultation

4.2.2 **Table 4.1** summarises the post-submission consultation responses received regarding Cultural Heritage and provides information on where and/ or how they have been addressed in this assessment.

4.2.3 Full details on the consultation responses can be reviewed in Technical Appendix 1.1: Post-submission Consultation Register (Volume 3).

[1] Scottish Government (2023) National Planning Framework 4. https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf [Accessed 13/06/2023]

Table 4.1 – Cultural Heritage Consultation Responses

Consultee and Date	Issue Raised	Response/Action Taken
Aberdeenshire Council Archaeology Service (ACAS) as advisor to Aberdeenshire and Moray Councils (08/09/2022)	ACAS raised concerns regarding impacts upon the setting of Craig Dorney, fort (Asset 20; SM13746) and to a lesser extent Auchindoun Castle (Asset 115; SM90024) and Tap o' Noth, fort (Asset 118; SM63). In addition to the general concerns raised ACAS asked for the following information: • An assessment of the transportation route to assess the potential for direct impacts upon known/unknown heritage assets along the routeway. • Additional visualisations for Craig Dorney, fort (Asset 20; SM13746)	ACAS concerns regarding the potential impact upon the settings of Craig Dorney, fort (Asset 20; SM13746) and to a lesser extent Auchindoun Castle (Asset 115; SM90024) and Tap o' Noth, fort (Asset 118; SM63) are noted. The Proposed Development includes the removal of turbine T9 to minimise the impact upon the setting of Craig Dorney. A revised assessment of impacts upon its setting and the resulting level of effect is presented in **Section 4.5**. • Whilst impacts upon the settings of Auchindoun Castle (Asset 115; SM90024) and Tap o' Noth, fort (Asset 118, SM63) are acknowledged, they have not been of such significance that they have warranted objection from Historic Environment Scotland (HES). Removal of turbine T9 would not alter the impact or effect predicted on the setting of Auchindoun Castle (Asset 115; SM90024) as turbine T9 was not visible from the Castle in the layout proposed in the 2022 Application. Whilst the removal of turbine T9 would result in one fewer turbine being visible from Tap o' Noth, given the distance to the Proposed Development this would not change the overall magnitude of impact or level of effect predicted in the 2022 EIA Report. On this basis the assessment of effect and significance on Auchindoun Castle (Asset 115; SM90024) and Tap o' Noth, fort (Asset 118; SM63) would remain unchanged from that reported in the 2022 EIA Report. An assessment of potential direct impacts along the transportation route has not been included. This is because the Transport Assessment included with the 2022 EIA Report is indicative and therefore subject to change based upon final turbine model chosen. It is considered that it would be more appropriate to provide an assessment of the transport route following receipt of planning permission, confirmation of the candidate turbine and following confirmation of the requirements for road upgrades. Photomontages from Craig Dorney, fort (Asset 20; SM13746) were included in the 2022 EIA Report and included a view from Craig Dorney (2022 EIA Report Volume 3b: Visualisations: Figure 3.16a-f: Craig Dorney) and a view from the Deveron Valley which included Craig Dorney and the Proposed Development (2022 EIA Report Volume 3b: Visualisations: Figure 5.9). Additional visualisations have been provided for Craig Dorney, fort (Asset 20; SM13746). These include: • An extension of the previous Craig Dorney photomontage to include views toward turbine T11 to the north-west, presented in **Volume 2b, Figure 4.13 a-h**; and • Two wirelines from points within the Deveron Valley, as agreed with HES, to further assess the potential impacts of turbines in views towards Craig Dorney: o **Volume 2b, Figure 4.14**: Cultural Heritage: Deveron Valley at entrance to Mill of Lynebain (wireline) o **Volume 2b, Figure 4.15**: Deveron Valley between Belcherrie and Greenloan.

Consultee and Date	Issue Raised	Response/Action Taken
Historic Environment Scotland (HES) Consultation Response (04/08/2022)	HES advised that they objected to the application based on adverse effects on the setting of Craig Dorney, fort (Asset 20; SM13746) and Auchindoun Castle (Asset 115; SM90024).	Consultee meeting undertaken 1st November 2022 to discuss HES concerns and potential mitigation.
HES Consutation Response (13/10/2022)	HES advised that their objection related to the potential for adverse effects upon the setting of Craig Dorney, fort (Asset 20; SM13746) only. They noted that they would welcome discussions with the applicant on the potential to reduce the impacts on the setting of Craig Dorney, particularly through the deletion or relocaiton of Turbines 7, 9 and 11. An appended initial assessment indicated that HES would welcome an extension of EIA Report Volume 3b: Visualisations: Figure 3.16a-f: Craig Dorney to include Turbine 11 and that they would welcome further visualisations from the Deveron Valley to allow for further understanding of the potential for impacts of the Proposed Development in views towards Craig Dorney.	Consultee meeting undertaken 1st November 2022 to discuss HES concerns and potential mitigation. Additional visualisations, as noted above, were provided at consultation stage as well as being included here.
HES Consulation Response 16/12/2022	Following provision of the requested visualisations noted above HES indicated that they were content that access tracks would have less of an adverse impact upon the setting of the monument than initially thought based on visualisation provided in the EIA Report. They further welcomed the provision of additional wirelines from the Deveron Valley which indicated that turbines would not be visible directly behind Craig Dorney in views from Mill of Lynebain and that the topography of the Deveron Valley would screen views of the Proposed Development and Craig Dorney in views along the valley from the south west. They however reiterated concerns relating to impacts upon the setting of Craig Dorney resulting from the views of the Proposed Development in views from the monument itself. They reiterated concern regarding Turbines 7, 9 and 11; indicating that Turbine 9 would have the greatest level of impact given its proximity to Craig Dorney and its location on the lower slope of Craig Watch hill.	Visualisations sent to HES considering the potential removal of turbine T9 from the Proposed Development.
HES Consulation Response 17/02/2023	Following review of visualisations with Turbine 9 removed, HES considered that whilst the Proposed Development would still have an adverse impact upon the setting of Craig Dorney, fort (Asset 20; SM13746) that the removal of Turbine 9 would reduce these impacts to a degree that would allow HES to remove their objection.	Noted.
HES Consulation Response 28/02/2023	HES confirmed to ECU that they maintain their objection on the basis of the Proposed Development but that they had informed the applicant (as per above) that removal of Turbine 9 would allow them to remove their objection should they be formally consulted on the revised design.	Noted. Impacts and resultant effects upon the setting of Craig Dorney, fort (Asset 20; SM13746), considering the removal to turbine T9, are discussed in **Section 4.5** and revised visualisations have been provided as set out above.

Method of Baseline Characterisation

Desk Study

4.2.4 The desk study undertaken for the assessment is unchanged from the 2022 EIA Report. Given the time that has elapsed since the original desk study, HES designated asset data sets were checked in July 2024, and the Aberdeenshire and Moray Historic Environment Records (HERs) were checked in October 2024,

to ascertain whether there had been any changes to the known historic environment baseline in the intervening period. Examination of the updated HER data is discused in **Section 4.4**.

Field Study

4.2.5 Given that changes to the Proposed Development have related to the removal of infrastructure and that there has been no change in landuse on Site no further walkover survey has been undertaken. As such the results of the surveys undertaken for the 2022 EIA Report are relied upon here.

Criteria for the Assessment of Effects

4.2.6 The publication of NPF4[2] in February 2023 has resulted in some changes to the EIA assessment methodology to align the methodology with the new policy wording. The updated methodology is presented below.

4.2.7 The assessment distinguishes between the term 'impact' and 'effect'. An impact is defined as a physical change to a heritage asset or its setting, whereas an effect refers to the significance of this impact. The first stage of the assessment involves establishing the importance of the heritage asset and assessing the sensitivity of the asset to change (impact). Then an assessment of the impact magnitude is made and a judgement regarding the level and significance of effect is arrived at.

Criteria for Assessing the Sensitivity of Receptors

4.2.8 The definition of cultural significance is readily accepted by heritage professionals both in the UK and internationally and was first fully outlined in the Burra Charter, which states in Article One that 'cultural significance' or 'cultural heritage value' means aesthetic, historic, scientific, social or spiritual value for past, present or future generations[3]. This definition has since been adopted by heritage organisations around the world, including HES. Historic Environment Policy for Scotland (HEPS) notes that to have cultural significance an asset must have a particular "aesthetic, historic, scientific or social value for past, present and future generations"[4]. Heritage assets also have value in the sense that they "...create spaces for recreation, leisure, tourism, and education, or places for nature to thrive" and "can be a source of identity, a resource for learning, or a spark for creativity"[5].

4.2.9 All heritage assets have significance; however, some heritage assets are judged to be more important than others. The level of that importance is, from a cultural resource management perspective, determined by establishing the asset's capacity to contribute to our understanding or appreciation of the past[6]. In the case of many heritage assets their importance has already been established through the designation (i.e. Scheduling, Listing and Inventory) processes applied by HES.

4.2.10 The rating of importance of heritage assets is first and foremost made in reference to their designation. For non-designated assets importance is assigned based on professional judgement and guided by the criteria presented in **Table 4.2**; which itself relates to the criteria for designations as set out in Designation Policy and Selection Guidance[7].

[2] ibid
[3] ICOMOS (2013) The Burra Charter: The Australia ICOMS Charter for Place of Cultural Significance. Article 1.2. https://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf. [Accessed 14/06/2023]
[4] HES (2019) Historic Environment Policy for Scotland. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=1bcfa7b1-28fb-4d4b-b1e6-aa2500f942e7. [Accessed 14/06/2023].
[5] HES (2023) Our Past, Our Future: The Strategy for Scotland's Historic Environment, page 10. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=79204155-9eb2-4d29-ab14-aff200ec2801 [Accessed 14/06/2023]
[6] HES (2019) Historic Environment Policy for Scotland. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=1bcfa7b1-28fb-4d4b-b1e6-aa2500f942e7. [Accessed 14/06/2023].
[7] HES (2019, updated 2020) Designation Policy and Selection Guidance. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b [Accessed 14/06/2023]

Table 4.2 – Criteria for Establishing Importance of Heritage Assets

Importance	Recptors
Very High	• World Heritage Sites (as protected by NPF4[8]). • Other designated or non-designated heritage assets with demonstrable Outstanding Universal Value.
High	• Scheduled Monuments (as protected by the Ancient Monuments and Archaeological Areas Act 1979[9] (the '1979 Act')). • Category A Listed Buildings (as protected by the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997[10]) (the '1997 Act'). • Inventory Gardens and Designed Landscapes (as protected by the 1979 Act, as amended by the Historic Environment (Amendment) (Scotland) Act 2011[11] (the '2011 Act')). • Inventory Battlefields (as protected by the 1979 Act, as amended by the 2011 Act). • Outstanding examples of some period, style or type. • Non-designated assets and/or Locally Listed assets considered to meet the criteria for the designations as set out above (as protected by NPF4).
Medium	• Category B and C Listed Buildings (as protected by the 1997 Act). • Conservation Areas (as protected by the 1997 Act). • Major or representative examples of some period, style or type. • Non-designated assets and/or Locally Listed assets considered to meet the criteria for the designations as set out above (as protected by NPF4).
Low	• Locally Listed assets. • Examples of any period, style or type which contribute to our understanding of the historic environment at the local level. • The above non-designated assets are protected by Policy 7o of NPF4[12].
Negligible	• Relatively numerous types of features. • Findspots of artefacts that have no definite archaeological remains known in their context. • The above non-designated features are protected by Policy 7o of NPF4[13].

4.2.11 Determining cultural heritage significance can be made with reference to the intrinsic, contextual and associative characteristics of an asset as set out in HEPS[14] and its accompanying Designation Policy and Selection Guidance[15]. The Designation Policy and Selection Guidance[16] indicates that the relationship of an asset to its setting or the landscape makes up part of its contextual characteristics. HES's Managing Change Guidance[17], in defining what factors need to be considered in assessing the impact of a change on the setting of a historic asset or place, states that the magnitude of the proposed change should be considered "relative to the sensitivity of the setting of an asset"[18], thereby making clear that assets vary in their sensitivity to changes in setting and thus have a relative sensitivity. The EIA Handbook suggests that cultural significance aligns with sensitivity but also states that "the relationship between value and

[8] Scottish Government (2023) National Planning Policy 4. https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf [Accessed 13/06/2023]
[9] Ancient Monuments and Archaeological Areas Act 1979. https://www.legislation.gov.uk/ukpga/1979/46. [Accessed 14/06/2023]
[10] Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997. https://www.legislation.gov.uk/ukpga/1997/9/contents. [Accessed 14/06/2023]
[11] Historic Environment (Amendment) (Scotland) Act 2011. https://www.legislation.gov.uk/asp/2011/3/contents. [Accessed 14/06/2023]
[12] Scottish Government (2023) National Planning Policy 4. https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf [Accessed 13/06/2023]
[13] ibid
[14] HES (2019) Historic Environment Policy for Scotland. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=1bcfa7b1-28fb-4d4b-b1e6-aa2500f942e7. [Accessed 14/06/2023].
[15] HES (2019, updated 2020) Designation Policy and Selection Guidance. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b [Accessed 14/06/2023]
[16] ibid
[17] HES (2016, updated 2020) Managing Change in the Historic Environment: Setting. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationid=80b7c0a0-584b-4625-b1fd-a60b009c2549 [Accessed 14/06/2023]
[18] Ibid, page 11

sensitivity should be clearly articulated in the assessment"[19]. It is therefore recognised[20] that the importance of an asset is not the same as its sensitivity to changes to its setting. Elements of setting may make a positive, neutral or negative contribution to the significance of an asset. Thus, in determining the nature and level of effects upon assets and their settings by the development, the contribution that setting makes to an asset's significance and thus its sensitivity to changes to setting need to be considered.

4.2.12 This approach recognises the importance of avoiding significant adverse impacts on the integrity of the setting of an asset in the context of the contribution that setting makes to the experience, understanding and appreciation of a given asset. It recognises that setting is a key characteristic in understanding and appreciating some, but by no means all, assets. Indeed, assets of High or Very High importance do not necessarily have high sensitivity to changes to their settings (e.g. do not necessarily have a high relative sensitivity). An asset's relative sensitivity to alterations to its setting refers to its capacity to retain its ability to contribute to an understanding and appreciation of the past in the face of changes to its setting. The ability of an asset's setting to contribute to an understanding, appreciation and experience of it and its significance also has a bearing on the sensitivity of that asset to changes to its setting. While heritage assets of High or Very High importance are likely to be sensitive to direct impacts, not all will have a similar sensitivity to impacts on their setting; this would be true where setting does not appreciably contribute to their significance. HES's guidance on setting makes clear that the level of effect may relate to "the ability of the setting [of an asset] to absorb new development without eroding its key characteristics"[21]. Assets with Very High or High relative sensitivity to settings impacts may be vulnerable to any changes that affect their settings, and even slight changes may erode their key characteristics or the ability of their settings to contribute to the understanding, appreciation and experience of them. Assets whose relative sensitivity to changes to their setting is lower may be able to accommodate greater changes to their settings without having key characteristics eroded.

4.2.13 The criteria used for establishing an asset's relative sensitivity to changes to its setting is detailed in **Table 4.3**. This table has been developed based on AOC's professional judgement and experience in assessing setting effects. It has been developed with reference to the policy and guidance noted above including NPF4[22], HEPS[23] and its Designation Policy and Selection Guidance[24], the Xi'an Declaration[25], the EIA Handbook[26] and HES's guidance on the setting of heritage assets[27]

Table 4.3 – Criteria for Establishing Relative Sensitivity of a Heritage Asset to Changes to its Setting

Relative Sensitivity	Criteria
Very High	An asset, the setting of which is critical to an understanding, appreciation and experience of it, should be thought of as having Very High Sensitivity to changes to its setting. This is particularly relevant for assets whose settings, or elements thereof, make an essential direct contribution to their cultural significance.
High	An asset, the setting of which makes a major contribution to an understanding, appreciation and experience of it, should be thought of as having High Sensitivity to changes to its setting. This is particularly relevant for assets whose settings, or elements thereof, contribute substantially to their cultural significance.
Medium	An asset, the setting of which makes a moderate contribution to an understanding, appreciation and experience of it, should be thought of as having Medium Sensitivity to changes to its setting. This could be an asset for which setting makes a contribution to significance but whereby its value is derived mainly from its other characteristics (see HES[28] for discussion of intrinsic, contextual and associative characteristics which may contribute to overall cultural significance).
Low	An asset, the setting of which makes some contribution to an understanding, appreciation and experience of it, should generally be thought of as having Low Sensitivity to changes to its setting.

[19] HES & NatureScot (2018) Environmental Impact Assessment Handbook, page 184. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0. [Accessed 14/06/2023]
[20] ibid
[21] HES (2016, updated 2020) Managing Change in the Historic Environment: Setting, page 11. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationid=80b7c0a0-584b-4625-b1fd-a60b009c2549 [Accessed 14/06/2023]
[22] Scottish Government (2023) National Planning Policy 4. https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf [Accessed 13/06/2023]
[23] HES (2019) Historic Environment Policy for Scotland. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=1bcfa7b1-28fb-4d4b-b1e6-aa2500f942e7. [Accessed 14/06/2023].
[24] HES (2019, updated 2020) Designation Policy and Selection Guidance. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b [Accessed 14/06/2023]
[25] ICOMOS (2005) Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas. https://www.icomos.org/images/DOCUMENTS/Charters/xian-declaration.pdf. [Accessed 14/06/2023]
[26] HES & NatureScot (2018) Environmental Impact Assessment Handbook. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0. [Accessed 14/06/2023]
[27] HES (2016, updated 2020) Managing Change in the Historic Environment: Setting. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationid=80b7c0a0-584b-4625-b1fd-a60b009c2549 [Accessed 14/06/2023]
[28] ibid

Relative Sensitivity	Criteria
	This may be an asset whose value is predominantly derived from its other characteristics (see HES[29] for discussion of intrinsic, contextual and associative characteristics which may contribute to overall cultural significance).
Negligible	An asset whose setting makes minimal contribution to an understanding, appreciation and experience of it should generally be thought of as having Negligible Sensitivity to changes to its setting.

4.2.14 The determination of a heritage asset's relative sensitivity to changes to its setting is first and foremost reliant upon the determination of its setting and the key characteristics of setting which contribute to its cultural significance and an understanding and appreciation of that cultural significance. This aligns with Stage 2 of the HES guidance on setting[30]. The criteria set out in **Table 4.3** are intended as a guide. Assessment of individual heritage assets is informed by knowledge of the asset itself; of the asset type if applicable and by site visits to establish the current setting of the assets. This allows for the use of professional judgement and each asset is assessed on an individual basis.

Criteria for Assesing the Magnitude of Change

4.2.15 Potential impacts, that is the physical change to known heritage assets, and unknown buried archaeological remains, or changes to their settings, in the case of the Proposed Development relate to the possibility of disturbing, removing or destroying in situ remains and artefacts during the construction phase or the placement of new features within their setting during the operational phase.

4.2.16 The EIA Handbook notes that "In the context of cultural heritage impact assessment, the receptors are the heritage assets and impacts will be considered in terms of the change in their cultural significance"[31]. Direct changes to assets during the construction phase will relate to the physical removal or damage (in part or whole) to a heritage asset and will therefore likely be adverse. However, the EIA Handbook states that "When considering setting impacts, visual change should not be equated directly with adverse impact. Rather the impact should be assessed with reference to the degree that the proposal affects those aspects of setting that contribute to the asset's cultural significance"[32]. It further indicates that magnitude of impact should largely be regarded in the context of impacts to "elements of the fabric or setting of the heritage asset that contribute to its cultural significance"[33]. It is further of note that the EIA handbook states that '*Change in the setting of an asset may be entirely neutral in terms of the resultant change in the asset's cultural significance, but this will rarely be the case where the actual fabric is affected*' (ibid).

4.2.17 On this basis, the magnitude of the impacts upon heritage assets caused by the Proposed Development is rated using the classifications and criteria outlined in **Table 4.4**. These criteria consider the extent of change which could be anticipated as a result of the Proposed Development in the context of the significance of the asset, including any contribution made by setting.

Table 4.4 – Criteria for Classifying Magnitude of Change

Magnitude of Change	Criteria
High	• Substantial loss of information content resulting from total or large-scale removal of deposits from an asset to the extent that it would result in a substantial loss of cultural significance. • Major alteration of an asset's baseline setting, which materially compromises the ability to understand, appreciate and experience the contribution that setting makes to the significance of the asset and erodes the key characteristics[34] of the setting to the extent that it would result in substantial loss of cultural significance.
Medium	• Loss of information content resulting from material alteration of the baseline conditions by removal of part of an asset that would lead to some loss of cultural significance. • Alteration of an asset's baseline setting that affects the ability to understand, appreciate and experience the contribution that setting makes to the significance of the asset to a degree but whereby the cultural significance of the monument in its current setting remains legible. The key characteristics of the setting[35] may be partially eroded; there would be some loss of cultural significance.

[29] ibid
[30] Ibid, page 9
[31] HES & NatureScot (2018) Environmental Impact Assessment Handbook, page 181. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0. [Accessed 14/06/2023]
[32] ibid
[33] Ibid, page 184
[34] HES (2016, updated 2020) Managing Change in the Historic Environment: Setting. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationid=80b7c0a0-584b-4625-b1fd-a60b009c2549 [Accessed 14/06/2023]
[35] ibid

Magnitude of Change	Criteria
Low	• Detectable impacts leading to minor alteration to baseline conditions by removal of a small proportion of the asset, that would lead to slight loss of cultural significance. • Alterations to the asset's baseline setting, which do not affect the ability to understand, appreciate and experience the contribution that setting makes to the asset's overall significance and would only lead to slight loss of cultural significance. Key characteristics are not eroded.
Negligible	• Loss of a small percentage of the area of an asset's peripheral deposits/fabric that would leave cultural significance unchanged. • A reversible alteration to the fabric of the asset. • A marginal alteration to the asset's baseline setting that would leave cultural significance of the asset unchanged.
None	• No impact predicted.

4.2.18 In line with HES guidance on setting[36] factors which will be considered in coming to a judgement regarding magnitude of impact will include, but not be limited to:

- "whether key views to or from the historic asset or place are interrupted;
- whether the proposed change would dominate or detract in a way that affects our ability to understand and appreciate the historic asset;
- the visual impact of the proposed change relative to the scale of the historic asset or place and its setting;
- the visual impact of the proposed change relative to the current place of the historic asset in the landscape;
- the presence, extent, character and scale of the existing built environment within the surroundings of the historic asset or place and how the proposed development compares to this;
- the magnitude of the proposed change relative to the sensitivity of the setting of an asset;
- sometimes relatively small changes, or a series of small changes, can have a major impact on our ability to appreciate and understand a historic asset or place. Points to consider include:
  - the ability of the setting to absorb new development without eroding its key characteristics;
  - the effect of the proposed change on qualities of the existing setting such as sense of remoteness, current noise levels, evocation of the historical past, sense of place, cultural identity, associated spiritual responses; and
  - cumulative impacts: individual developments may not cause significant impacts on their own, but may do so when they are combined"[37].

Criteria for Assessing Cumulative Effects

4.2.19 The criteria for assessing cumulative effects is unchanged from the 2022 EIA Report, subject to the changes in the overall assessment methdology noted here.

Criteria for Assessing Significance

4.2.20 The level of effect is judged to be the interaction of the asset's importance or relative sensitivity (**Table 4.2** and **Table 4.3**) and the magnitude of the impact (**Table 4.4**). In order to provide a level of consistency, the assessment of importance and relative sensitivity, the prediction of magnitude of impact and the assessment of level of effect will be guided by pre-defined criteria.

4.2.21 The predicted level of effect on each heritage asset is then determined by considering the asset's importance and/or relative sensitivity in conjunction with the predicted magnitude of the impact. The method of deriving the significance of effect is provided in **Table 4.5**.

[36] ibid
[37] Ibid, pages 10-11

Table 4.5 – Level of Effect based on Inter-Relationship between the Importance and/or Sensitivity of a Heritage Asset and/or its Setting and the Magnitude of Impact

Magnitude of Impact	Importance and/or Relative Sensitivity to Changes to Setting				
	Negligible	**Low**	**Medium**	**High**	**Very High**
High	Minor	**Moderate**	**Moderate**	**Major**	**Major**
Medium	Negligible/ Neutral	Minor	**Moderate**	**Moderate**	**Major**
Low	Negligible/ Neutral	Negligible/ Neutral	Minor	Minor	**Moderate**
Negligible	Negligible/ Neutral	Negligible/ Neutral	Negligible/ Neutral	Minor	Minor

4.2.22 Whilst the tables are used to ensure a consistent approach, it is noted that the EIA Handbook states that where matrices "are used, care must be taken to ensure that they are not applied in a mechanistic fashion or in a way that obscures the reasoning behind the assessment"[38]. The EIA Handbook further states that "Generally, a narrative approach will allow the assessor to set out their reasoning more clearly than a tabulated approach"[39]. As such a qualitative descriptive narrative is provided for each asset to summarise and explain each of the professional value judgements that have been made in establishing sensitivity and magnitude of impact for each individual asset.

4.2.23 Where a neutral level of effect is indicated in **Table 4.5** this primarily relates to potential setting effects where the Proposed Development would be perceptible, and thus result in a change to the baseline setting, but whereby the Proposed Development would not result in an adverse effect on the setting of the asset. This is in line with page 181 of the EIA Handbook[40], quoted above, which indicates that visual changes should not necessarily be considered to have an adverse impact upon setting.

4.2.24 Using professional judgment and with reference to the Guidelines for Environmental Impact Assessment (as updated)[41], and the EIA Handbook[42] the assessment considers moderate and greater effects to be significant (bold in **Table 4.5**), while minor and lesser effects are considered not significant.

Integrity of Setting

4.2.25 NPF4 indicates that development proposals affecting Scheduled Monuments will only be supported where 'significant adverse impacts on the integrity of setting of a scheduled monument are avoided'[43]. Significant adverse impacts on integrity of setting are judged here to relate to whether a change would adversely affect the asset's key attributes or elements of setting which contribute to an asset's significance. It is considered that a significant impact upon the integrity of the setting of an asset will only occur where the degree of change that will be represented by the Proposed Development would adversely alter those factors of the monument's setting that contribute to cultural significance such that the understanding, appreciation and experience of an asset are not adequately retained. In terms of effects upon the setting of heritage assets, it is considered that only those effects identified as 'significant' in EIA terms will have the potential to significantly adversely impact upon integrity of setting. Where no EIA significant effect is found it is considered that there would be no significant impact upon the integrity of an asset's setting. This is because for many assets, setting may make a limited contribution to their significance and as such changes would not significantly impact the integrity of their settings.

4.2.26 Where EIA significant effects are found, a detailed assessment of adverse impacts upon integrity of setting is made. Whilst non-significant effects are unlikely to significantly impact integrity of setting, the reverse is not always true. That is, the assessment of an effect as being 'significant' in EIA does not necessarily mean that the adverse effect to the asset's setting will significantly impact its integrity. The assessment of adverse impact upon the integrity of an asset's setting, where required, is a qualitative one, and largely depends upon whether the impact predicted would result in a major impediment to the ability to understand or appreciate the heritage asset.

[38] HES & NatureScot (2018) Environmental Impact Assessment Handbook, page 185. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0. [Accessed 14/06/2023]
[39] Ibid, page 184
[40] ibid
[41] IEMA (2017) Delivering Proportionate EIA. https://www.iema.net/resources/reading-room/2017/07/18/delivering-proportionate-eia [Accessed 14/06/2023]
[42] HES & NatureScot (2018) Environmental Impact Assessment Handbook. https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0. [Accessed 14/06/2023]
[43] Scottish Government (2023) National Planning Policy 4, Policy 7h(ii), page 46). https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf [Accessed 13/06/2023]

Limitations and Assumptions

4.2.27 There are no changes to the limitation and assumptions as set out in the 2022 EIA Report.

4.3 Policy Context

4.3.1 This Section examines any changes in planning policy since the production of the 2022 EIA Report.

National Policy

4.3.2 As noted above Scottish Planning Policy was superceded by NPF4 in February 2023. The EIA methodology has been updated to reflect this change. NPF4 policies relevant to the historic environment and this assessment are noted below.

4.3.3 The stated intent of Policy 7: Historic Assets and Places is 'To protect and enhance historic environment assets and places, and to enable positive change as a catalyst for the regeneration of places'[44].

4.3.4 The following sections of Policy 7 are relevant to this assessment:

a) Development proposals with a potentially significant impact on historic assets or places will be accompanied by an assessment which is based on an understanding of the cultural significance of the historic asset and/or place. The assessment should identify the likely visual or physical impact of any proposals for change, including cumulative effects and provide a sound basis for managing the impacts of change.

Proposals should also be informed by national policy and guidance on managing change in the historic environment, and information held within Historic Environment Records.

c) [. . .] Development proposals affecting the setting of a listed building should preserve its character, and its special architectural or historic interest.

h) Development proposals affecting scheduled monuments will only be supported where:

i. direct impacts on the scheduled monument are avoided;

ii. significant adverse impacts on the integrity of the setting of a scheduled monument are avoided; or

iii. exceptional circumstances have been demonstrated to justify the impact on a scheduled monument and its setting and impacts on the monument or its setting have been minimised.

j) Development proposals affecting nationally important Historic Battlefields will only be supported where they protect and, where appropriate, enhance their cultural significance, key landscape characteristics, physical remains and special qualities.

o) Non-designated historic environment assets, places and their setting should be protected and preserved in situ wherever feasible. Where there is potential for non-designated buried archaeological remains to exist below a site, developers will provide an evaluation of the archaeological resource at an early stage so that planning authorities can assess impacts. Historic buildings may also have archaeological significance which is not understood and may require assessment.

Where impacts cannot be avoided they should be minimised. Where it has been demonstrated that avoidance or retention is not possible, excavation, recording, analysis, archiving, publication and activities to provide public benefit may be required through the use of conditions or legal/planning obligations.

When new archaeological discoveries are made during the course of development works, they must be reported to the planning authority to enable agreement on appropriate inspection, recording and mitigation measures.

Regional and Local Policy

4.3.5 The Moray Local Development Plan (LDP) 2020[45], as quoted in the 2022 EIA Report remains the current policy for Moray Council local authority area. A new Moray Local Development Plan is expected to be adopted in 2027. However, the Aberdeenshire Local Development Plan 2017 has now been replaced with the Aberdeenshire Local Development Plan 2023[46]. Section 11 of the LDP deals with the historic environment and the following policy are relevant to this assessment:

[44] Scottish Government (2023) National Planning Policy 4, page 45. https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf [Accessed 13/06/2023]
[45] Moray Council (2020). Moray Local Development Plan 2020. http://www.moray.gov.uk/moray_standard/page_133431.htm. [Accessed 14/06/2023]
[46] Aberdeenshire Council (2023). Aberdeenshire Local Development Plan 2023. https://online.aberdeenshire.gov.uk/ldpmedia/LDP2021/AberdeenshireLocalDevelopmentPlan2023IntroductionAndPolicies.pdf. [Accessed 14/06/2023]

Policy HE1 Protecting Listed Buildings, Scheduled Monuments and Archaeological Sites (including other historic buildings)

HE1.1 We will resist development that would have an adverse impact on the character, integrity or setting of listed buildings, or scheduled monuments, or other archaeological sites. If adverse impact is unavoidable, it should be minimised and justified.

HE1.2 We will protect all listed buildings contained on the statutory list of Buildings of Special Architectural or Historic Interest for Aberdeenshire , all scheduled monuments contained on the statutory schedule of Monuments for Aberdeenshire and undesignated archaeological sites in Aberdeenshire. We will encourage their protection, maintenance, enhancement, and appropriate active use and conservation.

Scheduled Monuments and Archaeological Sites

HE1.5 Development on nationally or locally important monuments or archaeological sites, or having an adverse impact on the integrity of their setting, will only be allowed if there are exceptional circumstances, including those of a social or economic nature, and there is no alternative site. It is the developer's responsibility to provide information on the nature and location of the archaeological features, including details of any mitigation measures proposed, prior to determination of the planning application.

HE1.6 Where preservation of the site in its original location is not possible, the developer must arrange for the full excavation and recording of the site in advance of development to satisfy Aberdeenshire Council that the impacts from development have been fully mitigated.

Policy HE2 Protecting Historic, Cultural and Conservation Areas

Battlefields, Inventory Gardens and Designed Landscapes

HE2.3 Development affecting an inventory battlefield or inventory garden and designed landscape will only be permitted if:

- the proposal would not have an adverse impact that compromises the objectives of the designation of an inventory garden or designed landscape, or the key landscape characteristics and special qualities of an inventory battlefield; or,
- any significant adverse effects are outweighed by long-term social or economic benefits of overriding public importance and there is no alternative site for the development.

These conditions may also apply to developments outwith the designated sites. In either case, measures and mitigation must be taken to conserve and enhance the essential characteristics of the site as appropriate.

HE2.4 All development affecting the character and/or the appearance of an inventory battlefield or inventory garden and designed landscape must be justified through a Design Statement and/or Landscape Management Plan.

4.4 Baseline

4.4.1 As noted above in **Section 4.2**, given the time that has elapsed since the original desk study, HES designated asset data sets were checked in July 2024, and the Aberdeenshire and Moray Historic Environment Records (HERs) were checked in October 2024, to ascertain whether there had been any changes to the known historic environment baseline in the intervening period.

4.4.2 The HER searches were recieved on 21st June 2023. A total of 93 records had been added to the HERs since the previous extract had been obtained. These included both assets and events (archaeological investigations). With in the Site these records relate to desk-based research and walkover survey (Events 196 and 197) undertaken in 2021 to inform the 2022 EIA Report and the assets (Assets 161 – 191) recorded as part of that survey. Other new records within the Site boundary relate to post-medieval and modern strucutres and farmsteads (Asset 211, 214, 217, 221, 224 - 226, 232 and 240) depcited on Figure 6.3: Extract from the 1872 Ordnance Survey Map of the 2022 EIA Report and or modern mapping. These assets have been added **Technical Appendix 4.1 : Heritage Asset Gazeteer (Volume 3)** and **Figures 4.1 and 4.1a – 4.1d (Volume 2a).**

4.4.3 New entries in the 1 km Study Area relate to post-medieval farmsteads and other structures as depicted on the first edition and later Ordnance Survey maps (Assets 192, 193, 195, 205, 206, 210, 212, 213, 216, 218 - 220, 222, 223, 227 - 230, 233 - 236, 238, 239, 241, 243, 244, 246 and 248 - 251), a former quarry (Asset 247), undated cultivation remains (Asset 215), a undated enclosure (Asset 204) and probable prehistoric remains on the slopes of Craig Dorney hill, including roundhouses (Assets 194, 198 - 203, 207, 208, 245) and a possible burial or field clearance cairn (Asset 209). The former site of a cairn formed of cup and ring mark stones (Asset 252) has also been identifed near Greenloan, however site visits in May

2019 found no evidence of the cup-marked stones. These assets have been added to **Technical Appendix 4.1 : Heritage Asset Gazeteer (Volume 3)** and **Figures 4.1 and 4.1a – 4.1d (Volume 2a).**

4.4.4 In addition to the new entries outlined above, the area of some assets already recorded has been enlarged as a result of further evidence and understanding (e.g. Asset 19).

4.4.5 Whist the addition of these assets to the HER allows for further consideration of the use the area in the prehistoric and post-medieval periods; the 2022 EIA Report had already consider there to be a high potential for further, hitherto unrecorded, prehistoric and post-medieval remains to survive within the Site. This assessment has not changed based on analysis of the updated HER searches.

4.5 Assessment of Likely Effects

Potential Construction Effects

4.5.1 A group of non-designated assets at Garbet Hill (Assets 186 – 190) where recorded by AOC during the walkover survey undertaken for the Proposed Development in 2021. Unfortunately due to an error with survey shapefiles these assets did not appear on the 2022 EIA Report figures and were missed from assessment. The assets lie within Habitat Management Plan (HMP) Area 1 (see **Figure 4.5, Volume 2a**) which is proposed for riparian planting and peat restoration, which may involve rewetting and ditch blocking. An assessment of impacts upon these assets is given below.

Table 4.6 – Assets not assessed in the 2022 EIA Report

Asset Number	Asset Name	Designation	Description	Importance
186	Garbed Hill	Non-designated	Cairn	Low
187	Garbet Hill	Non-designated	Cairn	Low
188	Garbet Hill	Non-designated	Cairn	Low
189	Garbet Hill	Non-designated	Shooting Butt	Negligible
190	Garbet Hill	Non-designated	Shooting Butt	Negligible

4.5.2 The shooting butts (Asset 189 -190) are considered to be of Negligible importance; they are representative of sporting activity in the area and are extremely common remains. The cairns (Assets 186 – 188) are small and of stone construction, at least one (Asset 186) is visible on the 2nd edition Ordnance Survey map. The cairns are likely related to other cairns recorded on Garbet Hill such as Asset 77. The HER entry for Asset 77 indicates that 'all the stones and small cairns on these hill's are surveyor marks' and as such they likely represent modern consturction used for surveying or in relations to parish and county boundaries. They are considered to be of Low importance.

4.5.3 These assets cross Garbet Hill, to the east of the summit, on a north to south alignment and cross the centre of HMP1. Exact impacts would be dependent upon the location of the riparian planting and any requirement for ground works associated with the peat restoration. However, given the nature of the works required it is likely that the assets could be avoided by any works taking place here associated with the HMP but there is some potential for inadvertent damage. A Medium magnitude of impact upon these assets, resulting in a **Minor** level of effect for the cairns and a **Negligible** level of effect for the shooting buts is predicted. Such an effect would not be significant.

4.5.4 Whislt new assets have been recorded in the HER since the production of the 2022 EIA Report and elements of the proposed layout have changed, there would be no change to direct impacts predicted (excepting the assessment of Assets 186 -190 which should have been included in the 2022 EIA Report). None of the newly recorded assets would be impacted upon by the Proposed Development and alteration to the proposed design would not result in any new direct impacts to known assets. As such, the potential effects on cultural heritage during the construction phase are unchanged from the 2022 EIA Report.

Potential Operational Effects

4.5.5 The Proposed Development includes the removal of turbine T9 to reduce impacts upon the setting of the Scheduled Craig Dorney, fort (Asset 20; SM13746). Consideration of these reduced impacts is given below.

4.5.6 In addition to consideration of impacts and effects upon the setting of Craig Dorney, fort (Asset 20; SM13476) a review of the revised Zone of Theoretical Visibility (ZTV) (**Figure 4.2, Volume 2a**) and

updated visualisations has been undertaken to establish whether the removal of turbine T9 would also result in reduced impacts upon the setting of any other designated heritage assets.

4.5.7 The ZTV shows that there is no change to the extent of the ZTV where heritage assets are concerned. As such the assessment of effects upon all assets as set out in Appendix 6.2 of the 2022 EIA Report remain unchanged.

4.5.8 Updated visualisations for Auchindoun Castle (Asset 115; SM90024) (**Figures 4.7** - **4.9** and **Figure 4.12, Volume 2a**) indicate that there would be no change to the magnitude of impact or level of effect as predicted in the 2022 EIA Report. Turbine T9 would not have been visible from Auchindoun Castle itself or on approach to it and as such its removal would not change visibility of the Proposed Development in these views. Turbine T9 would have been visible from Jock's Hill (**Figure 4.7, Volume 2a**) however given the distance to the Proposed Development and the array of turbines, its removal would not change the overall impact on this view.

4.5.9 Similarly there would be no change in visibility of turbines from Balvenie Castle (Asset 114; SM90028) (**Figure 4.10, Volume 2a**) and thus no change to the magnitude of impact or level of effect set out in the 2022 EIA Report. There would be a reduced number of turbines visible from Tap o' Noth (Asset 118; SM63) however given the distance to the Proposed Development and the array of turbines, the removal of turbine T9 would not change the overall impact on this view.

Craig Dorney, fort (Asset 20; SM13746)

4.5.10 As set out in the 2022 EIA Report. Craig Dorney, fort is considered to have high sensitivity to changes to its setting on the basis that it is situated in a locally prominent landscape position on top of a hill. The all-round, open, commanding views over the surrounding landscape confirm this prominent position, and in particular its dominance over a natural routeway on lower ground along the Deveron Valley to the south-east, towards the Pictish Royal Centre at Rhynie. Key characteristics of setting, which contribute to an understanding, appreciation and experience of it, include its strategic defensive position which provides extensive views over the landscape and ensures that it is visible, as a prominent feature, from the wider landscape, with key views south-east over the Deveron Valley and beyond towards Rhynie. Views along the valley between Craig Dorney hill and Craig Watch hill, to the north-west and west are also considered important aspects of the asset's setting.

4.5.11 The removal of turbine T9 would increase the separation distance between the fort and the turbines from 0.9 km to c. 1.2 km. **Figure 4.13 (Volume 2a),** indicates that the removal of turbine T9 would mean that turbines would be visible further back on the higher slopes of Craig Watch. Access tracks and bases of turbines would, largely, not be visible. The impression resulting from the removal of turbine T9 would be of turbines located on the upper slopes of Craig Watch hill. This would result in the lessening of the impact upon the ability to understand and appreciate the relationship of the fort with lower lying ground between the two hills and would also reduce the extent to which the Proposed Development could be considered to detract from key views in this direction.

4.5.12 As per the 2022 EIA Report, the Proposed Development would not be visible in key views from Craig Dorney, fort to the south-east along the Deveron Valley. The removal of turbine T9 would change the number of turbines visible in views of the fort from the Deveron Valley. **Figure 3.9f (Volume 2a)**, indicates that whilst the horizontal spread of turbines in this view point, which see Craig Dorney hill set off to the left (south) of the turbines, would remain the same, the removal of turbine T9 would result in the removal of the most prominent turbine in this view and thus would lessen the extent to which the turbines might be considered to detract from the asset's prominence in the landscape. Similarly **Figure 4.14** (**Volume 2a**), shows a viewpoint from the Deveron Valley near the entrance to Mill of Lynebain and indicates that whilst the tip of turbine T6 would remain as the nearest visible turbine to the Craig Dorney, fort in this view, the removal of turbine T9 would remove the nearest turbine which would have been visible at hub height. This would increase the distance between the monument and Craig Dorney hill landform and the particularly noticeable elements of the Proposed Development and would thus also decrease the extent to which the Proposed Development would detract from the fort as a prominent feature in views along the valley from this direction. Views from the south (see **Figure 4.15, Volume 2a**) indicate that topography within the Deveron Valley would prohibit views of both Craig Dorney, fort and the Proposed Development in this area.

4.5.13 Whilst the removal of turbine T9 would reduce the magnitude of impact, the Proposed Development would still result in turbines being located within the close setting of the asset. However these would be set back from the valley between Craig Dorney and Craig Watch hills, which has been identified as being an important element of setting. Further turbines would not occupy the key view over the Deveron Valley and beyond to the south and south-east. There would be an alteration of an asset's current setting, and given the proximity of the Proposed Development to the asset, they would likely effect the ability to understand, appreciate and experience the contribution that setting makes to the significance of the asset to a degree but the cultural significance of the monument in its current setting would remain legible. The overall

magnitude of impact, albeit reduced as a result of the removal of turbine T9, is judged to be medium. This would result in a **Moderate** level of effect, which is considered significant.

4.5.14 Whilst there would be a potentially significant effect upon the setting of the fort, as noted above, the asset's key relationship with the Deveron Valley, the Pictish Royal Centre at Rhynie, and surrounding landscape would still be appreciable. The removal of turbine T9 would remove the most prominent turbine in views from the asset and in views of the asset when viewed from the Deveron Valley. As a result, the prominence of the monument and the landform on which it sits would still be appreciable and understandable. The ability to understand the defensive position of the asset would not be diminished; though it is expected that there would be some change to the experience of the asset. On this basis, those factors of the monument's setting that contribute to cultural significance such that the understanding, appreciation and experience of an asset would be adequately retained. There would no significant adverse impact upon the integrity of the asset's setting.

Potential Decommissioning Effects

4.5.15 The potential effects on cultural heritage during the decommissioning phase are unchanged from the 2022 EIA Report.

Potential Cumulative Effects

4.5.16 The potential cumulative effects on cultural heritage are unchanged from the 2022 EIA Report. The cumulative wirelines from Tap o' Noth (Asset 118; SM63) (**Figure 4.11, Volume 2a**) indicate that there are an increased number of at application stage cumulative developments which would be located between the asset and the Proposed Development. However, the addition of the Proposed Development to this cumulative baseline would not elevate the impact upon the setting above that predicted for the Proposed Development alone. As such as per the 2022 EIA Report, the magnitude of cumulative impact is judged to be low. The level of cumulative effect would be Minor and therefore not significant.

4.6 Mitigation

Mitigation During Construction

4.6.1 There is no change to the recommended mitigation during construction as set out in the 2022 EIA Report. In line with the mitigation set out in the 2022 EIA Report it is proposed that any impacts upon Assets 186 -190 are avoided by fencing these features under archaeological supervision prior to the commencement of HMP works and that no enhancement works are undertaken within the fenced areas. This would ensure that any impacts upon these assets are avoided and would result in **No Effect**.

Mitigation During Operation

4.6.2 There is no change to the recommended mitigation during operation as set out in the 2022 EIA Report.

Mitigation During Decommissioning

4.6.3 There is no change to the recommended mitigation during decommissioning as set out in the 2022 EIA Report.

4.7 Assessment of Residual Effects

Residual Construction Effects

4.7.1 There would be no change to the predicted residual construction effects as predicted in the 2022 EIA Report. Following implementation of the mitigation measures outlined above for Assets 186 – 190 there would be No Effect upon these assets.

Residual Operational Effects

4.7.2 There would be no change to the predicted residual operational effects as predicted in the 2022 EIA Report, noting however that there would be a reduced impact upon the setting of Craig Dorney, fort (Asset 20; SM13746) as a result of the removal of turbine T9.

4.8 Monitoring

4.8.1 There would be no change the proposed monitoring from that set out in the 2022 EIA Report.

4.9 Summary

4.9.1 Overall there would be no change to the levels of effect on cultural heritage receptors from those reported in the 2022 EIA Report. However as discussed in **Section 4.5**, the removal of turbine T9 would reduce the impact upon the setting of Craig Dorney (Asset 20; SM13746), by removing the most prominent turbine in

views from and of the asset and by reducing the encroachment of the Proposed Development on the lower slopes of Craig Watch hill.

Table 4.7– Summary of Potential Significant Effects of the Proposed Development

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/Residual Effect
Construction			
Potential direct impact on known non-designated Assets 19, 165, 166, 169, 173-175 and 178.	Demarcating of remains if required. Watching brief on ground breaking works which will cross or be located in the vicinity of these assets and recording of any remains. The watching brief would particularly relate to Assets 19 and 173-175 located within a proposed compensatory planting area.	Planning Condition with scope agreed by Written Scheme of Investigation.	Minor to Negligible, Adverse, though offset, Not significant.
Possible impact upon hitherto unknown archaeological remains.	Walkover survey following felling in forestry area but prior to commencement of construction to identify the extent of survival of known remains and demarcating of remains if required, to be secured by planning condition. Watching brief on ground breaking works which will cross or be located in the vicinity of any assets identified during walkover survey and recording of any remains. Outwith forestry areas a representative proportion of ground works, in areas of relatively greater archaeological potential, would be subject to an archaeological watching brief during ground-breaking works.	Planning Condition with scope agreed by Written Scheme of Investigation.	Moderate to Negligible, Adverse, though offset Not significant.
Potential impacts upon non-designated assets (Assets 33, 35, 36, 44, 50, 52, 59, 67, 77, 78, 163, 178 and 186 -190) within areas proposed for enhancement as part of the HMP.	Fencing of the assets under archaeological supervision prior to commencement of enhancement works and prohibiting of any planting within the fenced areas.	Planning Condition with scope agreed by Written Scheme of Investigation.	No effect.
Operation			
Impacts on the settings of Scheduled Monuments at Craig Dorney hillfort and Auchindoun Castle (Assets 20 and 115).	None	N/A	Moderate, Adverse, Significant.
Impacts on the settings of designated assets (Scheduled Monument Assets 111, 114, 118, 120 and Listed Building Assets 125-126, 130, 133-136, 138, 140, 143, 144, 147, 150-156 and 158-159) and upon the setting of the non-designated asset at Drywells (Asset 44).	None	N/A	Minor to Negligible Adverse, Not Significant.
Decommissioning			
Potential impact on heritage assets close to infrastructure.	None required unless the decommissioning extends beyond the construction footprint. Otherwise	Decommissioning Management Plan.	Neutral, Not Significant.

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/Residual Effect
	demarcation of archaeological assets in close proximity to working areas would ensure that accidental damage resulting from plant movement is avoided.		
Cumulative Construction			
Potential cumulative impact on known and unknown archaeological remains within the Site.	Demarcating of remains if required. Watching brief on ground breaking works which would cross or be located in the vicinity of these assets and recording of any remains. Walkover survey following felling in forestry area but prior to commencement of construction to identify the extent of survival of known remains and demarcating of remains if required, to be secured by planning condition. Watching brief on ground breaking works which would cross or be located in the vicinity of any assets identified during walkover survey and recording of any remains. Outwith forestry areas a representative proportion of ground works, in areas of relatively greater archaeological potential, would be subject to an archaeological watching brief during ground-breaking work.	Planning Condition with scope agreed by Written Scheme of Investigation.	Negligible, Adverse, though offset, Not significant.
Cumulative Operation			
Potential impact on the settings of the designated Scheduled Monument Craig Dorney, fort (Asset 20) and Auchindoun Castle (Asset 115).	None	N/A	Moderate, Adverse, Significant.
Potential impact on the settings of designated assets (Scheduled Monuments at Assets 114, 118, 120 and Listed Buildings at Assets 126 and 147) and upon the setting of the non-designated asset at Drywells (Asset 44).	None	N/A	Minor to Negligible, Adverse, Not Significant.

4.10 Glossary and Abbreviations

Abbreviation	Expanded Term
NPF4	National Planning Framework 4

Chapter 5: Ecology

Contents

5 Introduction

5.1 Introduction

5.1.1 This chapter reports on any changes to likely significant effects with respect to Ecology associated with the construction, operation and decommissioning of the Proposed Development changes as outlined in **Chapter 2: Proposed Development**. Where there is no change to the 2022 EIA Report this is stated.

5.1.2 This chapter is supported by the following figures and technical appendix:

- Volume 2a: Figures
  - **Figure 5.1: Phase 1 Habitat Plan;**
  - **Figure 5.2: National Vegetation Classification;**
  - **Figure 5.3: Terrestrial Mammal Survey Results;**
  - **Figure 5.4: Bat Roost Survey Plan;**
  - **Figure 5.5: Bat Activity Survey Plan;**
  - **Figure 5.6a: Fish Habitat Survey Plan;**
  - **Figure 5.6b: Fish Habitat Survey Plan; and**
  - **Figure 5.7: Habitat Management Areas.**
- Volume 3: Technical Appendices
  - **Technical Appendix 5.1: Outline Habitat Management Plan.**

5.1.3 Figure 7.1: Ecological Statutory Designated Sites, of the 2022 EIA Report has not required an update as a result of the Proposed Development. Technical Appendix 7.1: Habitats and Vegetation, Technical Appendix 7.2: Terrestrial Mammal, Technical Appendix 7.3: Bats and Technical Appendix 7.4: Fisheries of the 2022 EIA Report have also not required an update as a result of the Proposed Development.

5.2 Assessment Methodology and Significance Criteria

Scope of Assessment

5.2.1 The scope of the assessment is largely unchanged from the 2022 EIA Report. Note, some guidance such as the bat guidance[1] has been updated since, but surveys were undertaken in accordance with guidance applicable at the time (as listed in the 2022 EIA Report) and this makes no material difference to the assessment.

Consultation

5.2.2 **Table 5.1** summarises the post-submission consultation responses received regarding ecology and provides information on where and/ or how they have been considered in this assessment.

Table 5.1 – Ecology Consultation Responses

Consultee and Date	Issue Raised	Response/Action Taken
Aberdeenshire Council (13 July 2022)	Subject to comments from NatureScot, and based on information provided, agreed with the conclusion of the 2022 EIA Report with respect to ecology, that there will be no significant adverse effects on any important ecological features.	Noted.
	Stated that the Outline Habitat Management Plan (OHMP) measures proposed are acceptable and welcomed the commitment to consult with Aberdeenshire Council to finalise the HMP, if the Proposed Development is consented.	Noted.
Aberdeenshire Council NESBReC (22 June 2022)	Provided up to date desk study information.	Desk study information has been considered in the technical appendices and the 2022 EIA Report for the Proposed Development. The updated records

[1] SNH (2019). Bats and Onshore Wind Turbines – Survey, Assessment and Mitigation. Joint Publication with NatureScot, Natural England, Natural Resources Wales, RenewableUK, Scottish Power Renewables, Ecotricity Ltd, the University of Exeter and the Bat Conservation Trust (BCT).

Consultee and Date	Issue Raised	Response/Action Taken
		returned are comparable with those records previously obtained, and considered in the assessment, and thus no new information with regards to the desk study information is presented. The information from NESBReC can be provided to NatureScot and the ECU if required.
SEPA (20 July 2022)	Stated that the finalised HMP shall be based on the OHMP submitted, delivering restoration works to, as a minimum, the areas shown in the OHMP.	Noted, and there is a commitment to produce an HMP based on the measures in the OHMP (see **Technical Appendix 5.1: Outline Habitat Management Plan**) if the Proposed Development is consented. **Technical Appendix 5.1: Outline Habitat Management Plan** shows those parts of the Site targeted for enhancement measures.
NatureScot (10 October 2022)	Advised that the Scottish Ministers, as the competent authority, are required to carry out an appropriate assessment with respect to effects on the River Spey SAC. Based on information provided, NatureScot conclude that the Proposed Development will not adversely affect the integrity of the SAC. Added that risk of significant disturbance to otters within, or adjacent to, the SAC is avoided by the applicant's embedded mitigation and good practice protocols. Furthermore, the risk of significant disturbance to qualifying species of the SAC through public road network improvements is avoided by the applicant's embedded mitigation.	Noted.
	Noted that the Proposed Development largely avoids peat depth >0.5m (including upland heath and blanket bog), however small areas will be lost. The peatland habitats have characteristics consistent with drying out (effects of afforestation and/ or artificial drainage). Although there will be some (modest) losses of these (Annex 1/SBL) habitats, habitat loss has been minimised through a sensitive and iterative design process avoiding areas of deeper peat/better quality peatland habitats (which have greater future restoration potential). Considered that impacts identified should be mitigated and avoided through the measures identified by the applicant, including a detailed HMP and peat restoration.	Noted.
	Agreed that the mitigation proposed will ensure a good level of protection for species on-site and seeks to avoid or minimise adverse effects upon ecological features. Recommended that if practically possible 'reduced rotation speed while idling' is applied as mitigation alongside the 50 m buffer to reduce the risk to bats.	Noted, and commitment for such 'feathering' to be applied to wind turbines as part of the mitigation strategy (see **Section 5.6**).
	Welcomed the commitment for an HMP to be included from the outset to provide enhancement appropriate for local notable species, which will be produced post-consent for agreement with statutory consultees and other stakeholders.	Noted.
Fisheries Management Scotland (30 June 2022)	Stated that they do not have the appropriate local knowledge or technical expertise to comment, however have alerted the Deveron DSFB and Deveron, Bogie and Isla Charitable Rivers Trust to the Proposed Development. Recommended that the Board/Trust are consulted on the proposals for the Proposed Development.	Noted. There is a commitment within the 2022 EIA Report for production of a fish monitoring plan (FMP) if the Proposed Development is consented, with input from the Deveron DSFB and Deveron, Bogie and Isla Charitable Rivers Trust.
Deveron, Bogie and Isla Charitable Rivers Trust & River Deveron District Salmon	Requested that the Deveron DSFB and Deveron, Bogie and Isla Charitable Rivers Trust are consulted on the Proposed Development, given it straddles river catchments relating to two areas for both organisations.	

Consultee and Date	Issue Raised	Response/Action Taken
Fishery Board (1 July 2022)		
River Deveron District Salmon Fishery Board (17 August 2022)	Stated that existing degraded peat should be restored as part of the HMP, through ditch blocking and removal of commercial forestry from peatland areas.	Noted. The OHMP (see **Technical Appendix 5.1: Outline Habitat Management Plan**) includes the details of such measures, which would be considered to produce the HMP, post-consent. **Figure 5.7: Habitat Management Areas (Volume 3),** shows those parts of the Site targeted for enhancement measures.
	Welcomed the inclusion of the HMP and to have the opportunity to be on the review committee. Suggested certain stretches of watercourses that could be targeted for riparian tree planting. Stressed the requirement to restore peatland on-site as part of the HMP.	Noted. The OHMP (see **Technical Appendix 5.1: Outline Habitat Management Plan**) includes the details of such measures. Details into which specific areas should be targeted for enhancement and restoration would be determined post-consent and through consultation with the River Deveron District Salmon Fishery Board (and other stakeholders).
	Welcomed the CEMP and the schedule of environmental commitments, especially the production of an FMP. Open communication is key between contractors, the ECoW and staff from the Deveron, Bogie and Isla Charitable Rivers Trust & River Deveron District Salmon Fishery Board, particularly during installation of water-crossings and the implementation of drainage and silt protection measures.	Noted.
	Welcomed the reference to an FMP, and that this would include pre- and post-construction fish surveys. All watercourses draining the Site should be included in the FMP. Surveys should be conducted two years pre-construction, followed by monitoring during construction and two years after completion to ensure no impact. The survey should include reference sites out with the Site to act as a control. Surveys should include electro-fishing, invertebrate sampling and water quality monitoring.	Noted. It is proposed that the specifics of survey design and methodology for the FMP will be established post-consent with input from the River Deveron District Salmon Fishery Board (and other stakeholders).
	Stated that there is a risk to downstream watercourses both with diffuse pollution as a result of Site runoff and/ or during an acute pollution event. Suggested that fish populations should not have been scoped out of the 2022 EIA Report. Stated that turbine 7 should be moved more than 14 m away from the upper parts of the Linn Burn (preferably outside the 50 m buffer used for other parts of the Proposed Development).	Embedded mitigation (the Proposed Development being >50 m from watercourses) and the adoption of good practice measures (outlined in the 2022 EIA Report) will minimise effects on watercourses draining the Site. Turbine 7 is outside the 50 m buffer of two channels which were dry and/ or choked with vegetation during the survey and thus unsuitable for fish populations. The 2022 EIA Report (and accompanying technical appendix) provides further information with this regard. Furthermore, the FMP which the River Deveron District Salmon Fishery Board will be asked to input into, will ensure that monitoring is undertaken to ensure no impacts on the watercourses that pass through and/ or adjoin the Site.
RSPB Scotland (3 August 2022)	Satisfied with the 2022 EIA Report and conclusions and mitigation measures proposed, especially the changes in turbine layout of the Proposed Development to protect peatland habitats.	Noted.

Method of Baseline Characterisation

Desk Study

5.2.3 The desk study undertaken for the assessment is unchanged from the 2022 EIA Report.

Field Study

5.2.4 The field study undertaken for the assessment is unchanged from the 2022 EIA Report.

Criteria for the Assessment of Effects

Criteria for Assessing the Sensitivity of Receptors

5.2.5 The criteria for assessing the sensitivity of receptors is unchanged from the 2022 EIA Report.

Criteria for Assessing the Magnitude of Change

5.2.6 The criteria for assessing the magnitude of change is unchanged from the 2022 EIA Report.

Criteria for Assessing Cumulative Effects

5.2.7 The approach to cumulative assessment and cumulative effects considered are unchanged from the 2022 EIA Report. Additional wind farm schemes which have become 'live' since the 2022 EIA Report have been included in the assessment (where relevant)[2].

Criteria for Assessing Significance

5.2.8 The criteria for assessing significance are unchanged from the 2022 EIA Report.

Limitations and Assumptions

5.2.9 The limitations and assumptions are unchanged from the 2022 EIA Report.

5.3 Policy Context

5.3.1 This section examines any changes in planning policy since the production of the 2022 EIA Report.

National Policy

5.3.2 The National Planning Policy Framework 4 (NPF4) (2023)[3] has been produced and Policy 3 of the NPF4 is relevant to ecology and biodiversity enhancement. Below in bold and italics are wording related to Policy 3, with information into how the Proposed Development adheres to the policy.

a) Development proposals will contribute to the enhancement of biodiversity, including where relevant, restoring degraded habitats and building and strengthening nature networks and the connections between them. Proposals should also integrate nature-based solutions, where possible.

5.3.3 The Proposed Development includes for extensive biodiversity enhancements, facilitated through developer investment and the implementation of an ambitious Habitat Management Plan (HMP) to complement the Proposed Development's peat restoration measures. The updated OHMP is provided as **Technical Appendix 5.1: Outline Habitat Management Plan**, and will contribute to biodiversity enhancement, including restoring degraded peatland habitats and strengthening nature networks, through for example enhancing foraging opportunities in the wider landscape for SPA qualifying common gulls moving to and from the Tips of Corsemaul and Tom Mor SPA. Riparian tree planting will also improve habitat connectivity through the Site and also increase the resilience of watercourses to a warming climate through shading and cooling water temperatures, minimising potentially adverse effects of warming on aquatic wildlife.

b) Development proposals for national or major development, or for development that requires an Environmental Impact Assessment will only be supported where it can be demonstrated that the proposal will conserve, restore and enhance biodiversity, including nature networks so they are in a demonstrably better state than without intervention. This will include future management. To inform this, best practice assessment methods should be used. Proposals within these categories will demonstrate how they have met all of the following criteria:

[2] All relevant wind farm schemes considered are presented in Annex 1 of the **Technical Appendix 6.1**.

[3] The Scottish Government (2023). National Planning Framework 4. Available at https://www.gov.scot/publications/national-planning-framework-4/ [Accessed 16/07/2024]

i. the proposal is based on an understanding of the existing characteristics of the site and its local, regional and national ecological context prior to development, including the presence of any irreplaceable habitats;
ii. wherever feasible, nature-based solutions have been integrated and made best use of;
iii. an assessment of potential negative effects which should be fully mitigated in line with the mitigation hierarchy prior to identifying enhancements;
iv. significant biodiversity enhancements are provided, in addition to any proposed mitigation. This should include nature networks, linking to and strengthening habitat connectivity within and beyond the development, secured within a reasonable timescale and with reasonable certainty. Management arrangements for their long-term retention and monitoring should be included, wherever appropriate; and
v. local community benefits of the biodiversity and/or nature networks have been considered.

5.3.4 The Proposed Development includes for the implementation of habitat management measures within an HMP over its operational lifetime aimed at conserving, restoring and enhancing peatland and fisheries habitats, and habitats for black grouse and Scottish wildcat. Such measures will also provide enhanced opportunities for associated peatland biodiversity including breeding waders, invertebrates and plant species and which would not be possible without intervention.

5.3.5 The Proposed Development also meets the additional sub-principles (listed above as 'i-v'), through the detailed studies which have informed the Proposed Development's 2022 EIA Report, OHMP (also see **Technical Appendix 5.1: Outline Habitat Management Plan**) and peat restoration measures. This has established the presence and distribution of ecological and ornithological interests including peatlands within the Site and surrounding local area. In addition, this includes species and habitats which are protected and/or of conservation concern.

5.3.6 The Proposed Development's OHMP (see **Technical Appendix 5.1: Outline Habitat Management Plan**) includes for ambitious local peatland restoration measures, which will ensure the sustainable and local reuse of peats and excavated soils. Peatland restoration contributes to reducing net emissions, expands carbon sinks, enhances upland biodiversity and improves water quality.

5.3.7 Chapter 7 and 8 of the Proposed Development' 2022 EIA Report provide an assessment of effects upon ecological and ornithological interests in accordance with good practice industry guidance. The Proposed Development has had several design iterations (see Chapter 3: Design Evolution, Volume 2 of the 2022 EIA Report) in response to the findings of baseline ecological and ornithological studies. Specifically scheme design sought to: avoid habitat losses; minimise watercourse crossings, design those watercourse crossings required sensitively for wildlife and buffer infrastructure from areas identified as being important for sensitive species. This has included locating the Proposed Development away from the east of the Site where a common gull movement was identified where gulls were traversing to and from the Tips of Corsemaul and Tom Mor SPA. This is reflected in a modest number of gull flights (17 flights) being recorded 'at collision risk' compared to the total number of gull flights recorded (338 flights). Embedded scheme design measures have therefore recognised the potential for impacts upon biodiversity (including SPA qualifying species) at an early stage, complying with the first step of the mitigation hierarchy, i.e. avoidance, whilst balancing the need for the development to contribute a meaningful contribution to Scotland's net zero target. The Proposed Development will also include for a Construction Environmental Management Plan (CEMP) to be agreed in consultation with the Local Planning Authority, NatureScot, SEPA and other relevant consultees and based upon best practice guidance applicable at the time of development commencement. The CEMP will include for all good practice construction measures, pollution prevention controls and monitoring to be implemented over the course of the development in line industry and mandatory statutory guidance applicable at the time and as detailed in Technical Appendix 2.1: Outline CEMP, Volume 4 of the 2022 EIA Report. The CEMP will also include additional measures outlined within Chapter 7 and 8 of the 2022 EIA Report to further minimise the magnitude of loss and disturbance effects upon baseline habitats and species, restore temporary losses and reduce in so far as is possible, any residual impacts. On this basis, the assessments presented within the 2022 EIA Report (and SEI Chapters 5 and 6) confidently conclude the absence of potentially significant adverse residual effects upon ecological and ornithological features in EIA terms.

5.3.8 The Proposed Development has recognised the need to demonstrate that potentially adverse impacts upon ecological and ornithological interests will be offset and significant biodiversity enhancement secured. Within the finalised HMP there will be a commitment to adopt these enhancement measures which will be agreed in consultation with statutory and non-statutory consultees and will follow best practice guidance. The HMP will include for a monitoring and review framework to track and report on the efficacy of habitat management measures implemented and allow management prescriptions to adapt to emerging evidence and specialist advice and ensure net biodiversity gains are realised over the lifetime of the development. This will include the improvement of hydrological functioning and strengthening of the resilience of peatland habitats over extensive areas within the Site and the improvement of important habitats for populations of species of local conservation interest including those listed as a priority within the North East Scotland Local Biodiversity Action Plan. Habitat management measures proposed and

committed to as part of the Proposed Development will enhance local peatland habitats, restore their functioning and importance for carbon capture. Together with habitat creation and management of opportunities for associated species, such measures will improve connectivity for wildlife over an extensive area beyond the footprint of the Proposed Development.

c) Any potential adverse impacts, including cumulative impacts, of development proposals on biodiversity, nature networks and the natural environment will be minimised through careful planning and design. This will take into account the need to reverse biodiversity loss, safeguard the ecosystem services that the natural environment provides, and build resilience by enhancing nature networks and maximising the potential for restoration.

5.3.9 The Proposed Development has undergone several design iterations (detailed in Chapter 3: Design Evolution, Volume 2 of the 2022 EIA Report) to avoid and minimise the potential for adverse effects upon ornithological and ecological interests in line with the mitigation hierarchy. The Proposed Development also recognised the need to support the Scottish Government's ambitions to halt and reverse biodiversity loss and has identified the potential for intervention measures to be implemented in restoring important habitats and preserving populations of associated species of conservation priority. Such measures will be contained within an HMP (in line with the outline HMP in Technical Appendix 5.1), implemented over the lifetime of the Proposed Development, agreed with statutory and other relevant consultees and informed through best practice guidance.

5.3.10 Scotland's Onshore Wind Policy Statement (OWPS, 2022[4]) sets out Scottish Government's ambition to deploy 20GW of onshore wind by 2030, as well as details on the formation of the Onshore Wind Strategic Leadership Group (OWSLG), who will develop an onshore wind sector deal. The OWSLG was established in February 2023 and the onshore wind sector deal was published in September 2023[5], *'which sets the ambition for the next phase of onshore wind energy delivery in Scotland'*. In Section 3 of this Policy statement the Scottish Government sets out its committed to ensuring Scotland's citizens have access to affordable, low carbon and renewable energy whilst tackling the climate and nature crises in tandem.

As the rate of onshore wind deployment increases in the coming years, we see a great opportunity for wind energy developments to further contribute significantly to our biodiversity ambition. By proactively managing intact habitats and the species they support, restoring degraded areas and improving connectivity between nature-rich areas, onshore wind projects will contribute to our climate change targets and help address the biodiversity crisis.

5.3.11 The Proposed Development supports the Scottish Government's ambitions to tackle the twinned climate change and biodiversity crises. The Proposed Development will make a meaningful contribution to the Scottish Government's renewable energy targets, whilst delivering substantial commitments towards the enhancement of biodiversity contained within an HMP, to be finalised in consultation with NatureScot and other relevant consultees.

Regional and Local Policy

5.3.12 Aberdeenshire Local Development Plan 2023 was adopted on 13 January 2023[6] and associated relevant supporting documents (e.g. 'Habitats Regulations Appraisal', dated October 2022)[7].

Guidance

5.3.13 The recent NatureScot guidance[8] on peatland condition and restoration is considered with respect to the peatland restoration proposals which form part of the documentation (OHMP and peat restoration measures, and to form the HMP if the Proposed Development is consented) which supported the 2022 EIA Report (also see **Technical Appendix 5.1: Outline Habitat Management Plan**). This guidance confirms the importance of avoidance of priority peatland habitats and restoration of degraded peatland, which have been fundamental to the design of the Proposed Development, and measures within the OHMP

[4] Available at: https://www.gov.scot/publications/onshore-wind-policy-statement-2022/ [Accessed 16/07/2024]
[5] Available at: https://www.gov.scot/publications/onshore-wind-sector-deal-scotland/documents/ [Accessed 24/10/2024]
[6] Available at: https://www.aberdeenshire.gov.uk/planning/plans-and-policies/ldp-2023 [Accessed 16/07/2024]
[7] Available at: https://online.aberdeenshire.gov.uk/ldpmedia/LDP2021/HabitatsRegulationsAppraisalfortheModifiedProposedLDP2020.pdf [Accessed 16/07/2024]
[8] NatureScot (2023). Advising on peatland, carbon-rich soils and priority peatland habitats in development management. Revised November 2023.

and peat restoration. Areas for peatland management are shown in **Figure 5.7: Habitat Management Areas (Volume 3)**.

5.4 Baseline

5.4.1 The current and future baseline with respect to ecology is unchanged from the 2022 EIA Report.

5.5 Assessment of Likely Effects

Potential Construction Effects

5.5.1 Potential construction effects are largely unchanged from the 2022 EIA Report.

Habitats and Vegetation (Blanket Bog and Upland Heath)

5.5.2 Following the application of good practice measures during the construction phase to prevent indirect impacts, there are two main ways by which habitats and vegetation may be affected as a result of the construction phase of the Proposed Development:

- direct loss – the loss of habitats and vegetation under the footprint of the Proposed Development; and
- indirect loss – calculated for blanket bog, wet modified bog and dwarf shrub habitats located within 10 m of direct habitat loss areas, to account for potential changes in habitat vegetation structure, particularly due to drying effects as a result of construction works.

5.5.3 Habitat losses are calculated based on NVC community, though Phase 1 habitat type is used to group the habitats for ease of reference. As such, some NVC habitat types within a Phase 1 habitat group do not contribute to the total area within the Site as provided in **Table 5.2**.

5.5.4 For the purposes of assessment, a precautionary approach has been taken which assumes that direct habitat loss and indirect loss of blanket bog, dry modified bog and dry dwarf shrub heath habitats represents a permanent, irreversible adverse effect. In practice, some areas indirectly affected may be able to be restored i.e., during habitat reinstatement following construction in accordance with the OCEMP (which supported the 2022 EIA Report).

5.5.5 **Table 5.2** details the estimated direct and indirect habitat losses as a result of the construction of the Proposed Development, and potential effects on bog and heath communities.

5.5.6 Total known direct land take for the Proposed Development would be 17.45 ha, of which 3.80 ha are accounted for in **Table 5.2**. The remaining 13.65 ha of habitats to be directly lost comprise coniferous plantation woodland (13.1 ha) and scattered coniferous trees (<0.01 ha), dense scrub (<0.01 ha), marshy grassland (0.13 ha), improved grassland (0.22 ha), semi-improved acid grassland (0.1 ha) and mosaic habitat (0.06 ha) which have been scoped out of the assessment.

5.5.7 There would be a 1.76 % direct relative coverage loss of dry modified bog and 1.49 % of blanket bog, which equates to a direct loss of 1.65 % of peatland habitats overall. Direct loss of dry heath habitat for the Proposed Development equates to 0.22 % of its extent within the Site. Potential indirect losses of protected and notable habitats within 10 m of proposed infrastructure are of a greater extent (see **Table 5.2**), though are less certain to take place. Note that the impact assessment below is based on the potential total (direct and indirect) loss.

Table 5.2 – Summary of Habitat Losses

Phase 1 Habitat Type	NVC Community/ Sub-community	Total Area Within Site Boundary (ha)	Habitat Losses (ha)			Proportion Lost (%)[9]
			Direct	Indirect	Total	
Dry modified bog (E1.8)	H12a and H12a/ H18	119.03	2.10	4.07	6.17	5.18
Blanket bog (E1.6.1)	M19a and M19a/b	86.68	1.30	1.44	2.74	3.16
Acid dry dwarf shrub heath (D1.1)	H12a and H13	182.90	0.40	0.28	0.68	0.37
Total		**388.61**	**3.80**	**5.79**	**9.59**	**2.47**

[9] Includes indirect habitat losses too.

Blanket Bog and Dry Modified Bog (Peatland)

5.5.8 Both blanket bog and dry modified bog are classified as blanket bog on Annex 1 of the Habitats Directive, and so are grouped for this assessment as 'Peatland'. The Carbon and Peatland Map 2016[10] shows that the Proposed Development sits at the furthest north eastern edge of where extensive areas of priority peatland are located in the Grampian region, at the far eastern edge of NHZ11, grading to the east of the Site into "Lowland" and "Valleys/ Straths/ Glens/ Voes" Landscape Character Types of NHZ12. The fact that they are at the edge of their range in this part of Scotland, coupled with extensive previous anthropogenic intervention, has contributed to the dry, species-poor nature of peatland habitats on the Site, and they are not considered Regionally important examples of blanket bog habitat (further discussion into 'sensitivity/ geographic scale of ecological feature importance' classification, such as 'Regionally' important is provided in the 2022 EIA Report).

5.5.9 In the context of the quality of these habitats on-site, and the wider availability of extents of Class 1 Peatland to the south and west of the Proposed Development in NHZ11[10], the direct and indirect loss of the peatland habitats is considered to constitute an impact of Low/ Medium magnitude at a Regional scale, resulting in a **Minor Adverse** effect which is considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

5.5.10 'Priority peatland' in accordance with NatureScot guidance (2023) are those habitats which have the potential to raise issues of national interest and include M17, M18 and M19 peatland. H12a and H18 would not be considered as priority peatland in this guidance. As a precaution, the Proposed Development will result in the loss (direct and indirect) of 3.16 % of the potential priority peatland (M19a and M19b) habitat onsite, comprising 1.3 ha and 1.44 ha respective direct and indirect loss. In accordance with the current NatureScot guidance this loss of potential priority peatland would require *c*. 27.4 ha of peatland restoration. Furthermore, enhancement would be required composing of 10 % of the onsite priority peatland, and thus a further 8.7 ha of peatland would be required to be restored to achieve 'enhancement'.

5.5.11 A commitment to an HMP is included as part of the Proposed Development (see the 2022 EIA Report, and **Technical Appendix 5.1: Outline Habitat Management Plan)** which includes proposals for peatland restoration (up to 104.2 ha), which greatly exceeds the extent of peatland restoration required for compensation (27.4ha) and enhancement (8.7 ha). **Figure 5.7: Habitat Management Areas (Volume 3)**, shows those parts of the Site targeted for peatland restoration measures, with further details provided in **Technical Appendix 5.1: Outline Habitat Management Plan**.

Acid Dry Dwarf Shrub Heath

5.5.12 The dry dwarf shrub heath habitat on-site is heavily managed and species-poor. Only a very small amount of this habitat would be lost to infrastructure for the Proposed Development and this is considered to constitute an impact of Negligible magnitude at a Local scale, resulting in a **Negligible Adverse** effect which is not significant, and the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

5.5.13 An area of dry dwarf shrub heath has been identified as a search area for compensatory forestry planting (see the 2022 EIA Report). The compensatory planting plan would be finalised and agreed post-consent, and so losses associated with this element cannot be assessed at this stage. However, in the event that some compensatory planting is undertaken in areas of dry dwarf shrub heath, this would lead to an increase in loss relative to that assessed within this chapter. Given the extent and condition of this habitat within the Site, and the minimal proportion of loss overall (as outlined above), it is considered that this would still result in a no greater than **Minor Adverse** effect, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

Potential Operational Effects

5.5.14 The potential operational effects are unchanged from the 2022 EIA Report.

Potential Decommissioning Effects

5.5.15 The potential decommissioning effects are unchanged from the 2022 EIA Report.

Potential Cumulative Construction Effects

5.5.16 The potential cumulative construction and operation effects are unchanged from the 2022 EIA Report, with the additional wind farm schemes considered not resulting in any significant effects on ecological features.

5.6 Mitigation

5.6.1 The mitigation considered is largely unchanged from the 2022 EIA Report. However, following NatureScot's recommendation during the post-submission consultation (see **Table 5.1**) feathering of the wind turbine blades are proposed, to reduce the rotation speed while idling which is likely to further

[10] SNH (2016). Available at https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/soils/carbon-and-peatland-2016-map [Accessed 17/07/2024]

minimise the risk to foraging/commuting bats (beyond the adopted embedded mitigation as detailed in the 2022 EIA Report). Furthermore, this chapter and the **Technical Appendix 5.1: Outline Habitat Management Plan** considers the compensation required for the loss of potential priority peatland. The extent of peatland/moorland habitat identified to be investigated and used for restoration works is up to 104.2 ha, and the amount of compensatory peatland required (in accordance with current NatureScot guidance (2023), is 27.4 ha).

Enhancement

5.6.2 There is no change to the enhancement measures set out in the 2022 EIA Report. However, addition details are provided within this chapter, and **Technical Appendix 5.1: Outline Habitat Management Plan**, on the extent of peatland enhancement needed and delivered to adhere to current NatureScot guidance (2023), and how the Proposed Development would achieve, and succeed, this. Information on how the enhancement measures to be adopted are in accord with NPF4 (2023) are also described in this chapter and summarised in **Technical Appendix 5.1: Outline Habitat Management Plan**.

5.7 Assessment of Residual Effects

Residual Construction Effects

5.7.1 There would be no change to the predicted residual construction effects as predicted in the 2022 EIA Report.

Residual Operational Effects

5.7.2 There would be no change to the predicted residual operational effects as predicted in the 2022 EIA Report.

5.8 Monitoring

5.8.1 There would be no change the proposed monitoring from that set out in the 2022 EIA Report.

5.9 Summary

5.9.1 Overall there would be no change to the levels of effect on ecological receptors from those reported in the 2022 EIA Report.

Table 5.3 – Summary of Potential Significant Effects of the Proposed Development

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/Residual Effect
None	N/A	N/A	N/A

5.10 Glossary and Abbreviations

Abbreviation	Expanded Term
NPF4	National Planning Framework 4
OWPS	Onshore Wind Policy Statement

Chapter 6: Ornithology

Contents

6 Introduction

6.1 Introduction

6.1.1 This chapter reports on any changes to likely significant effects with respect to Ornithology associated with the construction, operation and decommissioning of the Proposed Development changes as outlined in **Chapter 2: Proposed Development**. Where there is no change to the 2022 EIA Report this is stated.

6.1.2 This chapter is supported by the following figures and technical appendix**.**

- Volume 2a: Figures
  - **Figure 6.1a: Desk Study Records;**
  - **Figure 6.2a: Vantage Point and Viewshed Location Plan Year 1 (Breeding Season, March - August);**
  - **Figure 6.2b: Vantage Point and Viewshed Location Plan Year 1 (Non-Breeding Season, September - February);**
  - **Figure 6.2c: Vantage Point and Viewshed Location Plan (Year 2);**
  - **Figure 6.3a: Breeding Bird Survey Plan (Year 1);**
  - **Figure 6.3b: Breeding Bird Survey Plan (Year 2);**
  - **Figure 6.4a: Target Species Flights Year 1 – Other;**
  - **Figure 6.4b: Target Species Flights Year 1 – Raptors;**
  - **Figure 6.4c: Target Species Flights Year 1 - Common gull;**
  - **Figure 6.4d: Target Species Flights Year 2 – Other;**
  - **Figure 6.4e: Target Species Flights Year 2 – Raptors;**
  - **Figure 6.4f: Target Species Flights Year 2 (Common gull);**
  - **Figure 6.5a: Moorland Breeding Bird Survey Results (Year 1);**
  - **Figure 6.5b: Moorland Breeding Bird Survey Results (Year 2);** and
  - **Figure 6.6a: Breeding Raptor and Owl Survey Results (Year 1).**
- Volume 4: Confidential Information
  - **Figure 6.1b: Confidential Desk Study Records;**
  - **Figure 6.6b: Confidential Breeding Raptor and Owl Survey Results (Year 1);**
  - **Figure 6.6c: Confidential Breeding Raptor and Owl Survey Results (Year 2);**
  - **Figure 6.7a: Confidential Woodland Grouse Lek Results (Year 1); and**
  - **Figure 6.7b: Confidential Woodland Grouse Lek Results (Year 2).**
- Volume 3: Technical Appendices
  - **Technical Appendix 6.1: Collision Risk Model Analysis.**

6.1.3 Figure 8.1: Ornithological Statutory Designated Sites, of the 2022 EIA Report has not required an update as a result of the updated Proposed Development. Technical Appendix 8.1: Ornithology and Technical Appendix 8.3: Confidential Ornithology, of the 2022 EIA Report have also not required an update as a result of the updated Proposed Development.

6.2 Assessment Methodology and Significance Criteria

Scope of Assessment

6.2.1 The scope of the assessment is unchanged from the 2022 EIA Report.

Consultation

6.2.2 **Table 6.1** summarises the post-submission consultation responses received regarding ornithology and provides information on where and/ or how they have been considered in this assessment.

Table 6.1 – Ornithology Consultation Responses

Consultee and Date	Issue Raised	Response/Action Taken
Aberdeenshire Council (13 July 2022)	Raised concerns regarding the potential increased mortality rates for goshawk resulting from collisions for one monitoring area. Are encouraged that NatureScot will provide comments regarding effects on goshawk.	NatureScot have provided comment, see below in this **Table 6.1**, and NatureScot agree with the assessment and interpretation presented in the 2022 EIA Report. This includes acknowledging that the reported mortality rates (particularly the high rate in Year 1) are likely to be over-estimates. Note, that the goshawk mortality rates, based on new collision risk analysis and reported in this chapter, are lower than those reported in Chapter 8 of the 2022 EIA Report.
	Raised some concern with regard to lack of availability of some collision risk data for some proposed or existing windfarms to use in the cumulative assessment. Encouraged NatureScot to comment with this regard.	NatureScot have not raised concerns with this regard. Publicly available information has been considered in the assessment, with further relevant collision risk data sourced and used in the assessment in **Section 6.5** of this Chapter.
	The OHMP detail presented to date is accepted, and as Aberdeenshire Council will be consulted on further development and finalisation of the HMP this is welcomed.	Noted. No amendments made to OHMP.
Aberdeenshire Council NESBReC (28 June 2022)	Provided up to date desk study information.	Desk study information has been considered in the technical appendices and the 2022 EIA Report for the Proposed Development. The updated records returned are comparable with those records previously obtained, and considered in the assessment, and thus no new information with regards to the desk study information is presented.
RSPB Scotland (3 August 2022)	Satisfied with the conclusions and mitigation measures proposed, particularly the changes in turbine layout to protect common gulls.	Noted.
	Stated that whilst the residual collision risks for most bird species are relatively low, concerns raised with high mortality rate predicted for goshawk, in Year 1, within the NHZ 11 regional population. Since there are so many goshawk flights recorded through the Site, it would be beneficial to check those flights at collision risk height to assess if there is any scope for mitigation measures, such as modifying turbine layout. Whilst goshawks are infrequently found as wind turbine fatalities worldwide, post-construction monitoring is recommended to inform understanding of the species and interaction with windfarms.	NatureScot have provided comment, see below in this **Table 6.1**, and agree with the assessment and interpretation. A commitment for post-construction ornithological monitoring is included as requested, see **Section 6.8**.
NatureScot (12 October 2022)	Advised that the Scottish Ministers, as competent authority, are required to carry out an appropriate assessment with respect to effects on the Tips of Corsemaul and Tom Mor SPA. Based on information provided, NatureScot conclude that the Proposed Development will not adversely affect the integrity of the SPA. Added that risk of significant disturbance to breeding and foraging common gull within or adjacent to the SPA is avoided by the applicant's embedded mitigation and design guidance. Furthermore, potential breeding and foraging habitats will remain available onsite and in wider area unaffected by the Proposed Development. CRM Analysis indicated a level of risk that is low and not likely to impact the viability of SPA species. The actions in the applicant's Outline Habitat Management Plan are complementary and will not add existing pressures on the SPA population. This advice also applies to the interest of the SSSI.	Noted.
	Agreed with applicant's conclusions in **Chapter 8** of the 2022 EIA Report and consider that the design process and mitigation measures are appropriate to	Noted.

Consultee and Date	Issue Raised	Response/Action Taken
	minimise potential effects. This includes appropriate buffers around black grouse leks and hen harrier nest sites, and embedded mitigation and good practice protocols as part of the CEMP, including production of a CBBPP, to help safeguard breeding birds during construction during breeding season.	
	Noted high goshawk collision risk in Year 1 (breeding season), but not in Year 2. While the resulting collision risk figure is relatively high, NatureScot consider that this is unlikely to be as high in reality. This is because it assumes the breeding pair (if present) would be immediately replaced. NatureScot therefore agree the overall direct and permanent habitat losses on the basis and scale of the Proposed Development are considered to be small at the regional NHZ population level, resulting in an adverse impact upon ornithological receptors at site-level only.	Noted. **Section 6.5** in this Chapter provides further information and discussion with regards mortality rates for goshawk, for the Proposed Development alone and cumulatively with other relevant wind farm schemes.

Method of Baseline Characterisation

Desk Study

6.2.1 The desk study undertaken for the assessment is unchanged from the 2022 EIA Report.

Field Study

6.2.2 The field study undertaken for the assessment is unchanged from the 2022 EIA Report.

Illustrative Materials

The illustrative materials used for the assessment is unchanged from the 2022 EIA Report.

Criteria for the Assessment of Effects

Criteria for Assessing the Sensitivity of Receptors

6.2.3 The criteria for assessing the sensitivity of receptors is unchanged from the 2022 EIA Report.

Criteria for Assessing the Magnitude of Change

6.2.4 The criteria for assessing the magnitude of change is unchanged from the 2022 EIA Report.

Criteria for Assessing Cumulative Effects

6.2.5 The approach to cumulative assessment and cumulative effects considered are unchanged from the 2022 EIA Report. Additional wind farm schemes which have become 'live' since the 2022 EIA Report have been included in the assessment (where relevant). These are provided in **Table 6.4**.

Criteria for Assessing Significance

6.2.6 The criteria for assessing significance are unchanged from the 2022 EIA Report.

Limitations and Assumptions

6.2.7 The limitations and assumptions are unchanged from the 2022 EIA Report.

6.3 Policy Context

6.3.1 This Section examines any changes in planning policy since the production of the 2022 EIA Report.

National Policy

6.3.2 The National Planning Policy Framework 4 (NPF4) (2023)[1] has been produced and Policy 3 of the NPF4 is relevant to ecology and biodiversity enhancement. **Chapter 5: Ecology** provides further information into Policy 3 of NPF4 and how the enhancement measures for the Proposed Development adhere to these requirements.

6.3.3 Fundamentally, the NPF4 considers that climate change and nature recovery are the primary guiding principles for all plans and decisions. The Proposed Development has gone through several design

[1] The Scottish Government (2023). National Planning Framework 4. Available at https://www.gov.scot/publications/national-planning-framework-4/ [Accessed 16/07/2024]

iterations to avoid and minimise the potential for adverse effects upon ornithological (and ecological) interests in line with the mitigation hierarchy. The Proposed Development is in accord with the Scottish Government's ambitions to halt and reverse biodiversity loss and has identified intervention measures to be implemented to restore important habitats and preserve (and enhance) populations of notable ornithological (and ecological) species.

6.3.4 Scotland's Onshore Wind Policy Statement (OWPS, 2022[2]) sets out Scottish Governments ambition to deploy 20GW of onshore wind by 2030, as well as details on the formation of an onshore wind strategic leadership group, who will develop an onshore wind sector deal. In Section 3 of this Policy statement the Scottish Government sets out its commitments to ensuring Scotland's citizens have access to affordable, low carbon and renewable energy whilst tackling the climate and nature crises in tandem. **Chapter 5** provides further information into how this Proposed Development will contribute towards the Scottish Government's targets, by contributing towards ensuring Scottish's citizens have access to affordable, low carbon and renewable energy whilst tackling the climate and nature loss emergencies in tandem.

Regional and Local Policy

6.3.5 Aberdeenshire Local Development Plan was adopted on 13 January 2023[3] and associated relevant supporting documents (e.g. 'Habitats Regulations Appraisal', dated October 2022)[4].

6.4 Baseline

Current Baseline

6.4.1 The current baseline with respect to ornithology is largely unchanged from the 2022 EIA Report.

6.4.2 The only exception is the 'at risk' flights, identified from VP Flight Activity Surveys and included in the Collision Risk Model (CRM) Analysis, and the results of the updated CRM Analysis which are summarised below and detailed in **Technical Appendix 6.1**.

VP Flight Activity Surveys

6.4.3 **Table 6.2** provides the 'at risk' flights recorded between March 2019 and August 2020.

Table 6.2 – Target Species Flight Activity Summary ('At Risk' Flights)

Species	Total No. Flights	Total No. Birds	Total Time Spent "At Collision Risk" (secs)[5]
Pink-footed goose *Anser brachrhynchus*	10	979	139,310
Golden plover *Pluvialis apricaria*[6]	5	93	11,379
Curlew *Numenius arquata*	7	9	685
Common Gull *Larus canus*	17	29	3,106
Goshawk *Accipiter gentilis*	16	16	3,330
Hen harrier *Circus cyaneus*	5	6	958
Peregrine *Falco peregrinus*	1	1	15
Lapwing *Vanellus vanellus*	1	2	120
Greylag goose *Anser anser*	2	44	4,422

Collision Risk Mortality

6.4.4 Calculations of collision mortality risk have been undertaken for common gull, hen harrier, goshawk, curlew and golden plover. No other target species recorded during VP flight activity surveys between March 2019

[2] Available at: https://www.gov.scot/publications/onshore-wind-policy-statement-2022/ [Accessed 16/07/2024]
[3] Available at: https://www.aberdeenshire.gov.uk/planning/plans-and-policies/ldp-2023 [Accessed 16/07/2024]
[4] Available at: https://online.aberdeenshire.gov.uk/ldpmedia/LDP2021/HabitatsRegulationsAppraisalfortheModifiedProposedLDP2020.pdf [Accessed 16/07/2024]
[5] Total time at risk height multiplied by the number of birds.
[6] Two of the golden plover flights were also recorded during the non-breeding season but given the low activity during the non-breeding survey period, only golden plover during the breeding season (three 'at risk' flights) were subject to CRM Analysis.

and August 2020 had three or more 'at risk' flights[7], with resulting collision risks reasonably concluded as being inconsequential.

6.4.5 Predicted collision mortality is summarised in **Table 6.3** and full details are presented in **Technical Appendix 6.1**.

Table 6.3 – Target Species Flight Activity Summary ('At Risk' Flights)

Species	Season	Annual Seasonal Mortality	33 Year Seasonal Mortality
Common gull	Year 1 Breeding Season (2019)	0.051	1.668
	Year 2 Breeding Season (2020)	0.072	2.381
	Breeding Season Average	0.062	2.025
Hen harrier	Year 1 Breeding Season (2019)	0.103	3.390
	Year 2 Breeding Season (2020)	0	0
	Breeding Season Average	0.052	1.695
Goshawk	Year 1 Breeding Season (2019)	0.663	21.893
	Year 2 Breeding Season (2020)	0.062	2.059
	Breeding Season Average	0.363	11.976
	Year 1 Non-Breeding Season (2019-20)	0.069	2.271
Curlew	Year 1 Breeding Season (2019)	0.014	0.469
	Year 2 Breeding Season (2020)	0.088	2.897
	Breeding Season Average	0.051	1.683
Golden plover[6]	Year 1 Breeding Season (2019)	0.173	5.707
	Year 2 Breeding Season (2020)	0	0
	Breeding Season Average	0.087	2.854

Future Baseline

6.4.6 The future baseline considered is unchanged from the 2022 EIA Report.

6.5 Assessment of Likely Effects

Potential Construction Effects

6.5.1 The potential construction effects are unchanged from the 2022 EIA Report.

Potential Operational Effects

6.5.2 The potential operational effects, with regards to displacement effects are unchanged from the 2022 EIA Report.

Collision Mortality

Common Gull

6.5.3 Common gull collision mortality for the updated Proposed Development has been assessed on the basis of 'at collision risk' flight activity recorded during baseline VP Flight Activity Surveys between March and August 2019 (Year 1 breeding season), and March and August 2020 (Year 2 breeding season).

6.5.4 Collision Risk Models (CRM) have been completed using a total of 17 flights which entered the collision risk zone during the VP Survey periods (10 and seven flights respectively in Year 1 and Year 2). An avoidance rate of 99.2 % was used[8].

[7] With the exception of pink-footed goose, which given there is no designated site with the species as a qualifying species within 20 km of the Site, and due to most flights being at HT4 (>180 m) likely to be reality above 'at risk' height, was not subject to CRM.

[8] Furness, R.W. (2019). Avoidance rates of herring gull, great black-backed gull and common gull for use in the assessment of terrestrial wind farms in Scotland. Scottish Natural Heritage Research Report No. 1019.

6.5.5 The CRM predicts a breeding season mortality of 0.051 and 0.072 respectively in Year 1 and Year 2, which equates to 1.67 and 2.38 birds over the lifespan (33 years) of the Proposed Development (see **Technical Appendix 6.1**). This is lower than the estimates in the 2022 EIA Report.

6.5.6 As in the 2022 EIA Report, the common gull population is not assessed at the Regional Natural Heritage Zone (NHZ) scale; instead for the purpose of assessment the predicted mortality rate will be considered in relation to the breeding population using the Tips of Corsemaul and Tom Mor SPA and SSSI.

6.5.7 Following the same assessment methodology from the 2022 EIA Report, common gulls recorded during baseline surveys were adult birds moving, to and from, the colony, so the additional maximum mortality resulting from the Proposed Development represents a <0.01 % (0.0085 %) increase in annual background adult bird mortality rates.

6.5.8 Overall collision mortality risks to common gulls are therefore considered to represent no more than a long-term, Negligible magnitude of impact at the breeding Tips of Corsemaul and Tom Mor SPA population level, resulting in a **Negligible Adverse** effect which is considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

Hen Harrier

6.5.9 Hen harrier collision mortality has been assessed on the basis of 'at collision risk' flight activity recorded during baseline VP Flight Activity Surveys between March and August 2019 (Year 1 breeding season). No 'at collision risk' hen harrier flights were recorded during baseline surveys between March and August 2020 (Year 2).

6.5.10 A CRM has been completed using a total of five flights which entered the collision risk zone between March and August 2019. An avoidance rate of 99 % was used, in accordance with NatureScot guidance[9].

6.5.11 The CRM predicts a breeding season worst-case mortality of 0.103 (in Year 1, with the mortality rate in Year 2 inconsequential), which equates to 3.39 birds over the lifespan (33 years) of the Proposed Development (see **Technical Appendix 6.1**). This is lower than the estimates in the 2022 EIA Report.

6.5.12 The predicted mortality rate of 0.103 represents 0.29 % and 1.72 % respectively of the most recently published Regional NHZ populations for NHZ11 and NHZ12 (NHZ11 - 36 birds and NHZ12 - six birds[10]).

6.5.13 Following the same assessment methodology from the 2022 EIA Report, the average background mortality rate for hen harrier across the two survey years is 0.74 % and 5.2 % respectively for NHZ11 and NHZ12, based on an average mortality rate of 0.052.

6.5.14 Overall collision mortality risks to hen harrier are therefore considered to represent no more than a long-term, Low/ Medium magnitude of impact at the Regional NHZ population level, resulting in a **Minor Adverse** effect which is considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

Goshawk

6.5.15 Goshawk collision mortality has been assessed on the basis of 'at collision risk' flight activity recorded during baseline VP Flight Activity Surveys between March and August 2019 (Year 1 breeding season), September 2019 to February 2020 (Year 1 non-breeding season) and March to August 2020 (Year 2 breeding season).

6.5.16 CRM have been completed using a total of 16 flights which entered the collision risk zone between March 2019 and August 2020 (nine flights in Year 1 breeding season, four flights in Year 1 non-breeding season and three flights in Year 2 breeding season). An avoidance rate of 98% was used, in accordance with NatureScot guidance[9].

6.5.17 The CRM predicts a breeding season mortality of 0.663 and 0.062, respectively in Year 1 and Year 2, and a non-breeding season mortality of 0.069, which equates to 21.89 and 2.06 birds in the breeding season, and 2.27 birds in the non-breeding season, over the lifespan (33 years) of the Proposed Development (see **Technical Appendix 6.1**).

6.5.18 The predicted breeding season mortality rates of 0.663 and 0.062 represents 5.53 % and 0.52 % respectively of the most recently published Regional NHZ populations for NHZ11 (12 adults), and represents 1.33% and 0.12% respectively of the most recently published Regional NHZ populations for NHZ12 (50 adults). This is lower than the estimates in the 2022 EIA Report.

[9] SNH (2018a). Avoidance rates for the onshore SNH Wind Farm Collision Risk Model. SNH, Inverness.
[10] Note this, and all, NHZ estimates considered in the assessment are taken from Wilson, M.W., Austin, G.E., Gillings, S. and Wernham, C.V. (2015). Natural Heritage Zone Bird Population Estimates. SWBSG Commissioned Report Number SWBSG_1504.

6.5.19 The predicted non-breeding season mortality rate of 0.069 represents 0.58 % and 0.14 % of the respective most recently published NHZ11 (12 adults) and NHZ12 (50 adults) populations. This is lower than the estimates in the 2022 EIA Report.

6.5.20 Following the same assessment methodology from the 2022 EIA Report, the increase in background mortality rates from the Proposed Development were typically 0.5 – 8 % for NHZ11 and NHZ12 populations. The exception to this was the considerably higher estimated NHZ11 mortality rate in the Year 1 breeding season, with a predicted additional breeding season mortality rate for the NHZ11 population attributed to the Proposed Development of 33.15 %. Accipiter species (which includes goshawk) are infrequently found as wind turbine collision fatalities worldwide[11], and therefore it is reasonable to conclude that the scale of collisions predicted for the Proposed Development are unlikely (particularly of the scale predicted for the NHZ11 population). Furthermore, goshawk is a species which is well documented as being difficult to effectively monitor and define discrete breeding populations[12], and there is no systematic monitoring of populations at an NHZ or regional level. As such the presented NHZ populations are not only out of date, but are likely to under-estimate the true goshawk breeding population in the NHZs.

6.5.21 Furthermore, as stated by NatureScot in their application response (see **Table 6.1**), the mortality estimate is likely to be an over-estimation given the CRM assumes that any loss of the goshawk pair present will immediately be replaced with other goshawks, which is considered unlikely. Goshawk flight activity was also notably different between the two years of survey with higher mortality estimates in Year 1 (when a breeding pair were considered active on-site) and very low mortality estimates in Year 2 (likely reflecting the absence of the breeding goshawk pair from the Site). The average breeding season mortality rates of 0.363 is thus considered more appropriate rather than the peak mortality estimate of 0.663, thus equating to a 18.15 % and 4.03 % increase in respective background mortality rates for NHZ11 and NHZ12.

6.5.22 The majority of the goshawk flights (especially in Year 1) were over the commercial plantation forestry on-site. Assuming the plantation forestry on-site continues to be part of a goshawk breeding pair's range during the operational phase of the Proposed Development it is predicted that goshawk flights will continue to be predominantly over forestry, with fewer flights over open habitats (including over key-holed areas cleared to accommodate the Proposed Development), thus further likely reducing the mortality risk for goshawk.

6.5.23 Overall collision mortality risks to goshawk are therefore considered to represent no more than a long-term, Low/ Medium magnitude of impact at the Regional NHZ population level, resulting in a **Minor Adverse** effect which is considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

Black Grouse

6.5.24 The collision mortality assessment is unchanged from the 2022 EIA Report.

Curlew

6.5.25 CRMs for curlew were completed utilising flight activity information from seven flights which occurred 'at collision risk' (three flights in the breeding season in Year 1 and four such flights in Year 2).

6.5.26 Estimated annual collision risks, using an avoidance rate of 98% in accordance with NatureScot guidance[9], equate to approximately 0.014 to 0.088 birds (see **Technical Appendix 6.1**), representing an indiscernible proportion of the most recent nationally published NHZ11 and NHZ12 breeding populations. This is lower than the estimates in the 2022 EIA Report.

6.5.27 Overall collision mortality risks to curlew are therefore considered to represent no more than a long-term, Negligible magnitude of impact at the Regional NHZ population level, resulting in a **Negligible Adverse** effect which is considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

Golden Plover

6.5.28 CRMs for golden plover were completed utilising flight activity information from three flights which occurred 'at collision risk' (three flights in the breeding season in Year 1).

6.5.29 Estimated annual collision risks, using an avoidance rate of 98% in accordance with NatureScot guidance[9], equate to approximately 0.173 birds (see **Technical Appendix 6.1**), representing an indiscernible proportion of the most recent nationally published NHZ11 and NHZ12 breeding populations. This is lower than the estimates in the 2022 EIA Report.

6.5.30 Overall collision mortality risks to golden plover are therefore considered to represent no more than a long-term, Negligible magnitude of impact at the Regional NHZ population level, resulting in a **Negligible**

[11] Watson, R.T. (2018). Raptor interactions with wind energy: case studies from around the world. Journal of Raptor Research 52(1), 1-18.

[12] Woodbridge, B. & Hargis, C.D. (2006). North goshawk inventory and monitoring technical guide. USDA.

Adverse effect which is considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

Lapwing

6.5.31 The collision mortality assessment is unchanged from the 2022 EIA Report.

Potential Decommissioning Effects

6.5.32 The potential decommissioning effects are unchanged from the 2022 EIA Report.

Potential Cumulative Construction Effects

6.5.33 Construction activities at nearby projects in combination with the construction works of the Proposed Development could result in cumulative disturbance and displacement effects on ornithological receptors, providing construction phase of the Proposed Development and other relevant schemes nearby were to overlap. The list of wind farm schemes considered in the cumulative assessment are listed in **Table 6.4**, and this includes schemes such as Clashindarroch Extension (ECU00002143) which has become 'live' since the 2022 EIA Report.

Table 6.4 – Cumulative Wind Farm Developments Identified within 25 km of the Site Considered for Effects on Common Gull [13]

Wind Farm Site Name	Number of Turbines	Maximum Blade Tip (m)
Operational		
Berry Burn	29	100
Cairnborrow	5	100
Clashindarroch	18	110
Dorenell	59	126
Dummuie	7	75
Edintore Wind Farm	6	125
Glens of Foudland	20	78
Hill of Towie	21	100
Kellas	8	110
Kildrummy	8	93
Muirake	2	99.5
Paul's Hill	28	100
Rothes I	22	-
Rothes II	18	125
Consented		
Berry Burn Extension	9	149.9
Clashindarroch II	*14*	*180*
Garbet	*7*	*190*
Hill of Towie II	*16*	*125*
Lurg Hill	5	130
Meikle Hill	6	126.5
Paul's Hill II	7	149.9
Rothes III	29	225
In Planning		
Aultmore Wind Farm redesign	13	110

[13] To be considered for cumulative assessment for common gulls based on 25 km being the range at which effects of onshore wind farm developments on foraging gulls is considered (see Quinn, L.R. 2019. Workshop Report on Gull foraging offshore and onshore: developing apportioning approaches to casework. *Scottish Natural Heritage, Workshop 31st January 2019*).

Cairds Hill Wind Farm	4	180
Clashindarroch Extension	*22*	*180 & 200*
Note: Those wind farm developments within 10 km of the Site, considered for other species [14] are in italics		

6.5.34 The potential for cumulative effects to occur is considered in relation to Clashindarroch II (ECU00000409) and Garbet Wind Farm (21/00020/EIA) which are both consented, and Clashinadarroch Extension, which is in planning/ at appeal. All other wind farms within at least 5 km are operational and therefore would not contribute to cumulative construction effects.

6.5.35 The Clashindarroch II application predicted no significant construction effects on ornithological receptors. An Outline Bird Protection Plan is included as part of the application which aims to avoid/ minimise effects on breeding birds during the construction phase of Clashindarroch II.

6.5.36 Notwithstanding, a high level assessment can be undertaken on the assumption that for any development to proceed, it will be required to comply with legislation and planning policy and a full assessment of effects and subsequent mitigation or compensation will be required, as necessary.

6.5.37 The Clashindarroch Extension application predicted no significant construction effects on ornithological receptors, and although some localised displacement of individual territories of species like black grouse and curlew cannot be entirely precluded, with the adoption of standard mitigation (and availability of alternative suitable breeding habitat), effects on these species will only be anticipated up to a local level.

6.5.38 EIA documentation concerning ornithology for the Garbet Wind Farm has largely been submitted as confidential and thus is not publicly available. Ornithology documentation was requested from NatureScot, who provided this as a redacted document. NatureScot correspondence with the developer for Garbet Wind Farm, confirmed that they were satisfied with the mitigation proposed and that it was appropriate to minimise risks to ornithological features.

6.5.39 Given all proposed wind farms in close proximity to the Proposed Development (within 5 km) propose mitigation to minimise effects on ornithological receptors (particularly breeding birds), the cumulative effects of the Proposed Development in-combination with these other projects are predicted to be short-term, Negligible magnitude of impact, resulting in a **Negligible Adverse** effect, at the regional (NHZ) level (or Tips of Corsemaul and Tom Mor SPA population level for common gull), which is considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

Potential Cumulative Operational Effects

6.5.40 Operational displacement is predicted to be relevant for a very small number of breeding pairs of a narrow range of species. A review of publicly available documentation for those wind farms out to 10 km for species scoped in to this assessment (extended to 25 km for common gull) found no evidence of significant displacement effects on these species. Surveys for Clashindarroch II reported that the development area was used by breeding goshawk, and considered operational effects to be minor adverse, and not significant. Surveys for the Clashindarroch Extension reported that the development area was used by breeding hen harrier (one territory, with another territory within 2 km) and up to four curlew territories, with effects only discerned at the local level (and not significant). All other wind farms reporting negligible adverse effects or did not assess effects on such species. There was no evidence of displacement operational effects on common gull. Therefore, cumulative effects would not be deemed significant at a Regional or National level, in line with NatureScot's primary aims of maintaining the conservation status of species at these population scales[15,16], so operational displacement is discounted from the cumulative assessment.

6.5.41 Only cumulative collision risks for important ornithological features have been considered as being potentially significant for the purposes of this assessment in terms of operational effects. Accordingly, the potential effects on black grouse and lapwing are not considered in the cumulative operational effects due to no collision risk to these species being identified for the Proposed Development.

6.5.42 The geographic scale at which a cumulative assessment of collision risks has been undertaken for common gull is 25 km, which is based on the documented scale typically used to assess effects of onshore wind farms on gulls[8]. For all other species which were subject to CRM Analysis in the assessment a Study Area of 10 km is used to assess cumulative effects given 10 km represents the maximum foraging range of these species, and core foraging ranges for these species are considerably lower[17].

[14] 10 km to be considered for cumulative assessment for all other species given this exceeds the core foraging range for these species (documented in SNH, 2018), and signifies the maximum foraging range.
[15] SNH (2018b). Assessing the Cumulative Impacts of Onshore Wind Farms on Birds. SNH, Inverness.
[16] SNH (2018c). Assessing the significance of impacts from onshore wind farms outwith designated areas. SNH, Inverness.
[17] SNH (2016). Assessing Connectivity with Special Protection Areas. SNH, Inverness.

6.5.43 A summary of predicted cumulative annual collision mortality risks to common gull, hen harrier, goshawk, curlew and golden plover, including the Proposed Development and other wind farm developments (for which CRM Analysis has been undertaken, and is available), is provided in **Table 6.4**. All wind farm developments listed in **Table 6.4** are considered, and this includes schemes such as Clashinadarroch Extension (ECU00002143) which has come 'live' since the 2022 EIA Report. Where the wind farm is not listed in **Table 6.4**, this means that there was no collision risk estimates for the wind farm development, or given the age of the wind farm, the information is no longer publicly available. For the purposes of the assessment in these instances, no collision risk is considered[18,19]. In **Table 6.5** for those species with '-' there are no collision risk estimate and thus this is regarded as negligible for the purpose of the assessment.

6.5.44 Figures presented for other wind farm developments in **Table 6.5.** have not been checked or amended to reflect avoidance rates used within this assessment[20].

6.5.45 Note, the highest annual collision risk estimate is considered worst-case scenario as a precaution, given some wind farm schemes (Clashindarroch Extension) provided information on the highest collision estimate but considered average estimates across the survey years (as provided in brackets in **Table 6.5**). Information is provided in this assessment for the upper and lower range of the annual collision risk estimate and the average across the survey years.

Table 6.5 – Cumulative Collision Risks

Wind Farm	**Annual Collision Risk Estimate**				
	Common Gull	**Hen Harrier**	**Goshawk**	**Curlew**	**Golden Plover**
Craig Watch (the Proposed Development)	0.051 – 0.072 (0.062)	0 – 0.103 (0.052)	0.062 – 0.663 (0.363) 0.069 (Non-Br.)	0.014 - 0.088 (0.051)	0 – 0.173 (0.087)
Muirake	0.25 (95% avoidance)	-	-	-	-
Kildrummy	-	0.015 (99% avoidance)	-	-	-
Cairnborrow	1.898 (95% avoidance)	-	-	0.004 (98% avoidance)	-
Dorenell	0.03 (95% avoidance)	-	-	-	0.02 (98% avoidance)
Hill of Towie II	-	-	-	-	0.97 (98% avoidance)
Clashindarroch	1.33 *(95% avoidance)*	-	0.13 *(98% avoidance)*	-	-
Clashindarroch II	0.005 (99.2% avoidance)	-	0.046 (98% avoidance)	-	-
Clashindarroch Extension	0.13 – 0.36 (0.19) (99.2% avoidance)	0.003 – 0.20 (0.07) (99% avoidance)	0.17 – 0.34 (0.28) (98% avoidance)	0 - 0.4 (0.14)[21] (98% avoidance)	-
Total	**3.694 – 3.945 (3.765)**	**0.018 – 0.318 (0.137)**	**0.477 – 1.248 (0.888)[22]**	**0.018 - 0.492 (0.195)**	**0.99 – 1.163 (1.077)**

Common Gull

6.5.46 Cumulative collision risk estimates for common gull are calculated at 3.694 – 3.945 birds per year (average of 3.765 birds per year), which represents up to 0.065% of the most recent breeding population estimate

[18] In the redacted ornithology documentation for Garbert Wind Farm provided by NatureScot there was no evidence of collision risk modelling, and as such no CRM Analysis is considered to have been undertaken.
[19] This also includes Cairds Hill Wind Farm, and CRM Analysis was not undertaken given the inconsequential number of 'at risk' flights of target species.
[20] Those avoidance figures in *italics* in **Table 6.4** are assumed and not confirmed given the lack of publicly available information with this regard.
[21] Note, the documentation provides an annual collision risk estimate of 0.4, and the states the figure is 0.14 over the three survey years, so the breakdown of the estimate per year is not clear (thus the rate of '0' at least one of the survey years is assumed).
[22] The annual collision risk estimates provided includes the non-breeding estimate for the Proposed Development.

of the Tips of Corsemaul and Tom Mor SPA and SSSI (6,064 adults), and up to an 0.46 % increase in annual baseline mortality of the SPA population.

6.5.47 Overall cumulative collision mortality risks to common gulls are therefore considered to represent no more than a long-term, Negligible magnitude of impact at the breeding Tips of Corsemaul and Tom Mor SPA population level, resulting in a **Negligible Adverse** cumulative effect which is considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

Hen Harrier

6.5.48 Cumulative collision risk estimates for hen harrier are calculated at 0.018 – 0.318 birds per year (average of 0.137 birds per year), which represents up to 0.88 % and 5.3 % of the respective most recent breeding population estimate of NHZ11 (36 adults) and NHZ12 (six adults), and up to a respective 4.54 % and 31.8 % increase in annual baseline mortality of the NHZ11 and NHZ12 breeding estimates. Note, using the average estimate given annual collision risk estimates for the Proposed Development and Clashindarroch Extension varied considerably between survey years, 0.137 birds per year represents 0.38 % and 2.28 % of the recent breeding population estimate of NHZ11 (36 adults) and NHZ12 (six adults). This leads to a respective 1.98% and 13.8% increase in annual baseline mortality of the NHZ11 and NHZ12 breeding population estimates.

6.5.49 Of the wind farm schemes where hen harrier was recorded the Proposed Development identified one local breeding pair, Clashindarroch Extension identified at least two breeding harrier pairs within 2 km of the development site, and Kildrummy Wind Farm identified a likely breeding pair within 5 km. It is reported that fledging success rate for hen harriers is *c*.2.3 young per nest[23], with survival rate to the second year 22 %[24]. Given there are at least four hen harrier nest sites for which birds could be affected by collision risk, it is considered that the four nests may successfully fledge 9.2 birds (4 x 2.3), and at least two of these (22 %) will reach breeding age. This exceeds the annual collision risk estimate of 0.018 – 0.318 (average 0.137), by a factor of 14.6 (based on the average of 0.137), and at least a factor of 6.3 (based on the upper estimate of 0.318).

6.5.50 Overall cumulative collision mortality risks to hen harrier are therefore considered to represent no more than a long-term, Low/ Medium magnitude of impact at the Regional NHZ population level, resulting in a **Minor Adverse** cumulative effect which is considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

Goshawk

6.5.51 Cumulative collision risk estimates for goshawk are calculated at 0.477 – 1.248 birds per year (average of 0.888 birds per year), which represents up to 10.4 % and 2.5 % of the respective most recent breeding population estimate of NHZ11 (12 adults) and NHZ12 (50 adults), and up to a respective 62.4 % and 13.9 % increase in annual baseline mortality of the NHZ11 and NHZ12 breeding estimates.

6.5.52 Given the caveats concerning the goshawk breeding information on which the assessment is based, as detailed in **Sections 6.5.20** to **6.5.22**, overall cumulative collision mortality risks to goshawk are therefore considered to represent no more than a long-term, Low/ Medium magnitude of impact at the Regional NHZ population level, resulting in a **Minor Adverse** cumulative effect which is considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

Curlew

6.5.53 Cumulative collision risk estimates for curlew are calculated at 0.018 – 0.492 birds per year (average of 0.195 birds per year), which represents an indiscernible proportion of the most recent nationally published NHZ11 and NHZ12 breeding populations (respectively 1,322 and 2,815 breeding pairs).

6.5.54 Overall cumulative collision mortality risks to curlew are therefore considered to represent no more than a long-term, Negligible magnitude of impact at the Regional NHZ population level, resulting in a **Negligible Adverse** cumulative effect which considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

Golden Plover

6.5.55 Cumulative collision risk estimates for golden plover are calculated at 0.99 – 1.163 birds per year (average of 1.077 birds per year), which represents an indiscernible proportion of the most recent nationally published NHZ11 and NHZ12 breeding populations (respectively 3,616 and 659 breeding pairs).

6.5.56 Overall cumulative collision mortality risks to golden plover are therefore considered to represent no more than a long-term, Negligible magnitude of impact at the Regional NHZ population level, resulting in a

[23] Etheridge, B. (2020). Heads up for Harriers - Image analysis 2015-2019. NatureScot Research Report No. 1209.
[24] Available at: https://www.bto.org/understanding-birds/welcome-birdfacts [Accessed 16/07/2024]

Negligible Adverse cumulative effect which considered not significant, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

6.6 Mitigation

6.6.1 The mitigation considered is unchanged from the 2022 EIA Report.

6.7 Assessment of Residual Effects

Residual Construction Effects

6.7.1 There would be no change to the predicted residual construction effects as predicted in the 2022 EIA Report.

Residual Operational Effects

6.7.2 There would be no change to the predicted residual operational effects as predicted in the 2022 EIA Report.

6.8 Monitoring

6.8.1 The monitoring proposed is largely unchanged from the 2022 EIA Report. However, following RSPB Scotland's recommendation during the post-submission consultation (see **Table 6.1**) post-construction monitoring will be undertaken to record activity of Schedule 1 raptors (including goshawk). This will likely include targeted VP Flight Activity Surveys and carcass searches, with the programme specifics (including timescales) to be agreed with NatureScot (and other relevant consultees), and to be secured by a planning condition.

6.9 Information to Inform a Habitats Regulations Appraisal

6.9.1 The information to inform a Habitats Regulations Appraisal is largely unchanged from the 2022 EIA Report, and only minor alterations (noted below) with no material change to the assessment required.

6.9.2 The section '*Common gull activity was recorded during the breeding season (March to August), with a total of 388 gull flights recorded during two breeding seasons in 2019 and 2020. The VP flight activity surveys identified Kelman Hill as an area of high common gull activity (particularly used for foraging), with gull movements to the east of the Site to, and from, the SPA (and SSSI) to Kelman Hill apparent. The design of the Proposed Development is sensitive to this established common gull movement route, with a 500 m buffer applied around the main gull movement route where no proposed turbines would be located. Subsequently, only 20 gull flights (out of 338) were recorded 'at collision risk' and subject to CRM Analysis'.* The revised number of common gull 'at collision risk' flights is 17, instead of the original 20.

6.9.3 The CRM Analysis revealed an annual common gull mortality rate of 0.051 to 0.072 birds as a result of the Proposed Development, which is 1.67 to 2.38 gulls over the 33 year lifespan of the Proposed Development.

6.9.4 Cumulatively with other relevant wind farm schemes, the annual common gull mortality is 3.694 to 3.945.

6.9.5 Common gull mortality rates for adult birds is documented as 14%[24], and as such, it is reasonable to consider that the colony of 6,064 would accordingly result in mortality of 849 adult birds. Common gulls recorded during baseline surveys were adult birds, moving to and from the colony, so the additional maximum mortality resulting from the Proposed Development represents a <0.01% (0.0085%) increase in annual background adult common gull mortality rates. Cumulatively with other relevant wind farm schemes, the additional maximum mortality resulting from the Proposed Development represents a 0.46% increase in annual background adult common gull mortality rates. Based on the results of this assessment the Proposed Development is predicted to have a long-term, **Negligible Adverse** effect on the common gulls at the breeding Tips of Corsemaul and Tom Mor SPA population level. Such an increase in mortality would be nugatory and have no meaningful impact at the SPA population level. As such, likely significant effects on common gull through increased collision mortality (for the Proposed Development alone and cumulatively with other relevant wind farms) can be discounted, and so the significance of effects associated with the Proposed Development would remain unchanged from the 2022 EIA Report.

6.10 Summary

6.10.1 Overall there would be no change to the levels of effect on ornithological receptors from those reported in the 2022 EIA Report.

Table 6.6 – Summary of Potential Significant Effects of the Proposed Development

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/Residual Effect
None	N/A	N/A	N/A

6.11 Glossary and Abbreviations

Abbreviation	Expanded Term
CRM	Collision Risk Model
NHZ	Natural Heritage Zone
NPF4	National Planning Framework 4
OWPS	Onshore Wind Policy Statement

Chapter 7: Traffic, Transport and Access

Contents

7 Chapter 1: Introduction

7.1 Introduction

7.1.1 This chapter reports on any changes to likely significant effects with respect to traffic, transport and access associated with the construction, operation and decommissioning of the Proposed Development changes as outlined in **Chapter 2: Changes to Proposed Development**. Where there is no change to the 2022 EIA Report this is stated.

7.1.2 This chapter is supported by the following technical appendix which is referenced in the text where relevant:

- Volume 3: Technical Appendices
  - **Technical Appendix 7.1: Route Survey Report**

7.2 Assessment Methodology and Significance Criteria

Scope of Assessment

7.2.1 The scope of the assessment is unchanged from the 2022 EIA Report.

Consultation

7.2.2 **Table 7.1** summarises the post-submission consultation responses received regarding transport and access matters and provides information on where and/ or how they have been addressed in this assessment.

Table 7.1– Transport & Access Consultation Responses

Consultee and Date	Issue Raised	Response/Action Taken
Aberdeenshire Council – Structures Team 30/06/2023	The developer is required to prepare a Site Specific Route Access Report for all abnormal load movements (vehicles over 44 tonnes Gross Vehicle Weight or width greater than 2.9m or overall length greater than 18.3m), with input from Aberdeenshire Council (Roads-Abnormal Load Routing), Police Scotland, Transport Scotland (for Special Orders) and BEAR Scotland (A90 & A96 Trunk Roads). This shall be submitted at least 3 months prior to the predicted date of turbine delivery. The following details shall be submitted in the plan; 1) Timeframes, delivery port, route details and delivery vehicle details. 2) Proposals for surveying the route including overhead wires and buried cables and for consulting with the appropriate authority regarding suitability. 3) Details of any road widening, bridge strengthening or removal of street furniture required. 4) Proposals for trial run(s) and desktop swept path analysis. 5) Proposed traffic safety measures to be adopted for all movements including confirmation of police escorting at all times. The developer is required to give 1 months advance notice of the exact movement dates so that the route can be checked for planned road works and to re-check all bridges affected.	A detailed report will be provided upon the selection of the finalised turbine. This report would be secured by planning condition.
Aberdeenshire Council – Structures Team 28/06/2023	No comment to make	Noted
Moray Council – Transport Team 14/07/2023	Various comments were noted on the Route Survey Report.	A detailed report will be provided upon the selection of the finalised turbine. The required road upgrade works would then be designed and agreed with the Council prior to Abnormal Load Deliveries (AIL) being made. This report and upgrades would be

Consultee and Date	Issue Raised	Response/Action Taken
		secured by planning condition and delivered through the technical approval process.
	A trial run will be required on completion of the accommodation works to ensure clear and safe passage of AIL, with officers from Moray Council, Police Scotland and other roads authorities given the opportunity to attend and observe.	Agreed. A trial run will be arranged following completion of the road upgrade works.
	The development access must incorporate a visibility envelope rather than the indicative site line shown. A 4.5 m x 160 m visibility splay would be required for this location and in order to provide the required visibility, a significant length of the cut slope along the A941 would be removed. Furthermore, as a result several electricity poles inside the visibility splay would be required to relocate.	The site access junction design would be agreed via planning condition.
	The study area for the assessment has been defined as follows in the Transport Assessment. • A941, to the north of the Site access junction through to Dufftown; • A941, through Dufftown; • A920, between Dufftown and Huntly; and • A96, through Huntly. Therefore, the Transport Assessment does not cover the distribution of construction traffic and routing on the local road network. The consideration of the "C or U" Class routes would be required as local road network would use as a part of the journey to import materials to the site.	The scope of the study network was agreed with Moray Council prior to the submission. A Construction Traffic Management Plan (CTMP) would be prepared post consent and secured by a planning condition which would identify the exact sources of materials and would advise the council of traffic volumes once a contractor has been appointed.
	In the Transport Assessment, it was assumed that 40% of staff would be transported by minibus and 60% would arrive by car. Single car occupancy was assumed as the worst case scenario. While it is agreed that it is desirable for staff to use the mini bus, no details have been provided on how this will be managed to ensure employees use the bus. Previous projects have shown that a high proportion of the workforce will use their own transport as it is more convenient. This will increase the figure of maximum of 44 vehicle trips per day when staff choose to use their own transport. The number of vehicle trips made by staff if no bus was available must be provided as a worst case scenario.	The movement of staff will be controlled by A Staff Travel Plan which would be secured by planning condition. The site does not feature a parking area to cater for all staff arriving by car and extensive single occupancy car trips are not compatible with the sustainable nature of the Proposed Development.
Moray Council – Transport Team 16/11/2022	In the page 23 of the Transport Assessment, it has mentioned that the wear and tear agreement covering only 200m at the new site access. Based on experience with Dorenell, and the post construction road damage repairs part funded by Dorenell, a similar level of damage can be expected especially on the A941 south of Dufftown which in addition to AIL will carry the bulk of other construction related traffic. Any Section 96 wear and tear agreement should cover the entire AiL route plus potentially B9014 to Parkmore and A941 to Craigellachie incl perhaps Bluehill Quarry Road. (Should materials be imported from the Bluehill Quarry)	The extents of the Section 96 agreement is a post consent matter. The Section 96 Wear & Tear agreement will be secured by planning condition.
	There is a few passing references to existing road conditions being of a concern. Roads Maintenance can give no guarantee that these will be addressed in advance of this project as our road resurfacing and edge strengthen capital programme is prioritised based on engineering need, national road condition surveys, traffic volumes and budget allocation,	The condition of the road would be reviewed as part of the Section 96 agreement. Any significant defects would be highlighted to the Council for action or to allow the Applicant to address them, should they be of significance.

Consultee and Date	Issue Raised	Response/Action Taken
	rather than the wishes of a specific planning application.	
	Although there are other comments that it can only be assumed that Moray Council have only a 1m road width, this can only be confirmed from a position of fact established on site often in dialogue with landowners. In general Moray Council deem that the road includes any verges and other clearly man-made embankments or cuttings, which may not coincide with roadside boundary fences.	This is incorrect, it is assumed in the reports that the extents of road adoption are from boundary feature to boundary feature or extend up to 2 m, whichever is the smallest.
	Although trimming of vegetation is mentioned at numerous locations along the access route, we would highly recommend liaison with landowners even if it is considered to be a tree or other vegetation growing within the road verge.	The trimming of vegetation projecting into the limits of road adoption will be addressed with the appropriate authorities, noting however that Moray Council has powers under the Road (Scotland) Act 1984 to act where agreement cannot be reached.
	The A941 especially south of Glacks of Balloch is notorious for blown snow, despite being a recognised Priority 1 route. As a winter maintenance provider Moray Council can therefore give no special winter maintenance service to this length of public road on behalf of the developer.	Noted.
Transport Scotland	No response received	Noted.

Method of Baseline Characterisation

Desk Study

7.2.3 The desk study undertaken for the assessment is unchanged from the 2022 EIA Report.

Field Study

7.2.4 The field study undertaken for the assessment is unchanged from the 2022 EIA Report.

Criteria for the Assessment of Effects

Criteria for Assessing the Sensitivity of Receptors

7.2.5 The criteria for assessing the sensitivity of receptors is unchanged from the 2022 EIA Report.

Criteria for Assessing the Magnitude of Change

7.2.6 The criteria for assessing the magnitude of change is unchanged from the 2022 EIA Report.

Criteria for Assessing Cumulative Effects

7.2.7 The criteria for assessing cumulative effects is unchanged from the 2022 EIA Report.

Criteria for Assessing Significance

7.2.8 The criteria for assessing the significance of effects is unchanged from the 2022 EIA Report.

Limitations and Assumptions

7.2.9 The previously noted limitations and assumptions remain as per the 2022 EIA Report.

7.3 Policy Context

7.3.1 A review of updated policy statements has been undertaken since the publication of the 2022 EIA Report.

National Policy

7.3.2 The National Planning Framework (NPF) is a long-term plan for Scotland that sets out where development and infrastructure is needed in the country. NPF4 sets out the Government's plan looking forward to 2045 that will guide spatial development, set out national planning policies, designate national developments

and highlight regional spatial priorities. It is part of the development plan and so influences planning decisions across Scotland.

7.3.3 NPF4 puts the climate and nature crises at the heart of the Scottish planning system and was adopted in February 2023.

7.3.4 Policy 11 which relates to Energy makes specific reference to the impacts of construction traffic associated with renewable energy projects. Policy 11 states the following:

e) In addition, project design and mitigation will demonstrate how the following impacts are addressed:

- vi. impacts on road traffic and on adjacent trunk roads, including during construction.

7.3.5 The assessment undertaken as part of this SEI Report has taken cognisance of this and provided appropriate mitigation where necessary.

7.4 Baseline

7.4.1 The baseline conditions remain unchanged from the 2022 EIA Report.

7.5 Assessment of Likely Effects

Potential Construction Effects

7.5.1 The revised layout reduces the overall traffic levels associated with the Proposed Development. Traffic volumes are expected to continue to peak at Month 8 of the construction programme, however overall traffic flows will be 146 vehicles (formally 160) per day. Of these, 40 will be car / Light Goods Vehicles (LGV) movements and 106 Heavy Goods Vehicles (HGV).

7.5.2 The reduction in traffic will reduce the overall impact of the Proposed Development on the study area road network. The scale of impact will be reduced to the impacts noted in **Table 7.2**.

Table 7.2– Peak Month Daily Traffic Impact

Survey Location	Cars & LGV	HGV	Total Traffic	Cars & LGV	HGV	Total Traffic
A96, at Huntly	9777	797	10574	0.16%	4.40%	0.47%
A920, west of Cairnborrow	1247	250	1498	1.30%	15.49%	3.42%
A941, in Dufftown	1945	100	2045	0.83%	0.00%	0.79%
A941, north of Dufftown	3603	353	3956	0.45%	0.00%	0.41%
A941, near the proposed Site access junction	276	118	394	16.92%	779.53%	57.89%

7.5.3 The reduction in impact on the study area road links is minimal. The previously reported effects are therefore still valid.

Potential Operational Effects

7.5.4 The operational phase effects are unchanged from the 2022 EIA Report.

Potential Decommissioning Effects

7.5.5 The decommissioning phase effects are unchanged from the 2022 EIA Report.

7.6 Mitigation

Mitigation During Construction

7.6.1 The reduction in traffic impact is minimal, as a result, the proposed mitigation from the 2022 EIA Report is still valid.

7.6.2 The only change in physical mitigation is the requirement for slightly larger over-run and over-sail areas required for the larger turbine blades that are now proposed. Details of these works are provided in **Appendix 7.1.**

Mitigation During Operation

7.6.3 The operational phase mitigation is unchanged from the 2022 EIA Report.

Mitigation During Decommissioning

7.6.4 The commissioning phase mitigation is unchanged from the 2022 EIA Report.

7.7 Assessment of Residual Effects

Residual Construction Effects

7.7.1 The effects are unchanged from the 2022 EIA Report.

Residual Operational Effects

7.7.2 The effects are unchanged from the 2022 EIA Report.

7.8 Assessment of Cumulative Effects

Cumulative Construction Effects

7.8.1 Garbet Wind Farm, located to the north-east of the Proposed Development has been consented since the publication of the 2022 EIA Report. Cumulative traffic effects could be encountered in the unlikely event that construction traffic will use the road network concurrently.

7.8.2 The only road link affected is expected to be the A920. This road is of sufficient standard that the imposition both sets of construction traffic would not have a significant effect on the operation of the road.

7.8.3 Discussions with both Aberdeenshire Council and Moray Council will be held should construction activities coincide. A common approach to wider CTMP measures for both projects could then be considered if both authorities consider this necessary.

Cumulative Operational Effects

7.8.4 The effects are unchanged from the 2022 EIA Report.

Cumulative Decommissioning Effects

7.8.5 The effects are unchanged from the 2022 EIA Report.

7.9 Monitoring

7.9.1 No additional monitoring is required.

7.10 Summary

7.10.1 Traffic associated with the Proposed Development will reduce, however the scale of this reduction is small. The previous effects and mitigation measures therefore remain unchanged.

7.11 Glossary and Abbreviations

Abbreviation	Expanded Term
AIL	Abnormal Indivisible Load
CTMP	Construction Traffic Management Plan
HGV	Heavy Goods Vehicle
LGV	Light goods vehicles
RSR	Route Survey Report

Chapter 8: Noise and Vibration

Contents

8 Noise and Vibration

8.1 Introduction

8.1.1 This chapter reports on any changes to likely significant effects with respect to noise associated with the construction, operation and decommissioning of the Proposed Development changes as outlined in **Chapter 2: Changes to Proposed Development**. Where there is no change to the 2022 EIA Report this is stated.

8.1.2 This chapter is supported by the following figures and technical appendices:

- Volume 2a: Figures
  - **Figure 8.1: Noise Monitoring and Assessment Locations**.
- Volume 3: Technical Appendices
  - **Technical Appendix 8.1: Operational Noise Report**.

8.1.3 Figures and technical appendices are referenced in the text where relevant.

8.2 Assessment Methodology and Significance Criteria

Scope of Assessment

8.2.1 The scope of the assessment is unchanged from the 2022 EIA Report.

Consultation

8.2.2 **Table 8.1** summarises the post-submission consultation responses received regarding noise and provides information on where and/ or how they have been addressed in this assessment.

Table 8.1– Noise Consultation Responses

Consultee and Date	Issue Raised	Response/Action Tacken
EHO at Moray Council, November 2022	Moray Council requested that wind turbine noise source data be shared for proposed candidate turbine, as well as data used for Clashindarroch 2 and Garbet Hill.	Noise source data for the Proposed Development is subject to a Non Disclosure Agreement (NDA), and may be shared with the Council on that basis. Garbet uses the same candidate turbine as the Proposed Development, and the data used for Clashindarroch 2 is available on the website of the developer (Vattenfall).
	A query was raised over the correct application of the IOA GPG topographical corrections.	A requirement to include a concave ground profile correction of +3dB was calculated in accordance with section 4.3.9 of the IOA GPG (July 2011). A barrier correction of -2dB was included where the landform completely obscures a turbine at the noise assessment location. Where analysis indicated that both are required the barrier correction take precedence and a correction of -2dB is applied.
EHO at Moray Council, March 2024	No specific request from Moray Council on noise for this SEI, but due to the change of layout and the nearby Clashindarroch Extension Wind Farm, pro-active work on noise has been undertaken to update the noise assessment.	Consultation letter sent by TNEI in March 2024 to propose the inclusion of Clashindarroch Extension Wind Farm (CEWF) in the cumulative scenario, and the approach of dividing Site Specific Noise Limits between CEWF and the Proposed Development to allow both developments to coexist. No response from the Council was received at the time of writing.
EHO at Aberdeenshire Council, September 2022	Request for missing information: Background noise level scatter plots and lines of best fit.	A number of annexes were ommitted from the 2022 EIA Report submission; these missing annexes have been included (with appropriate revisions) within **Technical Appendix 8.1: Operational Noise Report (Volume 3)**.
	Request for missing information: Noise impact assessment detail, including confirmation of which cumulative developments were considered in the assessment, and what noise source data was used for the predictions.	As above, this detail is provided in **Technical Appendix 8.1: Operational Noise Report (Volume 3)**. Noise source data for the Proposed Development is subject to an NDA, and may be shared with the Council on that basis.

	Query regarding the consideration of consented noise levels in the cumulative noise impact assessment.	TNEI has not assumed that other schemes operate at their consented levels; rather, noise from cumulative developments has been considered in the following manner: Where significant headroom (>5 dB) was available between the likely predicted levels and the Total ETSU-R-97 Noise Limit, a 2 dB buffer was added to the turbine noise predictions for each of the other developments; this is considered to be a suitable buffer in accordance with Section 5.4.11 of the IOA GPG and would represent a 60% increase in emitted noise levels from the other schemes. The resulting 'cautious' predictions of cumulative wind turbine noise were then logarithmically subtracted from the Total ETSU-R-97 Noise Limit to determine the 'residual noise limit'. Graphs presented in **Technical Appendix 8.1: Operational Noise Report (Volume 3)** show the headroom available at each of the noise assessment locations.
	Noise source data considered within the noise impact assessment was requested for varification.	Noise source data for the Proposed Development is subject to an NDA, and may be shared with the Council on that basis.
EHO at Aberdeenshire Council, March 2024	No specific request from Aberdeenshire Council on noise for this SEI, but due to the change of layout and the proposed nearby Clashindarroch Extension Wind Farm, pro-active work on noise has been undertaken to update the noise assessment.	Consultation letter sent by TNEI in March 2024 to propose the inclusion of Clashindarroch Extension Wind Farm (CEWF) in the cumulative scenario, and the approach of dividing Site Specific Noise Limits between CEWF and the Proposed Development to allow both developments to coexist.No response from the Council was received at the time of writing.

Method of Baseline Characterisation

Desk Study

8.2.3 The desk study undertaken for the assessment is unchanged from the 2022 EIA Report.

Field Study

8.2.4 The field study undertaken for the assessment is unchanged from the 2022 EIA Report.

Criteria for the Assessment of Effects

Criteria for Assessing the Sensitivity of Receptors

8.2.5 The criteria for assessing the sensitivity of receptors is unchanged from the 2022 EIA Report.

Criteria for Assessing the Magnitude of Change

8.2.6 The criteria for assessing the magnitude of change is unchanged from the 2022 EIA Report.

Criteria for Assessing Cumulative Effects

8.2.7 The criteria for assessing cumulative effects is unchanged from the 2022 EIA Report.

Criteria for Assessing Significance

8.2.8 The criteria for assessing the significance of effects is unchanged from the 2022 EIA Report.

Limitations and Assumptions

8.2.9 Limitations and assumptions are unchanged from the 2022 EIA Report.

8.3 Policy Context

National Policy

8.3.1 Since the submission of the 2022 EIA Report, the National Planning Framework 4 (NPF4) was published in 2023. NPF4 supersedes the Draft NPF4 referenced in the 2022 EIA Report.

8.3.2 In relation to noise, NPF4 Policy 11 states:

'a) Development proposals for all forms of renewable, low-carbon and zero emissions technologies will be supported. These include:

... impacts on communities and individual dwellings, including, residential amenity, visual impact, noise and shadow flicker'

8.3.3 The introduction of NPF4 did not change the requirements for the noise assessment, and ETSU-R-97 *'The Assessment and Rating of Noise from Wind Farms (1996)'* and the Institute of Acoustics issued *'A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise'* (IOA GPG) remain the relevant guidelines to use for wind farm noise.

Regional and Local Policy

8.3.4 The regional and local policy relevant to the noise assessment is unchanged from the 2022 EIA Report.

8.4 Baseline

8.4.1 The baseline is unchanged from the 2022 EIA Report. It should be noted that the Section 36 application for the Clashindarroch Extension Wind Farm was submitted in 2023 however this does not constitute a change to the baseline noise environment, for which background noise levels are defined in the absence of any wind turbine noise.

8.5 Assessment of Likely Effects

Potential Construction Effects

8.5.1 The removal of turbine T9 and associated access track would result in reduced construction noise effects, compared to those reported in the 2022 EIA Report.

8.5.2 The location and design of the proposed substation has changed compared to the 2022 EIA Report. The proposed substation is larger than that proposed in 2022, however there will be no Battery Energy Storage System (BESS) component, and the substation is located at a substantially greater distance from the nearest noise sensitive receptor (approximately 500 m in the 2022 EIA Report compared to over 1.1 km for the revised design). As such, the changes to the design and location of the proposed substation would result in reduced construction noise effects, compared to those reported in the 2022 EIA Report.

8.5.3 The construction noise assessment contained within the 2022 EIA Report and the associated Technical Appendix 11.1 therefore presents a conservative assessment, and as such no further assessment work is required.

Potential Operational Effects

8.5.4 The following changes to the assessment of operational noise effects have been made.

Removal of the BESS

8.5.5 A BESS is no longer being considered as part of the Proposed Development; therefore no assessment of BESS noise is required as part of this SEI.

Removal of Turbine T9

8.5.6 Turbine T9 has been removed from the layout of the Proposed Development. No other changes have been made to the proposed layout coordinates from those detailed in the 2022 EIA Report.

Change of Candidate Wind Turbine

8.5.7 The client's preferred candidate wind turbine has changed from a Siemens Gamesa SG 6.6-155 on a 122m hub (previously) to a Nordex N163 6.X 7 MW with a hub height of 118.5 m. The Total ETSU-R-97 Noise Limits presented in the 2022 EIA Report considered a hub height of 125 m, and as such, are applicable for any proposed hub up to 125 m. For a hub height below 125 m, these limits would in fact be considered conservative.

8.5.8 It should be noted that the maximum sound power level of the Nordex N163 6.X 7 MW is 108.6 dB, whereas the maximum sound power level of the Siemens Gamesa SG 6.6-155 considered in the 2022 EIA Report was 107 dB. As such, predicted noise levels presented in this Chapter are higher at some receptors than in the 2022 EIA Report, despite the removal of Turbine T9.

Additional Cumulative Development – Clashindarroch Extension Wind Farm

8.5.9 An additional nearby wind development has been considered for cumulative noise as part of the updated operational noise assessment. Clashindarroch Extension Wind Farm (CEWF) was submitted into the consenting system in 2023 and consists of 22 turbines with tip heights ranging between 180 m and 200 m. CEWF is located approximately 3.5 km to the southeast of the Proposed Development.

Additional Noise Assessment Locations

8.5.10 The CEWF noise assessment considered a number of noise sensitive receptors located to the south, between CEWF and the Proposed Development, and four ofthese have now been included in the updated

Operational Noise Assessment (**Technical Appendix 8.1: Operational Noise Report, Volume 3**). The additional four Noise Assessment Locations (NALs) are closer to CEWF than the Proposed Development and are presented in

8.5.11 **Table** 8.2 and **Figure 8.1**.

Table 8.2– Additional Noise Assessment Locations

Noise Assessment Location (NAL)	Easting (m)	Northing (m)	Elevation (m AOD)	Approximate Distance to Nearest Craig Watch Turbine* (m)	Background Noise Data Used
NAL21 - Meikle Gouls	341912	834780	266	2,650 (T11)	Measured at Oldtown of Corinacy, as used in CEWF Noise EIAR.
NAL22 - Tomnaven	340420	833468	266	2,043 (T5)	
NAL23 - Hillock of Echt	339880	832476	259	2,456 (T5)	
NAL24 – Pyke	339302	831897	269	2,541 (T2)	

8.5.12 Noise limits for these additional NALs were based on background noise level data presented for the CEWF noise assessment (as in the 2023 Environmental Statement) for the property Oldtown of Corinacy. The CEWF background noise data was referenced to a hub height of 120 m, and as such can be assumed valid for any hub heights up to 120 m.

8.5.13 Due to the removal of Turbine T9, the change of preferred candidate turbine and the nearby CEWF planning application submission in 2023, a revised operational noise assessment has been undertaken, which is included in **Technical Appendix 8.1: Operational Noise Report (Volume 3)**.

Assessment of Operational Effects

Setting the Total ETSU-R-97 Noise Limits (Stage 1)

8.5.14 Total ETSU-R-97 Noise Limits have been established in line with the methodology outlined in the 2022 EIA Report and detailed in **Technical Appendix 8.1: Operational Noise Report (Volume 3)**.

Predicting the Likely Effects and the Requirement for a Cumulative Noise Assessment (Stage 2)

8.5.15 A likely cumulative noise assessment was undertaken at 24 NALs (the 20 NALs considered in the 2022 EIA Report and the additional 4 NALs presented in

8.5.16 **Table** 8.2). The results of the cumulative assessment are presented in **Technical Appendix 8.1: Operational Noise Report (Volume 3)** and show that the Proposed Development can operate concurrently with the operational, consented or proposed wind farms near to the NALs, whilst still meeting the Total ETSU-R-97 Noise limits established in accordance with ETSU--R--97 at all NALs. Therefore, there would be **no significant effects**.

Operational Phase - Derivation of Site Specific Noise Limits for the Development (Stage 3)

8.5.17 As per the original noise assessment in the 2022 EIA Report, this updated assessment considers potential noise conditions that could apply for the Proposed Development operating on its own. For this purpose, some form of apportionment was calculated to create Site Specific Noise Limits (SSNL) at each NAL. The SSNLs are typically equal or in most case lower than the TNLs, apportionment rules depend on the cumulative context of each NALs and have been detailed in the updated noise assessment.

8.5.18 The Proposed Development's SSNLs were compared to the predictions of the Proposed Development operating on its own and the results are summarised for the daytime and for the night-time in **Technical Appendix 8.1: Operational Noise Report (Volume 3)**. The SSNLs and predictions are also shown on **Figures A1.4a–x** in **Technical Appendix 8.1: Operational Noise Report (Volume 3)**.

8.5.19 Predicted noise levels indicate that at all noise assessment locations wind turbine noise immission were below the Site Specific Noise Limits when considering the Nordex N163 6.X 7 MW as a candidate turbine. An exceedance (up to 1.4 dB) of the SSNL was predicted at a wind speed of 6-7 ms^{-1} during the daytime period at NAL6 and NAL7, and also at NAL18, NAL19 and NAL20 (up to 0.4 dB) at 7 ms^{-1}. Therefore if using this candidate at the Site, some of the nearest wind turbines to these identified NALs would need to be operated in a lower noise mode, only in daytime 6-7 ms^{-1} and for certain wind directions. The predictions presented in this report incorporate the required low noise mode operation therefore the assessment shows that SSNLs are met at all NALs and in all conditions. Depending on the final turbine selected for the Site and confirmation of final warranted levels from chosen, manufacturer mode management may or may not be required. As such there would be **no significant effects**.

8.5.20 This is a similar outcome to the 2022 EIA Report which already identified the potential need for lower noise mode for the previous layout (which included Turbine T9) and previous candidate (SG 6.6-155) in the same

time period, and wind speeds. Due mostly to the new candidate now being slightly louder, the exceedances are slightly higher than previously and at a few more receptors. The other change is the inclusion of CEWF now means that the SSNLs for NALs to the south (between CEWF and the Proposed Development) have now been updated accordingly and there are now less margins than previously at these NALs.

Potential Cumulative Effects

8.5.21 The result of the likely cumulative operational noise assessment show that the Proposed Development can operate concurrently with the operational, consented or proposed wind farms (inclusive of Clashindarroch Wind Farm Extension) near to the NALs, whilst still meeting the Total ETSU-R-97 Noise limits at all NALs. There would be **no significant cumulative operational noise effects**.

Potential Decommissioning Effects

8.5.22 The assessment of decommissioning noise effects is unchanged from the 2022 EIA Report.

8.6 Mitigation

Mitigation During Construction

8.6.1 Mitigation relating to construction is unchanged from the 2022 EIA Report.

Mitigation During Operation

8.6.2 The exact make and model of wind turbine to be used at the Proposed Development would be the result of a future tendering process. Achievement of the noise limits determined by this assessment would be a key determining factor in the final choice of wind turbines for the Site. In order to present a conservative assessment of noise immission, predictions of wind turbine noise have been based upon sound power level data for the current client's preferred candidate wind turbine (the Nordex N163 6.X 7 MW with serrated trailing edge blades) currently being considered for the Site, and a noise prediction model procedure that can be considered to provide a realistic impact assessment. The mitigation requirements are nearly identical to the 2022 EIA Report, depending on the final choice of turbine there may be a requirement for using a limited amount of low noise modes in very specific conditions (i.e. daytime only, specific wind speeds and directions).

8.6.3 It is recommended that, should the Proposed Development receive consent, SSNL values be included within a suitably worded Planning Condition.

Mitigation During Decommissioning

8.6.4 Mitigation relating to decommissioning is unchanged from the 2022 EIA Report.

8.7 Assessment of Residual Effects

Residual Construction Effects

8.7.1 Residual construction noise effects are unchanged from the 2022 EIA Report.

Residual Operational Effects

8.7.2 The selection of appropriate wind turbine model operating with or without low noise modes will form part of the operational noise mitigation. The final choice should be able to demonstrate noise predictions below the SSNLs (or appropriate limits imposed in planning conditions) before construction. Therefore, it is considered that with the implementation of noise conditions and noise mitigation measures, there would be **no significant residual effects**.

8.7.3 At some locations, under some wind conditions and for a certain proportion of the time operational wind farm noise would be audible; however, it would be at an acceptable level in relation to the ETSU-R-97 guidelines and there would be **no significant residual effects**.

Residual Cumulative Effects

8.7.4 The noise assessment has considered cumulative noise as an integral part of the assessment, therefore the above conclusion are applicable and there would be **no significant residual operational noise effects**.

Residual Decommissioning Effects

8.7.5 Residual decommissioning noise effects are unchanged from the 2022 EIA Report.

8.8 Monitoring

8.8.1 Operational phase monitoring requirements remain unchanged from the 2022 EIA Report; any noise monitoring requirement would be triggered by a noise complaint investigation, and no regular noise monitoring is proposed.

8.9 Summary

8.9.1 The guidance contained within ETSU-R-97 was used to assess the likely operational noise impact of the Proposed Development, as per the original 2022 EIA Report. The main changes with regards to noise are the removal of Turbine T9 in the layout, the change of current preferred candidate turbine (which is louder than previous) and the cumulative context with Clashindarroch Extension Wind Farm submitted in 2023 and now considered in this assessment.

8.9.2 Predicted levels and measured background noise levels indicate that for dwellings neighbouring the Site, wind turbine noise would meet the noise criteria established in accordance with ETSU-R-97, therefore the operational noise impact is not significant (the same conclusion as 2022 EIA Report). Overall the mitigation requirements are nearly identical to the 2022 EIA Report, depending on the final choice of turbine there may be a requirement for using a limited amount of low noise modes in very specific conditions (i.e. daytime only, specific wind speeds and directions).

8.9.3 There are a range of wind turbine models that may be appropriate for the Proposed Development. If the proposal receives consent, further data would be obtained from the supplier for the final choice of wind turbine make and model to demonstrate compliance with the operational noise limits derived in this report and imposed as part of planning conditions. It is recommended that SSNL values be included within a suitably worded Planning Condition.

Table 8.3– Summary of Potential Significant Effects of the Proposed Development

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/Residual Effect
Operation			
Potential operational noise effects on noise sensitive receptors (NALs 1 to 5, 8 to 17 and 21 to 24)	No material changes compared to the 2022 EIA Report. Specific noise mitigation measures are not required. Noise condtions should adopt limits in this report and predictions for final choice of turbine should meet conditioned limits.	N/A	Not Significant
Potential operational noise effects on noise sensitive receptors (NAL 6 to 7, and 18 to 20)	No material changes compared to the 2022 EIA Report. Depeding on final choice of turbine, the use of low noise modes may be required for daytime and certain wind speeds and wind directions. Noise condtions should adopt limits in this report and predictions for final choice of turbine should meet conditioned limits.	Turbine control system	Not Significant
Potential cumulative operational noise effects on noise sensitive receptors	As above – cumulative noise is considered as an integral part of the assessment.	N/A	Not Significant

8.10 Glossary and Abbreviations

Term	Definition
NAL	Noise Assessment Location
CNAL	Construction Noise Assessment Location
BNAL	Battery Energy Storage System Noise Assessment Location
NML	Noise Monitoring Location
IOA	Institute of Acoustics
GPG	Good Practice Guide
dB	Decibels
MC	Moray Council
AC	Aberdeenshire Council
EHO	Environmental Health Officer
ECU	Energy Consents Unit
FML	Fixed minimum limit

Chapter 9: Aviation and Telecommunications

Contents

9 Introduction

9.1 Introduction

9.1.1 This chapter reports on any changes to likely significant effects with respect to aviation and telecommunications associated with the construction, operation and decommissioning of the Proposed Development changes as outlined in **Chapter 2: Changes to Proposed Development**. Where there is no change to the 2022 EIA Report this is stated.

9.1.2 This chapter is supported by the following technical appendix:

- Volume 3: Technical Appendices
  - **Technical Appendix 9.1: Summary of Consultation with the Civil Aviation Authority (CAA)**

9.2 Assessment Methodology and Significance Criteria

Scope of Assessment

9.2.1 The scope of the assessment is unchanged from the 2022 EIA Report.

Consultation

9.2.2 **Table 9.1** summarises the post-submission consultation responses received regarding aviation and telecommunications and provides information on where and/ or how they have been addressed in this assessment.

Table 9.1 – Aviation and Telecommunications Consultation Responses

Consultee and Date	Issue Raised	Response/Action Taken
Aberdeen Airport (23 June 2022)	Aberdeen International Airport has no objection to the proposal. Given the nature of the Proposed Development it is possible that a crane may be required during construction. We would, therefore, draw the Applicant's attention to the requirement within the British Standard Code of Practice for the safe use of Cranes, for crane operators to consult the aerodrome before erecting a crane in close proximity to an aerodrome. This is explained further in Advice Note 4 – Cranes (available at https://www.aoa.org.uk/policy-campaigns/operations-safety/).	Noted.
BT (1 July 2022)	The conclusion is that, the Proposed Development indicated should not cause interference to BT's current and presently planned radio network.	Noted.
Defence Infrastructure Organisation (5 August 2022)	The turbines will be 38.5 km from, detectable by, and will cause unacceptable interference to the ATC radar used by RAF Lossiemouth. Close examination of the proposal has indicated that the proposed turbines would have a significant and detrimental effect on operations and on the provision of air traffic services at RAF Lossiemouth. Reasons for this objection include, but are not limited to: a) Restrictions the development would impose upon approach and arrival procedures b) Restrictions the development would impose upon LARS/ZONE traffic patterns c) Restrictions the development would impose upon special tasks conducted by the Unit d) Restrictions the development would impose upon aircraft operating areas e) The position of the development in relation to high ground/sensitive areas; including changes to the Surveillance Minima Altitude Chart	Noted. A proposal for technical mitigation of effects on the Royal Air Force (RAF) Lossiemouth primary surveillance radar (PSR) was submitted to the Ministry of Defence (MoD) in December 2022, as outlined in paragraph 12.5.3. A response is awaited. A proposal for technical mitigation of effects on the Buchan air defence radar, as outlined in paragraph 12.5.6 of the 2022 EIA Report, was submitted to the MoD in February 2023 and accepted by them in April 2023. The mitigation scheme will be secured by an appropriately worded planning condition. Effects on military low flying will be addressed by provision of lighting on the turbines, as outlined in paragraphs 12.5.1 to 12.5.5 of the 2022 EIA Report, and by compliance with the legal requirement to notify details of the development to ensure that it is marked on aeronautical charts.

	f) The MOD's future airspace and operational requirements g) The frequency of the provision of Traffic Service and Deconfliction Service in the vicinity of the proposed windfarm h) Air traffic density in the vicinity of the proposed windfarm i) Existing clutter or windfarms in the vicinity of the proposed windfarm j) The type and characteristics of aircraft routinely using the airspace in the vicinity of the proposed windfarm k) The performance of the radar l) The complexity of the ATC task m) Air Traffic Services provided by RAF Lossiemouth controllers to RAF Lossiemouth aircraft n) The proximity of light aircraft, microlight, glider or para dropping sites o) The position of the development in relation to handover points The turbines will be 72.9 km from, detectable by, and will cause unacceptable interference to the AD radar at RRH Buchan. Reasons for this objection include, but are not limited to: 1. Several of the turbines within the development being RLOS. 2. The quantity of the turbines visible to the radar at RRH Buchan would exceed our 'cumulative effect' thresholds. In this case the development falls within Low Flying Area 14 (LFA 14), an area within which fixed wing aircraft may operate as low as 250 feet or 76.2 metres above ground level to conduct low level flight training. The addition of turbines in this location has the potential to introduce a physical obstruction to low flying aircraft operating in the area. As a minimum the MOD would require that the development be fitted with MOD accredited aviation safety lighting in accordance with the Air Navigation Order 2016.	
Joint Radio Company (22 June 2022)	The proposal is cleared with respect to radio link infrastructure by Scottish Hydro (Scottish & Southern Energy) and Scotia Gas Networks. JRC does not foresee any potential problems based on known interference scenarios and the data provided.	Noted.
NATS (23 June 2022)	The proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal.	Noted.
Civil Aviation Authority (CAA) (9 September 2023)	The CAA agrees a variation to the lighting requirements specified in the ANO Article for the Craig Watch wind farm, under provisions given in the Air Navigation Order (ANO) Article 222 section 6, as per the following: • medium intensity steady red (2000 candela) lights on the nacelles of turbines T01, T02, T04, T07, T08 and T11; • a second 2000 candela light on the nacelles of the above turbines to act as alternates in the event of a failure of the main light; • the lights on these turbines to be capable of being dimmed to 10% of peak intensity when the lowest visibility as measured at suitable points around the wind farm by visibility measuring devices exceeds 5km; • infra-red lights to MoD specification installed on the nacelles of turbines T01, T02, T03, T04, T05, T06, T07, T08, T10 and T11;	Noted

	• Intermediate level 32 candela lights are not required to be fitted on the turbine towers.	

Method of Baseline Characterisation

9.2.3 The method of baseline characterisation is unchanged from the 2022 EIA Report.

Criteria for the Assessment of Effects

9.2.4 The criteria for the assessment of effects are unchanged from the 2022 EIA Report.

9.3 Baseline

9.3.1 The aviation and telecommunications baseline is unchanged from the 2022 EIA Report.

9.4 Assessment of Likely Effects

Potential Construction Effects

9.4.1 The potential effects on aviation and telecommunications during the construction phase are unchanged from the 2022 EIA Report.

Potential Operational Effects

9.4.2 The potential effects on the radar at Remote Radar Head (RRH) Buchan, military low flying and telecommunications during the operational phase are unchanged from the 2022 EIA Report.

9.4.3 Potential effects on the RAF Lossiemouth PSR were not considered in the 2022 EIA Report since this was not raised as a concern in the scoping response from the MoD. Following the MoD's objection to the Proposed Development on grounds of effects on the RAF Lossiemouth PSR, further assessment was undertaken which concluded that Turbines 6, 7, 8, 9 and 10 of the 2022 Proposed Development would be within line of sight of the radar and therefore had the potential to generate false targets on the radar and reduce the probability of detection of real aircraft targets in the airspace overhead the Proposed Development. However, the RAF Lossiemouth PSR is a newly installed Thales STAR-NG which has enhanced capability to filter out unwanted targets such as wind turbines. Trials of this type of radar at RAF Spadeadam and Cambridge Airport have demonstrated its capability to maintain an acceptable false alarm rate and continue to track aircraft targets overhead wind farms that are within line of sight of the radar. It was concluded that the potential effects of the 2022 Proposed Development on the RAF Lossiemouth PSR would be **minor** and therefore not significant.

9.4.4 The removal of Turbine 9 from the Proposed Development would reduce the number of turbines that are within potential line of sight of the RAF Lossiemouth PSR from five to four – a reduction of 20%. This would further reduce the probability of any of the Proposed Development turbines being displayed as a target on the radar and would also reduce the potential for the radar to have a degraded probability of detection of real aircraft targets overhead the Proposed Development. It is concluded that the potential effects of the Proposed Development on the RAF Lossiemouth PSR would continue to be **minor** and therefore not significant.

Potential Decommissioning Effects

9.4.5 The potential effects on aviation and telecommunications during the decommissioning phase are unchanged from the 2022 EIA Report.

9.5 Mitigation

Mitigation During Construction

9.5.1 CAA and MoD approval was obtained for a reduced lighting scheme on the 2022 Proposed Development. This included visible spectrum lighting on Turbine 9, which has now been removed from the Proposed Development. As a result, the reduced lighting scheme has been redesigned and re-submitted to the CAA for approval. The revised proposed lighting scheme consists of MoD-approved infra-red lights on all

turbines and visible spectrum 2000 candela lights located on the nacelles of Turbines 1, 2, 4, 7, 8 and 11. The CAA approved the revised scheme on 9 September 2023.

Mitigation During Operation

9.5.2 Mitigation of the effects on the RRH Buchan radar are unchanged from the 2022 EIA Report.

9.5.3 A proposal for mitigation of the effects of the Proposed Development on the RAF Lossiemouth PSR was submitted to the MoD for approval in December 2022. The proposal consists of the use of the inherent wind turbine processing capabilities of the Thales STAR-NG radar.

Mitigation During Decommissioning

9.5.4 Mitigation of the potential effects on aviation and telecommunications during the decommissioning phase is unchanged from the 2022 EIA Report.

9.6 Assessment of Residual Effects

9.6.1 The residual effects of the Proposed Development on the RAF Lossiemouth PSR would be **None** during construction and decommissioning and **Minor** during operation once mitigation has been applied.

9.6.2 All other residual effects on aviation and telecommunications are unchanged from the 2022 EIA Report.

9.7 Summary

9.7.1 **Table 9.2** summarises the changes in effects on aviation and telecommunications from the Proposed Development. All other effects are unchanged from the 2022 EIA Report.

Table 9.2 – Summary of Potential Significant Effects of the Proposed Development

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome/Residual Effect
Degraded performance of RAF Lossiemouth PSR	Use of inherent processing capabilities of radar	Secured by appropriately worded planning condition	Minor, Not significant

9.8 Glossary and Abbreviations

Term/abbreviation	Meaning
AD	Air defence
ATC	Air traffic control
JRC	Joint Radio Company
MoD	Ministry of Defence
LARS	Lower Airspace Radar Service
LFA	Low Flying Area
NERL	NATS En Route plc
PSR	Primary surveillance radar
RAF	Royal Air Force
RLOS	Radar line of sight
RRH	Remote Radar Head

Chapter 10: Socioeconomics

Contents

10 Socioeconomics

10.1 Introduction

10.1.1 This chapter reports on any changes to likely significant effects with respect to socio-economic indicators and tourism associated with the construction, operation and decommissioning of the Proposed Development changes as outlined in **Chapter 2: Changes to Proposed Development**. Where there is no change to the 2022 EIA Report, this is stated.

10.2 Assessment Methodology and Significance Criteria

Scope of Assessment

10.2.1 The scope of the assessment is unchanged from the 2022 EIA Report.

Consultation

10.2.2 No post-submission consultation responses have been received regarding socio-economic factors.

Method of Baseline Characterisation

Extent of the Study Area

10.2.3 The extent of the study area for the assessment is unchanged from the 2022 EIA Report.

Desk Study

10.2.4 The desk study undertaken for the assessment is unchanged from the 2022 EIA Report.

Criteria for the Assessment of Effects

Criteria for Assessing the Sensitivity of Receptors

10.2.5 The criteria for assessing the sensitivity of receptors is unchanged from the 2022 EIA Report.

Criteria for Assessing the Magnitude of Change

10.2.6 The criteria for assessing the magnitude of change is unchanged from the 2022 EIA Report.

Criteria for Assessing Cumulative Effects

10.2.7 The criteria for assessing cumulative effects is unchanged from the 2022 EIA Report.

Criteria for Assessing Significance

10.2.8 The criteria for assessing the significance of effects is unchanged from the 2022 EIA Report.

Limitations and Assumptions

10.2.9 The limitations and assumptions for assessing the significance of effects is unchanged from the 2022 EIA Report.

10.3 Baseline

Current Baseline

Operational Wind Farms

10.3.1 The operational wind farm baseline surrounding the Proposed Development remains the same as stated in the 2022 EIA Report.

Population and Demographics

10.3.2 The key settlements in close proximity to the Proposed Development remain as stated within the 2022 EIA Report, however more recent baseline data is now available and is therefore provided below.

10.3.3 The Moray side of the Site is located in the Speyside Glenlivet Electoral Ward, which includes the villages of Dufftown, Aberlour and Craigellachie. In 2021, the population of this area was estimated to be 9,096[1], whilst the total population of the Moray Council area was estimated to be 96,410 (to the end of June 2021), an increase of 0.7 % from 95,710 in 2020[2]. In general, the Moray population trend between 2001 and 2021

[1] https://statistics.gov.scot/atlas/resource?uri=http%3A%2F%2Fstatistics.gov.scot%2Fid%2Fstatistical-geography%2FS13003024 [accessed 01/06/2023]
[2] https://www.nrscotland.gov.uk/files//statistics/council-area-data-sheets/moray-council-profile.html [Accessed 01/06/2023]

was one of increase, with an overall population increase of 10.8 %. Over the same period, Scotland's population increased by 8.2 %[2].

10.3.4 The Aberdeenshire side of the Site is located in the Huntly, Strathbogie and Howe of Alford Ward, which includes the town of Huntly and the village of Rhynie. In 2021, the population of this area was estimated to be 16,629 ,whilst the total population of the Aberdeenshire Council area was estimated to be 262,690[3]. The Aberdeenshire population as a whole saw a slight increase of 0.7 % from 2020 to 2021. In general, the population trend between 2001 and 2021 was one of increase, with an overall population increase of 15.8 %. Over the same period, Scotland's population rose by 8.2 %[4].

10.3.5 Population projections for Aberdeenshire and Moray remain unchanged from the 2022 EIA Report. Updated population projections based on 2020 data are available for Scotland, however for comparison purposes with Aberdeenshire and Moray, the 2018 projections are used to define the baseline for this assessment.

Economic Activity

10.3.6 Economic indicators for Moray and Aberdeenshire, compared against Scotland are presented in **Table 10.1**. The economic activity rate is higher in Moray (80.4 %) and Aberdeenshire (82.3 %) compared to Scotland as a whole (77.1 %). The unemployment rates in Aberdeenshire (3%) are lower than that of Scotland (3.5 %) as a whole, which Moray are in line with. The gross weekly pay of those in full time employment in Moray is the lower at £598.80 compared with Scotland as a whole (£640.30) and Aberdeenshire at £709.40.

Table 10.1– Economic Indicators in Aberdeenshire[5] , Moray[6] and Scotland[7,8] (Jan 2022 – Dec 2022)

	Aberdeenshire	**Moray**	**Scotland**
Economic Activity Rate (%)	82.3	80.4%	77.1
Unemployment Rate (%)	3	3.4	3.4
Gross Weekly Pay (Full Time) (£) (2022)	709.4	598.8	640.3

Employment and Economy Sectors

10.3.7 The regional and national employment structure in 2021 is provided in Table 11.2. Total employment in Moray was approximately 47,400 (76.6 % of the population) and approximately 136,800 (78.1 % of the population) in Aberdeenshire.

10.3.8 In Moray, 17.1 % of the population are employed within the manufacturing sector, wholesale and retail trade and human health and social work sector. Within Aberdeenshire, 15 % of the population are employed within wholesale and retail trade and repair of motor vehicles and motorcycles, with 13 % in the manufacturing sector. These percentages are largely similar to that of Scotland with 14.4 % employed within wholesale and retail trade and repair of motor vehicles and motorcycles and 15.9 % in human health and social work activities. Moray and Aberdeenshire both have a higher proportion of the population employed within the manufacturing sector compared against the national average (7.1 %).

10.3.9 Employment by sector for both local authorities and Scotland is summarised in **Table 10.2**.

[3] https://statistics.gov.scot/atlas/resource?uri=http%3A%2F%2Fstatistics.gov.scot%2Fid%2Fstatistical-geography%2FS13002861 [Accessed 01/06/2023]
[4] https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/aberdeenshire-council-profile.html [accessed 01/06/2023]
[5] https://www.nomisweb.co.uk/reports/lmp/la/1946157406/printable.aspx [Accessed 01/06/2023]
[6] https://www.nomisweb.co.uk/reports/lmp/la/1946157424/report.aspx#tabempocc [Accessed 01/06/2023]
[7] https://www.nomisweb.co.uk/reports/lmp/la/1946157406/printable.aspx [Accessed 01/06/2023]
[8] https://www.nomisweb.co.uk/reports/lmp/la/1946157424/report.aspx#tabempocc [Accessed 01/06/2023]

Table 10.2 – Employment by Sector in Aberdeenshire[9], Moray[10] and Scotland [11,12] (2021)

Sector	Percentage of Total (%) (Aberdeenshire)	Percentage of Total (%) (Moray)	Percentage of Total (%) (Scotland)
Manufacturing	13	17.1	7.1
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	15	17.1	14.4
Human Health and Social Work Activities	10	17.1	15.9
Professional, Scientific and Technical Activities	10	3.6	6.5
Education	9	10	8.7
Accommodation and Food Service Activities	6	7.1	7.6
Construction	9	7.1	6.1
Administrative and Support Service Activities	5	3.6	8
Public Administration and Defence; Compulsory Social Security	3.5	6.4	6.6

Accomodation

10.3.10 The accommodation baseline remains unchanged from the 2022 EIA Report.

Future Baseline

10.3.11 Future baseline context remains unchanged from the 2022 EIA Report.

10.4 Assessment of Likely Effects

Potential Construction Effects

10.4.1 As the overall capacity of the Proposed Development is still within the range considered in the 2022 EIA Report (i.e. 66-77 MW), the potential construction effects from the Proposed Development are unchanged from the 2022 EIA Report.

Potential Operational Effects

10.4.2 As the overall capacity of the Proposed Development is still within the range considered in the 2022 EIA Report (i.e. 66-77 MW), the potential operational effects from the Proposed Development are unchanged from the 2022 EIA Report.

10.5 Cumulative Effects

Potential Cumulative Construction Effects

10.5.1 The potential cumulative construction effects would remain unchanged from the 2022 EIA Report.

10.6 Mitigation

10.6.1 The 2022 EIA Report identified that no significant adverse effects as a result of the Proposed Development during construction and operation were identified and therefore, no mitigation was required. This remains unchanged.

10.7 Assessment of Residual Effects

Residual Construction Effects

10.7.1 The residual construction effects as reported in the 2022 EIA Report remain unchanged and are not significant.

[9] https://www.nomisweb.co.uk/reports/lmp/la/1946157406/printable.aspx [Accessed 01/06/2023]
[10] https://www.nomisweb.co.uk/reports/lmp/la/1946157424/report.aspx#tabempocc [Accessed 01/06/2023]
[11] https://www.nomisweb.co.uk/reports/lmp/la/1946157406/printable.aspx [Accessed 01/06/2023]
[12] https://www.nomisweb.co.uk/reports/lmp/la/1946157424/report.aspx#tabempocc [Accessed 01/06/2023]

Residual Operational Effects

10.7.2 The residual operational effects as reported in the 2022 EIA Report remain unchanged and are not significant apart from in relation to community benefit at the neighbourhood level which would be significant and beneficial.

Residual Cumulative Effects

10.7.3 The residual cumulative effects as reported in the 2022 EIA Report remain unchanged and are not significant apart from in relation to employment and expenditure at the neighboured level which would be significant and beneficial during construction and operation.

10.8 Summary

10.8.1 As presented above all socioeconomic effects remain unchanged from the 2022 EIA Report.