

CHAPTER 9 - ORNITHOLOGY

9	ORN	IITHOLOGY	9-2
	9.1	Introduction	9-2
	9.2	Scope of Assessment and Methodology	9-2
	9.3	Baseline Conditions	.9-26
	9.4	Assessment of Likely Significance of Effects	.9-59
	9.5	Additional Mitigation and Enhancement Measures	.9-82
	9.6	Residual Effects	9-86
	9.7	Assessment of Cumulative Effects	.9-87
	9.8	Summary and Conclusions	9-100

Figures (Volume 3 of this EIA Report)

Figure 9.1: Natural Heritage Zones

Figure 9.2: Ornithological Mitigation Measures

Visualisations (Volume 4 of this EIA Report)

There are no visualisations associated with this chapter

Appendices (Volume 5 of this EIA Report)

Appendix 9.1: Ornithology Technical Report, including the following figures:

- Figure 9.1.1a-c Desk Study Search Area;
- Figure 9.1.2a-c Focal Area and Field Survey Areas Overview;
- Figure 9.1.3a-n Focal Area Survey Areas;
- Figure 9.1.4a-o Flight Activity Survey Results (2022-2024) (by Focal Area as relevant);
- Figure 9.1.5a-i Non-confidential Scarce Breeding Bird Survey Results (2023) (by Focal Area as relevant);
- Figure 9.1.6a-g Breeding Wader Survey Results (2023) (by Focal Area as relevant);
- Figure 9.1.7a-d Non-confidential Black Grouse Survey Results (2023) (by Focal Area as relevant);
- Figure 9.1.8 Goose Field Use Survey Results (2023 / 24) (New Deer to Peterhead Focal Area Only);
- Figure 9.1.9a-e Non-confidential Scarce Breeding Bird Survey Results (2024) (by Focal Area as relevant);
- Figure 9.1.10a-d Breeding Wader Survey Results (2024) (by Focal Area as relevant).

Appendix 9.2: Confidential Ornithological Information, including the following figures:

- Figure 9.2.1 Confidential Desk Study Records;
- Figure 9.2.2a-f Confidential Scarce Breeding Bird Survey Results (2023) (by Focal Area as relevant);
- Figure 9.2.3a-e Confidential Black Grouse Survey Results (2024) (by Focal Area as relevant);
- Figure 9.2.4a-f Confidential Scarce Breeding Bird Survey Results (2024 and 2025) (by Focal Area as relevant).

Appendix 9.3: Outline Capercaillie Species Protection Plan, including the following figure

• Figure 9.3.1: Location of the Proposed Development Site relative to Darnaway and Lethen Forest SPA.



9 ORNITHOLOGY

9.1 Introduction

- 9.1.1 This Chapter presents the assessment of the potential for significant effects on important ornithological features (IOFs) resulting from the construction, operation, and decommissioning of the Proposed Development. For the assessment of potential significant effects on ecological (non-avian) features, see **Chapter 8: Ecology**.
- 9.1.2 The assessment is based upon comprehensive baseline data gathered through both desk-based studies and ornithological field surveys of legally protected and notable ornithological features of conservation concern as well as feedback from statutory and non-statutory consultees. It draws on pre-existing information, where appropriate, from other studies and survey data sources, and is based on standard industry guidance, as detailed in **Section 9.2**.
- 9.1.3 Additional information which supports this Chapter is presented in the following figures, visualisations, and technical appendices:
 - Volume 3: Figures
 - Figure 9.1: Natural Heritage Zones; and
 - Figure 9.2: Ornithological Mitigation.
 - Volume 5: Appendices
 - Appendix 9.1: Ornithology Technical Report;
 - Appendix 9.2: Confidential Ornithological Information; and
 - Appendix 9.3: Outline Capercaillie Species Protection Plan.
- 9.1.4 Additionally, a **Habitats Regulations Appraisal** (HRA)¹ which has been submitted alongside the EIA Report presents information to inform an assessment of effects on European designated sites of nature conservation interest, including those designated for their ornithological features as are relevant to this Chapter.
- 9.1.5 Information in figures, technical appendices, and other chapters are referred to where relevant, but in the interests of concision, information contained in other chapters and appendices is not repeated herein unless essential for understanding. Confidential figures and appendices will be supplied to relevant consultees.
- 9.1.6 This Chapter (and its associated Figures and Appendices, listed above) is not intended to be read as a standalone assessment and reference should be made to the introductory chapters of this EIA Report (Chapters 1-6).
- 9.1.7 All species' scientific names are provided in **Appendix 9.1**: **Ornithology Technical Report** and are therefore not repeated in this Chapter.

9.2 Scope of Assessment and Methodology

Scope of the Assessment

- 9.2.1 An EIA Scoping Report was submitted in June 2024, which presented an overview of the baseline ornithological conditions based on the data which was available at the time, and outlined the broad scope of this Ornithological Impact Assessment (OIA) (see **Appendix 6.1: EIA Scoping Report**).
- 9.2.2 This Chapter focusses on the effects of the construction and operational phase of the Proposed Development upon Important Ornithological Features (IOF) aligning with Ecological Impact Assessment (EcIA) Guidelines from

¹ SSEN Transmission (2025). Beauly to Blackhillock to New Deer to Peterhead 400 kV Project Habitats Regulation Appraisal Screening Report and Appropriate Assessment



the Chartered Institute of Ecology and Environmental Management (hereafter the 'CIEEM EcIA Guidelines') (CIEEM, 2018)².

- 9.2.3 This OIA has been prepared with reference to the applicable legislative framework and national and local planning policy; these are outlined below, under **Relevant Legislation and Policy**.
- 9.2.4 The following guidance has been followed in undertaking this OIA:
 - CIEEM EcIA Guidelines (CIEEM, 2018)²;
 - Environmental Impact Assessment Handbook³.
 - NatureScot's (formerly Scottish Natural Heritage (SNH)) guidance on:
 - assessment of the impacts of powerlines on birds (NatureScot, 2025a4);
 - assessment of impacts of onshore windfarms on bird populations outwith designated areas (NatureScot, 2025b⁵);
 - assessment of cumulative impacts of onshore windfarms on birds (NatureScot, 2025c)⁶;
 - (noting that the latter two guidance documents are considered to be equally applicable to powerline projects); and
 - the Applicant's own guidance on ornithological survey methods for transmission development (Coleman *et al.*, 2016)⁷.
- 9.2.5 Additional guidance is referenced throughout this Chapter as applicable.
- 9.2.6 This OIA concentrates on statutory and non-statutory designated sites of nature conservation value cited for their ornithological interests located in proximity to and / or potentially connected with the Site (defined as the area encompassing the footprint of the Proposed Development including the Proposed OHL Alignment, towers, access tracks, compounds / working areas, as shown on Figure 3.1: Site Layout and as explained in the Study Area Section (Paragraphs 9.2.12 to 9.2.15)). The OIA also focusses on legally protected and notable bird species of conservation concern (referred to hereafter as 'Target Species') recorded along and in close proximity to the Proposed Development.
- 9.2.7 Target Species are those which correspond to any of the following criteria, in accordance with the relevant NatureScot and Scottish Hydro Electric Transmission guidance (NatureScot (2025a)⁴ and Coleman *et al.*, (2016)⁷):
 - species listed on Annex I of the EU Directive on the Conservation of Wild Birds 79/409/EEC (the 'Birds Directive');
 - birds that are qualifying features of designated sites of nature conservation importance for birds (i.e., Special Protection Areas (SPAs), Wetlands of International Importance (Ramsar Sites) or Sites of Special Scientific Interest (SSSIs)) located in proximity or potentially connected to the Proposed Development (as explained above);

² CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (version 1.3 updated September 2024). Chartered Institute of Ecology and Environmental Management, Winchester. Available at: https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/.

³ Historic Environment Scotland and NatureScot (2018). Environmental Impact Assessment Handbook. Guidance for competent authorities, consultation bodies, and others involved in the Environmental Impact Assessment process in Scotland. Version 5. Online at:

https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationld=6ed33b65-9df1-4a2f-acbb-a8e800a592c0

A NatureScot (2025a). Assessment and mitigation of impacts of power lines and guyed meteorological masts on birds. March 2025 (and previous versions (SNH, 2016) - changes in the guidance are not considered fundamental to the baseline data collected and used in this assessment). Available at:

https://www.nature.scot/doc/guidance-assessment-and-mitigation-impacts-power-lines-and-guyed-meteorological-masts-birds

NatureScot (2025b). Assessing the significance of impacts on bird populations from onshore windfarms that do not affect protected areas. March 2025 (and previous versions (SNH, 2018) - changes in the guidance are not considered fundamental to the baseline data collected and used in this assessment). Available at:

https://www.nature.scot/doc/guidance-note-assessing-significance-impacts-bird-populations-onshore-wind-farms-do-not-affect#scope-and-purpose.

NatureScot (2025c). Assessing the cumulative impacts of onshore wind farms on birds. March 2025 (and previous versions (SNH, 2018) - changes in the guidance are not considered fundamental to the baseline data collected and used in this assessment). Available at:

⁷ Coleman, M., Fitchet, A., Seller, J., Williams, F. & Wright, P. (2016). SHE Transmission Ornithology Workshop – Ornithology Methods for Transmission Developments. SHE Transmission.



- species listed on Schedules 1, 1A and / or A1 of the Wildlife and Countryside Act (WCA) 1981 (as amended)⁸;
 and
- species registered on the 'Red List' of Birds of Conservation Concern 2021 (BoCC) (Stanbury et al., 2021)⁹.
- 9.2.8 Other species which are typically recognised as being potentially vulnerable to the effects of OHL developments, but which do not fall under any of the above categories, such as other waterfowl species, were also recorded as Target Species (e.g. mute swan). Passerines (songbirds) are not typically considered as Target Species as it is generally accepted that they are not significantly impacted by OHL developments³. However, the OIA considered potential impacts on regionally and nationally important passerine Target Species identified during the desk study exercise and field surveys, as defined in **Section 9.2 Scope of Assessment and Methodology** (Determining Baseline).
- 9.2.9 Given the scale of the Proposed Development, a pragmatic approach to the scope of the field survey programme was devised and agreed with NatureScot during the early stages of the Proposed Development as detailed in Section 9.2 Scope of Assessment and Methodology (Determining Baseline). This ultimately involved a suite of ornithology surveys which focussed on key areas of potentially suitable habitat for Target Species along the Proposed Development's Study Areas as they evolved through the Corridor and Route Selection Stages and was informed through an initial habitat suitability assessment based on review of OS mapping and aerial imagery and consideration of the distribution and habitat associations of key Target Species. Key areas of potentially suitable habitat included riparian corridors, open moorland / forest edge habitats and foraging areas for overwintering waterfowl, particularly where they may be associated with coastal designated sites, as identified in Section 9.3: Baseline Conditions, Table 9.6. The approach to, and scope of, the ornithological survey programme was agreed in consultation with NatureScot throughout the Proposed Development's Corridor and Route Selection Stages^{10, 11}. The suite of baseline ornithology surveys completed to inform this OIA have been carried out in accordance with good practice survey guidelines (SNH, 2017)¹², as was available at the time of the survey programme, and are referenced where applicable in Section 9.2 Scope of Assessment and Methodology (Determining Baseline).

Relevant Legislation and Policy

9.2.10 This assessment has been compiled with reference to the following relevant nature conservation legislation, planning policy and guidance documents from which the protection of ornithological designated sites and species is derived in Scotland. For local policies, the relevant Local Planning Authority (LPA) is noted below.

Legislation

- UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021¹³;
- European Commission Directive on the Conservation of Wild Birds (2009/147/EC) (the EU Birds Directive)¹⁴;
- Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (the EU Habitats Directive)¹⁵;
- Conservation and of Habitats and Species Regulations 2017(the Habitats Regulations)¹⁶;
- Wildlife and Countryside Act (WCA) 1981 (as amended)¹⁷;

⁸ UK Government (1981). Wildlife and Countryside Act 1981. Online at: https://www.legislation.gov.uk/ukpga/1981/69.

⁹ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021). The status of our bird populations: the

Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (2021). The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds 114: 723-747. Available at: https://www.bto.org/sites/default/files/publications/bocc-5-a5-4pp-single-pages.pdf.

¹⁰ NatureScot (2022). Response to Beauly - Peterhead 400kV OHL Response to Initial Consultation Request Regarding Ornithological Survey Methods (e-mail dated 27 October 2022).

¹¹ NatureScot (2023). Response to Beauly - Peterhead 400kV OHL Response to Further Consultation on Breeding Bird Survey Methods (e-mail dated 31 May 2023). ¹² SNH (2017). Recommended bird survey methods to inform impact assessment of onshore windfarms. Version 2, March 2017. (Since updated in March 2025, but not considered fundamental to the baseline data collected and used in this assessment).

¹³ UK Government (2021). UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021. Online at: https://www.legislation.gov.uk/asp/2021/4/contents.

¹⁴ UK Government (2009). Directive 2009/147/EC of the European Parliament and of the Council. Online at: https://www.legislation.gov.uk/eudr/2009/147/contents.

¹⁵ UK Government (1992). Council Directive 92/43/EEC. Online at: https://www.legislation.gov.uk/eudr/1992/43/contents.

¹⁶ UK Government (1994). The Conservation (Natural Habitats, &c.) Regulations 1994. Online at: https://www.legislation.gov.uk/uksi/1994/2716/made.

¹⁷ UK Government (1981) Wildlife and Countryside Act 1981. Online at: https://www.legislation.gov.uk/ukpga/1981/69/contents



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 - Nature Conservation (Scotland) Act 2004 (as amended)¹⁸;
 - The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017¹⁹;
 - Town and Country Planning (Scotland) Act 1997 (as amended)²⁰ and,
 - The Electricity Act 1989 (as amended)²¹.

Policy

- EU Biodiversity Strategy for 2030²² which sets out commitments to protect and restore biodiversity, including relevant targets on bringing nature back to agricultural land;
- National Planning Framework (NPF) 4²³ which aims to secure positive effects for biodiversity, specifically including the following policies of relevance:
 - Policy 3: Biodiversity intends to protect biodiversity, reverse biodiversity loss, deliver positive effects from development and strengthen nature networks; and is relevant with a proposed change to the baseline of the Proposed Development;
 - Policy 4: Natural places, intends to protect, restore and enhance natural assets making best use of nature-based solutions; and is relevant as it requires proposals that are likely to have an adverse effect on species protected by legislation to meet the relevant statutory tests, appropriate steps to be taken to establish presence, and the level of protection to be factored into the planning and design of the development. It also requires the precautionary principle to be applied. In a change to the previous policy position which is reflected in policy 4c of NPF4, the Chief Planner²⁴ has directed that all listed Ramsar sites in Scotland should be treated as if they were European sites for the purposes of land use change decision making. This Chapter has applied this updated policy to its assessments of the effects of the Proposed Development on Ramsar sites;
- Scottish Biodiversity Strategy (SBS) to 2045²⁵ which sets out an ambition for Scotland to be Nature Positive by 2030 and to have restored and regenerated biodiversity by 2045 and the Scottish Biodiversity Delivery Plan 2024-2030²⁶ which provides a framework outlining how the goals of the SBS will be achieved. The SBS to 2045 refers to a series of overarching targets and indicators, further details of which are provided in Chapter 8: Ecology.
- The Scottish Biodiversity List²⁷ (SBL) of flora, fauna and habitats considered of principal importance for the conservation of biodiversity.

Local Biodiversity Action Plans

- The Highland Nature Biodiversity Action Plan; and,
- The North East Scotland Biodiversity Partnership, covering Moray and Aberdeenshire.

¹⁸ UK Government (2004). Nature Conservation (Scotland) Act 2004. Online at: https://www.legislation.gov.uk/asp/2004/6/contents.

¹⁹ UK Government (2017). The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. Online at: https://www.legislation.gov.uk/ssi/2017/101/contents.

²⁰ UK Government (2019). Planning (Scotland) Act 2019. Online at: https://www.legislation.gov.uk/asp/2019/13/contents.21

²¹ UK Government (1989). Electricity Act 1989. Online at: https://www.legislation.gov.uk/ukpga/1989/29/contents.

²² European Commission, Directorate-General for Environment (2021). EU Biodiversity Strategy for 2030: bringing nature back into our lives. Publications Office of the European Union. Online at: https://data.europa.eu/doi/10.2779/677548.

²³ Scottish Government (2024a). National Planning Framework 4. Available at: https://www.gov.scot/publications/national-planning-framework-4/.

²⁴ Scottish Government (2025). Ramsar sites: Ministerial and Chief Planner letter - July 2025. Available at: https://www.gov.scot/publications/ramsar-sites-ministerial-and-chief-planner-letter-july-2025/

²⁵ Scottish Government (2023). Scottish Biodiversity Strategy to 2045. Tackling the Nature Emergency in Scotland. Available at: https://www.gov.scot/publications/scottish-biodiversity-strategy-2045-tackling-nature-emergency-scotland-2/.

²⁶ Scottish Government (2024b). Scottish Biodiversity Delivery Plan 2024-2030. Available at:

https://www.gov.scot/publications/scottish-biodiversity-delivery-plan-20242030/documents

²⁷ Scottish Ministers (2012). Scottish Biodiversity List. Online at: https://www.nature.scot/doc/scottish-biodiversity-list.



Consultation

9.2.11 Full details of the consultation process and responses are included in **Chapter 6**: **Scope and Consultation** and associated appendices, with specific responses relating to ornithology summarised below in **Table 9.1**: Consultation Responses of Relevance to Ornithology.



Table 9.1: Consultation Responses of Relevance to Ornithology

Organisation	Type of Consultation	Response	How response has been considered
NatureScot	Initial consultation on proposed scope of ornithological surveys (18 August 2022). Response received 06 September 2022, Operations Officer (North), with follow up correspondence 06-12 September 2022.	Acceptance of the proposed scope of ornithological surveys in principle was provided. Clarification and advice was also provided on the qualifying status of Slavonian grebes associated with Loch Ashie SPA and the potential scope of surveys to determine presence and potential risk to impacts, should OIA be required subject to the Proposed Development's evolution.	An overview of the accepted scope of ornithological survey methods is provided under Determining Baseline (Section 9.2) with full details presented in Appendix 9.1 Ornithology Technical Report.
NatureScot	Beauly to Peterhead Consultation Document - Corridor Selection Stage (October 2022). Response received, 27 October 2022, Operations Officer (North).	The recognised presence of several designated sites of nature conservation interest with ornithological features of interest (SPAs, Ramsar Sites and SSSIs) located within or in proximity to the Proposed Development at the Route Selection Stage was acknowledged. These would require careful consideration in the Proposed Development's optioneering process. It was agreed that the initial Habitats Regulations Appraisal (HRA) Screening Report (September 2022) reached acceptable conclusions in screening for Likely Significant Effects.	All relevant ornithological designated sites with the potential to be affected by the Proposed Development are identified in the Desk Study (Section 9.3) with those scoped in for assessment of impacts identified as Sensitive Receptors (Section 9.3). A Shadow HRA has been prepared in support of the Proposed Development to assess the potential impacts on European designated sites under the requirements of the Habitats Regulations, which accompanies this EIA Report.
		Further advice and guidance was also provided concerning the consideration and assessment of potential impacts on Slavonian grebes associated with Loch Ashie SPA. Otherwise, NatureScot reiterated that they were content with the proposed approach to ornithological survey work, as stated in response to the initial consultation above.	Potential impacts on Slavonian grebes associated with Loch Ashie SPA are scoped out as justified in Issues Scoped out (Section 9.3). An overview of the ornithological survey methods is provided under Determining Baseline (Section 9.2) with full details presented in Appendix 9.1 Ornithology Technical Report.
NatureScot	Follow up consultation on refined scope of ornithological surveys following selection of the Preferred Route (10 May 2023). Response received, 31 May 2023, Operations Officer (North),	NatureScot confirmed that the refined scope of ornithological surveys designed to focus on key areas of sensitive habitat for Target Species was appropriate. Feedback was provided on the Routing Stage HRA Screening Report and Appropriate Assessment including advice on European designated sites	An overview of the accepted scope ornithological survey methods is provided under Determining Baseline (Section 9.2) with full details presented in Appendix 9.1 Ornithology Technical Report. A Shadow HRA has been prepared in support of the Proposed Development to assess the potential



Organisation	Type of Consultation	Response	How response has been considered
	including feedback on the Routing Stage HRA Screening Report and Appropriate Assessment.	identified for further assessment, as well as agreement on which designated sites were unlikely to be affected. The Preferred Route's proximity to Darnaway and Lethen Forest SPA and potential impacts on its associated capercaillie population was raised. It was recommended to contact the Royal Society for the Protection of Birds (RSPB) Scotland's Capercaillie Project Officer regarding co-ordination of surveys and input to the Proposed Development's design. It was also agreed that final OHL alignment within the Preferred Route was unlikely to result in disturbance of Slavonian grebes at Loch Ashie SPA, and while collision may still potentially pose a risk it was acknowledged that detection of flights would likely be too infrequent to pick up during survey work.	
NatureScot	Scoping Response, received 22 July 2024, Operations Officer (North).	Reference was made to the extensive consultation in which NatureScot was engaged throughout the early stages of the project and commented that this had afforded them the confidence that the right level of information was being collected to inform the EIA. Whilst it was acknowledged that the Proposed Development had the potential to affect some designated sites, it was hoped that with considerate design and implementation of appropriate mitigation significant effects would be avoided.	The methods and results of baseline studies are presented under Determining Baseline (Section 9.2). This information has informed the impact assessment (Section 9.4) and proposed mitigation (Section 9.5).
NatureScot	Consultation regarding approach to collision risk assessment (19 June 2025).	The approach to the collision risk assessment was considered to be reasonable. It was stressed that the primary aim of the flight activity data and collision risk assessment was to inform a rational and pragmatic	The methods and results of the flight activity surveys and how the data has been used to inform collision risk are presented under Determining Baseline (Sections 9.2 and 9.3 respectively). This information



Organisation	Type of Consultation	Response	How response has been considered
	Response received 26 June 2025, Operations Officer (North).	approach to where bird diverters would be necessary and effective for species at potentially increased risk of collision with the Proposed Development.	has informed the impact assessment (Section 9.4) and proposed mitigation (Section 9.5).
RSPB Scotland	Beauly to Peterhead Consultation Document - Corridor Selection Stage (October 2022) Response received, 28 October 2022, Conservation Officer (Northeast Scotland and Shetland).	From the information provided RSPB Scotland were content that the assessment was generally comprehensive adding that it should be possible to avoid most receptors within the broad corridors which had been selected at that stage. However, specific consideration was recommended in regard to capercaillie in the woodlands associated with and connected to Darnaway and Lethen Forest SPA, advising that they held data which may inform the assessment. The presence of breeding common cranes was also identified in the vicinity of the eastern parts of the Study Area, with these birds representing 100% of the Scottish breeding populaiton. Consideration of this spcies was recommended as part of thesurvey scope.	An overview of the accepted scope ornithological survey methods, which includes capercaillie and common crane, is provided under Determining Baseline (Section 9.2) with full details presented in Appendix 9.1 Ornithology Technical Report.
RSPB Scotland	Beauly to Peterhead Consultation Document - Route Selection Stage (April 2023). Response received, 09 June 2023, Conservation Officer (Northeast Scotland and Shetland).	The presence of several designated sites of nature conservation interest located within or in proximity to the Proposed Development at the Route Selection Stage was acknowledged. It was recommended that two years of field surveys should be undertaken, especially in sensitive locations, and that these should follow NatureScot's relevant guidance ⁴ . It was recommended that RSPB Scotland and the Highland and Northeast Scotland Raptor Study Groups should be consulted for relevant bird records. The potential impacts of OHL developments on birds was identified and the potential requirement for line markers to reduce collision risk noted. Potential cumulative impacts of the Proposed Development with existing OHLs as well as with windfarms and any other relevant developments in the nearby and wider surrounding area should be assessed.	All relevant designated sites with potential to be affected by the Proposed Development are identified in the Desk Study (Section 9.3), with those scoped in for assessment of impacts identified as Sensitive Receptors (Section 9.3). The ornithological survey programme, which followed NatureScot guidance and was approved by NatureScot, extended over a two year period (2022-2024), full details of which are presented under Determining Baseline (Section 9.2). Consultation with these, and other relevant organisations was carried out, results of which are presented in under Determining Baseline (Section 9.2). Potential impacts of the Proposed Development on ornithological receptors and details of required mitigation measures are presented in Section 9.4 and Section 9.5 respectively.



Organisation	Type of Consultation	Response	How response has been considered
		The Preferred Route's proximity to Darnaway and Lethen Forest SPA and potential impacts on its associated capercaillie population was raised, including segregation of wider connecting forest habitat. The importance of obtaining up to date capercaillie records from RSPB Scotland and conducting appropriate survey work was stressed. Other areas with historic records of use by Target Species were identified, including for hen harrier, merlin and breeding waders in open moorland areas; capercaillie in other forested areas; and common crane, wintering geese and breeding waders in agricultural lowland areas.	An assessment of cumulative effects is presented in Section 1.7. Darnaway and Lethen Forest SPA and its associated capercaillie population are scoped in as a Sensitive Receptor (Section 9.3). Capercaillie data was requested and obtained from RSPB Scotland and an extensive programme of surveys has been undertaken throughout areas of suitable habitat along the Proposed OHL Alignment, as detailed under Determining Baseline (Section 9.2). Desk study records were requested and obtained from relevant organisations and the ornithological survey programme focussed on key areas of habitat for Target Species, to establish a detailed understanding of the ornithological baseline conditions, results of which are presented under Determining Baseline (Section 9.2).
RSPB Scotland	Scoping Response, received 22 August 2024, Senior Conservation Officer (Northeast Scotland and Shetland).	It was advised that RSPB Scotland hold capercaillie records relevant to the Proposed Development. The methodology for the baseline surveys was said to be somewhat unclear, including that there was uncertainty as to whether the second year of surveys included for capercaillie. RSPB Scotland required more detail to clarify adequacy of the survey programme for informing the EIA and the assessment of the potentially significant effects of the development. The availability of more recent capercaillie data from 2023 and 2024 in the vicinity of the Proposed Development was noted and on the basis of these it was recommended that further surveys should be carried out, ideally prior to the completion of the EIA. Further survey for common crane were also recommended. The Proposed Development's proximity to Darnaway and Lethen Forest SPA and potential impacts on its associated capercaillie population, including	



Organisation	Type of Consultation	Response	How response has been considered
		segregation of wider connecting forest habitat was reiterated.	beforehand. However, it was agreed during a meeting with NatureScot and RSPB Scotland on 26 November 2024 that updated surveys would take place in 2025 and prior to construction (if consented), to inform necessary mitigation (see Section 9.5). To ensure a representative baseline, two years of common crane surveys have been undertaken, details of which are presented under Determining Baseline (Section 9.2). Darnaway and Lethen Forest SPA and its associated capercaillie population are scoped in as a Sensitive Receptor (Section 9.3) and potential impacts are assessed in Section 9.4.
NatureScot and RSPB Scotland	RSPB Scotland: Senior Conservation Officer (Northeast Scotland and Shetland), Capercaillie Advisory Officer and	Meeting to discuss capercaillie distribution and population status relative to the Proposed Development, potential impacts and approach to assessment and potential mitigation options. RSPB Scotland advised that accurately establishing the abundance and distribution of capercaillie is difficult due to low population density and urged that a second year of surveys was undertaken to inform the OIA. NatureScot agreed additional pre-commencement survey information would be beneficial. RSPB Scotland provided advice on the dispersal and inter-connectivity of the capercaillie populations in northeast Scotland, including with Darnaway and Lethen Forest SPA based on the findings of satellite tracking and genetics studies which should be used to inform the OIA. NatureScot accepted that the selected route of the Proposed Development was reasonable in considering avoidance of Darnaway and Lethen Forest SPA whilst not taking an excessive deviation across the wider landscape. The potential for disturbance during construction was identified to be the impact of greatest concern. Whilst capercaillie may be at risk or collision with OHLs, it was	been used to inform the assessment of potential impacts in Section 9.4. The Proposed Development has undergone an extensive optioneering process which has sought to identify the most environmentally sensitive alignment possible whilst still being economically viable (see Chapter 4: The Routeing Process and Alternatives. These impacts have been considered in the impact assessment (Section 9.4) with appropriate mitigation proposed in Section 9.5. An Outline Capercaillie SPP is presented in Appendix 9.3 Outline Capercaillie SPP. Enhancement measures for capercaillie are provided in Section 9.5 Outline Capercaillie SPP.



Organisation	Type of Consultation	Response	How response has been considered
		recognised that they are typically low-flying, and earth wire diverters were considered to be unnecessary / ineffective. Recommended mitigation measures to minimise and avoid impacts were also discussed, including avoidance of leks, avoidance of works in capercaillie areas during the breeding season (March-August inclusive), and prevention of inadvertently creating recreational access routes into capercaillie forests. A capercaillie Species Protection Plan (SPP) should be	
		produced to specifically cover measures to minimise and avoid impacts to this species and raise awareness amongst site operatives of their behaviour and risk during construction.	
		Suggested enhancement measures were also discussed including opening up woodlands to improve woodland structure, favourable compensatory woodland planting including improved connectivity, removal of fences or application of fence markers.	
Scottish Government Energy Consents Unit (ECU)	Scoping Response, received 02 October 2024, Head of Planning and Economy.	The ECU recommended that decisions on bird surveys (species, methodology, vantage points, viewsheds & duration - site specific & cumulative) should be made following discussion between the Applicant and NatureScot.	The scope, methodologies and duration of the ornithological survey programme was developed and accepted in consultation with NatureScot from the outset, as detailed above.
Aberdeenshire Council	Economy.	Aberdeenshire Council made no comments specifically in relation to ornithology, other than that the range and scope of ornithological surveys appeared to be acceptable. Secondary effects to ornithology from forestry activities required to facilitate the Proposed Development should be considered.	The methods and results of baseline studies are presented under Determining Baseline (Section 9.2) and potential impacts are assessed in Section 9.4, including forestry activities where these are considered likely to impact upon features of ornithological interest.
The Highland Council	Scoping Response, received 22 August 2024, Strategic Projects Team Leader.	The Highland Council made little comment specifically on ornithology other than to confirm that an EIA Report chapter covering ornithology will be required which should include the baseline survey of bird interests present on-site.	The methods and results of baseline studies are presented under Determining Baseline (Section 9.2) and potential impacts are assessed in Section 9.4.



Study Area

9.2.12 Distinct study areas were established for the desk-based data review exercise and field surveys, to reflect the different elements of the Proposed Development, ornithological sensitivities and extent of the Proposed Development's Ecological Zone of Influence (EZoI). The CIEEM EcIA Guidelines (CIEEM, 2018²) define the EZoI as the area over which ecological features may be subject to significant effects as a result of the Proposed Development; this could extend beyond the locality of the Proposed Development itself and may be different for different receptors depending on sensitivity or connectivity to the Site. The specific study areas are explained in more detail in the following paragraphs.

Designated Sites

- 9.2.13 The extent of searches conducted for European / international designated sites (i.e. SPAs and Ramsar Sites) was dependent on their proximity to and / or potential connectivity with the Site. This included direct connectivity, such as via watercourses, or indirect connectivity, such as through the potential use of habitats within the Site by qualifying species of designated sites located in the wider surrounding area (based on those species' recognised foraging / commuting ranges (e.g., as detailed in SNH (2016b)²⁸). Such habitats are referred to as 'functionally linked land' and are defined as areas of land or sea outside of a designated European site (such as a Special Area of Conservation or SPA) that are ecologically important for supporting the species for which the site was designated (Bowland, 2021²⁹). Consequently, searches extended to at least 10 km from the Proposed OHL Alignment and were extended up to 20 km for sites designated for overwintering pink-footed geese and greylag geese, based on the upper-range foraging distance of these species, as quoted in SNH (2016b²⁸). The search area for European / international designated sites is shown in **Chapter 8 Ecology**, **Figure 8.1**.
- 9.2.14 Searches for all other designated sites with ornithological features of interest (including SSSIs, Important Bird Areas (IBAs); National Nature Reserves (NNRs) and Local Nature Reserves (LNRs)) extended to 2 km from the Proposed Development. The search area for these other designated sites is shown in **Chapter 8 Ecology**, **Figure 8.2**. This search area was considered to be sufficient to capture sites which could potentially be subject to significant effects as a result of the Proposed Development.

Target Species

9.2.15 Requests for recent historical records (i.e. from the period 2012 - 2024) and the programme of field surveys for Target Species focussed on the Proposed OHL Alignment plus a surrounding buffer of up to 2 km, as shown in Appendix 9.1 Ornithology Technical Report, Figure 9.1.1: Desk Study Search Area. This search area was considered to be sufficient to identify important populations or aggregations of Target Species which could potentially be subject to significant effects as a result of the Proposed Development. More information on how the data was gathered is set out below.

Determining Baseline

9.2.16 Full details of the methodologies used for determining the ornithological baseline through desk study and the programme of field surveys is detailed within **Appendix 9.1 Ornithology Technical Report**. The following provides a summary of the data gathering process.

 $\underline{\text{https://www.nature.scot/doc/assessing-connectivity-special-protection-areas.}}$

 $^{^{28}}$ SNH (2016b). Assessing Connectivity with Special Protection Areas (SPAs). Version 3, June 2016. Available at:

²⁹ Bowland Ecology 2021. Identification of Functionally Linked Land supporting SPA waterbirds in the North West of England. NERC361. Natural England. Available at: https://publications.naturalengland.org.uk/publication/6303434392469504.



Desk Study

Designated Sites

- 9.2.17 Desk top searches for statutory European / International designated sites (i.e., SPAs and Ramsar Sites) within at least 10 km of the Proposed Development, and up to 20 km for overwintering geese, and all other designated sites with ornithological features of interest (i.e. SSSIs, NNRs, LNRs and IBAs) within 2 km of the Proposed Development were conducted using the following sources:
 - NatureScot's Sitelink website³⁰;
 - The Multi-Agency Geographic Information for the Countryside (MAGIC Map) website³¹;
 - Joint Nature Conservation Committee's (JNCC) UK Protected Areas webpages³²; and
 - RSPB's IBA UK Open Data³³.

Target Species

- 9.2.18 Recent historical records of Target Species from the 10 year period 2012-2022 inclusive within 2 km of the Proposed Development were made to the following land management organisations and ornithological interest groups:
 - Highland Raptor Study Group (HRSG);
 - North East Raptor Study Group (NERSG);
 - The Roy Dennis Foundation (RDF);
 - RSPB Scotland; and
 - Forestry and Land Scotland (FLS).
- 9.2.19 Restricted consideration of records to the most recent 10 year period was considered to be sufficient and more accurately reflective of the existing baseline conditions regarding the presence of Target Species which could potentially be subject to significant effects as a result of the Proposed Development.
- 9.2.20 Additional capercaillie data from 2023 and 2024 was also obtained from RSPB Scotland following their notification of its presence during the consultation exercise (as detailed in **Table 9.1**: Consultation Responses of Relevance to Ornithology.
- 9.2.21 Data obtained from the above sources was used to inform the field surveys as and when it became available, further details of which are provided in **Appendix 9.1 Ornithology Technical Report**.
- 9.2.22 Information on the occurrence and activity patterns of Target Species was also obtained from the EIA Reports for other nearby large-scale developments (e.g. windfarms and other OHL projects), as well as other ongoing or rescinded SSEN Transmission projects, located within 1 km of the Proposed Development and is also detailed in Appendix 9.1 Ornithology Technical Report. Anecdotal information on the presence of Target Species was also provided for parts of some Focal Areas by relevant landowners as is also detailed in Appendix 9.1 Ornithology Technical Report.
- 9.2.23 The British Trust for Ornithology's (BTO) Wetland Bird Survey (WeBS) core count areas were also reviewed to identify any potential areas of importance for congregations of waterbird Target Species sites within 500 m of the Proposed Development, in line with NatureScot's survey area for wintering and migratory waterfowl surveys (SNH, 2017 and NatureScot, 2025a).

³⁰ NatureScot Sitelink website: https://sitelink.nature.scot/home.

³¹ MAGIC Map website: https://magic.defra.gov.uk/home.htm.

³² JNCC UK Protected Areas webpages: https://jncc.gov.uk/our-work/uk-protected-areas/.

³³ IBA Open Data website: https://opendata-rspb.opendata.arcgis.com/datasets/c38f60f68f094f269d90db26b1381837_0/explore



9.2.24 Additionally, high level information on the distribution, and hence potential presence, of regionally to nationally important passerine Target Species³⁴ along the Proposed Development corridor was obtained from a review of Balmer *et al.* (2013³⁵), further details of which are also provided in **Appendix 9.1 Ornithology Technical Report**. Four species were identified to qualify as passerine Target Species which may potentially occur in proximity to the Proposed Development: common crossbill, Scottish crossbill, crested tit and corn bunting.

Field Surveys

- 9.2.25 Given the scale of the Proposed Development, a pragmatic approach to the scope of the field survey programme was devised and agreed with NatureScot during the early stages of the Proposed Development's Corridor and Route Selection Stages (as detailed in **Table 9.1**: Consultation Responses of Relevance to Ornithology. This was informed by a high-level assessment of the suitability of the habitats within the study areas under consideration during the Corridor and Route Selection Stages for supporting Target Species (i.e. the habitat suitability assessment described in Paragraph 9.2.9).
- 9.2.26 The habitat suitability appraisal identified that the western half of the Proposed OHL Alignment would pass through upland and lowland agricultural terrain, commercial and semi-natural forestry and upland moorland habitats of east Inverness-shire and Moray. These habitats have potential to support overwintering waterfowl (swans, geese, ducks and wading birds) associated with coastal and estuarine wetland habitats, including qualifying species of designated sites. Forested and open moorland habitats were considered likely to support various raptor Target Species, including golden eagle, red kite, osprey, hen harrier and goshawk, as well as capercaillie and black grouse.
- 9.2.27 The eastern half of the Proposed OHL Alignment would traverse the predominantly lowland agricultural landscape of Aberdeenshire, which was recognised as being potentially suitable for overwintering waterfowl, particularly in areas closer to the coast. Other habitats in the eastern half of the Site, particularly scattered woodland blocks, were identified as having potential to support raptor Target Species such as red kite and goshawk. Through consultation with RSPB Scotland, it was also identified that Scotland's only breeding pairs of common crane occur in proximity to this part of the Proposed OHL Alignment.
- 9.2.28 The initial habitat suitability assessment and desk study data was supplemented with information provided during public consultation events. Using this information a survey programme was devised to focus on key areas of potentially suitable habitat for Target Species, occurring within 2 km of the Proposed Development's Preferred Route, as was available at the time. Habitat subject to field survey and with potential to support Target Species included riparian corridors, open moorland / forest edge habitats and foraging areas for overwintering waterfowl, particularly where they may be associated with coastal designated sites. Focal Areas selected for inclusion in the bird survey programme and are shown in Appendix 9.1 Ornithology Technical Report, Figure 9.1.2a-c: Focal Area and Field Survey Areas Overview. Focal Areas, including the relevant Local Planning Authorities in which they sit, included:

Highland

- Beauly River Corridor (south of Beauly);
- The Aird (southwest of Inverness);
- River Ness / Caledonian Canal Corridor (southwest of Inverness);
- Drummossie Muir and River Nairn Corridor (south of Inverness);
- Assich Forest / Strathdearn Foothills (east of Inverness and south of Nairn);

³⁴ For the purposes of this report and OIA, regionally and nationally important passerine Target Species are taken to be those which are listed on either Annex 1 of the EU Birds Directive or Schedule 1 of the Wildlife and Countryside Act (1981), and/or those with restricted ranges within the UK which overlap with the Proposed Development.

³⁵ Balmer, D.E., Gillings, S., Caffery, B.J., Swann, R.L., Downie, I.S., and Fuller, R.J., (2013). Bird Atlas 2007-2011: the Breeding and Wintering Birds of Britain and Ireland. BTO Books. Thetford.

• Dulsie Wood and Associated Woodlands (south of Nairn);

Moray

- Dava Moorlands (southeast of Nairn);
- Bednawinny Moss Moorlands and Newtyle Forest (southwest of Elgin);
- Glen Latterach Moorlands and Woodland Associated with Hill of Mulundy and Wangie Wood (southwest of Elgin);
- Brown Muir (southwest of Elgin);
- River Spey Corridor and Wood of Ordiequish (southeast of Elgin and northwest of Keith);
- River Isla Corridor (north of Keith);

<u>Aberdeenshire</u>

- River Deveron Corridor (where the Proposed OHL Alignment passes between Huntly and Aberchirder); and
- New Deer to Peterhead (the eastern end of the Proposed OHL Alignment).
- 9.2.29 To inform the optioneering process and ultimately this OIA, a 22-month programme of ornithological surveys was carried out between September 2022 and July 2024 involving the following:
 - Flight activity surveys;
 - Scarce breeding bird surveys;
 - Capercaillie surveys;
 - Black grouse surveys;
 - Common crane surveys; and
 - Goose field use surveys.
- 9.2.30 All surveys were carried out in accordance with the relevant NatureScot and the Applicant's own guidance (NatureScot, 2025a⁴ & 2017¹², and Coleman *et al.* 2016⁷); summarised methodologies for which are presented in the following sections, with full details provided in **Appendix 9.1 Ornithology Technical Report**. The surveys were targeted on the Focal Areas identified above, as and where relevant, based on the habitat suitability and / or known distribution range and hence potential for certain relevant Target Species to occur, as identified below in **Table 9.2**: Ornithological Surveys Undertaken in Each Focal Area.
- 9.2.31 All surveys were carried out by skilled and experienced surveyors from WSP, Redwing Ecological Surveys Ltd (formerly Stagfire Ecological Surveys Ltd.), Carroll Ecology Ltd. and Mhor Environmental Ltd. Where necessary for surveys involving or potentially involving Schedule-1 protected species of the Wildlife and Countryside Act 1981 (as amended), appropriately licensed surveyors were used.

Table 9.2: Ornithological Surveys Undertaken in Each Focal Area

Focal Area	Survey Type						
(Listed West to East)	Flight Activity Surveys+	Scarce Breeding Bird Surveys	Capercaillie Surveys	Black Grouse Surveys		Goose Field Use Surveys	
Beauly River Corridor	Υ	Υ ⁽²⁾					
The Aird	Υ*	Y ⁽²⁾		Υ*			
River Ness / Caledonian Canal Corridor	Υ	Υ					
Drummossie Muir and River Nairn Corridor	Y	Υ ⁽²⁾		Υ ⁽²⁾			
Assich Forest / Strathdearn Foothills	Υ	Υ ⁽²⁾		Y ⁽²⁾			



Focal Area	Survey Type						
(Listed West to East)	Flight Activity Surveys+	Scarce Breeding Bird Surveys	Capercaillie Surveys	Black Grouse Surveys	Common Crane Surveys	Goose Field Use Surveys	
Dulsie Wood and Associated Woodlands	Y*		γ*				
Dava Moorlands	Υ*	Υ ⁽²⁾		Y ⁽²⁾			
Bednawinny Moss Moorlands and Newtyle Forest	Y*	Y	Υ*	Y*			
Glen Latterach Moorlands and Woodland Associated with Hill of Mulundy and Wangie Wood		Y ⁽²⁾	Υ*	Υ*			
Brown Muir		Y		Y*			
River Spey Corridor and Wood of Ordiequish	Y	Y	Υ*				
River Isla Corridor	Y**						
River Deveron Corridor					Y ⁽²⁾		
New Deer to Peterhead	Υ#				Y ⁽²⁾	Y	

- + Flight activity surveys were conducted over a 12 month period covering the 2022 / 23 non-breeding season and 2023 breeding season unless otherwise denoted (as below).
- * Denotes surveys conducted over the 2023 breeding season only.
- ** Denotes surveys conducted over the 2022 / 23 non-breeding season only.
- # Denotes surveys conducted over the 2023 / 24 non-breeding season only.
- (2) Denotes surveys conducted in both the 2023 and 2024 breeding seasons.

Flight Activity Surveys

- 9.2.32 Flight activity surveys were undertaken from 16 strategically positioned vantage points (VPs) overlooking areas of suitable habitat for Target Species (particularly overwintering waterfowl and raptors) within the Focal Areas identified in **Table 9.2**: Ornithological Surveys Undertaken in Each Focal Area and **Table 9.3**: Seasonal Coverage of Flight Activity Surveys from Each Vantage Point. The majority of VPs were positioned overlooking river valleys, woodlands, and areas of open moorland. The locations and viewsheds of each VP, which are listed in **Table 9.3**: Seasonal Coverage of Flight Activity Surveys from Each Vantage Point below in west to east order, are shown in **Appendix 9.1 Ornithology Technical Report, Figure 9.1.3a-n: Focal Area Survey Areas**.
- 9.2.33 Table 9.3: Seasonal Coverage of Flight Activity Surveys from Each Vantage Point below identifies the seasons (breeding or non-breeding) which were covered by each VP. All VPs, with the exception of VPs 3, 4, 16, 23 and 24, covered the 2023 breeding season (taken as March to August, inclusive). Only VPs 1 to 16 covered the 2022 / 23 non-breeding season (taken as September to February inclusive), except for VP 16 which was extended into March to account for migratory waterfowl. An original set of VPs were identified from the very start of the survey programme to cover areas of potential importance for overwintering waterfowl within the much wider corridor under consideration at that time. As the position and design of the Proposed Development became more refined through the Route Selection Stage, many of those original VPs became irrelevant and were either no longer required or were repositioned. This is reflected in Table 9.3: Seasonal Coverage of Flight Activity Surveys from Each Vantage Point.
- 9.2.34 All VPs were subject to 36 hours of survey effort across each individual season covered. Additionally, 36 hours of survey effort was conducted from VPs 23 and 24 during the 2023 autumn passage period (mid-September to mid-November), to capture any potential peak in autumnal goose migration activity.



9.2.35 Survey effort was spread throughout the daytime period where daylight hours best represent temporal flight activity patterns. Each survey was undertaken by a single observer in good conditions (i.e., visibility of at least 2 km) and was limited to a maximum of three hours by a single observer, with a minimum half an hour break between any two consecutive surveys.

Table 9.3: Seasonal Coverage of Flight Activity Surveys from Each Vantage Point

Focal Area (Listed West to East)	VP No.	2022 / 23 Non- breeding Season	2023 Breeding Season	2023 / 24 Non- breeding Season
Beauly River Corridor	VP1	Υ	Υ	
The Aird	VP 17		Υ	
River Ness / Caledonian Canal Corridor	VP 2	Υ	Υ	
Drummossie Muir and River Nairn Corridor	VP 3	Y		
	VP 18		Υ	
Assich Forest / Strathdearn Foothills	VP 4*	Υ		
	VP 19		Υ	
	VP 5	Y	Y	
Dulsie Wood and Associated Woodlands	VP 8	Υ	Υ	
Dava Moorlands	VP 20		Υ	
	VP 21		Υ	
Bednawinny Moss Moorlands and Newtyle Forest	VP 22		Y	
River Spey Corridor and Wood of Ordiequish	VP 11	Υ	Υ	
River Isla Corridor	VP 16	Υ		
New Deer to Peterhead	VP 23			Y
	VP 24			Y

^{*} VP 4 was originally established to overlook the open ground and moorland to the north of Saddle Hill during the Corridor Selection Stage. Following the Route Selection Stage, the VP location was moved slightly further south to better overlook this section of the Preferred Route within which the Proposed Development was ultimately aligned, and was re-numbered VP 19.

9.2.36 Flights by all Target Species (except passerines) were recorded including the time, duration, behaviour and height according to four height bands above ground level corresponding to the Proposed Development's indicative lower and upper conductor heights³⁶ for each 15 second flight time interval. The flight paths were also recorded onto 1:10,000 OS maps. The collected flight data has been used in this OIA to determine flights at potential risk of collision (PRC) with the proposed OHL. Flights at PRC were those which were recorded at potential collision height (PCH: heights of between 10 and 60 m) and overlapped with the Proposed OHL Alignment's Limit of Deviation (LoD).

Scarce Breeding Bird Surveys

9.2.37 Scarce Breeding Bird Surveys were carried out in the Focal Areas as identified in **Table 9.2**: Ornithological Surveys Undertaken in Each Focal Area. Surveys comprised at least four survey visits to each Focal Area between mid-March and July 2023 (inclusive) and involved an amalgamation of moorland breeding bird surveys using a modified version of the Brown and Shepherd methodology (Brown and Shepherd, 1993) ³⁷ targeting breeding waders, and scarce breeding raptor surveys, broadly following standard methodology for assessing raptor populations set out by Hardey *et al.* (2013)³⁸.

 $^{^{36}}$ Height bands were: HB1 = <10 m, HB2 = 10-40 m, HB3 = 40-60 m, HB4 = >60 m).

³⁷ Brown, A.F., and Shepherd, K.B. (1993). A method for censusing upland breeding waders. Bird Study, 40: 189-195.

³⁸ Hardey, J., Crick, H., Wernham, C., Riley, H., Etheridge, B., and Thompson, D. (2013). Raptors. A Field Guide for Surveys and Monitoring. SNH. Inverness



- 9.2.38 Surveys of Focal Areas predominantly comprising open moorland involved broad walkovers interspersed with short, periodic watches from suitable VPs which offered wider views over open areas to establish presence and breeding activity by Target Species. Meanwhile, survey effort within the more variable Beauly River Corridor and forested River Spey Corridor / Wood of Ordiequish Focal Areas only involved short VP watches from a series of strategic locations overlooking areas of suitable habitat.
- 9.2.39 As part of the scarce breeding bird surveys, checks of waterbodies were undertaken for the presence of, and breeding activity by red- or black-throated divers following the guidance described in Gilbert *et al.* (1998)³⁹.
- 9.2.40 The scarce breeding bird surveys were repeated in 2024 in selected sections of several Focal Areas, as identified in **Table 9.2**: Ornithological Surveys Undertaken in Each Focal Area. The 2024 scarce breeding bird surveys were targeted using the findings of the 2023 surveys, to provide a second year of survey effort in habitats utilised by Target Species.

Capercaillie Surveys

- 9.2.41 Capercaillie surveys were carried out in all suitable woodland blocks within each relevant Focal Area, as identified in **Table 9.2**: Ornithological Surveys Undertaken in Each Focal Area and as agreed with the RSPB Scotland Capercaillie Project Officer. The only exception to this was Dulsie Wood, which the Capercaillie Project Officer advised would be covered by RSPB Scotland themselves (see reference to data provided in **Table 9.7**: Summary of Ornithological Records Obtained through Desk Study and **Appendix 9.1 Ornithology Technical Report**). Suitable woodlands were identified based on records collected during the desk study (in particular those provided by RSPB Scotland) and where potential connectivity existed with the Darnaway and Lethen Forest SPA (designated for supporting breeding capercaillie).
- 9.2.42 The surveys followed NatureScot's Capercaillie Survey Methods (SNH, 2013⁴⁰) and involved an initial programme of presence / absence surveys in late Winter / early Spring 2023, to identify areas of most suitable lekking habitat within each targeted area of woodland. Additionally, surveys also recorded any sightings of capercaillie or evidence of their presence (droppings or feathers). These were followed by a programme of capercaillie lek surveys conducted around dawn in the most suitable areas of habitat within each targeted woodland, undertaken between mid-April and early May 2023. Capercaillie lek surveys included checks at historical lek locations provided by RSPB Scotland. The principal aim of these surveys was to identify capercaillie leks and record the number of lekking males and any attending female birds.

Black Grouse Surveys

- 9.2.43 Black grouse surveys were carried out in the Focal Areas as identified in **Table 9.2**: Ornithological Surveys Undertaken in Each Focal Area. Surveys followed the standard methodology described in Gilbert *et al.* (1998)³⁹ and involved at least two visits to each Focal Area, focussing on areas of most suitable habitat for lekking black grouse. Surveys were conducted around sunrise between late March and mid-May 2023. The principle aim of these surveys was to establish the presence of black grouse, identify active lek sites and to record the number of lekking males and any attending female birds.
- 9.2.44 Black grouse surveys were repeated in 2024 in selected sections of several Focal Areas, as identified in **Table 9.2**:
 Ornithological Surveys Undertaken in Each Focal Area, to follow up on previously identified lek sites during the 2023 surveys, to provide a second year of survey effort in these areas.

Common Crane Surveys

9.2.45 Common crane surveys were conducted within in the River Deveron Corridor and New Deer to Peterhead Focal Areas as identified in **Table 9.2**: Ornithological Surveys Undertaken in Each Focal Area. Common crane surveys

 $\underline{https://www.nature.scot/sites/default/files/2018-01/Guidance-Licensing-Capercaillie-survey-methods.pdf.}$

³⁹ Gilbert, G., Gibbons, D.W., and Evans, J. (1998). Bird Monitoring Methods. RSPB, Sandy.

 $^{^{}m 40}$ SNH (2013) Capercaillie Survey Methods. February 2013. Available at:



were undertaken and were informed by records received from the RSPB Scotland. In the absence of a defined survey methodology, the common crane surveys involved a combination of drive-arounds and ad hoc VPs, undertaken in strategic locations overlooking areas of suitable breeding and foraging habitat. Surveys were conducted monthly between April and July 2023 (the core common crane breeding season) and these methods used were considered to be sufficient for establishing the presence of, and any breeding activity by common cranes and to identify nest sites.

9.2.46 These surveys were repeated in 2024 covering the same areas as surveyed in 2023, providing a second year of survey effort and results.

Goose Field Use Surveys

9.2.47 Goose field use surveys were conducted across the agricultural fields within the New Deer to Peterhead Focal Area only and involved a combination of drive-arounds and ad hoc VPs overlooking areas of suitable goose foraging habitat, principally arable and pastoral farmland, in line with SNH, 2017 and NatureScot, 2025a survey guidance. Surveys were conducted monthly between September 2023 and March 2024. The main aim of these surveys was to establish the presence, distribution, abundance and frequency of occurrence of foraging goose flocks along this section of the Proposed OHL Alignment, some of which may be overwintering and qualifying species of designated sites.

Incidental Observations and Site Investigation Pre-Works Check Records (2024-25)

9.2.48 As well as the formalised, dedicated surveys described above, observations and records of breeding / roosting Target Species were recorded on an ad hoc basis during ecology and habitat surveys in 2023 / 24, and more systematically during pre-construction surveys for enabling works conducted in 2024 and 2025.

Methodology for the Assessment of Impacts

9.2.49 The impact assessment methodology is detailed within Chapter 5: EIA Process and Methodology.

Characterising Important Ornithological Features (IOFs)

- 9.2.50 This OIA focuses on ornithological receptors of greatest nature conservation value (defined as Important Ornithological Features (IOFs)), as supported by the CIEEM EcIA guidelines (CIEEM 2018)². To inform the scoping of relevant IOFs, the nature conservation value of each ornithological receptor was evaluated in line with the criteria presented below in **Table 9.4**: Nature Conservation Evaluation Criteria for Important Ornithological Features using a geographical frame of reference comprising international, national, regional and local levels of nature conservation value. For the purposes of this assessment, international value relates to a European context whilst national value is based on a Scottish context. However, given the scale and geographic extent of the Proposed Development, regional and local value have been based on a northeast Scotland context and the broad shires of the Planning Authority areas through which the Proposed Development traverses respectively.
- 9.2.51 For the regional geographic context NatureScot deem Natural Heritage Zones (NHZs) to be the appropriate biogeographical areas against which to assess regional impacts on bird populations outwith designated sites (SNH, 2018⁵). NHZs are an established biogeographical regional classification used by NatureScot to reflect the variations between and commonalities within the varied landscape character, ecological conditions and land uses which exist throughout Scotland⁴¹. There are five NHZs which cover Northeast Scotland, four of which are intersected by the Proposed Development:
 - NHZ 9 North East Coastal Plain, which covers the agriculturally dominated lowlands of Aberdeenshire through which the eastern section of the Proposed Development passes;
 - NHZ 10 Central Highlands, which covers the foothills of the Cairngorm Mountains between Strathspey (Highland / Moray) and Strathdearn (Highland), and the Monadhliath Mountains (Highland), through which the

⁴¹ NatureScot Natural Heritage Zones webpage: https://opendata.nature.scot/datasets/snh::natural-heritage-futures-zones/about.



Proposed Development traverses the very northern extent between the River Nairn and River Spey (Highland / Moray);

- NHZ 12 North East Glens, which covers the Strathspey (Moray) and Deeside and the foothills of the Grampian Mountains (central Aberdeenshire) and the Angus Glens, only a narrow section of which is traversed by the Proposed Development around Keith (Moray); and
- NHZ 21 Moray Firth, which covers the agriculturally-dominated coastal lowlands associated with the Moray, Cromarty and Dornoch Firths, through which the Proposed Development traverses along the southern boundary with NHZ 10 between the River Beauly and the River Spey (Highland).
- 9.2.52 The location and extents of these NHZs relative the Proposed Development are shown on **Figure 9.1: Natural Heritage Zones**.
- 9.2.53 Despite extending across much of the central and southwestern parts of the Northeast Scotland region, NHZ 11 Cairngorm Massif, which covers the Cairngorms and Grampian Mountains, was not included as the Proposed Development will not overlap, or come into close proximity with it, nor are the predominantly mountainous and even sub-alpine habitats representative of those traversed by the Proposed Development.
- 9.2.54 For the Local geographic context, the broad shires through which the Proposed Development traverses are taken as East Inverness-shire, Nairnshire, Moray, Banffshire and North Aberdeenshire.

Table 9.4: Nature Conservation Evaluation Criteria for Important Ornithological Features

Nature Conservation Value	Criteria / Examples
International	An internationally designated site of nature conservation importance under the EU Birds Directive (i.e. SPA or Ramsar Site).
	Qualifying features connected to a nearby SPA / Ramsar Site, or an area meeting the criteria for an international designation.
	A regularly occurring, nationally important population of any species listed under Annex I of the EU Birds Directive, or regularly occurring migratory species connected to an SPA designated for this species under the EU Birds Directive.
	Non-statutory designated IBAs, designated by Bird Life International are also considered to be of international importance.
National	A nationally designated site with bird interests, or area meeting the criteria for national level designations (e.g. SSSI or NNR).
	A regularly occurring, nationally important population of any species listed under Schedule 1 of the WCA or Annex I of the EU Birds Directive, or species represented on the Red List of BoCC or Scottish Biodiversity List $(SBL)^{42}$.
	A nationally rare species (<300 breeding pairs in the UK).
Regional	A regularly occurring, regionally important population of any species listed under Schedule 1 of the WCA or Annex I of the EU Birds Directive or represented on the Red List of BoCC or SBL.
	Sites with bird interests which exceed the local authority-level designations but fall short of SSSI selection guidelines.
	A species for which a significant proportion (>1 %) of the regional population is found within the Site.
Local	Sites and species of local conservation concern such as LNRs and Local Nature Conservation Sites (LNCSs) with bird interests. Other species of conservation concern, including species listed as a priority species on the applicable Local Biodiversity Action Plans (LBAPs) (i.e. the Highland

⁴² Scottish Biodiversity List. Available at: https://www.nature.scot/doc/scottish-biodiversity-list.



				10	

Nature Conservation Value	Criteria / Examples
	LBAP ⁴³ and the North East Scotland Biodiversity Partnership covering Moray and Aberdeenshire ⁴⁴).
Site	Sites and species / species groups that are of low to no ecological / ornithological nature conservation importance, but which enrich the biodiversity value at a site level due to their size, extent, species composition and other factors.

- 9.2.55 Sites and species / species groups that are of less than local importance under the above geographical frame of reference were not considered in detail in this assessment (hereafter defined as having Site level importance).
- 9.2.56 The importance of each IOF was determined using professional judgement, taking account of the results of baseline field and desk study findings and the functional role of receptors within the context of the geographical area (e.g. the function of a designated site in supporting a bird assemblage which is important at a certain geographic scale). Reference was also made to respective national and regional populations and population trends.
- 9.2.57 It should be noted that nature conservation importance does not necessarily relate to the level of legal protection that a receptor receives, and ornithological receptors may be important for a variety of reasons, such as their connectivity to a designated site, rarity, or the geographical location of species relative to their known range.
- 9.2.58 In addition, the value of the Site was also considered. For example, a species associated with a nearby internationally designated site would not automatically be given high importance if it was only recorded rarely in the vicinity of the Site as it would clearly not be important in supporting substantial numbers of that species. So, whilst the conservation importance of a species was considered, the number of individuals and frequency of occurrence in relation to the Proposed Development was also taken into account.

Characterising Impacts

- 9.2.59 Impacts may be 'adverse' or 'beneficial' as set out below:
 - Adverse: a negative impact which has the potential to decrease the value or status of a receptor relative to baseline conditions; or
 - Beneficial: a positive impact which has the potential to increase the value or status of a receptor relative to baseline conditions.
- 9.2.60 Potential impacts upon IOFs are described with reference to their magnitude and their nature (adverse or beneficial), duration and reversibility, where this is relevant to understanding the nature of an effect and determining its significance.
- 9.2.61 For the purposes of the ornithological assessment, the temporal nature of potential impacts (duration) was defined as follows, and refers to the time for which an impact is expected to last before recovery to baseline conditions:
 - Negligible: of inconsequential duration;
 - Short-term: for 1-5 years;
 - Medium-term: for 5-10 years;
 - Long-term: for 10-30 years; and
 - Very long-term: >30 years.

 $\underline{\text{https://www.highland.gov.uk/downloads/file/27148/highland_nature_biodiversity_action_plan_2021_\%E2\%80\%93_2026.}$

 $^{^{\}rm 43}$ Highland Biodiversity Action Plan 2021-2026. Available at:

⁴⁴ North East Scotland Biodiversity Partnership website. Available at https://www.nesbiodiversity.org.uk/the-north-east-scotland-biodiversity-partnership/.

- TRANSMISSION
- 9.2.62 Impact magnitude refers to the size of the impact and is determined on a quantitative basis, where possible (for example the predicted loss of individuals from a population). The criteria used in this assessment to determine the magnitude of impacts are set out below in **Table 9.5**: Criteria for Determining Magnitude of Potential Impacts and are based on a reasonable index.
- 9.2.63 It is important to note that where reference is made to population level effects, the most recently published population estimates are used where this information is available, but that these values are considered to be guides only.
- 9.2.64 In addition, it will often be impossible to equate an impact to an actual population loss. For example, where birds may be displaced from the Site as a result of construction or operational activities, such a loss may be temporary (i.e. individuals may become habituated to the impacts over time) or may result in the relocation of birds to suitable habitats elsewhere within the immediate or wider area. Where uncertainty arises, professional judgement is used on the basis of best available evidence, whilst taking a precautionary approach.

Table 9.5: Criteria for Determining Magnitude of Potential Impacts

Magnitude	Description
Severe	The impact (either on its own or cumulatively with other projects) may result in the permanent total or almost complete loss of an ecologically important site and / or a species' status or productivity. For example, affecting >80% of the regional population estimate (or appropriate alternative).
Major	The impact (either on its own or cumulatively with other projects) may adversely affect the conservation status of a site and / or species population, in terms of the coherence of its ecological structure and function (integrity), across its whole area, that enables it to sustain the habitat, complex of habitats and / or the population levels of species of interest. For example, affecting 30-80% of the regional population estimate (or appropriate alternative).
Moderate	The impact (either on its own or cumulatively with other projects) would not adversely affect the conservation status of a site and / or species, but some element of the functioning might be affected, and impacts could potentially affect its ability to sustain some part of itself in the long-term. For example, affecting 10%-30% of the regional population estimate (or appropriate alternative).
Minor	The impact (either on its own or cumulatively with other projects) would not result in a loss of function to the conservation status of a site and / or species, but some adverse impact to species abundance would be observable, although this may only be temporary. For example, affecting 1%-10% of the regional population estimate (or appropriate alternative).
Negligible	An indiscernible reduction in a site and / or species status or productivity with no observable effect. For example, affecting <1% of the regional population estimate (or appropriate alternative).

9.2.65 It should be noted that sensitivity to change varies between species and between populations of the same species; for example, a bird may be more sensitive to disturbance when nesting than during the non-breeding season, and birds that are more readily exposed to human activity may be more tolerant of disturbance.

Therefore, the sensitivity of ornithological features was taken into account during the assessment, where this information existed.

Criteria for Assessing Significance

- 9.2.66 CIEEM EcIA Guidelines (2018)² has been used to inform the assessment methodology for determining the significance of effects. This guidance states that for the Ecology discipline of an EIA (taken here to also include Ornithology) a matrix approach and the production of a 'significance score' should be avoided as this would require making assumptions to create values that are not easily quantified. Instead, the terms 'significant' or 'not significant' are recommended to classify effects.
- 9.2.67 Significance was determined by considering the importance of each ornithological receptor and the magnitude of the impacts (as set out above) and by applying professional judgement as to whether the integrity of the feature would be affected.



- 9.2.68 Professional judgement takes into consideration bird species ecology, population trends and evidence from studies of bird and OHL interactions, where such evidence exists. Relevant data sources are referenced within the assessment, as appropriate.
- 9.2.69 Effects are more likely to be considered significant where the receptor affected is of higher conservation value or where the magnitude of the impact is high. Effects not considered to be significant would be those where the integrity of the receptor is not threatened, those affecting features of low conservation value, or where the magnitude of the impact is low. Justification for the conclusions made are provided within the assessment.
- 9.2.70 A significant effect will be one that undermines (in the case of adverse effects) biodiversity conservation objectives for IOFs, at an appropriately defined geographic scale. For the purposes of this assessment, these were primarily based on national (Scottish) or regional (northeast Scotland) population estimates where available, and provided sufficient information to allow a meaningful assessment. As described in Paragraph 9.2.55, only impacts on ornithological features of local importance or above were assessed in this OIA.
- 9.2.71 The term 'integrity' was used to refer to the maintenance of the conservation status of a population of a species at a specific location or geographical scale.
- 9.2.72 In cases of reasonable doubt, where it was not possible to robustly justify a conclusion of no significant effect, a significant effect was assumed as a precautionary approach. Where uncertainty exists, this was acknowledged.
- 9.2.73 Where the assessment proposes measures to mitigate adverse effects on ornithological receptors, a further assessment of residual effects, taking into account such measures, was undertaken.
- 9.2.74 Finally, it should be noted that the CIEEM EcIA guidelines (CIEEM, 2018²) state: "A significant effect does not necessarily equate to an effect so severe that consent for the project should be refused planning permission. For example, many projects with significant negative ecological effects have been lawfully permitted following EIA procedures".

Cumulative Effects

- 9.2.75 As well as considering the impacts of the Proposed Development on IOFs on its own, the EIA Regulations also require consideration of potential for cumulative effects from other projects and activities to be assessed in combination with those associated with the Proposed Development.
- 9.2.76 In line with NatureScot's latest guidance on the assessment of cumulative effects (NatureScot, 2025c⁶), developments at the following stages should be factored in when considering cumulative impacts:
 - developments that are already operational and those that are under construction or consented and likely to
 be built, should be considered first, as the impacts arising from these, once mitigation has been factored in,
 are unavoidable; and
 - applications that have been formally submitted to a planning authority or Scottish Government but have yet to be determined, consented and constructed, should then be factored in.
- 9.2.77 The inclusion of developments which are already in operation deviates from the cumulative impact assessment methodology outlined in **Chapter 5**: **EIA Process and Methodology**, but aligns with NatureScot's guidance for cumulative assessment of impacts from onshore windfarms on birds (NatureScot, 2025c⁶) which is considered to be more applicable to powerline projects in relation to the assessment of impacts on ornithological receptors.
- 9.2.78 Confidential data (e.g. on Schedule I species) from such assessments are often not in the public domain and therefore professional judgement was used for the assessment of cumulative impacts.
- 9.2.79 Proposed developments which are at the pre-application scoping stage of the EIA process were excluded from the cumulative assessment in this chapter, since baseline ornithological surveys are either ongoing or the data are not publicly available and so potential effects of such developments are as yet unknown.



- 9.2.80 The assessment of cumulative effects has been undertaken in line with the methodology described in **Chapter 5**: **EIA Process and Methodology**, **Section 5.5 Cumulative Effects**. This involves a two-stage approach, first considering other SSEN Transmission network upgrade projects associated with the Proposed Development ('intra developments') and then considering other projects with which there might be a risk of cumulative effects on IOFs ('inter developments').
- In general, a study area of 5 km distance from the Proposed Development has been used to identify Cumulative 9.2.81 Developments for all environmental topics, as the majority of the study areas for each of the individual environmental topic assessments is 5 km or less. In the case of ornithological cumulative effects however, the scope of the search for other projects extended to a 10 km buffer surrounding the Proposed Development, in recognition of the wider-ranging mobility of most Target Species under consideration. Given the scale of the Proposed Development the search for other projects in the wider surrounding area (i.e. between 5 km and 10 km) was restricted to large scale developments such as windfarms comprising four or more turbines and other OHLs. Additionally, of the projects listed in Appendix 5.1: Cumulative Developments (i.e. within 5 km of the Proposed Development), those smaller scale developments such as substations, battery storage facilities, underground cables and onshore grid connection works for offshore windfarms are not considered since the impacts associated with these developments are considered to be much more discrete and localised, and therefore, are considered unlikely to give rise to regional scale population effects on their own or contribute adverse effects sufficient to give rise to significant cumulative effects when considered in combination with those associated with the Proposed Development. The only exception to this from the projects listed in Appendix 5.1: Cumulative Developments are quarries, due to the potential long-term disturbance impacts they may pose.
- 9.2.82 The 10 km search area was considered to cover the core range of the majority of species scoped into the impact assessment (see **Table 9.13**: Important Ornithological Features Scoped In for Further Assessment). The only exception to this is pink-footed goose, however as explained in **Table 9.13**: Important Ornithological Features Scoped In for Further Assessment and **Table 9.14**: Important Ornithological Features Scoped Out for Further Assessment, those birds recorded in the vicinity of the Proposed Development were considered more likely to have been birds on migration or locally occurring birds, rather than those associated with more distant designated sites. Therefore 10 km was also considered appropriate for pink-footed goose.
- 9.2.83 The significance of cumulative effects was assessed following the same criteria detailed earlier in this section, in relation to the assessment of effects based on the nature conservation value of relevant IOFs and the magnitude of the impacts upon them.

Limitations and Assumptions

- 9.2.84 As identified above, the ornithology surveys were designed to focus on areas (Focal Areas) identified as having the greatest potential to support Target Species, as identified through a rigorous desk study process undertaken throughout the Corridor and Route Selection Stages. As such areas outside Focal Areas were not subject to field survey; however, were subject to a detailed desk study. This full suite of data, from field surveys and desk study, was then used to inform the baseline conditions and subsequent assessment. The assessment includes a qualitative assessment of collision risk for Target Species across non-Focal Areas where appropriate to ensure the assessment is robust. Based on the above it was considered that the baseline data gathered was adequate to undertake a robust assessment on the effects of the Proposed Development on ornithological receptors.
- As noted in the flight activity surveys methodology, flights considered to be at PCH were those recorded at heights of between 10 m and 60 m (Paragraph 9.2.31), as this aligned with the parameters provided at the outset of the survey programme. However, the OHL towers would typically vary in height from 41 m to a maximum of approximately 97 m in height, with the conductors being strung between a minimum of approximately 9 m above ground level to the maximum 97 m above ground level, as described in **Chapter 3 The Proposed**Development. This therefore represents the maximum height band above ground level within which birds would be at risk of colliding with the conductors. In order to accommodate for the discrepancy between flights recorded at PCH during the surveys (0 m 60 m) and flights which may have been at actual PCH, 10% of flights

which were recorded in the height band above the survey PCH height bands (i.e. Height Band 4 (60 m \pm)) and which intersected with the Proposed Development have been included in the final 'adjusted' number of flights (and constituent number of birds) at PRC. This resulted in a decimalised number which has been rounded up to the nearest whole number. This approach was considered to take an acceptably precautionary approach as it accounts for all towers up to 72 m in height, which is 99% of all towers.

9.3 Baseline Conditions

- 9.3.1 Full details of the desk study and field survey results are provided within Appendix 9.1 Ornithology Technical Report. Sensitive information pertaining to the nest and lek site locations of rare and vulnerable species, particularly those which may be at risk of persecution, has been omitted from this OIA and Appendix 9.1 Ornithology Technical Report and is instead presented in Appendix 9.2 Confidential Ornithological Information.
- 9.3.2 Although ornithological information and species records were sought for the Designated Sites and Target Species Study Areas as a whole, the results received have also been attributed to the relevant Focal Areas throughout this section.

Desk Study

Designated Sites

9.3.3 International statutory designated sites with ornithological interests within 10 km of the Proposed Development, extended to 20 km for sites designated for overwintering geese, are identified below in **Table 9.6**: International Statutory Designated Sites with Ornithological Interests within 20 km of the Proposed Development (ordered west to east) while their distribution relative the Site is shown on **Figure 8.1**: **International Designated Sites** of **Chapter 8**: **Ecology**. The Site does not overlap with any International statutory designated sites with ornithological interests, as such sites were avoided during the Proposed Development's design evolution. However, there are 14 such sites / site complexes located within the 20 km Designated Sites Study Area.

Table 9.6: International Statutory Designated Sites with Ornithological Interests within 20 km of the Proposed Development (ordered west to east)

Designated Site	Local Planning Authority	Distance to Proposed Development (Nearest Focal Area(s))	Qualifying Features ⁴⁵
Glen Affric to Strathconon SPA	Highland	9.9 km west (Beauly River Corridor)	Golden eagle (breeding) - 10 active territories in 2003, 2.2% of the GB population.
North Inverness Lochs SPA	Highland	8.8 km south (Beauly River Corridor, The Aird, River Ness / Caledonian Canal Corridor)	Slavonian grebe (breeding) - 1991 to 1995, 7 pairs, 12% of the GB population.
Inner Moray Firth SPA and Ramsar Site	Highland	0.5 km north (Beauly River Corridor, The Aird, River Ness / Caledonian Canal Corridor,	 Osprey forage (breeding) – 2008-2012, up to 25 territories within feeding range, 12.5% of the GB population, with 4 pairs breeding within the site, 4% of the GB population.

⁴⁵ All populations numbers taken from relevant SPA / Ramsar Site citations obtained from NatureScot's Sitelink website (https://sitelink.nature.scot/home)

Designated Site	Local Planning Authority	Distance to Proposed Development (Nearest Focal Area(s))	Qualifying Features ⁴⁵				
		Drummossie Muir to River Nairn Corridor)	 Common tern (breeding) - 310 pairs, 2% of the GB population. Bar-tailed godwit (non-breeding) - 1992 / 93-1996 / 97 five year peak mean of 1,090 individuals, 2% of the GB population. Greylag goose (non-breeding) - 1992 / 93-1996 / 97 five year peak mean of 2,651 individuals, 3% of the biogeographic population. Red-breasted merganser (non-breeding) - 1992 / 93-1996 / 97 five year peak mean of 1,184 individuals, 1% of the biogeographic population). Redshank (non-breeding) - 1992 / 93-1996 / 97 five year peak mean of 1,621 individuals, 1% of the biogeographic population. Non-breeding waterfowl assemblage >20,000 individuals including nationally important populations of scaup, curlew, goosander, goldeneye, teal, cormorant, redshank, red-breasted merganser, greylag goose, bar-tailed godwit and oystercatcher. Ramsar Site: Coastal and estuarine habitats. Ornithological features: osprey, common tern, scaup, curlew, goosander, goldeneye, teal, wigeon Anas Penelope, cormorant, oystercatcher, bar-tailed godwit, greylag goose, red-breasted merganser, redshank and non-breeding waterfowl assemblage >20,000 individuals. 				
Cromarty Firth SPA and Ramsar Site	Highland	11.2 km north (Beauly River Corridor)	 SPA: - considered for goose qualifying interests only given >10 km from the Proposed Development Greylag goose (non-breeding) – 1992 / 93-1996 / 97 five year peak mean of 1,782 individuals; 2% of the biogeographic population. Ramsar Site: Ornithological features include greylag goose, aligning with the SPA. 				
Moray Firth SPA	Coastal / Marine	0.85 km north (Beauly River Corridor, The Aird, River Ness / Caledonian Canal Corridor, Drummossie Muir to River Nairn Corridor)	 Great northern diver (non-breeding) – 2001 / 02-2006 / 07 peak mean of 144 individuals, 5.8% of the GB population, Red-throated diver (non-breeding) – 2001 / 02-2006 / 07 peak mean of 324 individuals, 1.9% of the GB population. Slavonian grebe (non-breeding) – 2001 / 02-2005 / 06 peak mean of 43 individuals, 3.9% of the GB population. Greater scaup (non-breeding) – 2001 / 02-2005 / 06 five year peak mean of 930 individuals, 17.9% of the GB population. Common eider (non-breeding) – 2001 / 02-2005 / 06 peak mean of 1,733 individuals, 2.9% of the GB population. Long-tailed duck (non-breeding) – 2001 / 02-2005 / 06 five year peak mean of 5,001 individuals, 45.5% of the GB population. Common scoter (non-breeding) – 2001 / 02-2005 / 06 five year peak mean of 5,479 individuals, 5.5% of the GB population. 				

Designated Site	Local Planning Authority	anning Proposed uthority Development (Nearest Focal Area(s))					
			 Velvet scoter (non-breeding) – 2001 / 02-2005 / 06 five year peak mean of 1,488 individuals, 59.5% of the GB population. Common goldeneye (non-breeding) – 2001 / 02-2005 / 06 five year peak mean of 907 individuals, 4.5% of the GB population. Red-breasted merganser (non-breeding) – 2001 / 02-2005 / 06 five year peak mean of 151 individuals, 1.8% of the GB population. European shag (breeding) - 1980-2006 average of 494 individuals during the breeding season, 2.7% of the biogeographic population and 10.2% of the GB population; non-breeding) - at least 6,462 individuals during the non-breeding season, 3.2% of the biogeographic population and 5.9% of the GB population. 				
Loch Ashie SPA	Highland	2.9 km south (River Ness / Caledonian Canal Corridor, Drummossie Muir to River Nairn Corridor)	Slavonian grebe (non-breeding) – post-breeding gathering of up to 60 individuals, up to 15% of the GB population.				
Loch Flemington SPA	Highland	5.5 km north (Assich Forest / Strathdearn Foothills)	Slavonian grebe (breeding) - 1991 - 1995 average 6 pairs, representing 10% of the GB breeding population.				
Darnaway and Lethen Forest SPA	Highland / Moray	3.6 km north (Dulsie Wood and associated Woodlands, Dava Moorlands, Bednawinny Moss Moorlands and Newtyle Forest)	Capercaillie (breeding) - estimated to support 23 individuals (mean 1999 / 2000, 2002, 2003), representing about 2.1 % of the GB population.				
Moray and Nairn Coast SPA and Ramsar Site	Moray	3.0 km north (River Spey Corridor / Wood or Ordiequish)	 Osprey (breeding) - 2008-2012 five year mean of up to 9 territories within feeding range, 4.5% of the GB population and 7 pairs breeding within the site, 7% of the GB population; Bar-tailed godwit (non-breeding) 1989 / 90-1993 / 94 five-year peak mean of 899 individuals, 2% of the GB population. Pink-footed goose (non-breeding) – 1988 / 89-1992 / 93 five year peak mean of 7,538 individuals, 4% of biogeographic population); Greylag goose (non-breeding) – 1988 / 89-1992 / 93, five year peak mean of 3,023 individuals, 3% of biogeographic population); and Redshank (non-breeding) – 1989 / 90-1993 / 94, winter peak mean of 1,690 individuals, 1% of biogeographic population). Non-breeding waterfowl assemblage >20,000 individuals. Ramsar Site: Coastal and estuarine habitats, floral communities and invertebrates. 				

Designated Site	Local Planning Authority	Distance to Proposed Development (Nearest Focal Area(s))	Qualifying Features ⁴⁵				
			 Ornithological features: osprey, bar-tailed godwit, red-breasted merganser, dunlin, oystercatcher, wigeon, pink-footed goose, greylag goose, redshank and waterbird assemblage >20,000 individuals. 				
Loch Spynie SPA and Ramsar Site	Moray	SPA: 9.7 km north Ramsar Site: 9.4 km north (Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood, Brown Muir)	 SPA: Greylag goose (non-breeding) – 1985 / 86-1989 / 90 five year peak mean of 8,830 birds (9% of the world population). Ramsar Site: Freshwater and associated woodland habitats and floral communities. Ornithological features: greylag goose. 				
Tips of Corsemaul and Tom Mor SPA	Moray / Aberdeenshire	8.2 km southwest (River Isla Corridor)	Common gull (breeding) estimated 15,870 pairs in 1998, 233 of GB, 3% of Western and Central Europe and 3% of World populations).				
Buchan Ness to Collieston Coast SPA	Aberdeenshire	7.9 km southeast. (New Deer to Peterhead)	Breeding seabird assemblage of >20,000 individual including nationally important populations of black-legged kittiwake, common guillemot, herring gull, European shag and Northern fulmar.				
Ythan Estuary, Sands of Forvie and Meikle Loch SPA and Ramsar Site	Aberdeenshire	SPA: 9.7 km southeast Ramsar Site: 11.7km southeast (New Deer to Peterhead)	 SPA: Sandwich tern (breeding) - 1989-1991, up to 1125 pairs, up to 7% of the GB population); Common tern (breeding) - 1989-1993, up to 265 pairs, up to 2% of the GB population). Little tern (breeding) - 1989-1993, up to 41 pairs, up to 2% of the GB population. Pink-footed goose (non-breeding) - 1988 / 89-1992 / 93 five year peak mean of 17,213 individuals, 9% of the biogeographic population. Non-breeding waterfowl assemblage >20,000 individuals, including nationally important populations of pink-footed goose, eider, redshank and lapwing. Ramsar Site: considered for goose qualifying interests only given >10 km from the Proposed Development Ornithological features include pink-footed goose, aligning with the SPA. 				
Loch of Strathbeg SPA and Ramsar Site	Aberdeenshire	12.2 km northeast (New Deer to Peterhead)	 SPA: - considered for goose qualifying interests only given >10 km from the Proposed Development Pink-footed goose (non-breeding) - 1986 / 87-1990 / 91, five year peak mean of 27,500 individuals, 25% of the biogeographic population. Greylag goose (non-breeding) - 1986 / 87-1990 / 91, five year peak mean of 5,565 individuals, 6% of the biogeographic population. Ramsar Site: Orbithological features include pink-footed goose				
			 Ornithological features include pink-footed goose and greylag goose, aligning with the SPA. 				

9.3.4 There is one SSSI within 2 km of the Proposed Development which is notified for its ornithological interests:

Beauly Firth SSSI, which is located approximately 0.5 km north of the Proposed Development and underpins

Inner Moray Firth SPA detailed in **Table 9.6** above. As well as its saltmarsh habitat and associated plant



- TRANSMISSION
 - community, Beauly Firth SSSI is notified for its non-breeding populations of greylag geese, goosander and red-breasted merganser.
- 9.3.5 There is one non-statutory designated site within 2 km of the Proposed Development which is cited for its ornithological interests: Moray Basin, Firths and Bays IBA, which is located approximately 0.5 km north of the Proposed Development. Moray Basin, Firths and Bays IBA broadly aligns with the Inner Moray Firth SPA and Moray and Nairn Coast SPA and is recognised for the same coastal and estuarine waterbird interest features as detailed in **Table 9.6** above.
- 9.3.6 The location of Beauly Firth SSSI and Moray Basin, Firths and Bays IBA are shown on **Figure 8.2: National, Local / Non-statutory Designated Sites** of **Chapter 8: Ecology**.

Target Species

9.3.7 Table 9.7: Summary of Ornithological Records Obtained through Desk Study below presents summary details of information gathered through the desk study and data requests on the presence and distribution of Target Species within the Study Area. Full details are provided in Appendix 9.1 Ornithology Technical Report with details pertaining to the nest and lek site locations of rare and vulnerable species is presented in Appendix 9.2 Confidential Ornithological Information and Figure 9.2.1a-l: Confidential Desk Study Results.

Table 9.7: Summary of Ornithological Records Obtained through Desk Study

Target Species	Summary of Data Received / Collected	Sources
Scarce Raptors		
White-tailed eagle	Records of white-tailed eagle were obtained from the predominantly open moorland areas in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Bednawinny Moss Moorlands and Newtyle Forest Focal Areas.	Clash Gour Wind Farm EIA Report.
Golden eagle	Records of golden eagle were obtained from the predominantly open moorland areas in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood Focal Areas.	Clash Gour and Kellas Drum Wind Farm EIA Reports.
Osprey	Records of osprey were obtained from throughout the Highland and Moray sections of the Proposed OHL Alignment, between Beauly River Corridor and River Spey Corridor / Wood of Ordiequish Focal Areas, including at least 14 breeding records in the wider Study Area associated with at least five Focal Areas. Activity, where reported, was typically associated with open waterbodies and river corridors.	HRSG; NERSG; Spittal— Loch Buidhe—Beauly 400kV Connection Project; Beauly to Blackhillock Reinforcement Project; Cairn Duhie, Clash Gour, Hill of Glaschyle; Kellas Drum and Teindland Wind Farm EIA Reports.
Honey buzzard	Records of honey buzzard were obtained from wooded areas in the Highland section of the Proposed OHL Alignment, between the Beauly River Corridor and Drummossie Muir and River Nairn Focal Areas, including records indicating the presence of breeding in the wider Study Area associated with two Focal Areas.	HRSG; Beauly to Blackhillock Reinforcement Project.
Red kite	Records of red kite were obtained from throughout the Highland and Moray sections of the Proposed OHL Alignment, between Beauly River Corridor / Wood of Ordiequish Focal Areas, including two breeding records in the wider Study Area associated with one of these Focal Areas.	HRSG; Spittal—Loch Buidhe—Beauly 400kV Connection Project; Beauly to Blackhillock Reinforcement Project and Teindland Wind Farm EIA Report.
Goshawk	Records of goshawk were obtained from predominantly wooded areas in the Highland and Moray sections of the Proposed OHL Alignment, between the Assich Forest /	HRSG; NERSG; FLS, Beauly to Blackhillock Reinforcement Project;

Target Species	Summary of Data Received / Collected	Sources		
	Strathdearn Foothills and River Spey Corridor / Wood of Ordiequish Focal Areas, including breeding records in the wider Study Area associated with at least four Focal Areas.	Cairn Duhie, Clash Gour, Hill of Glaschyle; Kellas Drum and Teindland Wind Farm EIA Reports; anecdotal landowner records.		
Hen harrier	Records of hen harrier were obtained from the predominantly open moorland areas in the Highland and Moray sections of the Proposed OHL Alignment, between the Assich Forest / Strathdearn Foothills and Brown Muir Focal Areas, including breeding records in the wider Study Area associated with at least two Focal Areas.	Spittal-Loch Buidhe- Beauly 400kV Connection Project; Beauly to Blackhillock Reinforcement Project; Cairn Duhie, Clash Gour, Hill of Glaschyle and Teindland Wind Farm EIA Reports; anecdotal landowner records.		
Peregrine	Records of peregrine were obtained from throughout the Highland and Moray sections of the Proposed OHL Alignment, between the Beauly River Corridor and River Spey Corridor / Wood of Ordiequish Focal Areas, including a breeding record in the wider Study Area associated with at least one Focal Area.			
Merlin	moorland areas in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Brown Muir Focal Areas, including breeding records in the wider Study Area associated with at least two Focal Areas.			
Hobby	Records of hobby were obtained from the predominantly open moorland areas in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Bednawinny Moss Moorlands and Newtyle Forest Focal Areas.	Clash Gour and Teindland Wind Farm EIA Reports.		
Short-eared owl	Records of short-eared owls were obtained from the predominantly open moorland areas in the Highland and Moray sections of the Proposed OHL Alignment, between the Assich Forest / Strathdearn Foothills and Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood Focal Areas. Anecdotal records of breeding short-eared owl were also provided from the New Deer to Peterhead Focal Area.	Cairn Duhie, Clash Gour and Kellas Drum Wind Farm EIA Reports; anecdotal landowner records.		
Barn owl	Records of barn owls were obtained from the predominantly open moorland areas in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Bednawinny Moss Moorlands / Newtyle Forest Focal Areas.	Cairn Duhie and Clash Gour Wind Farm EIA Reports.		
Capercaillie and Bla	ack Grouse			
Capercaillie	Records of capercaillie were obtained from the forested areas within the Highland and Moray sections of the Proposed OHL Alignment, between the Drummossie Muir / River Nairn Corridor and River Spey Corridor / Wood of Ordiequish Focal Areas. These included records of lekking birds in the wider Study Area associated with three of these Focal Areas, most of which were historical. Records provided by RSPB Scotland from their surveys in 2023 and 2024 included an incidental sighting of a female flying over a road in 2023 and of a single male observed in woodland, both of which were associated with the Dulsie Wood and associated Woodlands Focal Area.	RSPB Scotland; Clash Gour EIA Report.		
Black grouse	Records of black grouse were obtained from throughout the open moorland areas within the Highland and Moray sections of the Proposed OHL Alignment, between The Aird and Bednawinny Moss Moorlands and Newtyle Forest Focal Areas,	RSPB Scotland; Beauly to Blackhillock Reinforcement Project; Cairn Duhie, Clash Gour and Kellas Drum,		

Target Species	Summary of Data Received / Collected	Sources
	including records of lekking birds in the wider Study Area associated with at least three of these Focal Areas.	Teindland Wind Farm EIA Reports; anecdotal landowner records.
Divers		
Red- and black- throated diver	Records of red- and black throated divers were obtained from the predominantly open moorland areas comprising waterbodies in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Bednawinny Moss Moorlands and Newtyle Forest Focal Areas, including breeding records by both species in the wider Study Area associated with these two Focal Areas.	Cairn Duhie and Clash Gour Wind Farm EIA Reports.
Overwintering Water	rfowl	
Pink-footed and greylag goose	Records of pink-footed and greylag geese were obtained from throughout the Highland and Moray sections of the Proposed OHL Alignment, between Beauly River Corridor and River Isla Corridor Focal Areas. Activity, where reported, was typically associated with river corridors as well as open moorland areas and was recorded throughout the overwintering period.	Spittal-Loch Buidhe- Beauly 400kV Connection Project; Beauly to Blackhillock Reinforcement Project; Cairn Duhie, Clash Gour, Kellas Drum and Teindland Wind Farm EIA Reports.
Whooper swan	Records of whooper swan were obtained from the Moray section of the Proposed OHL Alignment, between the Dulsie Wood and associated Woodlands and Dava Moorlands Focal Areas (Moray).	Beauly to Blackhillock Reinforcement Project; Cairn Duhie Wind Farm EIA Report.
Wading Birds		
Golden plover, curlew and lapwing	Records of golden plover, curlew and lapwing were obtained from the predominantly open moorland areas in the Highland and Moray sections of the Proposed OHL Alignment, between the Assich Forest / Strathdearn Foothillsand Brown Muir Focal Areas, including breeding recorded in the wider Study Area associated with these Focal Areas.	Cairn Duhie, Clash Gour and Kellas Drum, Teindland Wind Farm EIA Reports; anecdotal landowner records.
Passerines Target Sp	pecies	
Common & Scottish crossbill	Common and / or Scottish crossbill occur within all 10 km grid squares within which all Focal Areas along the Proposed OHL Alignment sit (i.e. from Beauly River Corridor to New Deer to Peterhead Focal Areas), where they will predominantly be affiliated with coniferous woodland habitats.	Balmer <i>et al.</i> (2013); Beauly to Blackhillock Reinforcement Project; Hill of Glaschyle Wind Farm EIA Report.
Crested tit	Crested tit occur within almost all 10 km grid squares within which the Focal Areas in the western half of the Proposed OHL Alignment sit (i.e. between Beauly River Corridor and River Spey and Wood of Ordiequish Focal Areas), where they will predominantly be affiliated with coniferous woodland habitats.	Balmer <i>et al.</i> (2013); Beauly to Blackhillock Reinforcement Project; Hill of Glaschyle Wind Farm EIA Report.
Corn bunting	Corn bunting occur in the 10 km grid squares within which the River Deveron Corridor and New Deer to Peterhead Focal Areas sit (i.e. in the eastern half of the Proposed OHL Alignment), where they will be associated with arable farmland habitats. Anecdotal records of breeding corn bunting were also provided from the New Deer to Peterhead Focal Area.	Balmer <i>et al.</i> (2013); anecdotal landowner records.

Field Surveys

Flight Activity Surveys

9.3.8 The OHL infrastructure associated with the Proposed Development is described in Chapter 3 – The Proposed Development. In summary, the Proposed Development will comprise six conductor bundles strung from the horizontal cross-arms of steel lattice towers (three on each side) with the earth wire conductor strung between the tops of the towers (see Chapter 3 – The Proposed Development: Section 3.7). Towers would vary in height



from 41 m to approximately 72 m; with one special tower of approximately 97 m in height located on the eastern side of the Caledonian Canal (CB1-2). This 97 m tall special tower would be an exception and is not considered as part of the Proposed Development's standard components.

9.3.9 The bottom phase conductors would be approximately 9 m above ground level at the lowest point and, excepting the single 97 m tall special tower, the earth wire on the tallest towers would be 72 m above ground level. Typically, these would represent the heights above ground level between which birds would be at risk of colliding with the conductors (i.e. between 9 m to 72 m). As noted in the flight activity surveys methodology however, flights considered to be at PCH were those recorded at heights of between 10 m and 60 m (Paragraph 9.2.31), as this aligned with the parameters provided at the outset of the survey programme. Of the Proposed Development's 549 towers, only 1 % are greater than 72 m in height. In order to take a more precautionary approach and accommodate the discrepancy between flights recorded at PCH during the surveys (0 m – 60 m) and flights which may have been at actual PCH (9 m – 72 m), 10% of flights which were recorded in the height band above the survey PCH height bands (i.e. Height Band 4 (60 m+)) and which intersected with the horizontal LoD of the proposed tower and OHL alignment have been included in the final 'adjusted' number of flights (and constituent number of birds) at PRC in the following flight activity results tables. This has typically resulted in a decimalised number. Consultation with NatureScot confirmed that this approach was considered to be reasonable as, summarised in **Table 9.1**: Consultation Responses of Relevance to Ornithology.

Raptors

- 9.3.10 **Table 9.8: Summary of Raptor Flights Recorded During Flight Activity Surveys** below presents a summary of raptor flights recorded during the flight activity surveys, through which a total of 226 flights by 11 different species were recorded. Full details of the flight activity survey results are provided in **Appendix 9.1 Ornithology Technical Report** and shown on **Figure 9.1.4a-o: Flight Activity Survey Results (2022-2024)**.
- 9.3.11 Red kite was the most frequently recorded raptor species with 179 flights comprising 226 individuals and typically occurred year-round throughout the surveyed Focal Areas. Occurrence of red kites was restricted to the western part of the Proposed OHL Alignment between Beauly River Corridor and Dava Moorlands, with activity being associated with a combination of woodland, moorland and lowland agricultural habitats. Flights were most frequently recorded in the River Ness and Caledonian Canal Corridor, Drummossie Muir and River Nairn Corridor and Assich Forest / Strathdearn Foothills Focal Areas. Despite the numerous flights however, the frequency of flights at the adjusted PRC height was comparatively low, with just 35 flights comprising 40.3 individuals being recorded at PCH.
- 9.3.12 Osprey was the second most frequently recorded raptor species, albeit significantly less often than red kite, with 18 flights comprising 23 individuals recorded. All flights occurred during the breeding season, as expected for this summer migrant species. Flights were most frequently recorded in the Drummossie Muir and River Nairn Corridor Focal Area. Of the 17 flights recorded, 3.2 comprising 3.4 birds were at the adjusted PCH.
- 9.3.13 Goshawk were observed with similar frequency to osprey with 14 flights comprising 16 individuals recorded, most often in the Assich Forest / Strathdearn Foothills and New Deer-Peterhead Focal Areas. Flights recorded in the Assich Forest / Strathdearn Foothills Focal Area occurred throughout the year, as expected for this resident species. The New Deer-Peterhead Focal Area, which is where the majority of flights were recorded, was only surveyed during the non-breeding season, and so it is reasonable to assume that greater frequency would have been recorded if the breeding season had also been covered. Nonetheless, of the 14 flights recorded, only two flights comprising two birds were at the adjusted PCH.
- 9.3.14 Flight activity by all other raptor Target Species, which included white-tailed eagle, golden eagle, hen harrier, marsh harrier, peregrine, merlin, short-eared owl and barn owl, was recorded infrequently with no more than three flights being recorded for each species across the surveyed Focal Areas and throughout the entire survey programme. These species were predominantly recorded over the open moorland habitats of the Assich

Forest / Strathdearn Foothills Focal Area and the agricultural habitats of the New Deer-Peterhead Focal Area, reiterating that the latter was only surveyed during the non-breeding season.

Table 9.8: Summary of Raptor Flights Recorded During Flight Activity Surveys

Species	Focal Area	Total No. Of Flights	Total No. of Birds	No. of Flights at PRC	No. of Birds at PRC	Adjusted No. of Flights at PRC	Adjusted No. of Birds at PRC	Adjusted Time at PRC (secs)
Red kite	Beauly River Corridor	16	18	1	1	1	1	40.5
	The Aird	7	8	2	2	2.1	2.1	588
	River Ness / Caledonian Canal Corridor	40	50	2	2	2	2	840
	Drummossi e Muir / River Nairn Corridor*	60	87	8	10	8.5	10.8	3133.5
	Assich Forest / Strathdearn Foothills#	36	41	12	13	12.2	13.2	3394.5
	Dulsie Wood & assc. Woodlands	6	6	0	0	0.1	0.1	67.5
	Dava Moorlands+	14	16	9	11	9.1	11.1	1408.5
	TOTALS	179	226	32	39	35	40.3	9472.5
Osprey	Drummossi e Muir / River Nairn Corridor*	13	18	1	1	1.2	1.5	424.5
	Dulsie Wood & assc. Woodlands	4	4	1	1	1	1	15
	Dava Moorlands+	1	1	1	1	1	1	15
	TOTALS	18	23	3	3	3.2	3.4	454.5
Goshawk	Assich Forest / Strathdearn Foothills#	5	6	2	2	2	2	352.5
	Dulsie Wood & assc. Woodlands	1	1	0	0	0	0	0
	Dava Moorlands+	1	2	0	0	0	0	0
	New Deer- Peterhead [%]	7	7	0	0	0	0	0
	TOTALS	14	16	2	2	2	2	352.5
	Assich Forest /	1	1	1	1	1	1	330

Species	Focal Area	Total No. Of Flights	Total No. of Birds	No. of Flights at PRC	No. of Birds at PRC	Adjusted No. of Flights at PRC	Adjusted No. of Birds at PRC	Adjusted Time at PRC (secs)
White- tailed	Strathdearn Foothills#							
eagle	Dulsie Wood & assc. Woodlands	2	2	2	2	2	2	259.5
	TOTALS	3	3	3	3	3	3	589.5
Golden eagle	Assich Forest / Strathdearn Foothills#	1	2	1	2	1	2	586.5
	TOTALS	1	2	1	2	1	2	586.5
Hen harrier	Dava Moorlands+	3	3	0	0	0	0	0
	TOTALS	3	3	0	0	0	0	0
Merlin	Assich Forest / Strathdearn Foothills#	2	3	0	0	0	0	0
	TOTALS	2	3	0	0	0	0	0
Peregrine	New Deer- Peterhead [%]	1	1	0	0	0	0	0
	TOTALS	1	1	0	0	0	0	0
Marsh harrier	New Deer- Peterhead [%]	1	1	1	1	1	1	172.5
	TOTALS	1	1	1	1	1	1	172.5
Short- eared owl	New Deer- Peterhead [%]	3	3	0	0	0	0	0
	TOTALS	3	3	0	0	0	0	0
Barn owl	New Deer- Peterhead [%]	1	1	0	0	0	0	0
	TOTALS	1	1	0	0	0	0	0

^{*} Drummossie Muir / River Nairn Corridor data reflects flights recorded from both VPs 3 and 18 combined.

Waterfowl and Wading Birds

- 9.3.15 Table 9.9: Summary of Waterfowl and Wading Bird Flights Recorded During Flight Activity Surveys below presents a summary of the recorded flight activity by waterfowl and wading birds during the flight activity surveys. A total of 179 flights by 9 different Target Species were recorded (not including unidentified goose species).
- 9.3.16 Pink-footed goose was the most frequently recorded species, comprising 102 flights of 9369 individuals in total. Flights were recorded throughout the surveyed parts of the Proposed OHL Alignment from Beauly River Corridor Focal Area at the western extent to the New Deer-Peterhead Focal Area at the eastern extent. Recoded pink-footed geese were associated with lowland agricultural areas along river corridors, as well as occurring over woodlands and open moorland. Flights were recorded throughout the overwintering period, with the majority occurring during the autumn and spring passage periods, most likely reflecting migratory movements rather than

[#] Assich Forest Strathdearn Foothills data reflects flights recorded from VPs 4 / 19 and 5 combined.

⁺ Dava Moorlands data reflects flights recorded from VPs 20 and 21 combined.

 $^{^{\%}}$ New Deer-Peterhead data reflects flights recorded from VPs 23 and 24 combined.

- daily commuting flights between local roosting and foraging areas. Of the 102 flights recorded, only 14.1 (comprising 1274.6 individuals) were at, or included, time at the adjusted PCH, with all other flights being recorded entirely above PCH.
- 9.3.17 Greylag goose was the next most frequently recorded waterfowl species with 27 flights comprising 108 individuals. Flights occurred throughout the year, reflecting that activity comprised both resident / naturalised birds as well as migratory overwintering birds. As with pink-footed geese, flights were recorded throughout the surveyed parts of the Proposed OHL Alignment from the Beauly River Corridor Focal Area to the New Deer-Peterhead Focal Area and were similarly associated with a variety of habitats, including lowland agricultural areas along river corridors and open moorlands. Of the 27 flights recorded, only 9.2 (comprising 37.6 individuals) were at the adjusted PCH.
- 9.3.18 Curlew was the most frequently recorded species of wading bird with 28 flights comprising 37 individuals recorded. Flights were predominantly recorded during the breeding season and occurred most frequently over the open moorland habitats of the Drummossie Muir / River Nairn Corridor, Assich Forest / Strathdearn Foothills and Dava Moorlands Focal Areas. Of the 28 flights recorded, eight (comprising 11 individuals) were at the adjusted PCH.
- 9.3.19 Flight activity by all other waterfowl and wading bird Target Species, which included whooper swan, golden plover, lapwing, oystercatcher, snipe and whimbrel, was recorded infrequently with no more than six flights being recorded for each species across the surveyed Focal Areas and throughout the entire survey programme. These species were typically recorded over lowland agricultural areas along river corridors and open moorlands, with the majority of flights being recorded outside of PCH.

Table 9.9: Summary of Waterfowl and Wading Bird Flights Recorded During Flight Activity Surveys

Species	Focal Area	Total No. Of Flights	Total No. of Birds	No. of Flights at PRC	No. of Birds at PRC	Adjusted No. of Flights at PRC	Adjusted No. of Birds at PRC	Adjusted Flight Time at PRC
Whooper	Beauly River Corridor	1	14	0	0	0	0	0
swan	Drummossie Muir / River Nairn Corridor*	1	19	0	0	0	0	0
	Dulsie Wood & assc. Woodlands	1	6	0	0	0.1	0.6	54
	River Spey Corridor / Wood of Ordiequish	1	8	1	8	1	8	60
	New Deer- Peterhead [%]	2	6	0	0	0.1	0.1	67.5
	TOTALS	5	39	1	8	1.2	8.7	181.5
Pink-footed	Beauly River Corridor	6	346	2	25	2	25	135
goose	River Ness/ Caledonian Canal Corridor	7	436	0	0	0.1	10	67.5
	Drummossie Muir / River Nairn Corridor*	4	542	0	0	0.1	7.2	184.5
	Assich Forest / Strathdearn Foothills#	15	1846	2	458	2.2	459.9	672.5
	Dulsie Wood & assc. Woodlands	16	1400	2	222	2.3	237	1354.7
	Dava Moorlands+	3	204	0	0	0.3	20.4	432
	River Spey Corridor / Wood of Ordiequish	24	2518	2	98	2.9	214.5	1044
	River Isla Corridor	9	746	2	276	2.1	287.5	372

Species	pecies Focal Area		Total No. of Birds	No. of Flights at PRC	No. of Birds at PRC	Adjusted No. of Flights at PRC	Adjusted No. of Birds at PRC	Adjusted Flight Time at PRC
	New Deer- Peterhead [%]	18	1501	2	10	2.1	13.1	304.5
	TOTALS	102	9539	12	1089	14.1	1274.6	4566.5
Greylag goose	Beauly River Corridor	2	13	0	0	0	0	0
	River Ness / Caledonian Canal Corridor	3	24	1	13	1	13	210
	Drummossie Muir / River Nairn Corridor*	5	21	1	7	1	7	60
	Assich Forest / Strathdearn Foothills#	8	18	4	8	4	8	360
	Dulsie Wood & assc. Woodlands	2	3	0	0	0	0	0
	Dava Moorlands+	6	27	3	8	3.2	9.6	484.5
	New Deer- Peterhead [%]	1	2	0	0	0	0	0
	TOTALS	27	108	9	36	9.2	37.6	1114.5
Unidentified goose sp.	Drummossie Muir / River Nairn Corridor*	2	260	0	0	0	0	0
	Dulsie Wood & assc. Woodlands	2	3	0	0	0	0	0
	TOTALS	4	263	0	0	0	0	0
Golden plover	Assich Forest/ Strathdearn Foothills#	1	36	0	0	0.1	3.6	81
	New Deer- Peterhead [%]	1	5	0	0	0	0	0
	TOTALS	2	41	0	0	0.1	3.6	81
Curlew	Beauly River Corridor	1	1	0	0	0	0	0
	The Aird	3	3	1	1	1	1	45
	Drummossie Muir / River Nairn Corridor*	7	9	1	1	1	1	75
	Assich Forest / Strathdearn Foothills#	10	12	2	3	2	3	135
	Dulsie Wood & assc. Woodlands	1	1	0	0	0	0	0
	Dava Moorlands+	6	11	4	6	4	6	498
	TOTALS	28	37	8	11	8	11	768
Lapwing	Drummossie Muir / River Nairn Corridor*	1	1	0	0	0	0	0
	Dava Moorlands+	1	2	1	2	1	2	45
_	TOTALS	2	3	1	2	1	2	45
Oystercatcher	Beauly River Corridor	2	4	0	0	0	0	0
	River Ness / Caledonian Canal Corridor	3	5	0	0	0	0	0
	Dulsie Wood & assc. Woodlands	1	2	0	0	0	0	0
	TOTALS	6	11	0	0	0	0	0
Snipe	Drummossie Muir / River Nairn Corridor*	1	1	0	0	0	0	0



Species	Species Focal Area		Total No. of Birds	No. of Flights at PRC	No. of Birds at PRC	Adjusted No. of Flights at PRC	Adjusted No. of Birds at PRC	Adjusted Flight Time at PRC
Dava Moorlands+		1	1	0	0	0	0	0
	Bednawinny Moss	1	1	0	0	0	0	0
	New Deer- Peterhead [%]	3	5	0	0	0	0	0
	TOTALS	6	8	0	0	0	0	0
Whimbrel	Dulsie Wood & assc. Woodlands	1	1	0	0	0	0	0
	TOTALS	1	1	0	0	0	0	0

^{*} Drummossie Muir / River Nairn Corridor data reflects flights recorded from both VPs 3 and 18 combined.

Other Target Species

9.3.20 The only other Target Species recorded during the flight activity surveys was black grouse, with a single flight by an individual bird recorded over the Assich Forest / Strathdearn Foothills Focal Area, which was not at PCH.

Scarce Breeding Bird Surveys

Raptors

- 9.3.21 Full details of the scarce breeding bird survey results concerning raptors are provided in Appendix 9.1 Ornithology Technical Report and shown on Figure 9.1.5a-i: Non-confidential Scarce Breeding Bird Survey Results (2023) and Figure 9.1.9a-e: Non-confidential Scarce Breeding Bird Survey Results (2024) with the locations of nest sites presented in Appendix 9.2 Confidential Ornithological Information, Figure 9.2.2a-f: Confidential Scarce Breeding Bird Survey Results (2023) and Figure 9.2.4a-d: Confidential Scarce Breeding Bird Survey Results (2024 and 2025). These include records gathered during pre-construction surveys for enabling works conducted in 2024 and 2025
- 9.3.22 The presence of ten species of scarce breeding raptor was identified throughout the surveyed Focal Areas, including white-tailed and golden eagle, osprey, honey buzzard, red kite, goshawk, hen harrier, peregrine, merlin and barn owl. The species recorded broadly aligned with those recorded during the flight activity surveys, with the exception of marsh harrier and short-eared owl and the addition of honey buzzard.
- 9.3.23 Red kite, osprey and merlin were recorded most extensively, with these species being frequently recorded throughout most of the surveyed Focal Areas in the west of the Site, particularly those comprising open moorland habitats. Goshawk were recorded slightly less frequently and within slightly fewer Focal Areas but were typically affiliated with Focal Areas supporting open moorland habitats, as well as forestry. Confirmed and probable breeding by these species was identified in several of the Focal Areas.
- 9.3.24 Observations of honey buzzard, hen harrier, peregrine and barn owl were much less frequent and were limited to three Focal Areas as detailed in **Table 9.10**: Summary of Raptor Activity Recorded During Scarce Breeding Bird Surveys. Nonetheless, evidence of breeding by hen harrier and barn owl was recorded.
- 9.3.25 Sightings of white-tailed and golden eagle were relatively scarce and typically involved individual birds sighted over Focal Areas dominated by open moorland habitat. There was no evidence of breeding by either of these species.

[#] Assich Forest Strathdearn Foothills data reflects flights recorded from VPs 4 / 19 and 5 combined.

⁺ Dava Moorlands data reflects flights recorded from VPs 20 and 21 combined.

[%] New Deer-Peterhead data reflects flights recorded from VPs 23 and 24 combined.

9.3.26 Details of scarce breeding raptor observations are summarised below in **Table 9.10**: Summary of Raptor Activity Recorded During Scarce Breeding Bird Surveys for both the 2023 and 2024 surveys, as well as records gathered during the pre-construction surveys for enabling works conducted in 2024 and 2025.

Table 9.10: Summary of Raptor Activity Recorded During Scarce Breeding Bird Surveys

Target	Focal Area	Summary of Survey Records			
Species		2023	2024 8 2025		
Red Kite	Beauly River Corridor	Numerous sightings, plus identification of two nest sites, the closest approximately 180 m south of the Proposed OHL Alignment.	Several sightings, but no active nests recorded.		
	Drummossie Muir / River Nairn Corridor	Numerous sightings, plus identification of a nest site, approximately 620 m from the Proposed OHL Alignment.	A single observation of one bird in flight.		
	Assich Forest / Strathdearn Foothills	Numerous sightings over the moorland and adjacent forestry, but no evidence of breeding other than a nest site located outside the Focal Area, approximately 1 km from the Proposed OHL Alignment.	Numerous sightings over the moorland and adjacent forestry, with an additional nest site located during pre-construction surveys for enabling works approximately 140 m from the Proposed OHL Alignment.		
	Dulsie Wood and assc. Woodlands	A single sighting of an individual over woodland recorded during capercaillie surveys.	Surveys not repeated.		
	Dava Moorlands	Three sightings of individual birds.	Three flights of individual birds across open habitat.		
	Bednawinny Moss and Newtyle Forest	Observation of an individual to the north of the Proposed OHL Alignment.	Surveys not repeated.		
	Glen Latterach Moorlands (and Woodlands)	Observation of an individual along the Proposed OHL Alignment.	No sightings recorded.		
Osprey	Beauly River Corridor	Two nest sites identified, both over 1 km from the Proposed OHL Alignment.	No sightings recorded.		
	Drummossie Muir / River Nairn Corridor	Numerous sightings, plus identification three nest sites, the closest approximately 730 m from the Proposed OHL Alignment.	Confirmed occupation of the nearest nest site identified in 2023.		
	Assich Forest / Strathdearn Foothills	A single sighting of a bird flying south of Clunas Reservoir.	A single sighting of a bird flying over the west of the Focal Area.		
	Dulsie Wood	No dedicated raptor surveys undertaken in this Focal Area.	Two nest sites located during pre- construction surveys for enabling works approximately 145 m and 420 m from the Proposed OHL Alignment.		
	Dava Moorlands	Observation of a single bird recorded south of the Proposed OHL Alignment.	No sightings recorded.		
	Glen Latterach Moorlands (and Woodlands)	Several records of single birds, the majority observed over / around Glenlatterach Reservoir.	Two observations of individual birds in the vicinity of Glenlatterach Reservoir.		

Target	Focal Area	Summary of Survey Records	
Species		2023	2024 & 2025
	River Spey Corridor / Wood of Ordiequish	Two osprey nest sites identified, one just over 500 m north of the Proposed OHL Alignment and the other over 1.3 km to the south.	Surveys not repeated.
Goshawk	Assich Forest / Strathdearn Foothills	Four sightings of individual male and female birds recorded over the moorland and adjacent forest habitats.	No sightings recorded.
	Dulsie Wood and assc. Woodlands	Two sightings including a displaying bird recorded over the forestry during capercaillie surveys.	Surveys not repeated.
	Dava Moorlands	A confirmed nest site located over 1 km south of the Proposed OHL Alignment.	One flight of an individual bird to the south of the Proposed OHL Alignment.
	Glen Latterach Moorlands (and Woodlands)	A single bird observed to the west of Glenlatterach Reservoir.	No sightings recorded
White-tailed eagle	Drummossie Muir / River Nairn Corridor	Sighting of a single bird to the north of the Proposed OHL alignment.	No sightings recorded.
	Assich Forest / Strathdearn Foothills	Three sightings, all of individual birds, recorded across the open moorland south of the Proposed OHL Alignment.	Two sightings of individual birds recorded across the open moorland habitat.
	Brown Muir	Sighting of a single bird to the south of the Proposed OHL alignment.	Surveys not repeated.
Golden eagle	The Aird	Single sighting of a male bird flying overhead.	Surveys not repeated.
	Assich Forest / Strathdearn Foothills	Two sightings of birds in flight across the moorland to the south of Proposed OHL Alignment.	No sightings recorded.
	Dava Moorlands	A single sighting of an immature bird flying across moorland southeast of the Proposed OHL Alignment.	One flight of an individual bird to the south of the Proposed OHL Alignment.
	Glen Latterach Moorlands (and Woodlands)	A single sighting of an individual bird south of Glenlatterach Reservoir and the Proposed OHL Alignment.	No sightings recorded.
Honey Buzzard	Beauly River Corridor	Three observations of single birds.	No sightings recorded.
Hen harrier	Assich Forest / Strathdearn Foothills	Two records of a male bird(s) hunting over the moorland south of the Proposed OHL Alignment.	No sightings recorded.
	Dava Moorlands	A confirmed nest site located over 2 km from the Proposed OHL Alignment, along with several sightings over the moorland habitat.	No sightings recorded.

Target	Focal Area	Summary of Survey Records	
Species		2023	2024 & 2025
Peregrine	Beauly River Corridor	Sightings of individual birds. The historic nest site provided by HRSG was visited but was not active.	No sightings recorded.
	Drummossie Muir / River Nairn Corridor	Two sightings of individual birds to the north of the Proposed OHL Alignment.	No sightings recorded.
	Dava Moorlands	A single sighting of an individual bird at the western end of the Focal Area.	No sightings recorded.
Merlin	The Aird	Single sighting of an individual hunting bird over associated moorland.	Surveys not repeated.
		Three records of individual birds recorded over moorland to the south of the Proposed OHL Alignment.	No sightings recorded.
	Assich Forest / Strathdearn Foothills	Several sightings, predominantly of hunting birds, recorded across the moorland habitat with one confirmed and one probable nest site identified over 2 km south of the Proposed OHL Alignment.	Three observations of an individual adult birds in flight over the moorland in the west of the Focal Area.
	Dava Moorlands	Several records of hunting birds over the moorland habitat and a possible, but unconfirmed nest site located over 500 m of the proposed OHL alignment.	No sightings recorded.
	Bednawinny Moss and Newtyle Forest	Three sightings of the same bird over the open moorland habitat.	Surveys not repeated.
	Glen Latterach Moorlands (and Woodlands)	A nest site located over 1 km south of the Proposed OHL Alignment.	No sightings recorded.
Barn owl		An occupied barn owl box identified within a small block of woodland approximately 500 m from the Proposed OHL Alignment.	No sightings recorded.
	Dava Moorlands	Two barn owl roosts identified in buildings, one within 500 m of the Proposed OHL Alignment where a bird was also seen nearby, the other located over 2 km from the Proposed OHL Alignment.	No sightings recorded.

Divers

- 9.3.27 Full details of the scarce breeding bird survey results concerning divers are provided in Appendix 9.1 Ornithology Technical Report and shown on Figure 9.1.5a-i: Non-confidential Scarce Breeding Bird Survey Results (2023) and Figure 9.1.9a-e: Non-confidential Scarce Breeding Bird Survey Results (2024).
- 9.3.28 Red-throated divers were only recorded in three Focal Areas. Three observations of up to two birds were recorded on Clunas Reservoir, within the Assich Forest / Strathdearn Foothills Focal Area in 2023; with four



- TRANSMISSION
 - observations (three of which were pairs) associated with Clunas Reservoir in 2024. However, there was no evidence of breeding at Clunas Reservoir in either year.
- 9.3.29 Two observations of red-throated divers were recorded in the Dava Moorlands Focal Area in 2023; one of a single bird and another of a pair recorded on lochans to the west of Knock of Braemoray (over 3 km south of the Proposed Development). No evidence of breeding was observed at this location.
- 9.3.30 A red-throated diver was observed on Glenlatterach Reservoir, within the Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood Focal Area, in May 2023. No evidence of breeding was observed at this location.
- 9.3.31 There were no records of black-throated divers in either the 2023 or 2024 surveys.

Wading / Wetland Birds

- 9.3.32 Full details of the scarce breeding bird survey results concerning breeding waders and wetland birds are provided in Appendix 9.1 Ornithology Technical Report and shown on Figure 9.1.6a-g: Breeding Wader Survey Results (2023) and Figure 9.1.10a-d: Breeding Wader Survey Results (2024).
- 9.3.33 Breeding waders included golden plover, curlew, lapwing, oystercatcher and snipe were recorded in the majority of Focal Areas comprising open moorland or farmland habitats (i.e. as listed in **Table 9.11**: Summary of Breeding Wader Activity Recorded During Scarce Breeding Bird Surveys below). Additionally, a potential goldeneye breeding territory was identified in the Beauly River Corridor Focal Area during scarce raptor surveys. Two small breeding colonies of common gull were recorded at Clunas Reservoir and Glenlatterach Reservoir in the Assich Forest / Strathdearn Foothills and Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood Focal Areas respectively. Details of breeding wading birds, goldeneye and common gull are summarised below in **Table 9.11**: Summary of Breeding Wader Activity Recorded During Scarce Breeding Bird Surveys for both 2023 and 2024.

Table 9.11: Summary of Breeding Wader Activity Recorded During Scarce Breeding Bird Surveys

Species	Focal Area	Summary of Survey Records				
		2023	2024			
Golden Plover	Assich Forest / Strathdearn Foothills	Four territories, none within 500 m of the Proposed OHL Alignment.	A single territory within 500 m of the Proposed OHL Alignment.			
	Dava Moorlands	A single territory within 500 m of the Proposed OHL Alignment.	Two territories, both within 500 m of the Proposed OHL Alignment.			
	Glen Latterach Moorlands (and Woodlands)	Two territories, both within 500 m of the Proposed OHL Alignment.	No territories recorded.			
Curlew	The Aird	A single territory not within 500 m of the Proposed OHL Alignment.	Surveys not repeated.			
	Drummossie Muir / River Nairn Corridor	Nine territories, three within 500 m of the Proposed OHL Alignment.	Three territories, two within 500 m of the Proposed OHL Alignment.			
	Assich Forest / Strathdearn Foothills	Seven territories, three within 500 m of the Proposed OHL Alignment.	Five territories, two within 500 m of the Proposed OHL Alignment.			
	Dava Moorlands	16 territories, seven within 500 m of the Proposed OHL Alignment.	Four territories, all within 500 m of the Proposed OHL Alignment.			
	Bednawinny Moss and Newtyle Forest	Three territories, none within 500 m of the Proposed OHL Alignment.	Surveys not repeated.			
	Glen Latterach Moorlands (and Woodlands)	13 territories, nine within 500 m of the Proposed OHL Alignment	Two territories, both within 500 m of the Proposed OHL Alignment.			
	Brown Muir	Two territories, one within 500 m of the Proposed OHL Alignment	Surveys not repeated.			

Species	Focal Area	Summary of Survey Records	
		2023	2024
Lapwing	The Aird	A single territory not within 500 m of the Proposed OHL Alignment	Surveys not repeated.
	Drummossie Muir / River Nairn Corridor	Six territories, four within 500 m of the Proposed OHL Alignment	No territories recorded.
	Assich Forest / Strathdearn Foothills	Three territories, two within 500 m of the Proposed OHL Alignment	No territories recorded.
	Bednawinny Moss and Newtyle Forest	Three territories, two within 500 m of the Proposed OHL Alignment	Surveys not repeated.
	Glen Latterach Moorlands (and Woodlands)	Six territories, two within 500 m of the Proposed OHL Alignment	No territories recorded.
	Dava Moorlands	Seven territories, five within 500 m of the Proposed OHL Alignment.	No territories recorded.
Oystercatcher	Drummossie Muir / River Nairn Corridor	A single territory not within 500 m south of the Proposed OHL Alignment.	No territories recorded.
	Assich Forest / Strathdearn Foothills	Two territories, both within 500 m of the Proposed OHL Alignment.	Two territories, both within 500 m of the Proposed OHL Alignment.
	Bednawinny Moss and Newtyle Forest	A single territory, not located within 500 m of the Proposed OHL Alignment.	Surveys not repeated.
Snipe	The Aird	A single territory approximately 2.3 km south of the Proposed OHL Alignment.	Surveys not repeated.
	Drummossie Muir / River Nairn Corridor	16 territories, seven within 500 m of the Proposed OHL Alignment.	Four territories, all within 500 m of the Proposed OHL Alignment.
	Dava Moorlands	Nine territories, five within 500 m of the Proposed OHL Alignment.	A single territory within 500 m of the Proposed OHL Alignment.
	Assich Forest / Strathdearn Foothills	Eleven territories, six within 500 m of the Proposed OHL Alignment.	No territories recorded.
	Bednawinny Moss and Newtyle Forest	Two territories, neither within 500 m of the Proposed OHL Alignment.	Surveys not repeated.
	Brown Muir	Two territories, neither within 500 m of the Proposed OHL Alignment.	Surveys not repeated.
Goldeneye	Beauly River Corridor	No sightings recorded.	Potential breeding territory identified over 500 m southeast of the Proposed OHL Alignment.
Common Gull	Assich Forest / Strathdearn Foothills	Colony comprising approximately eight pairs at Clunas Reservoir, within 500 m of the Proposed OHL Alignment.	Colony comprising approximately ten pairs at Clunas Reservoir, within 500 m of the Proposed OHL Alignment.
	Glen Latterach Moorlands (and Woodlands)	Colony comprising approximately six pairs at Glenlatterach Reservoir, within 500 m of the Proposed OHL Alignment.	Colony comprising approximately ten pairs at Glenlatterach Reservoir, within 500 m of the Proposed OHL Alignment.

Capercaillie Surveys

9.3.34 There were no sightings of capercaillie or evidence of the species' presence in any of the woodlands covered by the surveys, with the exception of the record provided by RSPB Scotland from their surveys of 2023 and 2024 as provided in the Desk Study Section.



Black Grouse Surveys

- 9.3.35 Full details of the black grouse survey results are provided in Appendix 9.1 Ornithology Technical Report and shown on Figure 9.1.7a-d: Non-confidential Black Grouse Survey Results (2023) with the locations of lek sites presented in Appendix 9.2 Confidential Ornithological Information, Figure 9.2.3a-e: Confidential Black Grouse Survey Results (2023).
- 9.3.36 Black grouse were recorded in the majority of moorland Focal Areas, lekking birds recorded at 10 locations across five Focal Areas, all involving single birds, as summarised below in **Table 9.12**: Summary of Black Grouse Activity Recorded During Black Grouse Surveys.

Table 9.12: Summary of Black Grouse Activity Recorded During Black Grouse Surveys

Focal Area	Summary of Survey Records
The Aird	Three leks, all of single males, recorded across open moorland to the south of the Proposed OHL Alignment in March / April 2023, the nearest of which was located approximately 1.2 km to the south.
Drummossie Muir / River Nairn Corridor	At least one lekking male was heard (but not seen) approximately 2 km south of the Proposed OHL Alignment in April 2023. Further sightings of non-lekking birds, including two observations of two male birds together, were recorded in 2023 across open moorland to the south of the Proposed OHL Alignment.
Assich Forest / Strathdearn Foothills	A single lekking male was recorded approximately 250 m from the Proposed OHL Alignment to the west of this Focal Area in April 2023. An additional sighting of an individual non-lekking male was also recorded at the eastern end of the Focal Area in 2023. Follow up surveys of the 2023 lek location in 2024 recorded no black grouse, although sightings of individual female and male birds were recorded across open moorland approximately 500 m south of the Proposed OHL Alignment in April and May 2024.
Dava Moorlands	Five discrete lek sites, all of single males, were recorded within this Focal Area in 2023. Three of these leks were located within 250 m of Proposed OHL Alignment. An additional five observations of non-lekking males and a female were recorded during the surveys, all of single birds. Follow up surveys of the 2023 lek location in 2024 recorded no black grouse.
Bednawinny Moss and Newtyle Forest	A single lekking male was recorded to the west of this Focal Area in May 2023, located over 1 km from the Proposed OHL Alignment.

9.3.37 In addition to the above, two non-lekking male black grouse were recorded approximately 2.2 km south of the Proposed OHL Alignment, in the Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood Focal Area. No observations recorded lekking birds.

Common Crane Surveys

9.3.38 No sightings of common cranes or evidence of their breeding were made during the surveys carried out in 2023 and 2024.

Goose Field Use Surveys

- 9.3.39 The only goose species recorded during the field surveys was pink-footed goose, with five records of foraging / loafing geese recorded throughout the survey period. All records were observed within the western half of the Goose Field Use Survey Area and within approximately 500 m of the Proposed Development. A peak count of 150 birds was recorded west of Maud in November 2023. The distribution of records is shown in Appendix 9.1 Ornithology Technical Report, Figure 9.1.8: Goose Field Use Survey Results (2023 / 24).
- 9.3.40 In addition to observations within fields, seven records of pink-footed geese passing overhead were made. The largest flock recorded was one of 1,500 birds flying due south in October 2023, suggesting that it was of birds on migration. Otherwise, flocks comprised no more than 100 birds.



Kellas Alternative Alignment

9.3.41 The ornithological baseline conditions for the Kellas Alternative Alignment are comparable to those described above, where the desk study or field survey results relate to the Glen Latterach Moorlands and Woodland Associated with Hill of Mulundy and Wangie Wood Focal Area. None of the ornithological designated sites are significantly closer to Kellas Alternative Alignment and there are no specific ornithological features which are significantly different to those described for the Proposed Development.

Future Baseline

- 9.3.42 In the absence of the Proposed Development, habitats and species identified directly in and around the Site are considered likely to continue existing into the future, due to the foreseeable continuation of current land use practices e.g. commercial forestry and agriculture.
- 9.3.43 Highland, Moray and Aberdeenshire are recognised as attractive locations for prospective windfarm developments, therefore it is likely new windfarms may be consented and constructed in the vicinity of the Proposed Development. However, any future windfarm developments would only be consented if they demonstrated that they would not result in significant adverse effects on habitats and / or species of conservation importance.
- 9.3.44 As outlined below in **Table 9.13**: Important Ornithological Features Scoped In for Further Assessment, the range and population size of some species is stable or increasing (e.g. red kite and osprey) while the populations of some other species appear to be declining (e.g. capercaillie and black grouse). In the absence of external conservation efforts, these trends are predicted to continue should the Proposed Development not progress.

Implications of Climate Change

- 9.3.45 UK Climate Projections (UKCP18)⁴⁶ for temperature and precipitation by 2080 (assumed to be the perceived lifetime of the Proposed Development) based on a precautionary intermediate Representative Concentration Pathway for greenhouse gases of 6.0 Watts / m², suggests that Scotland will experience greater climatic extremes; becoming hotter and drier in the summer (June to August) and warmer and wetter in the winter (December to February). By 2080 under a low global emissions scenario, average summers are projected to be around 1°C warmer and 11% drier. Under a high global emissions scenario average summers are projected to be around 3°C warmer and 18% drier according to Adaptation Scotland (2021)⁴⁷.
- 9.3.46 For Scottish bird species, the implications of climate change are whether the overwinter and early spring weather conditions are suitable for adults to reach breeding condition. For many species the main period of concern will be spring and early summer (March to May / June), when nesting takes place and chicks require feeding. Low cloud and rainfall can adversely affect the foraging activities of birds which forage in flight, such as raptors and insectivorous birds, with implications for their ability to successfully breed or feed chicks to fledging. Furthermore, the availability of invertebrates as food for chicks of species such as gamebirds, waders and most passerines, may be affected by alterations in rainfall patterns. For ground nesting species (e.g. waders, gamebirds and some raptors) eggs and chicks could be subject to chilling due to early spring rainfall, prior to the predicted warmer, drier summer months. The nests of other species such as raptors, often situated in exposed locations, could also be susceptible to chilling. Dry conditions in summer may benefit breeding success by improving conditions for the chicks, if temperatures do not go too high. Warm and wet winters may well improve growing conditions for vegetation and hence provide better food for geese and swans, or for breeding waders. As such, a changing climate is likely to affect Target Species' abundance and distribution, either positively or negatively. However, these changes and the timescales over which they are likely to occur are unlikely to make a substantial difference to the nature or magnitude of any potential impacts which the Proposed Development may have on such Target Species.

 $^{{\}tt ^{46}\,UK\,Climate\,Projections\,(UKCP18)\,website:}\,\underline{\tt https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/index}.$

⁴⁷ Adaptation Scotland (2021). Climate Change for Scotland Summary. https://adaptation.scot/scotland-and-climate-change/climate-change-trends-and-projections/.



Sensitive Receptors

9.3.47 The designated sites and species identified as IOFs are presented below in **Table 9.13**: Important Ornithological Features Scoped In for Further Assessment, together with the justification for this evaluation as explained in the Methodology for the Assessment of Impacts section, under Characterising Important Ornithological Features (IOFs) (Paragraphs 9.2.50 – 9.2.58). IOFs are sensitive receptors that occur within the EZoI (see **Section 9.2**, Paragraph 9.2.12) and have been evaluated as of local nature conservation importance or above.



Table 9.13: Important Ornithological Features Scoped In for Further Assessment

Feature	Nature Conservation Importance	Justification
Inner Moray Firth SPA and Ramsar Site: qualifying feature - osprey	International	The Inner Moray Firth SPA and Ramsar Site is scoped in for assessment of potential effects on its qualifying osprey population, which nest in and around the Beauly and Inner Moray Firths and use the inshore coastal waters to forage. The core osprey foraging range is 10 km (SNH, 2016b ²⁸ and Hardey <i>et al.</i> , 2013 ³⁸); therefore all osprey nest sites and locations of frequently observed osprey activity within this distance from the SPA / Ramsar Site are considered affiliated birds associated with the SPA / Ramsar Site. This includes osprey activity recorded in the River Beauly Corridor, River Ness / Caledonian Canal Corridor, Drummossie Muir and River Nairn Corridor and Assich Forest / Strathdearn Foothills Focal Areas. As a qualifying species of a European designated site, the osprey population associated with Inner Moray Firth SPA and Ramsar Site is valued as being of international importance. The size and status of the osprey population associated with the SPA / Ramsar Site and the wider Northeast Scotland region is presented below, in justification of the species' inclusion for assessment. All other qualifying interests associated with the Inner Moray Firth SPA and Ramsar Site are scoped out. Although greylag geese were recorded flying across the Proposed OHL Alignment inland of the SPA / Ramsar Site, they were observed infrequently and in low numbers. Additionally, their recognised foraging grounds around the Inner Moray Firth are associated with near-coastal fields to the west of the Beauly Firth, along the southern shore between Alturlie Point / Castle Stuart and Ardesier and across the Black Isle (Hearn and Mitchell, (2004) ⁴⁸ and Mitchell, (2012) ⁴⁹). These foraging grounds which are not intersected or segregated by the Proposed Development. Therefore, birds observed flying across the Proposed OHL Alignment are considered unlikely to
		have been affiliated with the SPA / Ramsar Site. All other overwintering waterfowl, wading birds and breeding common terns for which the site is designated are strongly affiliated with the coastal and estuarine habitats of the Beauly and Inner Moray Firths and were rarely recorded if at all during field surveys of the adjacent, inland sections of the Proposed Development. Additionally, as the Proposed Development does not overlap with the Inner Moray Firth SPA and Ramsar Site, there will be no direct loss of habitat, whilst the risk and severity of any incidents causing deterioration of the habitats associated with the SPA / Ramsar Site will be avoided or reduced to a negligible level by the separation distance and embedded mitigation
Darnaway and Lethen Forest SPA:	International	(specifically pollution prevention) measures detailed in Section 9.4 . Although the Proposed Development is located 3.6 km from Darnaway and Lethen Forest SPA, this site is scoped in because there is understood to be interchange of birds (capercaillie) between the SPA and connected forest habitat in the wider
qualifying feature - capercaillie		surrounding area, as advised through consultation with NatureScot and RSPB Scotland (see Table 9.1 : Consultation Responses of Relevance to Ornithology). Indeed, the capercaillie population associated with the SPA is considered to be so fragmented and

⁴⁸ Hearn, RD & CR Mitchell. 2004. Greylag Goose *Anser anser* (Iceland population) in Britain and Ireland 1960/61–1999/2000. Waterbird Review Series, The Wildfowl & Wetlands Trust/Joint Nature Conservation Committee, Slimbridge. Available at: https://www.bto.org/get-involved/volunteer/projects/goose-and-swan-monitoring-programme/newsletters-and-reports.

⁴⁹ Mitchell, C. (2012). Mapping the distribution of feeding Pink-footed and Iceland Greylag Geese in Scotland. Wildfowl & Wetlands Trust / Scottish Natural Heritage Report, Slimbridge. 108pp. Available at: https://www.bto.org/sites/default/files/mitchel_2012_mapping_distribution_feeding_pinkfooted_and_greylag_geese_scotland_wwtsnh_report.pdf.



Feature	Nature Conservation Importance	Justification
		existing at such low density that birds occurring outwith the SPA are considered part of the wider metapopulation (i.e. a group of spatially separated populations which interact and are dependent on one another) (as defined in relation to the Cairngorms National Park capercaillie population (Cairngorms National Park Authority, 2015 ⁵⁰). Satellite tracking studies have shown that although female capercaillie tend to remain within 5 km of breeding areas, they can disperse up to 16 km, and in exceptional cases 30 km (Fletcher and Baines, 2020) ⁶⁵ . Therefore, historical records of capercaillie received through the desk study are considered to be part of the SPA population. However, this is only considered relevant to the forests associated with the Dulsie Wood and Associated Woodlands Focal Area, where the presence of capercaillie has been confirmed in the last five years. RSPB Scotland has suggested that capercaillie associated with Darnaway and Lethen Forest SPA and the surrounding woodlands are interconnected with birds from the Strathspey population. However, these woodlands are separated by approximately 16 km (the upper range dispersal distance referred to above) of predominantly unsuitable open upland habitat. It has been suggested that birds may use isolated woodlands in between as stepping stones,: however, there are few opportunities for this and there are no capercaillie records in these woodlands for recent years. Therefore, if the two capercaillie populations (Darnaway and Lethen Forest, with Strathspey) are connected, they are considered to be very loosely so.
		As a qualifying species of a European designated site, the capercaillie population associated with Darnaway and Lethen Forest SPA is valued as being of international importance . The size and status of the capercaillie population associated with the SPA and the wider Northeast Scotland region is presented below, in justification of the species' inclusion for assessment.
Moray and Nairn Coast SPA and Ramsar Site: qualifying feature - osprey	International	The Moray and Nairn Coast SPA and Ramsar Site is only scoped in for assessment of potential effects on its qualifying osprey population, which nest in and around the Moray Firth and use the inshore coastal waters to forage. The core osprey foraging range is 10 km (SNH, 2016b ²⁸ and Hardey <i>et al.</i> , 2013 ³⁸); therefore all osprey nest sites and locations of frequently observed osprey activity within this distance from the SPA / Ramsar Site are considered to be affiliated birds. This includes osprey activity recorded in the Brown Muir and River Spey Corridor / Wood of Ordiequish Focal Areas.
		As a qualifying species of a European designated site, the osprey population associated with Moray and Nairn Coast SPA and Ramsar Site is valued as being of international importance . The size and status of the osprey population associated with the SPA / Ramsar Site and the wider Northeast Scotland region is presented below, in justification of the species' inclusion for assessment.
		All other qualifying interests associated with the Moray and Nairn Coast SPA and Ramsar Site are scoped out. Although pink-footed and greylag geese were recorded flying across the Proposed OHL Alignment inland of the SPA / Ramsar Site, they were generally observed infrequently and / or in low numbers. Additionally, their recognised foraging grounds around the Moray Firth and Nairn Coast are associated with near-coastal fields between Findhorn Bay and the lower reaches of the River Spey, as well to the east of Nairn for pink-footed geese (Hearn and Mitchell, (2004) ⁴⁸ , Mitchell and Hearn, (2004) ⁵¹ and Mitchell, (2012) ⁴⁹). These

⁵⁰ Cairngorms National Park Authority (2015). Cairngorms Capercaillie Framework Phase 1 Report. January 2015. Available at: https://cairngorms.co.uk/wp-content/uploads/2015/07/CapercaillieFrameworkReport_V2.0.pdf.

⁵¹ Mitchell, CR & RD Hearn. (2004). Pink-footed Goose Anser brachyrhynchus (Greenland/Iceland population) in Britain 1960/61 – 1999/2000. Waterbird Review Series, The Wildfowl & Wetlands Trust/Joint Nature Conservation Committee, Slimbridge. Available at: https://www.bto.org/get-involved/volunteer/projects/goose-and-swan-monitoring-programme/newsletters-and-reports.



Feature	Nature Conservation Importance	Justification
		foraging grounds are not intersected or segregated by the Proposed Development, and so those birds observed flying across the Proposed OHL Alignment are considered unlikely to be affiliated with the SPA / Ramsar Site. All other overwintering waterfowl, wading birds and breeding common terns (for which the site is designated) are strongly affiliated with the coastal and estuarine habitats of the Beauly and Inner Moray Firths and were recorded rarely, if at all, during field surveys of the adjacent inland sections of the Proposed Development.
		As the Proposed Development does not overlap with the Moray and Nairn Coast SPA and Ramsar Site there will be no direct loss of habitat, and the risk and severity of any accidental pollution incidents causing deterioration of the habitats associated with the SPA / Ramsar Site will be avoided or reduced to a negligible level by this separation distance. Additionally, embedded pollution prevention measures are proposed as detailed in Section 9.4 .
Red kite	Regional	Red kites were regularly recorded within the surveyed sections of the Proposed OHL Alignment with several nest sites identified within the wider Study Area. Flight activity levels were particularly high in the River Ness / Caledonian Canal Corridor, Drummossie Muir and River Nairn Corridor and Assich Forest / Strathdearn Foothills Focal Areas.
		Red kite is a Schedule 1 and Annex I listed species with a national population of at least 298 breeding pairs, based on surveys undertaken by the Scottish Raptor Study Group (SRSG) in 2022 (Challis <i>et al.</i> , 2023) 52 . This reflects the continued increase and range expansion in this species' national population from the estimated 60 pairs in 2004 (Forrester <i>et al.</i> (eds), 2007) 53 and 253 in 2020 (Challis <i>et al.</i> , 2022) 54 . Red kite is also listed as a priority species on the SBL and Highland LBAP.
		The regional / Northeast Scotland population (NHZs 9, 10, 12 and 21 combined), as reported in Wilson <i>et al.</i> (2015) ⁵⁵ , is 69 (NHZ 9 (12), NHZ 10 (0), NHZ 12 (7) and NHZ 21 (50)). Although this was based on surveys undertaken in 2013 and the national population has clearly increased substantially since, as stated above, the SRSG do not identify any significant increases in the red kite populations of these NHZs between 2009 and 2018 (Challis et al., undated) ⁵⁶ . Additionally, the SRSG reports referenced above caveat that they do not monitor all breeding pairs, and so the number presented in their reports do not represent absolute populations sizes at either a regional or national scale. Therefore, it is considered reasonable to assume that the regional / Northeast Scotland population remains at least roughly the same at approximately 69 pairs, but is probably more likely to be in the range of 70-80 pairs.

⁵² Challis, A., Beckmann, B.C., Wilson, M.W., Eaton, M.A., Stevenson, A., Stirling-Aird, P., Thornton, M. & Wilkinson, N.I. (2023). Scottish Raptor Monitoring Scheme Report 2021 & 2022. BTO Scotland, Stirling. Available at: https://raptormonitoring.org/annual-report.

⁵³ Forrester, R.W., Andrews, I.J., and McInerny, C.J. eds. 2007. The Birds of Scotland. The Scottish Ornithologists' Club, Aberlady.

⁵⁴ Challis, A., Wilson, M.W., Eaton, M.A., Stevenson, A., Stirling-Aird, P., Thornton, M. & Wilkinson, N.I. (2022). Scottish Raptor Monitoring Scheme Report 2020. BTO Scotland, Stirling. Available at: https://raptormonitoring.org/annual-report.

⁵⁵ 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. pp72. Available at: https://web.archive.org/web/20211103054636/http://www.swbsg.org/images/SWBSG_Commissioned_Report_No_1504.pdf.

⁵⁶ Challis, A., Wilson, M.W., Eaton, M.A., Etheridge, B., Kortland, K., Mattingley, W., Steele, L.D., Stevenson, A., Stirling-Aird, P., Thornton, M., Titherington, J., Wernham, C.V. and Wilkinson N.I. (undated) Scottish Raptor Monitoring Scheme Trends for 2009-2018: Regional focus. Available at: https://raptormonitoring.org/trends/regional-accounts.



Feature	Nature Conservation Importance	Justification
		In light of its ongoing population increase and range expansion, the UK red kite population is registered on the green list of least conservation concern (Stanbury <i>et al.</i> , 2021) ⁹ . This extends to the Scottish population which is considered to be stable and in favourable conservation status. In the context of the Site therefore, red kite is considered to be of regional importance .
Osprey	SPA population: International Non-SPA population: Regional	favourable conservation status. In the context of the Site therefore, red kite is considered to be of regional importance . Ospreys were frequently recorded within the surveyed sections of the Proposed OHL Alignment with several nest sites identified within the wider Study Area. Flight activity levels were particularly high in the Drummossie Muir and River Nairn Corridor Focal Area, but were lower than might have been expected along the river corridors connecting to the Beauly and Moray Firths, known to represent important foraging areas for birds breeding further inland. Osprey is a Schedule 1 and Annex I listed species with a national population of at least 229 breeding pairs, based on surveys undertaken in 2021 (Eaton & the Rare Breeding Birds Panel, 2023) ⁵⁷ . This reflects the continued expansion in this species' national population from the estimated 182-200 pairs in 2004 (Forrester <i>et al.</i> (eds), 2007) ⁵³ and 216 pairs in 2015 (Challis <i>et al.</i> , 2022) ⁵⁸ . Osprey is also listed as a priority species on the SBL and Highland LBAP. The regional / Northeast Scotland population (NHZs 9, 10, 12 and 21 combined), as reported in Wilson <i>et al.</i> (2015) ⁵⁵ , is 69 (NHZ 9 (8), NHZ 10 (8), NHZ 12 (18) and NHZ 21 (35)). This estimate was based on surveys undertaken in 2013 and the national population has clearly increased substantially since then, as stated above. Indeed, (Challis <i>et al.</i> , undated) ⁵⁶ identify that the population in NHZ 21 (Moray Firth) increased by 5.1% between 2009 and 2018 (no trends were available for the other relevant NHZs). The SRSG reports caveat that they do not monitor all breeding pairs, and so the number presented in their reports do not represent absolute populations sizes at either a regional or national scale. Therefore, it is reasonable to assume that the regional / Northeast Scotland population has increased since 2013 and is probably more likely to be in the range of 70-80 pairs. With regards to the osprey SPA populations associated with the Inner Moray Firth SPA / Ramsar S
		Moray Firth SPA / Ramsar Site and Moray and Nairn Coast SPA / Ramsar Site, the osprey population associated with these designated sites which covers the western half of the Proposed OHL Alignment, essentially between Beauly and Keith, is valued as being of international importance. In the context of the eastern half of the Proposed OHL Alignment, where records of osprey were less frequent, the population would still represent more than 1% of the regional, Northeast Scotland population and is therefore considered to be of regional importance.

⁵⁷ Eaton, M.A. & the Rare Breeding Birds Panel (2023). Rare Breeding Birds in the United Kingdom in 2021. British Birds 116: 615-676. Available at: https://rbbp.org.uk/wp-content/uploads/2024/09/rbbp-report-2021.pdf.

⁵⁸ Challis, A., Wilson, M.W., Holling, M., Roos, S., Stevenson, A. & Stirling-Aird, P. (2016). Scottish Raptor Monitoring Scheme Report 2015. BTO Scotland, Stirling. Available at: https://raptormonitoring.org/annual-report.

⁵⁹ JNCC (2021a). Inner Moray Firth SPA Natura 2000 Standard Data Form. Updated December 2021. https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9001624.pdf

⁶⁰ JNCC (2021b). Moray and Nairn Coast SPA Natura 2000 Standard Data Form. Updated December 2021. https://jncc.gov.uk/jncc-assets/SPA-N2K/uk9001625.pdf.



Feature	Nature Conservation Importance	Justification
Goshawk	Regional	Goshawks were recorded infrequently within the surveyed sections of the Proposed OHL Alignment. The desk study identified several nest sites within the Study Area, including some in close proximity to the Proposed OHL Alignment in the Dava Moorlands, Brown Muir and River Spey Corridor / Wood of Ordiequish Focal Areas.
		Goshawk is a Schedule 1-listed species with a national population of at least 283 breeding pairs, based on surveys undertaken in 2021 (Eaton & the Rare Breeding Birds Panel, 2023) ⁵⁷ . This reflects the continued increase and range expansion in this species' national population from the estimated 130 pairs in 2004 (Forrester <i>et al.</i> (eds), 2007) ⁵³ and 174 pairs in 2016 (Challis <i>et al.</i> , 2019^{61} , taken from Holling <i>et al.</i> , 2018^{62}). Goshawk is also listed as a priority species on the Highland LBAP.
		The regional / Northeast Scotland population (NHZs 9, 10, 12 and 21 combined), as reported in Wilson $et~al.~(2015)^{55}$, is 51 (NHZ 9 (14), NHZ 10 (12), NHZ 12 (25) and NHZ 21 (0)). Although this was based on surveys undertaken in 2013 and the national population has clearly increased substantially since then, , the SRSG do not identify any changes in the goshawk populations in these NHZs between 2009 and 2018 (Challis $et~al.$, undated) ⁵⁶ . Additionally, the SRSG reports caveat that they do not monitor all breeding pairs, and so the number presented in their reports do not represent absolute populations sizes at either a regional or national scale. Therefore, it is reasonable to assume that the regional / Northeast Scotland population remains at least roughly the same at approximately 51 pairs, but is probably more likely to be in the range of 60-70 pairs.
		In light of its ongoing population increase and range expansion the UK goshawk is registered on the green list of least conservation concern (Stanbury <i>et a.l.</i> , 2021) ⁹ . This extends to the Scottish population which is considered to be stable and in favourable conservation status. In the context of the Site therefore, goshawk is considered to be of regional importance .
Capercaillie	SPA population: International	Capercaillie is scoped in as a qualifying feature of Darnaway and Lethen Forest SPA only (as detailed above). It is acknowledged that through the design process, direct impacts to this SPA will be avoided.
		The species is not considered outside the context of the SPA population, based on its apparent absence in historically occupied areas of suitable habitat located elsewhere along the Proposed OHL Alignment, as evidenced from recent desk study records and field surveys.
		Capercaillie is a Schedule 1 and Annex I listed species. It is also listed as a priority species on the SBL and Highland LBAP. The estimated national population is 532 (CI 227-810) based on winter surveys undertaken between 2021 and 2022 (Wilkinson <i>et al.</i> , 2023) ⁶³ . This represents a 52% decline from the previous estimate of 1,114 birds from 2015 / 2016 (Wilkinson <i>et al.</i> , 2017) ⁶⁴ and reflects the species' continued long-term decline and range contraction over recent decades (Fletcher and Baines, 2020 ⁶⁵ ; Trout

⁶¹ Challis, A., Eaton, M., Wilson, M.W., Holling, M., Stevenson, A. & Stirling-Aird, P. (2019). Scottish Raptor Monitoring Scheme Report 2018. BTO Scotland, Stirling. Available at: https://raptormonitoring.org/annual-report.

⁶² Holling, M. & the Rare Breeding Birds Panel (2018). Rare Breeding Birds in the United Kingdom in 2016. British Birds 111: 644-694. Available at; https://rbbp.org.uk/wp-content/uploads/2024/09/rbbp-report-2021.pdf.

⁶³ Wilkinson, N. I., Doubleday, M., Douse, A., Ford, A., Kelly, L. A., Kortland, K., Ewing, S. R. (2023). Further declines of the Western Capercaillie *Tetrao urogallus* in Scotland as shown by the 2021–2022 winter survey. Bird Study, 71(1), 17–31. Available at: https://www.tandfonline.com/doi/full/10.1080/00063657.2023.2286298.

⁶⁴ Wilkinson, N. I., Eaton, M. A., Marshall, G., & Haysom, S. (2018). The population status of Capercaillie *Tetrao urogallus* in Scotland during winter 2015–16. Bird Study, 65(1), 20–35. Available at: https://www.tandfonline.com/doi/full/10.1080/00063657.2018.1439448#abstract.

⁶⁵ Fletcher, K., & Baines, D. (2020). Observations on breeding and dispersal by Capercaillie in Strathspey. Scottish Birds, 40: 27-34. Available at: https://www.gwct.org.uk/media/1107720/SB40-1-Capercaillie.pdf.



Feature	Nature Conservation Importance	Justification
		and Kortland, 2012^{66}), (i.e. compared to the population estimate of 1,300-2,800 birds based on the previous 2003 / 04 winter surveys (Forester et al, 2007) ⁵³). The species' decline is due primarily to predation, weather conditions and collision with deer fences (Fletcher and Baines, 2020^{65}).
		No NHZ-based regional / Northeast Scotland population estimate could be found; however, the latest national population estimate is based almost entirely on birds recorded within recording areas which overlap with the Northeast Scotland Region. These are Strathspey and Badenoch (423), Easter Ross, Nairn and Moray (70) and Deeside (37) and represent 80%, 13% and 7% of the Scottish population respectively (Wilkinson <i>et al.</i> , 2023) ⁶³ . Although the Strathspey and Badenoch and Easter Ross, Nairn and Moray recording areas overlap slightly with adjacent NHZs which are not considered in this OIA to represent the Northeast Scotland Region (NHZ 11: Cairngorms Massif and NHZ 7: Northern Highlands respectively), given the Scottish capercaillie population's critical status and restricted geographic distribution, the regional population is taken to be the same as the national population for the purposes of this assessment.
		With regards to the Darnaway and Lethen Forest SPA, the site was originally designated for a population of 23 individuals based on counts undertaken between 1999 and 2003 (see Table 9.6). However, the population is understood to have declined significantly over recent decades in line with national trends. Indeed, lek count surveys undertaken between 2015 and 2024 show the number of lekking males recorded in the broadly associated Nairn and Moray sub-recording areas to have reduced from less than 10 to none since 2023 (Cairngorms Capercaillie Project, 2024) ⁶⁷ . While this does not include immature, non-lekking males and females, the population has clearly reduced to critical levels, such that the current population affiliated with the SPA is likely to be no more than 10 or 15 individuals. As noted above however, the capercaillie population associated with the SPA is considered to exist as part of a metapopulation distributed throughout the wider surrounding area (i.e. Nairn and Moray). Based on the counts upon which the Easter Ross, Nairn and Moray population estimate (70) is based, only six capercaillie were recorded in just four 5 km² grid squares; two of which were within the Nairn and Moray sub-recording areas (these grid squares were those affiliated with the Darnaway and Lethen Forest SPA and Dulsie Wood) (Wilkinson <i>et al.</i> , 2023) ⁶³ . Therefore, it is estimated that the population associated with the Nairn and Moray sub-recording area is approximately half that of the wider Easter Ross, Nairn and Moray recording area. Hence, it is reasonable to assume that the SPA population is more likely to be in the region of 30-40 individuals. According to NatureScot (2022 ⁶⁸), the Nairn and Moray sub-population is very small, declining and vulnerable to extinction.
		In light of its ongoing population decline and range contraction, the UK capercaillie population, which is entirely based in Scotland, is registered on the Red List of highest conservation concern (Stanbury <i>et al.</i> , 2021) ⁹ . Hence the UK / Scottish population is understood to be in critical decline and unfavourable conservation status. As noted above, as a qualifying species

⁶⁶ Trout, R. and Kortland, K. (2012). Fence marking to reduce grouse collisions. Forestry Commission Technical Note FCTN019. December 2012. Available at: https://www.forestresearch.gov.uk/publications/fence-marking-to-reduce-grouse-collisions/.

⁶⁷ Cairngorms Capercaillie Project (2024). Capercaillie Lek Count Report 2024. 10 June 2024 https://cairngormscapercaillie.scot/capercaillie-lek-count-report-2024/.

⁶⁸ NatureScot (2002). Review of Capercaillie Conservation and Management - Report to the Scientific Advisory Committee. Available at: https://www.nature.scot/doc/review-capercaillie-conservation-and-management-report-scientific-advisory-committee.



Feature	Nature Conservation Importance	Justification
		of Darnaway and Lethen Forest SPA, the capercaillie population associated with it and wider surrounding Nairn and Moray area connected to it, is valued as being of international importance .
Black grouse	Regional	Black grouse were recorded in six of the surveyed Focal Areas with 11 lek sites identified in five Focal Areas. However, all leks were represented by single males and were either sufficiently distant from one another that they were considered to represent separate, isolated birds, or in such close proximity to other records from the same survey that they were most likely the same bird recorded twice.
		Black grouse is registered on the Red List of highest conservation concern in the UK based on its long-term decline (Stanbury <i>et al.</i> , 2021) ⁹ . It is also listed as a priority species on the SBL and Highland LBAP. The estimated national population is at least 3,344 displaying males (range 2,580-4,171), based on surveys undertaken during the last national survey in 2005 (Sim <i>et al.</i> (2008) ⁶⁹ and Wilson <i>et al.</i> (2015) ⁵⁵) and reflected a 29% decline in this species' population since the previous national survey in 1995/96, which estimated the population to be between 4,700 lekking males (Forester <i>et al.</i> , 2007 ⁵³ , from Hancock <i>et al.</i> , 1999 ⁷⁰).
		The regional / Northeast Scotland population (NHZs 9, 10, 12 and 21 combined), based on the same sources and as reported in Wilson <i>et al.</i> (2015) ⁵⁵ , is estimated to be 346 displaying males (range 198-530, (NHZ 9 (0), NHZ 10 (114), NHZ 12 (215) and NHZ 21 (17)). Despite the species' substantial national decline, the population in Northeast Scotland has declined the least (9%, (Sim <i>et al</i> (2008) ⁶⁹). Therefore, it is reasonable to assume that the regional / Northeast Scotland population would only have declined slightly since 2005 and is more likely to be in the region of 300-325 displaying males.
		In light of its ongoing population decline and red-listed conservation status, the Scottish black grouse population is considered to be in unfavourable conservation. Despite the widespread distribution and single-male status of the lek sites recorded along the Proposed OHL Alignment during the field surveys, the population associated with the Site is considered to represent more than 1% of the regional, Northeast Scotland population and is therefore considered to be of regional importance .
Pink-footed goose	Local	Pink-footed geese were regularly recorded within the surveyed sections of the Proposed OHL Alignment, with highest flight activity levels recorded in the following Focal Areas; River Spey Corridor / Wood of Ordiequish, New Deer to Peterhead, Assich Forest / Strathdearn Foothills and Dulsie Wood and associated Woodlands. The frequency of recorded flight activity along the River Beauly, River Ness / Caledonian Canal and River Nairn corridors was lower than might have been expected. Meanwhile the field usage by foraging flocks of pink-footed geese in the New Deer to Peterhead Focal Area was infrequent and comprised relatively small numbers of birds.
		Pink-footed goose is an amber-listed species of moderate conservation concern, based on the international importance and localised distribution of the population, which overwinters in the UK (Stanbury <i>et al.</i> , 2021) ⁹ . However, the estimated UK overwintering population is approximately 485,000 based on the 5-year peak mean taken from autumn census surveys

⁶⁹ Sim, I.M.W., Eaton, M.A., Setchfield, R.P., Warren, P.K. & Lindley, P. (2008). Abundance of male Black Grouse *Tetrao tetrix* in Britain in 2005 and change since 1995-96. Bird Study, 55:304–313. Available at: https://www.tandfonline.com/doi/pdf/10.1080/00063650809461536.

Hancock, M., Baines, D., Gibbons, D.W., Etheridge, B., & Shepherd, M. (1999). Status of male Black Grouse Tetrao tetrix in Britain 1995-96. Bird Study, 46: 1-15. Available at: https://www.tandfonline.com/doi/abs/10.1080/00063659909461110.



Feature	Nature Conservation Importance	Justification
		undertaken between 2016 / 17 and 2020 / 21 (Wildfowl and Wetlands Trust (WWT), 2017^{71} ; 2018^{72} ; 2019^{73} ; 2020^{74} and 2021^{75}). This reflects the species' considerable recovery from approximately 50,000 since the middle of the 20^{th} Century (Mitchell and Hearn, 2008) ⁵¹ .
		The regional / Northeast Scotland population based on the 5-year peak mean taken from the same WWT autumn census surveys referred to above is estimated to be approximately 87,583, and is considered to broadly represent birds passing through the traditionally used coastal areas of NHZs 9, 10, 12 and 21.
		Despite its amber-listed status, the UK's overwintering pink-footed goose population continues to follow a strong increasing trend (WWT, 2021) ⁷⁵ and is at its highest level since records begin in the 1960's. The population is therefore in favourable conservation status at both a UK and Scottish level. Given the widespread distribution of pink-footed geese recorded along the Proposed OHL Alignment during the field surveys, their comparatively low abundance relative to the Northeast Scotland regional population, and the tenuous connectivity of those birds recorded over and around the Proposed OHL Alignment with SPAs in the wider surrounding area (as explained in Table 9.14 : Important Ornithological Features Scoped Out for Further Assessment below), pink-footed goose populations associated with the Site are considered to be of local importance .
Breeding wader assemblage and common gull	Local	Target breeding wader species recorded during the scare breeding bird surveys were golden plover, curlew, lapwing, oystercatcher and snipe. The open moorland habitats of the Drummossie Muir and River Nairn Corridor, Assich Forest / Strathdearn Foothills, Dava Moorlands, Bednawinny Moss and Newtyle Forest and Glen Latterach Moorlands (and Woodlands) Focal Areas represented the main areas where these species were found. Breeding common gull colonies were also recorded at Clunas Reservoir and Glenlatterach Reservoir (Assich Forest / Strathdearn Foothills and Glen Latterach Moorlands (and Woodlands) Focal Areas respectively. Golden plover, curlew and lapwing are listed as priority species on the SBL and Highland LBAP. Curlew and lapwing are also redlisted of birds of conservation concern (Stanbury <i>et al.</i> , 2021) ⁹ while snipe and oystercatcher are included on the Highland LBAP.
		The national and regional populations of these species (where available) are presented below (Wilson <i>et al.</i> , 2015 ⁵⁵ unless otherwise stated):

⁷¹ WWT. 2017. Goose & Swan Monitoring Programme: survey results 2016/17 Pink-footed Goose Anser brachyrhynchus. WWT/JNCC/SNH, Slimbridge. Available at: https://www.bto.org/get-involved/volunteer/projects/goose-and-swan-monitoring-programme/newsletters-and-reports.

⁷² WWT. 2018. *Goose & Swan Monitoring Programme: survey results 2017/18 Pink-footed Goose Anser brachyrhynchus.* WWT/JNCC/SNH, Slimbridge. Available at: https://www.bto.org/get-involved/volunteer/projects/goose-and-swan-monitoring-programme/newsletters-and-reports.

⁷³ WWT, 2019. Goose & Swan Monitoring Programme: survey results 2018/19 Pink-footed Goose Anser brachyrhynchus. WWT/JNCC/SNH, Slimbridge. Available at: https://www.bto.org/get-involved/volunteer/projects/goose-and-swan-monitoring-programme/newsletters-and-reports.

⁷⁴ WWT. 2020. *Goose & Swan Monitoring Programme: survey results 2019/20 Pink-footed Goose Anser brachyrhynchus.* WWT/JNCC/NatureScot, Slimbridge. Available at: https://www.bto.org/get-involved/volunteer/projects/goose-and-swan-monitoring-programme/newsletters-and-reports.

⁷⁵ WWT. 2021. Goose & Swan Monitoring Programme: survey results 2020/21 Pink-footed Goose Anser brachyrhynchus. WWT/JNCC/NatureScot, Slimbridge. Available at: https://www.bto.org/get-involved/volunteer/projects/goose-and-swan-monitoring-programme/newsletters-and-reports.



Feature	Nature Conservation Importance	Justification
		Golden plover: National population - 37,480 pairs; Regional / Northeast Scotland population - 4,007 pairs (NHZ 9 - 552; NHZ 10 - 2,702; NHZ 12 - 659; NHZ 21 - 94).
		 Curlew: National population – 31,194 pairs; Regional / Northeast Scotland population – 5,048 pairs (NHZ 9 – 1,037; NHZ 10 - 811; NHZ 12 – 2,815; NHZ 21 – 385).
		 Lapwing (Foster et al., 2013)⁷⁶): National population – 71,500 – 106,600 pairs; Regional / Northeast Scotland population – not available.
		Oystercatcher (Foster et al., 2013) ⁷⁶ : National population – 84,500 – 116,500 pairs; Regional / Northeast Scotland population – not available.
		 Snipe: National population – 34,594 pairs; Regional / Northeast Scotland population – 2,328 pairs (NHZ 9 – 220; NHZ 10 - 690; NHZ 12 – 1,285; NHZ 21 – 133).
		 Common gull (Forrester et al., 2007)⁵³: National population – 48,113 pairs (apparently occupied nests); Regional / Northeast Scotland population – 24,929 pairs (apparently occupied nests).
		Given the widespread distribution and / or comparatively low abundance of breeding waders and common gull recorded along the Proposed OHL Alignment during the field surveys relative to their national or Northeast Scotland regional populations (where available), the populations associated with the Site are considered to be of local importance .

⁷⁶ Foster, S., Harrison, P., Buckland, S., Elston, D., Brewer, M., Johnston, A., Pearce-Higgins, J. & Marrs, S. 2013. Trends of Breeding Farmland Birds in Scotland. Trend Note 022. Scottish Natural Heritage. Available at: https://www.researchgate.net/publication/323748587_Trends_of_Breeding_Farmland_Birds_in_Scotland.



Issues Scoped Out

Ornithological Features Scoped Out

- 9.3.48 The CIEEM EcIA Guidelines (CIEEM, 2018²) state that the assessment process does not require consideration of effects on ecological features deemed to be below a predefined nature conservation importance threshold and where predicted effects are unlikely to occur. Therefore, an assessment of the effects upon features of Site level nature conservation importance, those which do not occur within the Proposed Development's EZoI, or where effects are unlikely to occur or be of negligible significance, have been excluded from further assessment.
- 9.3.49 Features scoped out of further assessment and the justification for doing so are detailed in **Table 9.14**: Important Ornithological Features Scoped Out for Further Assessment below.

Table 9.14: Important Ornithological Features Scoped Out for Further Assessment

Feature	Justification
Glen Affric to Strathconon SPA	The Proposed Development is situated sufficiently beyond the 6 km core ranging distance for golden eagle for which this site is designated (SNH, 2016b ²⁸). Therefore, it is considered highly unlikely that individuals associated with this SPA would occur in proximity to, and hence be at risk of adverse effects from, the Proposed Development.
North Inverness Lochs SPA, Loch Ashie SPA and Loch Flemington SPA	These SPAs, which are designated for their breeding and post-breeding populations of Slavonian grebe, are all located at least 2.9 km from the Proposed Development and so the birds associated with these SPAs would not be at risk of being disturbed by works associated with the Proposed Development. Additionally, Slavonian grebes are not likely to undertake regular flights to and from these lochs which may intersect with the Proposed OHL Alignment, therefore it is reasonable to assume negligible / no risk of adverse effects on the populations of these designated sites.
Cromarty Firth SPA / Ramsar Site	The Proposed Development is located almost 10 km inland from this SPA, which is designated for its breeding seabird and overwintering pink-footed goose populations, as well as its broader non-breeding waterfowl assemblage. While the breeding seabirds associated with this site would not be at risk of being affected by the Proposed Development, there is a possibility that pink-footed geese may commute at least 10 km to access known foraging grounds (SNH, 2016b ²⁸). However, the Proposed Development does not overlap with, or come into close proximity to, any of the traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) ⁵¹ and Mitchell, (2012) ⁴⁹). Consequently, it is reasonable to assume negligible / no risk of adverse effects on the bird populations associated with this designated site.
Moray Firth SPA	The Proposed Development is located approximately 0.85 km inland from this SPA, which is designated for its non-breeding seabird / seaduck populations. Therefore, the birds associated with it would not be at risk of impacts associated with the Proposed Development nor are they expected to regularly fly inland where there may be potential for intersection with the Proposed OHL Alignment. Consequently, it is reasonable to assume negligible / no risk of adverse effects on the seabird populations associated with this designated site.
Loch Spynie SPA / Ramsar Site	The Proposed Development is located almost 10 km inland from this SPA, which is designated for its populations of overwintering greylag geese. However, the Proposed Development does not overlap with, or come into close proximity to, any of the traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) ⁵¹ and Mitchell, (2012) ⁴⁹). It is recognised that a relatively high frequency of greylag goose flights were recorded inland along the River Spey corridor; however, the vast majority of these were not at PRC. Consequently, it is reasonable to assume negligible / no risk of adverse effects on the bird populations associated with this designated site.
Tips of Corsemaul SPA	This SPA, which is designated for its breeding common gull population, is located over 8 km the Proposed Development and so the birds associated with it would not be at risk of impacts associated with the Proposed Development. Additionally, the birds associated with the SPA are expected to predominantly use agricultural land well within that distance in which to forage. Therefore, it is reasonable to assume negligible / no risk of adverse effects on the population of this designated site.

Feature	Justification
Buchan Ness to Collieston Coast SPA	The Proposed Development is located approximately 7 km inland from this SPA, which is designated for its breeding seabird populations. Therefore, the birds associated with it would not be at risk impacts associated with the Proposed Development nor are they expected to regularly fly inland where they may intersect with the Proposed OHL Alignment. Consequently, it is reasonable to assume negligible / no risk of adverse effects on the seabird populations associated with this designated site.
	The Proposed Development is located almost 10 km inland from this SPA, which is designated for its breeding seabird and overwintering pink-footed goose populations, as well as its broader non-breeding waterfowl assemblage. While the breeding seabirds associated with this site would not be at risk of effect from the Proposed Development, there is a possibility that pink-footed geese may commute up to 10 km inland to access known foraging grounds. However, the Proposed Development does not overlap with, or come into close proximity to any of the traditional foraging grounds known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) ⁵¹ and Mitchell, (2012) ⁴⁹). Consequently, it is reasonable to assume negligible / no risk of adverse effects on the bird populations associated with this designated site.
Loch of Strathbeg SPA / Ramsar Site	The Proposed Development is located over 12 km inland from this SPA, which is designated for its populations of overwintering waterfowl, including pink-footed geese and greylag geese. However, the Proposed Development does not overlap with, or come into close proximity to, any of the core traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) ⁵¹ and Mitchell, (2012) ⁴⁹). It is recognised that some peripheral foraging areas are used by geese in the vicinity of the proposed OHL alignment, specifically around the North and South Ugie Waters (Keller <i>et al.</i> (1997) ⁷⁷); however, the field surveys did not identify regular habitat use by substantial numbers of birds in the vicinity of the Proposed Development. Consequently, it is considered reasonable to assume negligible / no risk of adverse effects on the goose populations associated with this designated site.
Beauly Firth SSSI	Although this SSSI is located 0.5 km from the Proposed Development, the ornithological features for which it is notified (non-breeding greylag goose, goosander and red-breasted merganser) were recorded infrequently, if at all, during field surveys of the adjacent, inland sections of the Proposed Development. Whilst greylag geese were occasionally recorded flying across the Proposed OHL Alignment inland of the SSSI, they were observed in low numbers. In addition, their recognised foraging grounds around the Beauly Firth are associated with near-coastal fields to the west (Mitchell and Hearn, (2004) ⁵¹ and Mitchell, (2012) ⁴⁹), not along the River Beauly Corridor which the Proposed Development traverses. Therefore, it is considered reasonable to assume negligible / no risk of adverse effects on the overwintering bird populations associated with this designated site.
Moray Basin, Firths and Bays IBA	Although this IBA is located 0.5 km from the Proposed Development, the ornithological features for which it is recognised (overwintering and passage waterfowl and wading birds, and breeding seabirds) were recorded infrequently, if at all, during field surveys of the adjacent, inland sections of the Proposed Development. Whilst greylag geese were occasionally recorded flying across the Proposed OHL Alignment inland of the IBA, they were observed in low numbers and their recognised foraging grounds around the Beauly and Moray Firths are associated with near-coastal fields which are not intersected or segregated by the Proposed Development (Hearn and Mitchell, (2004) ⁴⁸ , Mitchell and Hearn, (2004) ⁵¹ and Mitchell, (2012) ⁴⁹). Therefore, it is considered reasonable to assume negligible / no risk of adverse effects on the bird populations associated with this site.
White-tailed eagle	Recorded rarely, in low abundance and with no evidence of breeding, therefore it is considered reasonable to assume negligible / no risk of adverse effects at population level.
Golden eagle	Recorded rarely, in low abundance and with no evidence of breeding, therefore it is considered reasonable to assume negligible / no risk of adverse effects at population level.

The Keller V.E., Gallo-Orsi U., Patterson I.J. and Naef-Daenzar B. (1998). Feeding Areas Used by Individual Pink-footed Geese Anser brachyrynchus around the Loch of $Strathbeg, North-east Scotland. \ Wildfowl (1997) \ 48: 52-64. \ Available \ at; \ \underline{https://wildfowl.wwt.org.uk/index.php/wildfowl/article/view/1013/pdf_95. \ and \ attack the strathbeg \ attack the stra$

Feature	Justification
Honey buzzard	Recorded rarely, in low abundance and with no evidence of breeding, therefore it is considered reasonable to assume negligible / no risk of adverse effects at population level.
Hen harrier	Recorded rarely and in low abundance, with the only identified nest site located over 2 km from the proposed OHL alignment, therefore it is considered reasonable to assume negligible / no risk of adverse effects.
Marsh harrier	Recorded only once and therefore it is considered reasonable to assume negligible / no risk of adverse effects.
Peregrine	Recorded rarely, in low abundance and with no evidence of breeding, therefore it is considered reasonable to assume negligible / no risk of adverse effects.
Merlin	Recorded infrequently with no confirmed records of breeding within 1 km of the Proposed OHL Alignment. Also considered a highly agile and visually aware species, with the ability to readily detect and avoid collision with OHL conductors. Therefore, it is considered reasonable to assume negligible / no risk of adverse effects.
Hobby	Presence recorded through desk study only and distribution indicates species would be present at low density; therefore it is considered reasonable to assume negligible / no risk of adverse effects.
Short-eared owl	Recorded rarely, in low abundance and with no evidence of breeding; therefore, it is considered reasonable to assume negligible / no risk of adverse effects at population level.
Barn owl	Recorded rarely and in low abundance with the only identified nesting and roosting sites located over 500 m and approximately 300 m from the Proposed OHL Alignment respectively; therefore it is considered reasonable to assume negligible / no risk of adverse effects.
Red-throated diver	Recorded rarely, in low abundance and with no evidence of breeding; therefore it is considered reasonable to assume negligible / no risk of adverse effects.
Black-throated diver	Presence recorded through desk study only and distribution indicates species would be present at low density; therefore it is considered reasonable to assume negligible / no risk of adverse effects.
Greylag goose	Recorded infrequently and in low abundance compared to overwintering populations, with birds recorded considered unlikely to be associated with nearby designated sites (see Table 9.13 : Important Ornithological Features Scoped In for Further Assessment above); therefore, it is considered reasonable to assume negligible / no risk of adverse effects at population level.
Whooper swan	Recorded rarely and in low abundance; therefore it is considered reasonable to assume negligible / no risk of adverse effects.
Common crane	Presence recorded through desk study only and distribution indicates species would be present at low density; therefore it is considered reasonable to assume negligible risk of adverse effects.
Goldeneye	Recorded rarely and in low abundance, therefore it is considered reasonable to assume negligible / no risk of adverse effects.
Passerine Target Species	Presence recorded through desk study. Passerines are generally considered to be at low risk of impacts from OHL developments and are not likely to experience adverse effects at the population level (NatureScot, 2025a ⁴ and Coleman <i>et al.</i> , 2016 ⁷). Damage / destruction of nests and / or disturbance of nesting birds during the breeding season will nonetheless need to be accounted and mitigated for through appropriate measures outlined in Section 9.5 in order to comply with wildlife legislation.

Potential Impacts Scoped Out

9.3.50 Indirect effects to bird species from habitat damage / deterioration as a result of changes to water quality during the construction phase have been scoped out of this assessment. The construction works have potential to result in degradation of water quality from the accidental release of pollutants / contaminants (e.g. fuel / oil) or sediment into watercourses and waterbodies. These habitats may provide important foraging, breeding or roosting opportunities to IOFs. The Proposed Development would span, and involve construction works in close proximity to, several major watercourses and large waterbodies (e.g. the River Beauly, River Ness, Caledonian



Canal, River Nairn, River Findhorn, River Spey, River Isla and River Deveron, and Clunas and Glenlatterach Reservoirs). However, construction of the Proposed Development will adhere to industry standard pollution prevention measures as discussed in **Appendix 3.5**: **General Environmental Management Plans (GEMPs)** (see **Section 9.4** (Embedded Mitigation)). Further mitigation to protect water quality is outlined in the Construction Environmental Management Plan (CEMP), detailed in **Appendix 3.3**: **Construction Environmental Management Plan** and referred to in **Section 9.4** (Embedded Mitigation). Following the implementation of these measures, it is considered reasonable to assume there will be no significant effects on water quality from the construction of the Proposed Development (**Chapter 10**: **Water and Geological Environment**).

- 9.3.51 Construction effects of accidental direct mortality to the eggs / chicks or breeding birds has been scoped out of further assessment. Direct mortality could occur if eggs / chicks are accidentally crushed when installing access tracks / work areas or by the movement of plant. It is assumed that the mitigation hierarchy detailed in the Bird Species Protection Plan (SPP) (Appendix 3.6: Species Protection Plans (SPPs) (see Section 9.4 (Embedded Mitigation)), including pre-construction surveys and avoiding active nests (under the supervision of an Environmental Advisor) will significantly reduce the potential for this impact. Indirect mortality of eggs / chicks as a result of accidental disturbance is considered further as this impact can occur over a much wider EZoI and is inherently more difficult to identify and mitigate (although this impact is also considered in the Bird SPP at a high level).
- 9.3.52 Direct mortality due to collision with temporary OHL diversions installed during the construction stage has been scoped out of further assessment. To facilitate the construction of replacement towers along sections of the Proposed OHL Alignment in close proximity to the existing OHL alignment, temporary diversions of the existing OHL will be required. Temporary diversions will be required at nine locations as identified in **Chapter 3: Project Description** and **Figure 3.1: Site Layout**. The temporary diversions will be in place for approximately six months and the majority will be located within 50 m of the existing OHL. Based on the above it is not considered that the temporary diversions will present a collision risk to birds during construction. Furthermore, the temporary diversions are not located in close proximity to (i.e. within the ZoI of) any known Target Species nesting or lekking sites.
- 9.3.53 All operational disturbance impacts associated with routine and emergency inspection, maintenance and repair works have been scoped out. Potential effects from electrocution of birds from the Proposed Development, once operational, are also scoped out since the risk of such impacts are not typically considered to be attributable to high voltage transmission OHLs. This is due to the wider spacing of the conductors making it unlikely that any species found in Scotland would be large enough to bridge the gaps between two sets of live wires (NatureScot, 2025a⁴ and EirGrid, 2016⁷⁸). Additionally, due to the design of the Proposed Development, no impacts of bird electrocution are anticipated as a result of birds perching on the OHL components.

9.4 Assessment of Likely Significance of Effects

Embedded Mitigation

Mitigation by Design

9.4.1 As described in **Chapter 4**: **The Routeing Process and Alternatives**, the Proposed Development has undergone an extensive optioneering process which has sought to identify the most environmentally sensitive alignment possible, as well as avoiding residential areas, nationally significant infrastructure and important cultural sites, whilst still being economically viable. This has involved avoidance of designated sites and areas used by associated qualifying species outwith those sites (i.e. 'functionally linked land'). The Proposed OHL Alignment has also avoided, as far as possible, important areas for species of conservation concern (e.g. many of the woodlands

⁷⁸ EirGrid (2016). EirGrid Evidence Based Environmental Studies Study 5: Birds. Literature review and evidence-based field study on the effects of high voltage transmission lines on birds. May 2016. Available at: https://cms.eirgrid.ie/sites/default/files/publications/EirGrid-Evidence-Based-Environmental-Study-5-Birds.pdf.



- known to support, or to have supported, capercaillie and areas supporting common crane) and areas possessing habitats which support high species diversity (semi-natural woodlands and wetland habitats).
- 9.4.2 Having undertaken this process, the Proposed Development is considered to follow an alignment which has met this balance, meeting both technical and economic considerations, whilst also protecting environmental features including ornithological interests.

Inherent SSEN Transmission Environmental Working Protocols

- 9.4.3 Included as part of the embedded mitigation considered in undertaking this OIA, are the standard tried and tested working environmental protocols and mitigation measures set out in the following documents:
 - General Environmental Management Plans (GEMPs) (Appendix 3.5: General Environmental Management Plans), and
 - Species Protection Plan for Birds (Bird SPP) (Appendix 3.6: Species Protection Plans).
- 9.4.4 It is reasonable to assume protocols detailed within the GEMPs and Bird SPP will be implemented thoroughly and successfully.
- 9.4.5 For clarity, embedded mitigation measures captured within the following particular GEMPs will be sufficient to address and control potential impacts associated with pollution events, such that pollution impacts have not been addressed through this assessment. These include detailed procedures for the following:
 - Oil Storage and Refuelling;
 - · Working in or Near Water;
 - · Working with Concrete;
 - Watercourse Crossings;
 - · Waste Management; and
 - Contaminated Land.
- 9.4.6 Other GEMPs which will address and mitigate (fully or in part) potential impacts on habitat interests include:
 - Working in Sensitive Habitats;
 - Restoration; and
 - Bad weather.
- 9.4.7 Where mitigation measures relevant to IOFs either differ from that presented in the Bird SPP or are considered important to highlight for specific elements of the Proposed Development, this is captured as additional mitigation herein and supersedes or adds to that presented in the Bird SPP.
- 9.4.8 All additional mitigation will be captured in and delivered through the CEMP (see **Appendix 3.3: Outline** Construction Environmental Management Plan (CEMP)).

Predicted Construction Impacts

Description of Impacts

Habitat Loss and Degradation

9.4.9 The Proposed Development is described in Chapter 3: The Proposed Development and shown in Figure 3.1: Site Layout. The Proposed Development will result in permanent loss of habitat associated with the establishment of wayleaves for the Proposed OHL Alignment through felling of woodland, construction of new and upgrading of existing access tracks and the installation of new tower foundations. Full details of the habitat baseline conditions, gathered from a UK Habitat Classification Survey, and habitat assessment, including habitat loss calculations, are presented in Chapter 8: Ecology and Appendix 8.1: UK Habitat and Protected Species.

There will also be a loss of woodland habitat through management felling in order to establish wind-firm edges



to felled sections of forestry required to facilitate the Proposed Development. However, this is only anticipated to involve areas of commercial plantation forestry and the affected areas will be replanted. Therefore, any loss will only be temporary. Further details of the management felling are provided in **Chapter 12: Forestry**.

- 9.4.10 The largest amount of habitat loss would result from felling of woodland to enable formation of the Proposed Development's Operational Corridor, construction of new access tracks and upgrading of existing access tracks. Woodlands likely to be affected would mostly comprise semi-natural and plantation coniferous forestry, including Scot's pine woodland, with substantial areas of broadleaved woodland. There will also be loss of modified grassland, bog and heathland habitats in more open areas, principally within the sections which pass through Highland and Moray, as well as some agricultural land. The majority of habitat loss from agricultural land will occur in the eastern half where the Proposed Development traverses Aberdeenshire.
- 9.4.11 Small amounts of habitat will also be lost through the construction of new 'flat formation towers' where the Proposed Development will intersect with and pass over existing transmission OHLs (referred to as 'diamond crossings' or 'duck under' arrangements). These crossings will all occur in either agricultural or modified grassland habitats.
- 9.4.12 There will also be small amounts of habitat loss associated with the 2.6 km realignment of the 275 kV OHL south of Ferness and the 7.8 km diversion of the existing 400 kV Blackhillock to Rothienorman OHL, to the southeast of Keith. The 275 kV OHL realignment south of Ferness will predominantly involve the loss of moorland (bog and heathland) habitat for the new realignment tower foundations, while the diversion of the existing 400 kV Blackhillock to Rothienorman OHL near Keith will predominantly involve the loss of agricultural land and commercial plantation forestry.
- 9.4.13 The Proposed Development also involves removal of the existing 16.9 km 132 kV OHL and approximately 1 km of underground cable which runs between Beauly and Knocknagael substations, with removal of an approximately 3 km redundant section of the 400 kV Blackhillock to Rothienorman OHL, following the diversion described above. Whilst these works will not involve any habitat loss, they are likely to involve temporary habitat disturbance relating to the generic disturbance of ground associated with the undertaking of these works, which will primarily involve agricultural land and commercial plantation forestry.
- 9.4.14 The remaining works associated with the Proposed Development will result in temporary habitat loss, perceived as habitat degradation, as habitats would be restored and / or re-establish naturally in the short-term. Habitats will be temporarily lost where occurring under temporary works areas (e.g. site compounds, tower works sites, temporary diversions of existing OHL, Equipotential Zones (EPZs) and temporary access tracks). All excavated habitat required for foundation works will be reinstated in accordance with methodology detailed in relevant GEMPs and all temporary OHL diversions removed. The majority of temporary OHL diversions are proposed within agricultural or modified grassland habitats: the only one located within moorland (bog and heathland) habitats is associated with the 275 kV OHL realignment south of Ferness. EPZs, and where possible temporary access tracks, will be constructed using metal trackway to minimise damage to sensitive habitats by heavy plant, and temporary and permanent floating tracks will be used in sensitive habitats to minimise habitat loss and preserve hydrological functionality.

Disturbance and Displacement

9.4.15 Noise and visual stimuli emitted during construction works could accidentally disturb birds during activities vital to survival and reproduction and, as a worst-case, could cause the abandonment of active nests and death of eggs or chicks. The movement of plant and general construction activities will emit noise with the loudest noise likely associated with rock pecking required in the formation of tower foundations. It is considered likely that visual disturbance from plant and personnel will have a wider EZoI than acoustic disturbance (Goodship and



Furness, 2022)⁷⁹. The EZoI for construction disturbance will vary by species and activity with the maximum disturbance distance associated with the Proposed Development likely to be approximately 1 km for activities taking place in the vicinity of active capercaillie leks (Goodship and Furness, 2022)⁷⁹. The EZoI will typically be greater for nesting birds in comparison to foraging (or other behaviours); however information on disturbance distances for behaviours other than nesting is generally limited. Birds subject to disturbance will typically cease the activity (e.g. foraging) by becoming alert to the source of disturbance. If the stimuli become too intense to tolerate, birds will typically take flight and move away (i.e. displaced) to an area sufficiently distant from the source of disturbance. The distance and duration of that displacement effect will likely be dependent on the duration of the disturbance impact as well as any potential habituation the birds may develop to it over time.

- 9.4.16 Construction of the Proposed Development may include the use of helicopters during the conductoring phase along the entire length of the Proposed OHL Alignment to introduce the pilot wire, which will then be used to pull the conductors and earth wires through. Helicopters may also be used to remove dismantled sections of decommissioned or replaced OHL towers.
- 9.4.17 Displacement occurs when ongoing construction works discourage or even prevent birds from accessing habitats within the disturbance EZoI, usually as they have been disturbed and have left the area. This could be manifested through avoiding otherwise suitable nesting or foraging habitat, thus reducing the habitat available to the birds.
- 9.4.18 Works associated with the Proposed Development are anticipated to take place over a four year period from Q3 2026 until Q4 2030.

Assessment of Effects on IOFs

Inner Moray Firth SPA and Ramsar Site, Moray and Nairn Coast SPA and Ramsar Site and Moray Basin, Firths and Bays IBA

Habitat Loss and Degradation

- 9.4.19 As the Proposed Development does not overlap with, or come into close proximity to, the Inner Moray Firth SPA / Ramsar Site or Moray and Nairn Coast SPA / Ramsar Site, there will be no direct loss or degradation of habitat from within these designated sites: **no effect**. This conclusion extends to Moray Basin, Firths and Bays IBA.
- 9.4.20 Assessment of potential loss and degradation of habitat used by osprey, the only qualifying species of the Inner Moray Firth SPA / Ramsar Site which has been scoped into the assessment, outside of the designated site (functionally-linked land) is considered below in relation to the assessment of impacts on the species as an IOF.
 - Disturbance and Displacement
- 9.4.21 The assessment of disturbance and displacement impacts on osprey, the only qualifying species of the Inner Moray Firth SPA / Ramsar Site and Nairn Coast SPA / Ramsar Site which has been scoped into the assessment, is considered below in relation to the assessment of impacts on the species as an IOF.

Darnaway and Lethen Forest SPA

Habitat Loss and Degradation

9.4.22 As the Proposed Development does not overlap with, or come into close proximity to, the Darnaway and Lethen SPA there will be no direct loss or degradation habitat from within the designated site: **no effect**.

 $\underline{https://www.nature.scot/doc/naturescot-research-report-1283-disturbance-distances-review-updated-literature-review-disturbance-distances-review-updated-literature-review-disturbance-distances-review-updated-literature-review-disturbance-distances-review-updated-literature-review-disturbance-distances-review-updated-literature-review-disturbance-distances-review-updated-literature-review-disturbance-distances-review-updated-literature-review-disturbance-distances-review-updated-literature-review-distance-distances-review-updated-literature-review-distances-review-updated-literature-review-distances-review-updated-literature-review-distances-review-updated-literature-review-distances-review-distances-review-updated-literature-review-distances-review-updated-literature-review-distances-review-updated-literature-review-distances-review-updated-literature-review-distances-review-updated-literature-review-distances-review-updated-literature-review-distances-review-updated-literature-review-distances-review-updated-literature-review-distances-review-updated-literature-review-distances-review-updated-literature-review-upda$

⁷⁹ Goodship, N, M and Furness, R, W (2022). Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. NatureScot Research Report 1283. Available at:



9.4.23 Assessment of potential loss and degradation of habitat used by capercaillie, the only qualifying species of Darnaway and Lethen SPA, outside of the designated site ('functionally-linked land') is considered below in relation to the assessment of impacts on the species as an IOF.

Disturbance and Displacement

9.4.24 The assessment of disturbance and displacement impacts on capercaillie, the only qualifying species of the Darnaway and Lethen SPA, is considered below in relation to the assessment of impacts on the species as an IOF.

Osprey

Habitat Loss and Degradation

- 9.4.25 The Proposed Development will not result in the loss of any osprey nest sites (no effect).
- 9.4.26 In terms of foraging habitat, osprey are likely to use most of the large rivers and waterbodies spanned by, or located in close proximity to, the Proposed OHL Alignment. These are the River Beauly, River Ness and Caledonian Canal, River Nairn, River Findhorn, River Spey, River Isla and River Deveron, and the Clunas and Glenlatterach Reservoirs. Osprey were also recorded over and around Achagour Fishery during the flight activity surveys and are considered likely to use this as a foraging resource. However, the Proposed Development will not result in the direct loss of any habitat associated with these rivers and waterbodies. Therefore, there are not anticipated to be any significant effects on osprey from habitat loss (no effect).
- 9.4.27 This conclusion extends to functionally linked land used by ospreys associated with Inner Moray Firth SPA / Ramsar Site, Moray and Nairn Coast SPA / Ramsar Site and Moray Basin, Firths and Bays IBA (**no effect**).
 - Disturbance and Displacement
- 9.4.28 Goodship and Furness (2022)⁷⁹ identify an upper range disturbance distance of 750 m for osprey during the breeding season (the only time of year when the species is present in the UK). There are four osprey nest sites located within 750 m of the OHL line: two located within the Dulsie Wood and associated Woodlands Focal Area and two located within the River Spey Corridor / Wood of Ordiequish Focal Area.
- 9.4.29 The nest sites located within the Dulsie Wood and associated Woodlands Focal Area are located within 350 m of each other and are both within 500 m of the Proposed OHL Alignment: one approximately 420 m away and the other approximately 145 m away. Both of these nest sites are also located within 250 m of a proposed access track which is to be upgraded. Notably, both of these nest sites are also located within 500 m of the existing OHL, at approximately 490 m and 225 m respectively. Both of these nest site records were from 2024, with the further away nest site being occupied while the closer nest site, an artificial nesting platform, was reported to be inactive at the time of inspection, but it showed signs of activity earlier in the season. Whilst ospreys can nest in close proximity to one another, this is relatively unusual in Scotland (Hardey *et al.*, 2013³⁸). Therefore, these are considered to be alternative nest sites used by the same pair of ospreys. Nonetheless, precautionary measures outlined in the Bird SPP will be applied to avoid disturbance of nesting birds during the breeding season through both track upgrade, operation and OHL installation works. Therefore, construction works at this location are not expected to affect the presence or breeding success of osprey at this location.
- 9.4.30 Of the two nest sites located within the River Spey Corridor / Wood of Ordiequish Focal Area, the closest is located approximately 500 m away from the Proposed OHL Alignment. This nest site record was provided by NESRSG, however no information on the recent occupancy status or breeding success was provided. The other nest is located approximately 575 m from the Proposed OHL Alignment and was identified during scarce raptor surveys in 2023. Notably, the land between the closest nest site and the Proposed Development is intersected by a busy A-class road, while the other nest site is located approximately 260 m from the same A-class road. Goodship and Furness (2022)⁷⁹ state that birds which are exposed to human presence can become accustomed to associated disturbance. It is reasonable to assume therefore that if these nest sites are active, then the birds associated with them are habituated to a relatively high level of daily noise disturbance from the passing traffic.



Therefore, disturbance from construction activities down to at least 500 m from these nest sites is unlikely to adversely affect birds associated with them, especially when precautionary measures outlined in the Bird SPP are applied.

- 9.4.31 A further three nest sites are located within 750 m of proposed access tracks within the River Spey Corridor and Wood of Ordiequish Focal Area, all of which are located within 500 m, with two being within 200 m of the Proposed Development. However, it is considered that application of the standard precautionary measures outlined in the Bird SPP (to avoid disturbance of nesting birds during the breeding season) will avoid or minimise disturbance to ospreys to a negligible level. Therefore, the construction / upgrade and use of access tracks in the vicinity of these nest sites is not expected to adversely disturb breeding ospreys at these locations.
- 9.4.32 As noted above in relation to habitat loss, the Proposed OHL Alignment traverses several large rivers and waterbodies which ospreys are likely to use as a foraging resource, as well as to commute along. However, any disturbance associated with the construction of the Proposed Development at these locations will be highly localised, specifically focussed around the individual works areas rather than extending over large areas. Ospreys will continue to have access to these foraging areas, albeit potentially displaced to areas outwith the influence of the disturbance source(s), i.e. further up- or downstream or the opposite ends of waterbodies. Even so, the scale of any such effect is predicted to be negligible against the wider availability of foraging habitat further upstream or downstream the rivers or across the large waterbodies. Similarly, any displacement effects on osprey flight paths along commuting corridors are anticipated to be negligible; at worst potentially causing birds to take minor detours around the disturbance source's zone of influence, whilst continuing on to intended destination.
- 9.4.33 Works involving helicopters are likely to exert a very specific and intense disturbance influence which would be very likely to disturb ospreys from nests or foraging sites. As with all other construction works however, helicopter activities would be carried out with application of the standard precautionary measures outlined in the Bird SPP to avoid disturbance of nesting birds during the breeding season, such that any potential disturbance to ospreys from helicopter activities will be avoided or minimised to a negligible level.
- 9.4.34 Consequently, any disturbance effects on osprey during the construction phase are anticipated to be temporary and highly localised and are therefore predicted to be **not significant**.
- 9.4.35 This conclusion extends to disturbance and displacement of ospreys associated with Inner Moray Firth SPA / Ramsar Site, Moray and Nairn Coast SPA / Ramsar Site and Moray Basin, Firths and Bays IBA (**not significant**).

Capercaillie

Habitat Loss and Degradation

- 9.4.36 RSPB Scotland provided records for two capercaillie lek sites within the Dulsie Wood and associated Woodlands Focal Area, the closest of which is located just within 1 km of the Proposed OHL Alignment, although the last record of this having been attended was in 2013. Records for two lek sites were also provided for the River Spey Corridor / Wood of Ordiequish Focal Area, but these were both located over 1 km from the Proposed OHL Alignment and had also not been attended since at least 2017. Therefore, there will be no loss of active capercaillie lek sites as a result of the Proposed Development.
- 9.4.37 The records received from RSPB Scotland through the desk study identified woodlands connecting Dulsie Wood and Darnaway Forest as supporting some of the last remaining capercaillie representing the Nairn and Moray population. These birds are also affiliated with the SPA population associated with Darnaway and Lethen Forest. These connecting woodlands are therefore considered to represent functionally linked land for the SPA capercaillie population and are considered likely to be fundamental to the persistence of the capercaillie population both in terms of the SPA and the wider Nairn and Moray area.
- 9.4.38 The felling of woodland to clear the wayleave for the OHL where the Proposed Development traverses these woodlands (i.e. between Clunas Wood (southeast of Cawdor) and New Inn Wood (Ferness)) will therefore represent the loss of capercaillie habitat which is functionally linked to Darnaway and Lethen Forest SPA. It will



- also further sever the connectivity between the woodlands associated with Dulsie Wood and those associated with the SPA which is already severed by the A939 and the existing 275 kV OHL.
- 9.4.39 It is worth noting however, that the sections of woodland which the Proposed Development traverses are not comprised of extensive tracts of capercaillie's preferred mature, open-structured pine forest; but are more fragmented patches of mixed-age broadleaved and coniferous plantation woodland, considered to be less preferable to capercaillie. Therefore, it is considered that the habitat which will be affected is not likely to represent important breeding habitat but is more likely to form part of their local movement corridors between adjoining woodlands. Given this movement corridor is already severed, as noted above, the installation of the Proposed Development will further fragment the connectivity of the local woodlands. It is also worth noting however, that the section the Proposed Development which traverses Dulsie Wood is aligned in close proximity to and largely parallel with the existing 275 kV OHL, with the separation distance ranging from 100 m to 600 m (much of it being within 250 m although the full extent of these gaps will not be felled). Therefore, while the effective width of the severance gap will be increased, the fragmentation effect will remain relatively localised to the same linear corridor.
- 9.4.40 Woodlands within and surrounding Dulsie Wood are predominantly managed for commercial purposes with all of the coupes throughout the surrounding woodlands being in different stages of forestry rotation; including some larger, more extensive swathes of recently clear-felled woodland. Therefore, the loss of less preferable woodland from along the Proposed Development's narrow wayleave is considered to be negligible in the wider geographic context.
- 9.4.41 Despite capercaillie's preference for more extensive mature pine forest, they also utilise areas of more open habitat amongst forests such as bog, heathland and naturally regenerating woodland for foraging and moving amongst. Therefore, it is expected that locally occurring birds will still cross the Proposed Development's wayleave in order to move between adjoining woodlands, as they do with the existing OHL's wayleave. It is considered that the severance effect from the Proposed Development would just make birds more wary.
- 9.4.42 In conclusion, although the habitat loss and degradation will be permanent, it will mainly affect less preferred habitat, will be relatively localised and broadly consistent with the existing fragmentation corridor formed by the existing OHL and will be negligible in extent compared to forestry activities in the wider surrounding woodlands. Therefore, the impact of this habitat loss and degradation is considered to be no more than minor magnitude in the context of the local capercaillie population only and, despite the species' critical status and international importance, is predicted to be **not significant**. This would extend to the qualifying population of the Darnaway and Lethen Forest SPA.

Disturbance and Displacement

- 9.4.43 Goodship and Furness (2022)⁷⁹ identify an upper range disturbance of 1 km lekking capercaillie and 100 m for nesting females during the breeding season. As noted above, RSPB Scotland provided records for four capercaillie lek sites within the Proposed Development Study Area: two in the Dulsie Wood and associated Woodlands Focal Area and two in the River Spey Corridor / Wood of Ordiequish Focal Area.
- 9.4.44 Both of the lek sites in the River Spey Corridor / Wood of Ordiequish Focal Area are located over 1 km from the Proposed OHL Alignment and have not been attended since at least 2017. Indeed, no records of capercaillie were provided in this area since 2017 and on this basis it is considered unlikely that the species is present there anymore. Therefore, no impacts to lekking capercaillie are predicted in this Focal Area.
- 9.4.45 Of the two lek sites located within the Dulsie Wood and associated Woodlands Focal Area, one is located just within 1 km of the Proposed OHL Alignment. However, this lek site had not been attended since 2013 and it is therefore no longer considered to be active. Nevertheless, during the construction phase, precautionary measures outlined in the Bird SPP will be undertaken within 1 km of this lek site, therefore no disturbance effects are anticipated.



- TRANSMISSION
- 9.4.46 As noted above, the records received from RSPB Scotland have identified that the woodlands connecting Dulsie Wood and Darnaway Forest support some of the last remaining capercaillie representing the Nairn and Moray population. These birds are also affiliated with the population associated with Darnaway and Lethen Forest SPA. Therefore, it is likely that the construction works taking place throughout these woodlands, including track upgrades and use, will pose a disturbance risk to locally occurring capercaillie. However, any disturbance associated with the construction of the Proposed Development in this area will be highly localised, specifically focussed around the individual works areas, rather than extending over large areas. The most extensive construction phase activity will be the felling of forestry to clear the wayleave for the Proposed Development, although this will also be localised to the area being felled at any particular time.
- 9.4.47 The precautionary measures outlined in the Bird SPP will be applied to avoid disturbance of nesting birds during the breeding season. It is therefore anticipated that any disturbance impacts will only affect birds moving through the adjacent forestry which come into close proximity with the works areas and these birds will be able to move away of their own accord. Given the localised nature of the works and associated disturbance effects, construction of the Proposed Development is considered unlikely to prevent birds from accessing important foraging areas or other intended destinations.
- 9.4.48 Works involving helicopters are likely to exert a very specific and intense disturbance influence, which would be very likely to disturb capercaillie from lekking or nesting sites. As with all other construction works however, helicopter activities would be carried out with the application of the standard precautionary measures outlined in the Bird SPP, to avoid disturbance of nesting and lekking birds during the breeding season such that any potential disturbance to capercaillie from helicopter activities will be avoided or minimised to a negligible level.
- 9.4.49 Consequently, any disturbance effects on capercaillie during the construction phase are anticipated to be temporary and highly localised and are therefore predicted to be **not significant**.

Red Kite

Habitat Loss and Degradation

- 9.4.50 The Proposed Development will not result in the loss of any red kite nest sites (no effect).
- 9.4.51 In terms of foraging habitat, red kite is predominantly a scavenging species, most closely affiliated with lowland mixed agricultural and woodland habitats as well as lower altitude upland habitats. Indeed, the species' occurrence corresponds to areas where these habitat types are most prevalent in the western half of the Proposed OHL Alignment between Beauly and Forres. Whilst the Proposed Development will result in the direct loss of land associated with these habitats through the construction of access tracks, installation of towers and, in woodland areas, the felling of the OHL's wayleave, the loss of habitat is considered to be localised and negligible, relative to the availability of these habitats in the nearby and wider surrounding areas. Loss of habitat is therefore considered unlikely to affect the conservation status of red kite at any geographical scale. Therefore, the effect of habitat loss and degradation on red kite will be **not significant**.

Disturbance and Displacement

9.4.52 Goodship and Furness (2022)⁷⁹ identify an upper range disturbance distance of 300 m for red kite during both the breeding and non-breeding season, for nest sites and roost sites respectively. Two red kite nest sites, located within the River Beauly Corridor and Assich Forest / Strathdearn Foothills Focal Areas, are situated within this distance. The nest within the River Beauly Corridor Focal Area, which was reported to be occupied during the 2023 field surveys, is located approximately 190 m from the Proposed OHL Alignment and associated access tracks at its closest point. Notably, this nest site is already located approximately 225 m from the existing OHL and is less than 100 m from a busy A-class road. Goodship and Furness (2022)⁷⁹ state that birds which are exposed to human presence can be more accustomed to associated disturbance. It is reasonable to assume therefore that the birds associated with this nest site are habituated to a relatively high level of daily noise disturbance from the passing traffic. Nonetheless, disturbance from construction activities within 200 m of this nest site could



- adversely affect the birds associated with it. Meanwhile, the nest site located within the Assich Forest / Strathdearn Foothills Focal Area, which was identified during site investigation works in 2025, is located approximately 140 m from the Proposed OHL Alignment and associated access tracks at its closest point. This nest site is located even closer to the existing OHL, at approximately 40 m but it is in a much more remote location with much less human disturbance than the River Beauly Corridor Focal Area. However, precautionary measures outlined in the Bird SPP will be applied to avoid disturbance of nesting birds during the breeding season. Therefore, construction works at both of these locations are not expected to affect the presence or breeding success of red kites at this location.
- 9.4.53 As noted above in relation to habitat loss, the Proposed Development traverses a mixture of lowland agricultural and woodland habitats and lower altitude upland habitats which red kites are typically affiliated with. It is reasonable to assume therefore that red kites will encounter construction activities in the areas where they are most prevalent (i.e. in the western half of the Proposed OHL Alignment between Beauly and Forres). However, most of the disturbance associated with the construction of the Proposed Development in these areas will be highly localised, specifically focussed around the individual works areas rather than extending over large areas. The most extensive construction phase activity will be the felling of forestry to clear the wayleave for the Proposed Development, although this will also be localised to the area being felled at any particular time. Since red kites scour large areas in search of food, these localised construction activities are anticipated to have a negligible impact on the availability of foraging areas or displacement birds from flight paths to their intended destinations.
- 9.4.54 Works involving helicopters are likely to exert a very specific and intense disturbance influence which would be very likely to disturb red kite from nests or foraging areas. As with all other construction works however, helicopter activities would be carried out with application of the standard precautionary measures outlined in the Bird SPP to avoid disturbance of nesting birds during the breeding season, such that any potential disturbance to red kites from helicopter activities will be avoided or minimised to a negligible level.
- 9.4.55 Consequently, any disturbance effects on red kite during the construction phase are anticipated to be temporary and highly localised and are therefore predicted to be **not significant**.

Goshawk

Habitat Loss and Degradation

- 9.4.56 While the majority of goshawk nest site records provided through the desk study or identified during the field surveys are located well away from the Proposed Development, there is one territory (suspected by NESRSG and FLS) located in the Brown Muir Focal Area, which could potentially be affected by woodland felling. Felling in this area would be necessary to clear the wayleave for the OHL and the formation of the associated temporary access track. The identified goshawk territory is located in commercial coniferous plantation forestry, which is subject to periodic felling and restocking; therefore the birds inhabiting such forests are accustomed to being relocated to alternative nesting sites. Indeed, goshawk typically have several nest sites within their territories and so it is likely that other, alternative nests sites exist within the wider territory to which birds could be displaced. Therefore, whilst the woodland felling at this location might result in the loss of a goshawk nest site, it is unlikely to result in the loss of birds from this location and hence is not predicted to have a significant effect at any geographic level.
- 9.4.57 In terms of foraging habitat, goshawk is a woodland raptor which predominantly occurs within mixed and coniferous forests and woodlands in lowland areas, and lower altitude uplands typically associated with agricultural and open moorland habitats where they hunt for small to medium sized birds and mammals. The desk study and field survey records of the species' occurrence corresponds to areas where these habitat types are most prevalent. These habitats occur in the western half of the Proposed OHL Alignment between Beauly and Keith, with sightings also at the eastern end of the Proposed OHL Alignment near Peterhead. Whilst the Proposed Development will result in the direct loss of land associated with these habitats through the construction of access tracks, installation of towers and, in woodland areas, the felling of the OHL's wayleave, the loss of habitat



is considered to be localised and indiscernible relative to the availability of these habitats in the nearby and wider surrounding areas and it is considered unlikely to affect the conservation status of goshawk at any geographical scale. Therefore, the effect of habitat loss on goshawk will be **not significant** at any geographical scale.

Disturbance and Displacement

- 9.4.58 Goodship and Furness (2022)⁷⁹ identify an upper range disturbance distance of 500 m for goshawk during the breeding season. As noted above in relation to habitat loss, there is one suspected territory in the Brown Muir Focal Area which is located within this distance and birds associated with this territory could be affected by construction activities including woodland felling to clear the wayleave for the OHL and formation and use of the associated temporary access track. As also noted above however, this territory is located in commercial coniferous plantation forestry and the birds inhabiting this forest and associated with this territory will likely be accustomed to forestry activities and the presence of humans to a certain degree (Goodship and Furness, 2022)⁷⁹. Indeed, aerial images of the woodland show that felling activities have taken place in the forest in recent years and that there are also two operational quarries. Given that goshawks typically have several nest sites within their territories (Hardey et al, 2013³⁸), it is considered likely that other, alternative nests sites exist within the wider territory which birds could elect to use, should they be unduly disturbed from nest sites located closer to the construction works. This is notwithstanding that precautionary measures outlined in the Bird SPP will be applied to avoid disturbance of nesting birds during the breeding season. Therefore, whilst construction works at this location may result in minor disturbance of locally occurring goshawks, it is considered unlikely to affect their presence or breeding success at this location.
- 9.4.59 As noted above in relation to habitat loss, the Proposed Development traverses extensive areas of woodland habitat including areas where goshawks are known to occur, based on sightings and nest site records. However, most of the disturbance associated with the construction of the Proposed Development in these areas will be highly localised, specifically focussed around the individual works areas rather than extending over large areas. The most extensive construction phase activity will be the felling of forestry to clear the wayleave for the Proposed Development, although this will also be localised to the area being felled at any particular time. Given that goshawks are moderately tolerant of human disturbance (Goodship and Furness, 2022⁷⁹) and cover large areas of forestry and surrounding open habitats as part of their core range (Hardey et al, 2013³⁸), these localised construction activities are not anticipated to have a significant effect on the availability of foraging areas or to displace birds from flight paths to their intended destinations.
- 9.4.60 Works involving helicopters are likely to exert a very specific and intense disturbance influence which would be very likely to disturb goshawk from nests sites and foraging areas. As with all other construction works however, helicopter activities would be carried out with application of the standard precautionary measures outlined in the Bird SPP to avoid disturbance of nesting birds during the breeding season, such that any potential disturbance to goshawks from helicopter activities will be avoided or minimised to a negligible level.
- 9.4.61 Consequently, any disturbance effects on goshawk during the construction phase are anticipated to be temporary and highly localised and are therefore predicted to be **not significant**.

Black Grouse

Habitat Loss and Degradation

- 9.4.62 Black grouse were recorded in almost all Focal Areas containing suitable open moorland / forest edge habitat, where it was prevalent in the western half of the Proposed OHL Alignment between Beauly and Keith.
- 9.4.63 One of the eleven lek sites identified during the field surveys is located along the Proposed OHL Alignment. This was located in the Dava Moorlands Focal Area and was represented a by a single male during the surveys in 2023. However, no birds were recorded at, or near this location during any of the other surveys that year or during the follow up surveys in 2024. When they exist in reasonable numbers, black grouse typically display at traditional lek sites year after year (Watson and Moss⁸⁸). However, where they occur at low densities, lekking is often



undertaken by single birds which become less tied to specific lek sites and instead lekking males rove around their wider territory more arbitrarily in search of females, and other males to display with. Indeed, another single male was observed in the same area on the same day, implying that more than one roving male was present in that part of the survey area in 2023. It is therefore concluded that the black grouse population in this part of the Proposed OHL Alignment exists at low density and is comprised of a small number of lone males which are not tied to a specific lek site. Therefore, the alignment of this Proposed Development over the location where a single male bird was observed lekking in 2023 is not considered to represent the loss of a specific lek site, and the small number of males which exist in that area will continue to be able to display at a variety of locations in the wider surrounding area, as the survey results appear to suggest they currently do.

9.4.64 In terms of loss of foraging, nesting and shelter habitat, the Proposed Development will result in the permanent loss of suitable such habitat, where it traverses open moorland / forest edge habitat where black grouse were found to occur. However, the extent of the habitat loss will be extremely small and localised compared to the availability of alternative and comparable habitat in the nearby and wider surrounding area. Given the low densities at which the black grouse populations occur along the Proposed OHL Alignment and that the magnitude of any habitat loss impacts are predicted to be negligible, effects on the black grouse population will be **not significant** at all geographic scales.

Disturbance and Displacement

- Goodship and Furness (2022)⁷⁹ identify an upper range disturbance distance of 750 m for lekking black grouse 9.4.65 and 150 m for nesting females during the breeding season. As well as the single male lek site recorded along the Proposed OHL Alignment in the Dava Moorlands Focal Area in 2023 (discussed above), three other lek sites were recorded within 750 m of the Proposed OHL Alignment: two others in the Dava Moorlands Focal Area and one in the Drummossie Muir / River Nairn Corridor Focal Area, all of which were within 250 m of the Proposed OHL Alignment. Additionally, two lek sites located in the Aird Focal Area were recorded within 500 m of a proposed access track which is to be upgraded. Like the lek site recorded along the Proposed OHL Alignment, these five other lek sites were also represented by single males and were recorded on single occasions in 2023 with no other birds observed at, or near these locations during any of the other surveys that year, or during the follow up surveys in 2024. Therefore, these records are also considered to be reflective of single roving males which are not tied to specific lek sites. Consequently, whilst construction activities in the vicinity of these locations, including the formation and use of access tracks and other temporary infrastructure, may deter birds from lekking there during the construction phase, they will be able to continue to display in the wider surrounding area, as the survey results appear to suggest they currently do. This is notwithstanding that precautionary measures outlined in the Bird SPP will be applied to avoid disturbance of displaying birds during the lekking season.
- 9.4.66 As noted above in relation to habitat loss, the Proposed Development traverses areas of open moorland / forest edge habitat which provide suitable foraging, nesting and shelter habitat for locally occurring birds. However, as explained for other species, any disturbance associated with the construction of the Proposed Development at these locations will be highly localised, specifically focussed around the individual works areas rather than extending over large areas. Black grouse will continue to have access to suitable alternative habitats in their wider surrounding territories.
- 9.4.67 Works involving helicopters are likely to exert a very specific and intense disturbance influence which would be very likely to disturb black grouse from lekking or nesting sites. As with all other construction works however, helicopter activities would be carried out with application of the standard precautionary measures outlined in the Bird SPP to avoid disturbance of nesting birds during the breeding season, such that any potential disturbance to black grouse from helicopter activities will be avoided or minimised to a negligible level.
- 9.4.68 Consequently, any disturbance effects on black grouse during the construction phase are anticipated to be temporary and highly localised and are therefore predicted to be **not significant**.



Pink-footed Goose

Habitat Loss and Degradation

- 9.4.69 As detailed in **Table 9.14**: Important Ornithological Features Scoped Out for Further Assessment in the justification for scoping out designated sites where pink-footed geese are a qualifying interest, the core foraging areas surrounding the Proposed Development are associated with the agricultural lowlands along the East Inverness-shire, Nairnshire, Moray and Aberdeenshire coast (e.g. Mitchell, 2012⁴⁹).
- 9.4.70 The only section of the Proposed Development which was considered to have the potential to support forging flocks of pink-footed geese and which was subject to field surveys was at the eastern end of the Proposed OHL Alignment between New Deer and Peterhead. However, only five foraging flocks of pink-footed geese were recorded in the surveyed area throughout the 2023 / 24 winter survey period, with the highest count of 150 birds representing a very small proportion of the regional population (87,583, see **Table 9.13**: Important Ornithological Features Scoped In for Further Assessment).
- 9.4.71 Although pink-footed geese are confirmed to use the fields at the eastern end of the Proposed OHL Alignment for foraging, the surveys demonstrated that they only do so infrequently and in low numbers. Whilst the Proposed Development will result in the permanent loss of habitat from within these fields through the placement of towers and access tracks, the extent of the habitat loss will be infinitesimal compared to the availability of alternative, and equally suitable foraging fields in the nearby and wider surrounding area. Consequently, the loss of pink-footed goose foraging habitat from the Proposed Development will be **not significant** at any geographic scale.

Disturbance and Displacement

9.4.72 As noted above in relation to habitat loss, only five foraging flocks of pink-footed geese with a peak count of 150 birds were recorded feeding in the agricultural fields along the eastern end of the Proposed OHL Alignment between New Deer and Peterhead during the winter surveys of 2023 / 24. The fields at the eastern end of the Proposed OHL Alignment are therefore not considered to be particularly important to locally occurring birds and, as explained for other species, any disturbance associated with the construction of the Proposed Development at these locations will be highly localised, specifically focussed around the individual works areas rather than extending over large areas. In any case, there is extensive availability of equally suitable foraging fields in the nearby and wider surrounding area to which any disturbed birds could be displaced. Consequently, there are not anticipated to be any significant effects on pink-footed geese from disturbance during construction (no effect).

Breeding Waders and Common Gull

Habitat Loss and Degradation

- 9.4.73 Breeding waders were recorded in all Focal Areas containing suitable open moorland habitat where it was prevalent in the western half of the Proposed OHL Alignment between Beauly and Keith. Drummossie Muir and River Nairn Corridor, Assich Forest / Strathdearn Foothills, Dava Moorlands, Bednawinny Moss and Newtyle Forest and Glen Latterach Moorlands (and Woodlands) Focal Areas represented the main areas where these species were found. Small breeding common gull colonies were also recorded at Clunas Reservoir and Glenlatterach Reservoir (Assich Forest / Strathdearn Foothills and Glen Latterach Moorlands (and Woodlands) Focal Areas respectively).
- 9.4.74 Curlew, snipe and lapwing were the most prevalent species with several territories held by these species being located along, or in the immediate vicinity of, the Proposed OHL Alignment; particularly in the Drummossie Muir and River Nairn Corridor, Dava Moorlands and Glen Latterach Moorlands (and Woodlands) Focal Areas. A single golden plover territory was also located along the Proposed OHL Alignment in the Newtyle Forest and Glen Latterach Moorlands (and Woodlands) Focal Area. Territories held by other wading bird species and the two common gull territories were located outwith the Proposed OHL Alignment. In terms of loss of nesting sites, waders do not return to specific nest sites year on year but establish new nest sites each year within their wider



recognised territories. Therefore, while the construction of the Proposed Development may result in small areas of habitat loss from within their breeding territories, any loss is considered to be negligible and localised and unlikely to prevent or deter birds from establishing alternative nest sites in the nearby surrounding area. Therefore, the impact of the loss of nest sites or nesting habitat during construction is predicted to be of negligible magnitude and effects on the breeding wader or common gull populations will be **not significant** at any geographic scale.

9.4.75 Similarly, although the installation of towers and construction of access tracks across areas of open moorland will represent the loss of potential foraging habitat for wading birds, any such losses are considered to be localised and of small scale relative to these birds' wider territories. Therefore, the impact on the loss of foraging habitat during construction is predicted to be of negligible magnitude and effects on the breeding wader or common gull populations will be **not significant** at any geographic scale.

Disturbance and Displacement

- 9.4.76 Goodship and Furness (2022)⁷⁹ identify upper range disturbance distances of up to 300 m for most breeding waders and up to 500 m for golden plover. No disturbance distance is provided from common gull, but a precautionary 500 m is adopted here.
- 9.4.77 Two golden plover territories and one common gull colony were located within 500 m of the Proposed OHL Alignment, whilst numerous curlew, snipe and lapwing territories and a small number of oystercatcher territories were located within 300 m of the Proposed OHL Alignment (see **Table 9.11**: Summary of Breeding Wader Activity Recorded During Scarce Breeding Bird Surveys). Therefore, the construction works associated with the Proposed Development, including the formation / upgrade and use of access tracks and other temporary infrastructure, have the potential to result in the disturbance of birds breeding within 300 m to 500 m. However, precautionary measures outlined in the Bird SPP will be applied to avoid disturbance of breeding waders and common gull during the construction phase. Therefore, **no effects** are predicted.
- 9.4.78 As noted above in relation to habitat loss, the Proposed Development traverses areas of open moorland habitat where breeding waders and common gull were found to occur, which will represent foraging and shelter habitat for locally occurring birds. However, as explained for other species, any disturbance associated with the construction of the Proposed Development at these locations will be highly localised, specifically focussed around the individual works areas rather than extending over large areas. Breeding waders and common gulls will still have access to suitable alternative habitats in their wider surrounding territories.
- 9.4.79 Works involving helicopters are likely to exert a very specific and intense disturbance influence which would be very likely to disturb breeding waders and common gulls from nesting sites. As with all other construction works however, helicopter activities would be carried out with application of the standard precautionary measures outlined in the Bird SPP to avoid disturbance of nesting birds during the breeding season such that any potential disturbance to breeding waders and common gulls from helicopter activities will be avoided or minimised to a negligible level.
- 9.4.80 Consequently, there are not anticipated to be any significant effects on breeding waders and common gull from disturbance during construction (**no effect**).

Predicted Operational Impacts

Description of Impacts

Collision

9.4.81 NatureScot guidance (2025a)⁴ recognises that birds may collide with OHL components, causing injury or death, with collisions often being concentrated along relatively short sections of OHLs. The guidance further states that several factors can interact to create collision 'hotspots'; with combining factors that create a hotspot not always being readily apparent. Bird collisions with OHLs are inherently rare events with risk being associated with the



design of the OHL and environmental factors (characteristics of the birds, site topography / habitats and prevailing weather conditions). The susceptibility of particular bird species or individuals to collision with OHL components is a combination of morphology, vision, age / condition, behaviour and population density. EirGrid (2016)⁷⁸ provides a detailed account of the factors influencing potential bird collision with OHL components. It can reasonably be assumed that birds colliding with OHL components would, in the majority of cases, result in direct or indirect mortality.

- 9.4.82 Bird collisions with OHLs typically involve the 'wires' (conductors, earth wires and stays), with the towers posing less of a risk presumably due to being more visible (Renewables Grid Initiative (RGI), 2024)⁸⁰). Generally speaking, the less visible the wires are the greater the risk of collision and as such the lighter / thinner earth wires generally pose a greater risk than conductors which are heavier / thicker. Additionally, there is only a single earth wire strung between the tops of the towers, whilst the conductors of high voltage OHLs are typically double or triple strung, making them even more visible. The risk of collision could be assumed to be directly proportional to the thickness and stringing configuration (and therefore visibility) of the wires concerned.
- 9.4.83 The OHL infrastructure associated with the Proposed Development is described in **Chapter 3: Project**Description. The 400 kV OHL will comprise six conductor bundles (three wires per bundle) strung between steel lattice towers, of which there are three different designs: suspension towers, angle / tension towers and terminal towers. The conductor bundles will be strung from the towers' horizontal cross-arms (three on each side), with the earth wire conductor strung between the tops of the towers (see **Chapter 3: Project Description, Section 3.7**).
- 9.4.84 Towers will vary in height from 48 m to approximately 72 m, although there is also one special tower of approximately 97 m in height at the crossing of the Caledonian Canal. The vertical spacing between the bottom, middle and top phase conductors will be almost the same regardless of tower type, summarised as below:
 - Middle phase of conductors strung 8.95 m to 9.5 m above bottom phase conductors; and
 - Top phase of conductors strung 9.7 m to 11 m above middle phase conductors.
- 9.4.85 The spacing between the earth wire and top phase conductors is more variable depending on the tower design, ranging between 6.75 m and 14 m and the thickness of the conductors will range from approximately 24 mm to 37 mm.
- 9.4.86 The bottom phase conductors will be no less than approximately 9 m above ground level at the lowest point and the earth wire on the tallest tower 97 m above ground level (the design height of the tallest possible tower). Typically, this would represent the minimum and maximum heights above ground level between which birds will be at risk of colliding with the conductors (i.e. PCH). As noted in the flight activity survey results however (Paragraph 9.3.9), there is a discrepancy between the heights at which birds were recorded at PCH during the surveys (10 m 60 m) and the actual PCH. To accommodate for this, 10% of the flights which were recorded in the height band above the survey PCH bands (i.e. Height Band 4 (60 m +)) and which intersected with the Proposed Development have been included in the final 'adjusted' number of flights (and constituent number of birds) at PRC presented in the flight activity results tables (Tables 9.8 and 9.9). This is considered to reasonably account for flights occurring within the height of 99% of the total 549 towers (72 m). Consultation with NatureScot confirmed that this approach was considered to be reasonable, as summarised in Table 9.1: Consultation Responses of Relevance to Ornithology.
- 9.4.87 The Proposed Development's design parameters include a vertical LoD of 9 m in addition to the designed heights presented in **Appendix 3.1**: **Tower Schedules**. However, it is unlikely that this would make a substantial difference to the number or frequency of flights which would be at risk of colliding with the Proposed Development, with the vast majority of flights occurring in the upper height recording band during the flight activity surveys almost

⁸⁰ RGI (2024). Avian-power line collision. Overview of risk factors and effectiveness of line markers. Energy & Nature Methodology Report. September 2024. Available at: https://renewables-grid.eu/fileadmin/user_upload/Nature/Wire_Marker_Methodology_Report_min.pdf



- certainly being considerably higher than this and therefore well above the maximum potential collision risk height. Indeed, the 'adjusted' number of flights (and constituent number of birds) used to accommodate the discrepancy between survey and actual collision risk heights, as described above, are considered more than sufficient to accommodate any flights which might have occurred in the vertical LoD.
- 9.4.88 Additionally, it is noteworthy that large sections of the Proposed Development will be closely aligned and run parallel with existing OHLs along much of the Proposed OHL Alignment. This includes the Beauly to Blackhillock 275 kV OHL and the Blackhillock to Peterhead 400 kV OHL (see Figure 3.1: Site Layout). The Proposed Development is aligned in close parallel to the Beauly to Blackhillock 275 kV OHL where it traverses the River Beauly Corridor and across Drummossie Muir, the open ground where Assich Forest meets the Strathdearn foothills, Dulsie Wood and the associated woodlands, the Dava moorlands and Brown Muir. The Proposed Development is aligned in close parallel to the Blackhillock to Peterhead 400 kV OHL, towards the eastern end of the Proposed OHL Alignment between Stuartfield and the approach to the proposed Netherton Hub substation.
- 9.4.89 The diversion of the existing 400 kV OHL between Blackhillock and Rothienorman will also comprise six conductor bundles (three wires per bundle) strung between the horizontal cross-arms of steel lattice towers, with the conductors ranging between approximately 20 mm and 25 mm in diameter.
- 9.4.90 The realigned 275 kV OHL at Ferness will comprise six conductor bundles (two wires per bundle) strung between the horizontal cross-arms of steel lattice towers, with the conductors ranging between approximately 21 mm and 25 mm in diameter.
- 9.4.91 The flat formation 'diamond crossings' or 'duck under' towers, where existing transmission OHLs will be diverted under the Proposed Development, will involve splitting the vertically configured conductors on either side of the existing OHLs (three conductors per side) and passing them under the proposed OHL along separate flat formation (horizontal) towers, before returning them to a vertical configuration along the existing OHL towers on the opposite side of the Proposed Development. There are six diamond crossings in total, as shown on Figure 3.1: Site Layout. These diamond crossings will require lowering the height of the existing OHL's conductors below both their current, existing height and that of the lowest strung conductors of the Proposed Development (i.e. less than 9 m above ground level) before raising them up on the other side to the standard conductor height for the relevant OHL design. These lower strung conductors theoretically pose a collision risk to birds flying below the heights at which birds are considered to be at risk of collision with the Proposed Development. Compared to the full length of the Proposed Development and the existing OHLs themselves, these lower strung sections span very short distances, typically no more than 400 m, and so are considered to pose a negligible increased risk of collision to lower flying birds at these locations. In any case, none of the diamond crossing locations were covered by any of the 16 VPs which were used to record bird flight activity in the targeted focal areas. Therefore, it is not possible to provide a meaningful assessment of bird collision risk at these diamond crossing locations.
- 9.4.92 Weather conditions recorded on-site during the field surveys were typical of lowland northeastern Scotland, being generally dry and overcast with light to moderate wind conditions. These are conditions under which birds have existed in relation to the existing OHL over the last 50 years. The Proposed OHL Alignment does not typically traverse higher altitude areas which might be more susceptible to periods of lower cloud which would affect visibility. Therefore, periods of reduced visibility which might increase the likelihood of collision events are expected to be relatively rare when compared to more upland locations.
- 9.4.93 Eleven of the 16 VPs used during the flight activity surveys overlooked existing OHLs. From the 540 hours of survey effort undertaken from those VPs, no bird collisions with the existing OHL were noted.

Displacement

9.4.94 The operational OHL could potentially exclude birds from the immediate or surrounding area for a number of reasons. Birds could avoid the OHL and surrounding area due to its presence and the towers could increase predation risk if they are used as perches by predators (or conversely increase hunting success for these



predatory birds). Displacement could also include barrier effects if birds are deterred from using their normal routes to feeding, roosting or breeding sites by the presence of the OHL. Despite this, relatively little published information is available on the avoidance of power lines by birds.

9.4.95 The presence of existing OHLs along much of the Proposed OHL Alignment is particularly relevant in this instance as it represents a feature which forms the baseline conditions of the Site and the presence / absence and activity of birds in association with it. It is considered that the survey results from areas in the vicinity of the existing OHL could provide a proxy to inform the potential effects of the Proposed Development, as they are very similar structures.

Assessment of Effects on IOFs

Inner Moray Firth SPA and Ramsar Site, Moray and Nairn Coast SPA and Ramsar Site and Moray Basin, Firths and Bays IBA

Collision and Displacement

9.4.96 The assessment of collision and displacement impacts on osprey, the only qualifying species of the Inner Moray Firth SPA / Ramsar Site and Moray and Nairn Coast SPA / Ramsar Site which has been scoped into the assessment, is considered below in relation to the assessment of impacts on the species as an IOF. This also extends to consideration of osprey in relation to Moray Basin, Firths and Bays IBA.

Darnaway and Lethen Forest SPA

Collision and Displacement

9.4.97 The assessment of collision and displacement impacts on capercaillie, the only qualifying species of Darnaway and Lethen Forest SPA, is considered below in relation to the assessment of impacts on the species as an IOF.

Osprey

- 9.4.98 A total of 18 osprey flights were recorded during the flight activity surveys, the majority of which (13 flights, 72%) were recorded over the Drummossie Muir and River Nairn Corridor Focal Area. The other five flights were recorded over the Dulsie Wood and associated Woodlands and Dava Moorlands Focal Areas. No osprey flights were recorded along the river valleys overlooked by the various VPs (e.g. River Beauly, River Ness and River Spey). Of the 18 recorded flights 3.2 (18%) were at PRC (i.e. intersected the Proposed OHL Alignment at the adjusted PCH). The majority of flights were recorded outwith the Proposed OHL Alignment and / or were above PCH.
- 9.4.99 The RGI (2024)⁸⁰ identifies osprey to be at 'high risk' of collision based on the results of studies in Germany (Bernotat and Dierschke, 2021)⁸¹ and Spain (D´Amico, M. *et al.*, 2019)⁸². However, Bevanger (1998)⁸³, who determined the relative risk of species groups to collision with OHLs based on the relationship of wing loading (the ratio of body weight to wing area) and wing aspect ratio (the ratio of the square of the wing span to the wing area), considered that large, thermal-soaring raptors such as osprey were less susceptible to collision based on their low wing loading and low wing aspect ratio. Raptors such as osprey also typically have excellent manoeuvrability and binocular vision, being adept at judging depth perception, particularly in the act of catching fish, their principal prey. Osprey are even known to successfully nest on OHL towers with a pair having nested on a tower near Alyth, Perth and Kinross for several years, before they were encouraged to move to a purpose-built

⁸¹ Bernotat, D. and Dierschke, V. (2021) Overarching criteria for assessing wildlife mortality in the context of projects and interferences. Teil II.1: Arbeitshilfe zur Bewertung der Kollisionsgefährdung von Vögeln an Freileitungen. Leipzig. Available at: https://www.natur-und-erneuerbare.de/en/news/newsdetail/uebergeordneten-kriterien-zur-bewertung-der-mortalitaet-wildlebender-tiere-im-rahmen-von-projekten-und-eingriffen/.

⁸² D´Amico, M., Martins, R.C., Alverez-Martinez. J.M., Porto, M., Barrientos, R. and Moriera, F. (2019) Bird collisions with power lines: Prioritizing species and areas by estimating potential population-level impacts. Diversity and Distributions, 26(6), pp. 975–982. Available at: https://onlinelibrary.wiley.com/doi/full/10.1111/ddi.12903.

⁸³ Bevanger, K. (1998). Biological and conservation aspects of bird mortality caused by electricity power lines: a review. Biological Conservation 86: 67–76.



nesting platform nearby in 2014, to enable maintenance works to be carried out (SSEN, 2021)⁸⁴. In the years when they were nesting on the OHL tower, it is expected that the birds will have undertaken regular flights over and around the conductors on approach into and out from their nest sites. Ospreys have also been reported nesting on OHL towers in Germany, Latvia, Australia and North America (Roy Dennis Wildlife Foundation, 2017⁸⁵ and Mammadaba Forest Park⁸⁶).

- 9.4.100 As explained in Paragraph 9.4.82, with the exception of the thinner and single-strung earth wire, the configuration of the conductor wires as well as their greater thickness than in the existing OHLs, would make the majority of the conductors more visible.
- 9.4.101 Based on the flight activity results, the risk of ospreys colliding with the Proposed Development is most likely to occur over Drummossie Muir, where the majority of flights were recorded. However, it is reasonable to assume that birds will also be at risk along the river valleys which are traversed by the Proposed Development despite the absence of recorded flights. These are the River Beauly, River Ness and Caledonian Canal, River Nairn, River Findhorn, River Spey, River Isla and River Deveron. There is also considered to be a risk of collision where the Proposed OHL Alignment passes in close proximity to the Clunas Reservoir, Glenlatterach Reservoir and Achagour Fishery where osprey were also recorded foraging during the surveys. It is worth noting though, that many of the Proposed Development's sections which traverse these potential osprey foraging habitats and flight corridors are closely aligned with the existing OHL. Therefore, birds using these locations will be familiar with the presence of the existing OHL and may exert some degree of habituation to, and avoidance of its conductors. Overall therefore, the actual susceptibility of ospreys to collision with the Proposed Development is considered to be relatively low.
- 9.4.102 Whilst the occurrence of osprey collision events is likely to be very rare, the effect of any collisions would be direct mortality resulting in the loss of individuals from the population. It is unlikely that collisions would be frequent enough to have an adverse effect on the conservation status of osprey at the national or regional scale, but the loss of an individual from the population at a local (Shire) scale could constitute an impact of minor magnitude and hence represent a significant effect.
- 9.4.103 Any such collisions occurring within 10 km of the Inner Moray Firth SPA / Ramsar Site, Moray and Nairn Coast SPA / Ramsar Site and Moray Basin, Firths and Bays IBA are likely to involve birds which are associated with these designated sites. Therefore, significant local scale effects of osprey collision mortality could also represent a significant effect on the qualifying osprey populations associated with these designated sites.

Displacement

- 9.4.104 The desk study and field surveys identified 16 osprey nest sites within the Study Area. This includes four nest sites which are located within the species' 750 m upper range disturbance distance (Goodship and Furness, 2022⁷⁹) from the existing OHL: two located within the River Spey Corridor and Wood of Ordiequish Focal Area and two located within the Dulsie Wood and associated Woodlands Focal Area. While the two River Spey Corridor and Wood of Ordiequish Focal Area nest sites will be at least 500 m away from the Proposed Development, the two located within the Dulsie Wood and associated Woodlands Focal Area will both be within 500 m of the proposed OHL alignment, at approximately 420 m and 145 m.
- 9.4.105 As mentioned in relation to construction phase disturbance, the Dulsie Wood and associated Woodlands Focal Area nest sites are located within 350 m of each other and so are considered to be alternative nest sites used by the same pair of ospreys, rather than used by two different pairs. They are also located within 500 m of the

⁸⁴ SSEN News and Views Webpage (2021): https://www.ssen-transmission.co.uk/news/news--views/2021/9/successful-purpose-built-osprey-nest-at-alyth-substation-sees-three-more-chicks-fly-south-for-the-winter/.

⁸⁵ Roy Dennis Wildlife Foundation (2017). How to Build an Osprey Nest. November 2017. Available at: https://www.roydennis.org/o/wp-content/uploads/2017/11/How-to-Build-an-Osprey-Nest.pdf.

 $^{^{86}}$ Mammadaba Forest Park website. $\underline{\text{https://www.mammadaba.lv/en/news/252-experts/4007-two-osprey-nests-have-been-found-on-the-poles-of-a-high-voltage-line}.}$



existing OHL, at approximately 490 m and 225 m respectively. The 2024 records suggested that the birds prefer the nest site which is located slightly further away from the existing OHL. However, the encroachment of the Proposed Development to approximately 420 m away from the preferred nest site is not considered to pose a significantly different influence to the current proximity to the existing OHL, as ospreys are not thought to be unduly deterred by OHLs in the vicinity of their nest sites. As noted above in relation to collision risk, ospreys are known to successfully nest on OHL towers and the relocated osprey nest near Alyth in Perth and Kinross, which has been used annually since its establishment in 2014, is located approximately 250 m from Alyth substation and the associated 275 and 400 kV OHLs⁸⁷. Indeed, there was also an observation during one of the flight activity surveys in June 2023 from VP 8 in the Dulsie Wood and associated Woodlands Focal Area, which suggested that an osprey was attempting to build a nest on one of the towers with several sticks being deposited on it, although there were no further observations to suggest this nest was progressed.

- 9.4.106 The presence of the existing OHL also does not appear to deter birds from accessing suitable foraging areas such as the River Spey, Glenlatterach Reservoir or the Achagour Fishery where ospreys were recorded hunting during the field surveys. Additionally, ospreys were frequently recorded flying over the existing OHL at various locations along the Proposed OHL Alignment throughout the field surveys, indicating that locally occurring birds are aware of and undeterred by the existing OHL, in going about their normal behaviour within the landscape.
- 9.4.107 This demonstrates that ospreys which occur along the Proposed OHL Alignment and nest in close proximity to it, do so despite the presence of the existing OHL and do not seem to be unduly disturbed or displaced by the presence of the structures throughout the landscape.
- 9.4.108 It is reasonable to assume therefore, that even though the Proposed Development will be taller, there are not anticipated to be any significant displacement effects on osprey from the operational Proposed Development (not significant).
- 9.4.109 This conclusion extends to displacement of ospreys associated with Inner Moray Firth SPA / Ramsar Site, Moray and Nairn Coast SPA / Ramsar Site and Moray Basin, Firths and Bays IBA (**not significant**).

Capercaillie

- 9.4.110 No flight activity surveys were undertaken to inform potential collision risk to capercaillie based on the species' low abundance, sparse distribution and preferred forest habitat which would have made the chances of detection extremely low. Nonetheless, no capercaillie were recorded in any of the woodlands covered by the dedicated surveys with the only recent sightings being of two individuals provided by RSPB Scotland from 2023 and 2024 in the Dulsie Wood and associated Woodlands Focal Area.
- 9.4.111 The only location where capercaillie are likely to be at risk of collision with the Proposed Development is where the Proposed OHL Alignment traverses the woodland associated with Dulsie Wood, between Clunas Wood (southeast of Cawdor) and New Inn Wood (Ferness). Along this section, the Proposed Development severs a number of interconnected woodland blocks which, although not optimal habitat for capercaillie, are still suitable for their use.
- 9.4.112 Grouse, as a species group, are generally considered to be susceptible to collision with OHLs due to their heavy body forms, small wings and rapid flight characteristics which restricts evasive reactions to unexpected obstacles (Bevanger, 1998⁸³). This is likely to be particularly applicable to capercaillie given their large size. Indeed, the RGI (2024) class capercaillie as being at 'very high risk' of collision based on the results of studies in Germany and Spain.
- 9.4.113 However, capercaillie are generally recognised to fly at low height, typically flying at or below the tree canopy level within their preferred forest habitat and therefore below the level of the thinner, less visible earth wire. This

⁸⁷ Alyth 275kV Substation website: https://www.ssen-transmission.co.uk/projects/project-map/alyth-275kv-substation--reactive-compensation/.

was acknowledged by NatureScot and RSPB Scotland in the meeting held on 26 November 2024 (see Table 9.1: Consultation Responses of Relevance to Ornithology). Indeed, deer fences, which are typically no more than 2 m in height, are considered to pose a bigger risk of collision mortality to capercaillie (Fletcher and Baines, 2020⁶⁵, Watson and Moss, 2016⁸⁸ and Forester et al, 2007⁵³). While lower-level flights are likely to occur within the zone occupied by the lower-strung conductor wires, their triple-bundled configuration and greater thickness would make them more visible and therefore a lower risk of being collided with. However, it should be recognised that capercaillie flying between adjacent woodlands on opposite sides of the Proposed OHL Alignment at PCH may be caught out by suddenly flying out into the OHL wayleave and encountering the OHL towers or conductors with little time or space to react and avoid colliding with them. Therefore, it is considered that the Proposed Development would pose a collision risk to capercaillie. It is also worth noting though, that the section the Proposed Development which traverses Dulsie Wood is aligned in relatively close-parallel to the existing 275 kV OHL, with the separation distance ranging from 100 m - 600 m, much of it being within 250 m. Therefore, birds inhabiting the surrounding woodlands will be familiar with the presence of the existing OHL and may exert some degree of habituation to, and avoidance of it. Consequently, it is reasonable to assume that the introduction of the Proposed Development may pose less of a risk to locally occurring birds than if it were to be a completely new feature in their landscape.

9.4.114 Although the theoretical collision risk to capercaillie is 'very high' and the effect of any collisions with the Proposed Development would be permanent, in reality collision events are anticipated to be very rare due to the species' scarcity and low density in the Nairn and Moray area. Nonetheless, any collision mortalities would have an adverse effect on the regional population, and by extension the population associated with the Darnaway and Lethen Forest SPA / IBA such is the species' critical conservation status. Therefore, the impact of any capercaillie collisions is anticipated to have a **significant effect** at the regional local scale and would also represent a **significant effect** on the qualifying population of the Darnaway and Lethen Forest SPA and IBA.

Displacement

- 9.4.115 The records received from RSPB Scotland through the desk study have identified that the woodlands associated with the Dulsie Wood and associated Woodlands Focal Area support some of the last remaining capercaillie representing the Nairn and Moray population. However, there are no known active lek sites within 1 km of the Proposed Development and the majority of evidential records which were provided, and which are assumed to reflect the species' core distribution and most suitable habitat, were from the deeper parts of the woodlands located over 500 m from the Proposed Development.
- 9.4.116 As noted above in relation to construction phase disturbance, these woodlands in which capercaillie continue to persist are already intersected by the existing 275 kV OHL. Even if the distribution of capercaillie within the surrounding woodlands is influenced by the existing OHL, given that the Proposed Development will be aligned in relatively close proximity to, and broadly parallel with the existing OHL it is reasonable to assume that it will not exert a significantly different disturbance or displacement effect to that which already exists. Furthermore, the existing OHL traverses fragmented patches of mixed-age broadleaved and coniferous plantation woodland which is considered to be less preferable to capercaillie. Therefore, it is considered more likely that locally occurring birds are habituated to and not unduly disturbed or displaced by the presence of the existing OHL through their habitat.
- 9.4.117 Therefore, based on the above, it is concluded that there are not anticipated to be any significant displacement effects on capercaillie from the operational Proposed Development (**not significant**).

$D \sim A$	Vi+~
Red	nite

⁸⁸ Watson, A. and Moss, R. (2016). Grouse. New Naturalist Series. Collins.



- 9.4.118 Red kite was the most frequently recorded species during the flight activity surveys, with 179 flights comprising 225 individuals being recorded, all of which were recorded in the western half of the Proposed OHL Alignment between Beauly and Forres. The highest levels of flight activity were recorded over the following Focal Areas: Drummossie Muir and River Nairn Corridor (59 flights, 33%); River Ness / Caledonian Canal Corridor (40 flights, 22%); and Assich Forest / Strathdearn Foothills (36 flights, 20%). Regular flight activity was also recorded over the River Beauly Corridor Focal Area (16 flights, 9%) and Dava Moorlands Focal Area (14 flights, 8%). Of the 179 recorded flights 34 (19%) were at PRC (i.e. intersected the Proposed OHL Alignment at the adjusted PCH). The majority of flights were recorded outwith the Proposed OHL Alignment and / or were above PCH.
- 9.4.119 The RGI (2024)⁸⁰ identifies red kite to be at 'moderate risk' of collision. However, Bevanger (1998)⁸³ considered that kites were less susceptible to collision based on their low wing loading and average wing aspect ratio, and like osprey, raptors such as kites have excellent manoeuvrability and binocular vision. As explained in Paragraph 9.4.82, with the exception of the thinner and single-strung earth wire, the configuration of the conductor wires as well as their greater thickness would make the majority of the conductors more visible. Additionally, many of the Proposed Development's sections which traverse the areas where red kites were most regularly recorded are closely aligned with the existing OHL. Therefore, birds using these locations will be familiar with the presence of the existing OHL and may exert some degree of habituation to, and avoidance of its conductors. Overall, therefore, the actual susceptibility of red kite to collision with the Proposed Development is considered to be relatively low.
- 9.4.120 Whilst the occurrence of red kite collision events is likely to be very rare, the effect of any collisions would be permanent resulting in the loss of individuals from the population. It is considered unlikely that collisions would be frequent enough to have an adverse effect on the conservation status of red kite at the national or regional scale, but the loss of an individual from the population at a local (Shire) scale could constitute an impact of minor magnitude and hence represent a **significant effect**.

Displacement

- 9.4.121 The desk study and field surveys identified that red kite are prevalent throughout the western half of the Study Area between Beauly and Forres including in the vicinity of the existing OHL. This includes two nest sites which are located within the species' 300 m upper range disturbance distance (Goodship and Furness, 2022⁷⁹). However, as noted above in relation to construction phase disturbance, these nest sites are located approximately 40 m and 225 m from the existing OHL with one of them also being less than 100 m from a busy A-class road. Additionally, red kite were regularly recorded flying over the existing OHL at various locations along the Proposed OHL Alignment throughout the field surveys, indicating that locally occurring birds are aware of and undeterred from the existing OHL in going about their normal behaviour within the landscape.
- 9.4.122 Based on the above, it is reasonable to assume that even though the Proposed Development will be taller, there are not anticipated to be any significant displacement effects on red kites from the operational Proposed Development (not significant).

Goshawk

- 9.4.123 Goshawk was rarely recorded during the flight activity surveys, with only 14 flights comprising 16 individuals being recorded. The majority of these were recorded in the Assich Forest / Strathdearn Foothills Focal Area (5 flights, 36%) and New Deer to Peterhead Focal Area (7 flights, 50%), noting that surveys were only carried out in the New Deer to Peterhead Focal Area during the non-breeding season. However, all but two flights were recorded outwith the Proposed OHL Alignment and / or were above PCH.
- 9.4.124 The risk to goshawk from collision with OHLs was not specifically identified by the RGI (2024)⁸⁰. However, Bevanger (1998) ⁸³ considered that hawks had low susceptibility to collision based on their low wing loading and average wing aspect ratio, and as well as having binocular vision, goshawks are one of the most agile and



manoeuvrable of raptors. As explained in Paragraph 9.4.82, with the exception of the thinner and single-strung earth wire, the configuration of the conductor wires as well as their greater thickness would make the majority of the conductors more visible. Additionally, many of the Proposed Development's sections which traverse the areas where goshawks were most regularly recorded, or which possess suitable goshawk habitat are closely aligned with the existing OHL. Therefore, birds using these locations will be familiar with the presence of the existing OHL and may exert some degree of habituation to, and avoidance of its conductors. Overall therefore, the actual susceptibility of goshawks to collision with the Proposed Development is considered to be low and in reality collision events would be very rare due to species' high agility and flight behaviour. Therefore, collision risk is predicted to pose an impact of low magnitude on the goshawk population at all geographic levels and so any effects are predicted to be **not significant**.

Displacement

- 9.4.125 Although goshawk were only recorded infrequently during the field surveys, the desk study data indicated that goshawk are particularly prevalent in the western half of the Study Area between Beauly and Forres. This includes one suspected territory which is located within the species' 500 m upper range disturbance distance (Goodship and Furness, 2022⁷⁹), from the existing OHL. However, goshawk occur throughout many of the forestry areas which are traversed by the existing OHLs and given their agility and manoeuvrability, as noted above in relation to collision risk, it is reasonable to assume that locally occurring birds are aware of and undeterred from the existing OHLs in going about their normal behaviour within the landscape.
- 9.4.126 Based on the above, it is concluded that even though the Proposed Development will be taller than the existing OHLs, there are not anticipated to be any significant displacement effects on goshawk from the operational Proposed Development (not significant).

Black Grouse

- 9.4.127 Only a single black grouse flight was recorded during the flight activity surveys. This involved a single bird observed within the Assich Forest / Strathdearn Foothills Focal Area but it was over 1 km away from the Proposed OHL Alignment and was below PCH. This is despite half of the 16 VPs (VPs 2, 18, 4 / 19, 5, 20, 21 and 22) overlooking suitable black grouse habitat and the species being recorded in six of the Focal Areas covered by these VPs during the black grouse and scarce breeding bird surveys (see black grouse survey results, **Section 9.3**).
- 9.4.128 As noted above in relation to capercaillie, grouse, as a species group, are generally considered to be susceptible to collision with OHLs due to their physiology and flight characteristics (Bevanger, 1998)⁸³, with the RGI also classing black grouse as being at 'very high risk' of collision (RGI, 2024⁸⁰). However, black grouse typically fly relatively low to the ground and, like capercaillie, are recognised to be more at risk of collision with deer fences. While lower level flights could occur within the zone occupied by the lower-strung conductor wires, their triplebundled and twin-strung configuration and greater thickness would make them considerably more visible and therefore a lower risk of being collided with. Furthermore, black grouse typically occur in open moorland habitat where the Proposed Development and its associated components should be more visible and hence detectable. It is also worth noting that most of the sections of the Proposed Development which traverse areas of suitable black grouse habitat are typically aligned in relatively close-parallel to the existing OHL (e.g. typically within 125 m across Drummossie Muir, the open moorland of Assich Forest / Strathdearn Foothills and the Dava Moorlands). Therefore, birds inhabiting these areas will be familiar with the presence of the existing OHL and may exert some degree of habituation to, and avoidance of, its conductors. Indeed, three of the lekking black grouse were located within 100 m of the existing OHL. Therefore, it is reasonable to assume that the introduction of the Proposed Development may pose less of a risk to locally occurring birds than if it were to be a completely new feature in their landscape. Consequently, while the theoretical collision risk to black grouse is 'very high', in reality, it is considered that the species will be at low risk of collision with the Proposed Development.



9.4.129 The risk of collision with the Proposed Development to black grouse would extend to all areas of suitable habitat in the western half of the Proposed OHL Alignment (i.e. associated with the Drummossie Muir, Assich Forest / Strathdearn Foothills Dava Moorlands, Bednawinny Moss Moorlands, and Glen Latterach Moorlands). However, although the theoretical collision risk is 'very high' and the effect of any collisions would be permanent, in reality collision events would be very rare due to the design of the OHL components, the species' flight behaviour, the low number of flights recorded and the species' low population density along the Proposed OHL Alignment. Therefore, collision risk is predicted to pose an impact of low magnitude and is unlikely to affect the conservation status of the black grouse population at all geographic levels and so any effects are predicted to be **not**

Displacement

significant.

- 9.4.130 Most of the areas in which black grouse were recorded during the field surveys were areas which are traversed by the existing OHL. Furthermore, as noted above in relation to the assessment of disturbance during the construction phase, three of the single lekking males recorded during the field surveys were within 250 m of the existing OHL, including one located immediately along the existing Proposed OHL Alignment. This is contrary to the species' upper range disturbance distance of 750 m (Goodship and Furness, 2022⁷⁹) and indicates that locally occurring birds are aware of and undeterred from the existing OHL in going about their normal behaviour.
- 9.4.131 Based on the above, it is concluded that there are not anticipated to be any significant displacement effects on black grouse from the operational Proposed Development (**not significant**).

Pink-footed Goose

Collision

- 9.4.132 A total of 102 pink-footed goose flights comprising 9,539 individuals were recorded from the various VPs during the flight activity surveys. The majority of these occurred along the River Spey Corridor / Wood of Ordiequish Focal Area (23 flights, 25%), over the agricultural habitats of the New Deer to Peterhead Focal Area (18 flights, 20%) and over the upland and woodland habitats of the Assich Forest / Strathdearn Foothills and Dulsie Wood and associated Woodlands Focal Areas (15 flights, 16%; and 16 flights, 17% respectively). There were few flights along the other river corridors covered by the surveys (i.e. River Beauly, River Ness, River Nairn and River Isla). Of the 102 recorded flights 14.1 (14%) were at PRC (i.e. intersected the Proposed OHL Alignment at the adjusted PCH). The majority of flights were recorded outwith the Proposed OHL Alignment and / or were above PCH.
- 9.4.133 The RGI (2024)⁸⁰ identifies pink-footed goose to be at 'moderate risk' of collision and EirGrid (2016)⁷⁸ conclude that geese as a group are vulnerable to collision with OHLs. It is worth nothing however, that the Proposed Development's sections which traverse the areas where pink-footed geese were most regularly recorded flying over (identified above) as well as most of the river corridors which it spans, are closely aligned with existing OHLs (e.g. Beauly to Blackhill 275 kV, Elgin to Keith South 132 kV and North East 400 kV). Therefore, the increased presence of structures in these locations will increase their detectability to birds flying over these locations, increasing their likelihood of avoiding collision with the conductors. Overall, therefore, the actual susceptibility of pink-footed geese to collision with the Proposed Development is considered to be moderate.
- 9.4.134 Whilst the occurrence of pink-footed goose collision events is likely to be rare, the effect of any collisions would be permanent resulting in the loss of individuals from the population. Given the size of the species' national and regional populations however, it is unlikely that collisions would be frequent enough to have an adverse effect on the species' conservation status at the national, regional or even local scale. Therefore, the effects of any pink-footed goose collisions with the Proposed Development are considered to be **not significant** at any geographic scale

Displacement



9.4.135 As noted above in relation to construction phase impacts, foraging flocks of pink-footed geese were recorded rarely, with a peak count of 150 birds recorded feeding in the agricultural fields along the eastern end of the Proposed OHL Alignment between New Deer and Peterhead during the winter surveys of 2023 / 24. The fields at the eastern end of the Proposed OHL Alignment are therefore not considered to be particularly important to locally occurring birds. In any case, there is extensive availability of equally suitable foraging fields in the nearby and wider surrounding area to which any birds which are deterred from foraging in proximity to the Proposed Development, once operational, could be displaced instead. Consequently, there are not anticipated to be any significant effects on pink-footed geese from displacement from the Proposed Development, once operational (not significant).

Breeding Waders and Common Gull

Collision

- 9.4.136 Wading birds were recorded infrequently during the flight activity surveys with a total of 38 flights by six different species being recorded, the most frequent being of curlew (22 flights, 58%), with all other species being recorded relatively rarely. The majority of wader flight activity was recorded in the Focal Areas comprising open moorland habitat. No flights by common gull were recorded.
- 9.4.137 The majority of curlew flights were recorded in the following Focal Areas: Drummossie Muir and River Nairn Corridor (7 flights, 32%); Assich Forest / Strathdearn Foothills (6 flights, 27%) and Dava Moorlands (6 flights, 27%). Of these, eight flights were recorded at the adjusted PRC.
- 9.4.138 The RGI (2024)80 identifies waders such as curlew, snipe and golden plover to be at 'very high risk' of collision, whilst common gulls are considered to be at 'moderate' risk. However, Bevanger (1998)83 considered wader species to be only moderately susceptible to collision based on their higher wing aspect ratio, whilst gulls are generically considered to be at relatively low risk of collision. Additionally, most of the sections of the Proposed Development which traverse areas where breeding waders and common gull were recorded are typically aligned in relatively close-parallel to existing OHLs (e.g. typically within 125 m across Drummossie Muir, the open moorland of Assich Forest / Strathdearn Foothills and the Dava Moorlands). Therefore, birds inhabiting these areas will be familiar with the presence of the existing OHL and may exert some degree of habituation to, and avoidance of, its conductors. Indeed, a number of breeding wader breeding territories were located in close proximity to the exiting 275 kV OHL in the moorland habitats of the Drummossie Muir and River Nairn Corridor and Dava Moorlands Focal Areas, although the majority of breeding territories were located in the wider surrounding moorland. Therefore, it is reasonable to assume that the introduction of the Proposed Development may pose less of a risk to locally occurring birds than if it were to be a completely new feature in their landscape. Consequently, while the theoretical collision risk to breeding waders and common gull is 'very high' and 'moderate' respectively, due to the local factors described above it is considered that all such species will be at relatively low risk of collision with the Proposed Development.
- 9.4.139 Whilst the occurrence of wader or common gull collision events is likely to be relatively rare, the effect of any collisions would be permanent resulting in the loss of individuals from the population. However, is unlikely that collisions would be frequent enough to have an adverse effect on the conservation status of breeding waders or common gull at the national or regional scale, and given the size of their regional / Northeast Scotland populations (as / where available, see **Table 9.13**: Important Ornithological Features Scoped In for Further Assessment) are only predicted to have a negligible effect on the local (Shire) populations. Therefore, any impacts from collision risk on breeding waders and common gull are predicted to be **not significant**.

Displacement

9.4.140 As noted above in relation to construction phase impacts, all areas of open moorland habitat which are traversed by the Proposed Development supported breeding waders, with small breeding common gull colonies recorded in two of these areas. Most of these moorland areas are already traversed by existing OHLs and the survey results indicated that while a small number of territories were identified in close proximity to them, typically at least 100



- m, the majority were located in the wider surrounding area. Therefore, it is reasonable to assume that the existing OHL does exert a localised displacement effect on breeding waders and that the Proposed Development will have a similar, additional displacement effect.
- 9.4.141 However, given that in the majority of open moorland areas which are traversed by the Proposed Development, it will be aligned in close proximity to and parallel with the existing OHL, any additional displacement effects are expected to be similarly localised. However, these moorland areas are considered to be sufficiently extensive that any displaced birds will be able to find suitable alternative nesting sites in the nearby surrounding area and will not be completely displaced from the locality or lost from the breeding population.
- 9.4.142 Therefore, any displacement effects are only considered to be significant in the context of the Site which is not considered to be significant (**not significant**).

Kellas Alternative Alignment

- 9.4.143 The only notable difference between the Proposed Development and the Kellas Alternative Alignment with regards to ornithological impacts, is that the Kellas Alternative Alignment passes within approximately 100 m of the common gull breeding colony at the northern end of Glenlatterach Reservoir. At this proximity, the Kellas Alternative Alignment is likely to result in the displacement and potentially the loss of this breeding colony, if there is no suitable alternative breeding habitat elsewhere around the reservoir. This colony was reported to comprise up to 10 breeding pairs. As identified in **Table 9.13**: Important Ornithological Features Scoped In for Further Assessment however, the regional / Northeast common gull population is represented by almost 25,000 pairs and represents over half of the national population, with the majority of that being found in Moray and Nairn. Therefore, the potential displacement and loss of this common gull breeding colony, should the Kellas Alternative Alignment be selected, is only considered to represent a significant effect in the context of the Site which is not considered to be significant (**not significant**).
- 9.4.144 Otherwise, the conclusions of the impact assessment for construction and operational phase impacts are not considered to be any different for any of the other IOFs in relation to the Kellas Alternative Alignment.

9.5 Additional Mitigation and Enhancement Measures

Construction Phase

Habitat Loss and Degradation

Capercaillie (OR1)

9.5.1 The loss of woodland habitat to clear the wayleave for the OHL through Dulsie Wood and the associated woodlands is concluded to have a 'not significant' effect on the local capercaillie population. Nonetheless, habitat management measures described below in relation to mitigating the operational impacts of collision risk, are considered to further diminish impacts associated with the loss of suitable, albeit less preferred, woodland habitat with a heathland ground layer.

Disturbance

Capercaillie (OR1)

9.5.2 Whilst the Applicant's Bird SPP provides suitable overarching measures to identify the presence of and prevent disturbance to breeding birds including lekking and nesting capercaillie, a number of additional outline measures, are prescribed specifically in relation to capercaillie, to reinforce the protection measures for this critically endangered species. These measures, which have been developed from recommendations made by NatureScot and RSPB Scotland during a meeting held on 26 November 2024 (see Table 9.1: Consultation Responses of Relevance to Ornithology), are presented in Appendix 9.3: Outline Capercaillie Species Protection Plan and are



summarised below. The outline measures should be built upon and finalised based on the findings of the dedicated pre-construction capercaillie surveys:

- Pre-construction surveys in areas of suitable capercaillie habitat intersected by the Proposed Development
 carried out in the two years preceding the commencement of construction (2025 and 2026). The surveys will
 include both presence / absence surveys in late winter / early spring and dedicated capercaillie lek surveys
 conducted between mid-April and early May, following the methods of SNH (201340).
- Avoidance of construction works in woodlands which are confirmed through the pre-construction surveys
 above to be inhabited by capercaillie during the capercaillie breeding season (March-August inclusive). Where
 surveys conclude that capercaillie are not present, works may proceed subject to procedures set out in the
 Outline Capercaillie SPP.
- Appointment of an Environmental Advisor (or suitably qualified ornithologist (SQQ)) to supervise and oversee
 construction works being undertaken within woodlands occupied by capercaillie and be responsible for
 monitoring compliance with the measures prescribed in the Applicant's Bird SPP and the Outline Capercaillie
 SPP
- Delivery of a Toolbox Talk to all Site Operatives working in capercaillie woodlands, so that they are aware of the potential presence of capercaillie, how to identify them, their behaviour and protection status and the specific protection measures set out in both the Applicant's Bird SPP and the Outline Capercaillie SPP.
- Completion of pre-felling / vegetation clearance and pre-construction checks in former / potentially suitable capercaillie woodlands, even where pre-construction surveys have not identified the presence of capercaillie. Checks will extend to at least 1 km either side of the works areas during the capercaillie lekking period (April to mid-May (SNH, 2013⁴⁰)) and 100 m either side of the works areas during the nesting and chick rearing period (May to August), as advised in consultation with NatureScot and RSPB Scotland (see Table 9.1: Consultation Responses of Relevance to Ornithology). Works will only be permitted to advance into new areas upon confirmation by the Environmental Advisor / SQO.
- Ideally, no fences will be installed within known capercaillie woodlands. However, where fences are
 unavoidable these, and any existing fences located capercaillie woodlands traversed by the Proposed
 Development, will be fitted with markers to make them more visible and to reduce the risk of capercaillie
 collision mortalities. These will involve either orange plastic mesh, wooden pales or reflective metal plate
 markers, as described in Trout and Kortland (2012)⁶⁶ (as advocated by the Cairngorms Capercaillie Project
 Capercaillie Emergency Plan) (NatureScot and Cairngorms National Park Authority, 2024⁸⁹).

Operational Phase

Collision Risk

Osprey and Red Kite (OR2)

- 9.5.3 Of the IOFs scoped into the assessment, the introduction of the Proposed Development across the landscape is predicted to pose a risk of collision to osprey and red kite, although other species scoped out of the assessment may also potentially be at risk of collision, albeit very low risk based on the recorded frequency of flights.
- 9.5.4 NatureScot (2025a⁴,) recommends the use of line markers (or diverters) as a practical and effective way of reducing bird collision risk with OHLs, with research showing that collision rates can be reduced by up to 94% (from Prinsen *et al.*, 2011⁹⁰). However, it is noted that the efficacy of line marking varies considerably between species and regions and is very unlikely to eliminate mortality entirely (especially for crepuscular or nocturnal

⁸⁹ NatureScot and Cairngorms National Park Authority (2024). Capercaillie Emergency Plan 2025-2030. Available at: https://cairngorms.co.uk/capercaillie-emergency-plan/.

⁹⁰ Prinsen, H.A.M., Smallie, J.J., Boere, G.C. & Pires, N. (Eds.) (2011). *Guidelines on how to avoid or mitigate impact of electricity power grids on migratory birds in the African-Eurasian region*. Bonn: AEWA Conservation Guidelines No. 14, CMS Technical Series No. 29, AEWA Technical Series No. 50, CMS Raptors MOU Technical Series No. 3. Available at: https://www.unep-aewa.org/sites/default/files/publication/ts50_electr_guidelines_03122014.pdf.



- species). As discussed in the description of collision impacts (Paragraphs 9.4.81 to 9.4.93) it is the earth wire, located between the tops of the towers which poses the greater collision risk, as it is thinner and hence less detectable than the thicker, conductors.
- 9.5.5 NatureScot (2025a⁴) advises that the placement of diverters should be informed by survey evidence informing activity hotspots and regular flight corridors. The field surveys undertaken to inform this OIA identified four flight activity hotspots for osprey and / or red kite: River Beauly Corridor, Drummossie Muir, the Saddle Hill area of Assich Forest / Strathdearn Foothill and the River Spey Corridor. Additionally, despite relatively few flights being recorded by other IOFs, the various river corridors and large water bodies spanned, or passed in close proximity by the Proposed Development are also considered likely to represent focal areas for bird flight activity at different times of year.
- 9.5.6 Therefore, bird diverters are proposed to be installed at the following locations, to reduce collision risk for osprey, red kite and potentially vulnerable bird species in general, as shown in **Figure 9.2: Ornithological Mitigation**Measures:
 - River Beauly crossings: Tower BC1-6A to Tower BC2-2A and Tower BC2-6A to Tower BC3-2A;
 - River Ness / Caledonian Canal crossing: Tower BC5-21 to Tower CB1-3;
 - Drummossie Muir: Tower CB1-12 to Tower CB2-9;
 - River Nairn crossing: Tower CB2-20A to Tower CB2-23;
 - Saddle Hill: Tower CB3-7 to Tower CB3-21;
 - Clunas Reservoir (adjacent to): Tower CB4-17 to Tower CB5-1;
 - Achagour Fishery: Tower CB5-20 to Tower CB5-23;
 - River Findhorn Crossing: Tower CB6-1 to Tower CB6-2;
 - Glenlatterach Reservoir (adjacent to): Tower CB9-20 to Tower CB9-21;
 - River Spey crossing: Tower CB12-16 to Tower CB14-2;
 - River Isla crossing: Tower CB15-12A to Tower CB15-14A; and
 - River Deveron crossing: Tower BN2-9A to Tower BN2-11A.
- 9.5.7 The extent over which diverters are proposed to be placed at each location is based on the factors which may influence the area over which birds may be more likely to come into contact with the OHL. These may include the width of river crossings and the angle at which the Proposed Development intersects them, sections of OHL which are aligned adjacent to the nearest and / or most likely approach / departure routes for flights into or out of key habitat features (i.e. waterbodies), the extent of suitable habitat being traversed and adjacent topographical and habitat features which may concentrate or disperse bird flightpaths.
- 9.5.8 Diverters will be installed at 5-10 m intervals between the towers specified above in line with NatureScot guidance (2025a⁴), within the bounds of engineering constraints (RGI, 2024⁸⁰).
- 9.5.9 A number of bird diverter designs are available and these are discussed in RGI (2024⁸⁰) and EirGrid (2016⁷⁸). The design which is proposed for installation on the above listed sections has not been confirmed, but an indicative example is shown in **Image 9.1** below. The final bird diverter design would be selected in consultation with NatureScot.



Image 9.1: Example Bird Diverter







9.5.10 The installation of bird diverters at the above-listed locations is considered to significantly reduce the risk of osprey, red kite and other bird collisions at flight activity hotspots.

Capercaillie (OR3)

- 9.5.11 The impact assessment has also concluded that the Proposed Development poses a risk of collision to capercaillie where it traverses Dulsie Wood and associated woodlands. As this species typically flies at lower heights, it is considered more at risk from the lower strung conductors than the higher conductors and earth wire. While the greater thickness and triple bundled configuration of the lower conductors will make them more visible than the earth wire, capercaillie are still likely to be at risk of collision based on their physiology and flight characteristics. Birds may also be caught out when flying between adjacent woodlands on opposite sides of the Proposed OHL Alignment and suddenly encountering the OHL towers or conductors with little time or space to react and avoid colliding with them.
- 9.5.12 In order to reduce the risk of capercaillie colliding with the OHL where it passes through Dulsie Wood and the associated woodlands, it is proposed to manage the ground layer habitat and vegetation in order to encourage the birds to walk across the wayleave rather than fly across it. Capercaillie's preferred ground layer vegetation typically comprised heather and blaeberry (e.g. Forrester at al, 2007⁵³) and it is proposed to investigate the feasibility of retaining and / or establishing this heathland habitat along the sections of wayleave which intersect the woodlands associated with Dulsie Wood. Such conditions already exist along some corresponding sections of the existing Beauly to Blackhillock 275 kV OHL's wayleave.
- 9.5.13 The intersected woodlands along the Proposed OHL Alignment occur between the following OHL towers:
 - Tower CB5-10 to Tower CB5-17A (Clunas Wood and Newlands of Fleenas Wood); and
 - Tower CB5-21 to Tower CB6-6A (Dulsie Wood, Dalnaheiglish Wood to the B9007).
- 9.5.14 From the habitat surveys undertaken to inform **Chapter 8: Ecology**, the OHL passes through a mixture of upland birch woodland, Scot's pine and other native pine woodlands and coniferous plantation woodland. Of these however, it was only the comparatively small areas of Scot's pine and other native pine woodlands which supported a ground layer comprising heather and blaeberry. The ground layer within the upland birch woodland areas typically comprised grasses and bracken, while the coniferous plantation woodlands have limited ground flora.
- 9.5.15 In areas where the heather and blaeberry ground flora already exists the vegetation will be protected from damage as much as possible during the felling and construction phase to retain this heathland character throughout the operational phase. Areas in which the ground layer vegetation is too disturbed and damaged during construction may require reinstatement with seeding to encourage re-establishment of heathland vegetation.
- 9.5.16 In areas along the wayleave where heather and blaeberry do not already exist, it is proposed to seed these areas with an appropriate heathland seed mix and / or using heathland brash-bales containing seed capsules either translocated from elsewhere within the Site or from another local source. Additionally, blaeberry plugs may be necessary to encourage the inclusion of this species in the ground flora community. The establishment of



- heathland vegetation in these areas may be dependent on factors such as soil and light conditions, with full consideration of these factors necessary to understand feasibility. Where heathland conditions cannot be achieved, a rough tussock grassland habitat is considered an appropriate alternative.
- 9.5.17 In order to fully understand and develop the wayleave heathland habitat management through Dulsie Wood and the associated woodlands, a detailed habitat and soil condition assessment is recommended. Based on the results of this assessment a Capercaillie Heathland Habitat Management Plan will be prepared detailing the measures required to protect and retain existing heathland vegetation, establish heathland vegetation in areas where it is currently not present and monitoring and maintenance of the vegetation throughout the Proposed Development's operational lifespan.
- 9.5.18 Through the effective retention / establishment of heathland vegetation along the Proposed Development's wayleave where it traverses Dulsie Wood and associated woodlands, it is anticipated that the risk of capercaillie collisions with the OHL conductors will be reduced to a negligible level.

Disturbance

Capercaillie (OR4)

Managing Public Recreational Access

- 9.5.19 Although no significant adverse effects to capercaillie were predicted from the Proposed Development, the following measures are prescribed to prevent increased human access and associated disturbance to capercaillie, as a result of creating new access tracks into forested areas inhabited by the species.
- 9.5.20 While the majority of access tracks into the section of the Proposed OHL Alignment which traverses Dulsie Wood and associated woodlands, where capercaillie are still known to exist in Nairn and Moray, will be via existing access tracks, a small number of new permanent access tracks will need to be created (see Figure 3.1: Site Layout). These potentially pose a risk of inadvertently increasing public recreational access into these woodlands, increasing the area over which human disturbance can extend and displace capercaillie. Some of these tracks are only accessible via private access roads or established forest tracks already accessible to the public and so are unlikely to significantly increase public access and disturbance. However, there is one access track off the minor C-class road running to the east of Dulsie Wood where a new permanent access track is to be formed through potentially suitable capercaillie woodland. To deter members of the public from entering the woods via this new access track, a locked gate would be installed where it meets the public road. This will include signage ordering 'No parking 24-hour access required'.

Kellas Alternative Alignment (OR5)

9.5.21 The only difference to the additional mitigation measures outlined above for the Proposed Development which would be applicable to the Kellas Alternative Alignment would be the placement of diverters adjacent to Glenlatterach Reservoir. Should the Kellas Alternative Alignment be selected, diverters should be installed between Tower CB9C-27A to Tower CB9C-30A.

9.6 Residual Effects

Construction Phase

9.6.1 The habitat management measures prescribed in relation to mitigating the operational impacts of collision risk on capercaillie where the Proposed OHL Alignment traverses Dulsie Wood and associated woodlands, are considered to diminish the impact associated with the loss of woodland habitat with an alternative suitable heathland ground layer. These measures are therefore considered to reduce the impact magnitude associated with the loss and degradation of capercaillie woodland habitat along this section of the OHL to a negligible level



- and reinforces the conclusion that this impact will not have a significant effect on the local and Darnaway and Lethen Forest SPA capercaillie population (**not significant**).
- 9.6.2 The pre-construction surveys and additional measures set out in the Outline Capercaillie Species Protection Plan are prescribed to reinforce the negligible construction phase disturbance impacts associated with the Proposed Development (no effect).

Operational Phase

- 9.6.3 The only operational phase impact which was predicted to potentially result in significant adverse effects on IOFs was the collision of osprey, red kite and potentially capercaillie with the Proposed Development's conductors. Whilst osprey and red kite are more likely to collide with the thinner, less visible earth wire, lower-flying and less manoeuvrable capercaillie are more likely to collide with the lower conductors, particularly where the Proposed Development segregates suitable woodland habitat.
- 9.6.4 Installation of Bird Flight Diverters on the Proposed Development's earth wire at key locations, as described in Section 9.5, will significantly reduce the risk of collision for osprey and red kite. Whilst the risk will not be entirely alleviated, it is anticipated that the frequency of collisions will be reduced to a negligible level, such that the effects that any collisions may have on the populations of these species at a local level or above will be not significant.
- 9.6.5 Additionally, the effective retention / establishment and maintenance of heathland vegetation along the Proposed Development's wayleave where it traverses Dulsie Wood and associated woodlands, is anticipated to reduce the risk of capercaillie collisions to a negligible level such that the effects on the regional and Darnaway and Lethen Forest SPA population will be **not significant**.
- 9.6.6 Measures proposed to prevent and manage public recreational disturbance within woodlands supporting capercaillie are also prescribed to reinforce the negligible operational phase disturbance impacts associated with the Proposed Development (no effect).
- 9.6.7 Whilst not currently part of the Proposed Development, there is potential for the existing, lower voltage OHL crossing of the River Nairn at Mains of Daviot, which comes into close proximity with the Proposed Development, to be undergrounded for a short section due to landscape and visual and heritage reasons as detailed in Appendix 11.4: Potential Mitigation: Undergrounding of Existing 275 kV OHL at Daviot. This undergrounded section has the potential to reduce bird collision risk over the River Nairn corridor, thereby reinforcing the overall conclusion of no significant effects on IOFs from collision mortality.

Kellas Alternative Alignment

9.6.8 Extending the proposed installation of bird diverters along the section of the Kellas Alternative Alignment which passes in close proximity to Glenlatterach Reservoir, the conclusions of the assessment remain the same (**not significant** for all relevant IOFs).

9.7 Assessment of Cumulative Effects

9.7.1 The following assessment has been undertaken in line with the methodology in described Chapter 5: EIA Process and Methodology, Section 5.5 Cumulative Effects and as further detailed in Section 9.2 under Methodology for the Assessment of Impacts.

In-combination Effects: Stage 1 - Associated SSEN Transmission Network upgrades

- 9.7.2 The Stage 1 assessment of cumulative impacts on ornithological receptors associated with other SSEN Transmission Network projects is based on the list of projects provided in **Chapter 5: EIA Process and Methodology**, **Table 5.2 (Stage 1 Cumulative Schemes)**, as follows:
 - Fanellan Substation (Highland);



- Greens 400 kV Substation (Aberdeenshire), and,
- Netherton Hub (Aberdeenshire).
- 9.7.3 Following review of these, only the OIA for the Fanellan Substation project included some of the same IOFs considered in this assessment for the Proposed Development; osprey (including birds associated with Inner Moray Firth SPA / Ramsar Site and Moray and Nairn Coast SPA / Ramsar Site) and red kite. The review concluded that there is no potential for the Proposed Development to contribute to any cumulative impacts on the IOFs considered in the Greens Substation or Netherton Hub projects.
- 9.7.4 With regards to the Fanellan Substation project, potential impacts on osprey and red kite were considered to be restricted to the construction phase only. Upon assessment, the OIA concluded that there would be no significant loss of foraging or nesting habitat used by these species and any potential disturbance risk to nesting or foraging bird habitats, as a result of construction activities, would be avoided through adherence to the prescriptions of the Applicant's Bird SPP. Consequently, the Fanellan Substation project was not concluded to result in any significant adverse effects on any of the IOFs in common with the Proposed Development.
- 9.7.5 In conclusion therefore, none of the associated SSEN Transmission Network projects are anticipated to result in adverse effects which might act in combination with those associated with the Proposed Development to potentially give rise to significant cumulative effects on any related IOFs (**not significant**).

In-combination Effects: Stage 2 – Other Developments

- 9.7.6 The Stage 2 assessment of cumulative impacts on ornithological receptors is based on the list of projects provided in Appendix 5.1: Cumulative Developments, Table 5.1 (Cumulative Developments Inter Developments) but extended to include large scale windfarm and high voltage (132 400 kV) OHL projects within 10 km of the Proposed Development, as explained in Section 9.2: Scope of Assessment and Methodology; Cumulative Effects.
- 9.7.7 Identification of large scale windfarm and high voltage OHL projects within 10 km of the Proposed Development involved searches on the Scottish Government Energy Consent Unit's Planning Portal⁹¹ and the planning portals and wind turbine applications webmaps for Highland⁹², Moray⁹³ and Aberdeenshire Councils⁹⁴. Details of relevant OHLs were also provided by SSEN Transmission such as information relating to their age and the availability of ornithological impact assessments.
- 9.7.8 It should be noted that of the projects listed in Appendix 5.1: Cumulative Developments, Table 5.1 (Cumulative Developments Inter Developments) several were only at the pre-application stage at the time of writing. Therefore, no impact assessments had been undertaken to identify whether those projects are considered likely to give rise to adverse effects to which the Proposed Development may contribute. Additionally, and as mentioned in Section 9.2: Scope of Assessment and Methodology (Determining Baseline Effects), many of the projects listed in Appendix 5.1: Cumulative Developments, Table 5.1 (Cumulative Developments Inter Developments) are substations and minor OHL or underground cable grid connections or diversions, which are considered to be sufficiently small in scale such that any adverse impacts, particularly associated with construction phase habitat loss and operational phase displacement, are likely to be highly localised and of no worse than minor magnitude on locally occurring bird populations. This includes the grid connection works for a number of offshore windfarms. Cumulative impacts associated with the offshore windfarms themselves were also discounted due to their distance from the Proposed Development and absence of expected impacts upon

⁹¹ Scottish Government ECU Planning Portal. Available at: https://www.energyconsents.scot/ApplicationSearch.aspx.

⁹² Highland Council Planning Portal and Wind Turbine Map. Available at: https://www.highland.gov.uk/info/198/planning_-https://wam.highland.gov.uk/info/198/planning_-
https://wam.highland.gov.uk/info/198/planning_-
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⁹³ Moray Council Planning Portal. Available at: https://publicaccess.moray.gov.uk/eplanning/ and http://www.moray.gov.uk/moray_standard/page_119083.html.

 $^{^{94}}$ Aberdeenshire Council Planning Portal and . Available at: $\underline{\text{https://upa.aberdeenshire.gov.uk/online-applications/}}$ and $\underline{\text{https://www.aberdeenshire.gov.uk/planning/planning-applications/wind-turbine-applications/}}$.

- IOFs which are common to the Proposed Development, with those associated with the offshore windfarms expected to be principally coastal and marine species.
- 9.7.9 Furthermore, operational phase collision mortality risk associated with the minor OHL diversion and connection projects is expected to have a negligible effect on the populations of locally occurring IOFs as a result of collision mortality based on their scale and, for the reasons given above, for the Proposed Development itself in terms of the susceptibility of different IOF species to collision. It is also noteworthy that for construction phase disturbance impacts associated with other SSEN developments, these projects will also adhere to the prescriptions of the Applicant's Bird SPP, therefore no disturbance impacts during construction are anticipated. Consequently, any adverse effects associated with these particular other projects are unlikely to act in combination with those associated with the Proposed Development, to result in significant cumulative effects on any IOFs above the Local scale.
- 9.7.10 The following presents details of the various large scale windfarms, high voltage OHL projects and other relevant developments which have been taken forward for consideration in the Stage 2 cumulative impact assessment.

Windfarms

9.7.11 A total of 25 operational, consented or applied for large scale windfarm developments were identified within 10 km of the Proposed Development. These are listed in **Table 9.15**: Large Scale Windfarm Developments within 10 km of the Proposed OHL Alignment Proposed OHL Alignment below along with details of their status, number of turbines and proximity to the Proposed Development. Projects are ordered by Planning Authority and then by proximity to the Proposed Development.

Table 9.15: Large Scale Windfarm Developments within 10 km of the Proposed OHL Alignment Proposed OHL Alignment

Planning Authority	Windfarm Name	Status	Number of Turbines	Proximity to Proposed OHL Alignment
Highland	Cairn Duhie	Consented	16	0.3 km
	Moy	Operational	20	5.5 km
	Ourack	Submitted	17	5.5 km
	Lynemore	Submitted	14	5.9 km
	Tom nan Clach	Operational	13	9.8 km
Moray	Kellas Drum	Consented	8	0.3 km
	Rothes I & Rothes II	Operational	40	0.5 km
	Clash Gour	Consented	48	0.7 km
	Glaschyle	Operational	12	0.7 km
	Meikle Hill	Consented	6	0.7 km
	Cairds Hill	Submitted	4	2.1 km
	Berry Burn	Operational	29	2.3 km
	Rothes III (Elchies)	Consented	28	2.5 km
	Aultmore	Submitted	16	2.5 km
	Edintore	Operational	6	2.6 km
	Berry Burn Extension	Consented	9	4.9 km
	Hill of Towie	Operational	21	7.0 km
	Pauls Hill I	Operational	22	8.2 km
	Hill of Towie II	Consented	16	9.0 km
	Pauls Hill II	Consented	6	9.9 km
Aberdeenshire	Cairnborrow	Operational	5	3.5 km
	Glens of Foudland	Operational	20	4.7 km



Planning Authority	Windfarm Name	Status	Turbines	Proximity to Proposed OHL Alignment
	Gordonstown Hill	Operational	5	5.0 km
	Greenmyres	Operational	7	7.0 km

9.7.12 There are two options for the Proposed OHL Alignment near to the planned Kellas Drum Wind Farm which are dependent on the outcome of the application for consent which is currently under the consideration of the ECU. The Proposed Development would be progressed if the windfarm is not granted consent which would include the section that passes adjacent to the south of Glenlatterach Reservoir between Tower CB9C-10A and Tower CB10-8. For the purposes of this assessment, if the windfarm is not granted consent there would be no need for it to be considered here as part of this cumulative impact assessment. However, if Kellas Drum Wind Farm is consented, the Kellas Alternative Alignment would be taken forward, and on this basis consideration of the effects associated with Kellas Drum Wind Farm on ornithological receptors has been included in the cumulative impact assessment for Kellas Alternative Alignment only (Paragraph 9.7.34 below).

OHLs

9.7.13 Twenty-one high voltage OHL developments were identified by SSEN Transmission within 10 km of the Proposed Development. These are listed in **Table 9.16**: Other High Voltage (132 – 400 kV) OHLs within 10 km of the Proposed OHL Alignment Proposed OHL Alignment and are broadly ordered by from west to east.

Table 9.16: Other High Voltage (132 – 400 kV) OHLs within 10 km of the Proposed OHL Alignment Proposed OHL Alignment

OHL Name	Rating	Status
Spittal - Beauly	400 kV	Scoping
Beauly - Deanie	132 kV	Operational
Beauly - Denny	400 kV	Operational
Beauly - Corriemoillie	275 kV	Operational
Beauly - Shin	132 kV	Operational
Beauly - Fyrish	275 kV	Operational
Beauly - Nairn	132 kV	Operational
Beauly - Keith	132 kV	Operational
Beauly - Blackhillock	275 kV	Operational
Knocknagael - Farigaig	275 kV	Operational
Knocknagael - Tomatin	275 kV	Operational
Clash Gour Wind Farm Connection	275 kV	Submitted
Glenfarclas - Keith	132 kV	Operational
Elchies (Rothes III Wind Farm) Connection	132 kV	Submitted
Blackhillock - Dornell	132 kV	Operational
Blackhillock - Kintore	275 kV	Operational
Blackhillock - Macduff	132 kV	Operational
North East 400 kV Upgrade (Blackhillock – Rothienorman – Peterhead)	400 kV	Operational
Peterhead - Kintore	275 kV	Operational
Peterhead - Persley (Kinmuck BESS) Connection	275 kV	Submitted
Peterhead - St. Fergus	132 kV	Operational

9.7.14 The Cairn Duhie Wind Farm 275 kV Grid Connection and the Eastern High Voltage Direct Current (HVDC)
Peterhead converter station new sealing end tower were also identified. However, the scale of these
developments is very small, being limited to the construction of single towers connecting them to the grid and
associated works in the immediate vicinity. The Peterhead – Persley (Kinmuck BESS) 275 kV Connection project is



also of small scale involving a minor realignment of the existing OHL by up to approximately 50 m, with the removal of three existing towers to be replaced by three repositioned towers as well as the installation of a single new tower. Consequently, the impacts associated these developments are considered to be very discrete and localised, and therefore unlikely to give rise to regional scale population effects on their own or contribute adverse effects sufficient to give rise to significant cumulative effects when considered in combination with those associated with the Proposed Development. These three projects have therefore been discounted.

9.7.15 Of the above-listed OHL projects, ecological impact assessments / appraisals where consideration of ornithological receptors was relevant were only available for four: North East 400 KV, Clash Gour Wind Farm Connection, Elchies (Rothes III Wind Farm) Connection and Knocknagael – Tomatin 275 kV. The majority of the other projects were too old for relevant ornithological assessments to be available on public planning portals or be available from SSEN Transmission, or where ecological assessments had been carried out these did not include detailed assessment of impacts on ornithological receptors. Additionally, the EIA for the Spittal to Loch Buidhe to Beauly 400 kV Project had not been completed at the time of freezing the final list of developments for the cumulative effects assessment, and therefore the conclusions of the ornithological assessment were not available at that time to determine what impacts associated with that development could potentially act in combination with the Proposed Development.

Other Relevant Developments

- 9.7.16 Of the projects listed in **Appendix 5.1: Cumulative Developments, Table 5.1 (Cumulative Developments Inter Developments)** and not included in the above list of windfarm or OHL projects, the only other relevant inter development projects were the following five quarry developments, all of which are located in Moray:
 - Rosarie Quarry;
 - Blackmuir Quarry;
 - · Cairdshill Quarry;
 - Dykeside Farm Quarry; and,
 - Marchfield Quarry.
- 9.7.17 Upon review of the application documents for these quarry developments, no specific ornithological information, particularly referring to any IOFs which are relevant to the Proposed Development, or assessment documents were available. Whilst the Decision Notice for Cairdshill Quarry and the Pre-application Consultation Report for Dykeside Quarry refer to EclAs having been submitted for those developments, these were not represented on the Moray Council Planning Portal. Consequently, it is not possible to draw any conclusions as to the potential cumulative impacts that the Proposed Development may have when considered in combination with those associated with these proposed quarry developments.

Construction Phase Cumulative Impacts

Habitat Loss and Degradation

9.7.18 Residual effects associated with the habitat loss and degradation of important breeding, lekking, foraging or roosting habitat for the IOFs considered in the assessment of impacts from the Proposed Development alone are all concluded to be minor or negligible and not significant, due to either avoidance or small scale and localised extent of the impacts. Therefore, the habitat loss and degradation impacts associated with the Proposed Development are not considered likely to contribute to the impacts of other developments in the nearby and wider surrounding area, to an extent that they would give rise to significant cumulative effects (not significant).

Disturbance

9.7.19 The potential for cumulative construction phase disturbance effects will only be applicable to other developments which are being constructed at the same time as the Proposed Development, which is between 2026 and 2032. Furthermore, disturbance impacts from the Proposed Development and other developments are

only likely to extend to their nearby surrounding areas. As a precaution, consideration of cumulative construction phase disturbance effects has included other developments within 2 km of the Proposed OHL Alignment and assumes a maximum cumulative disturbance influence of 1 km. This corresponds to the maximum upper-range disturbance distance of the IOFs considered in this assessment (capercaillie lek sites) but is greater than that for all other species.

- 9.7.20 As identified in **Table 9.15**: Large Scale Windfarm Developments within 10 km of the Proposed OHL Alignment Proposed OHL Alignment, the only consented windfarm and OHL developments within 2 km of the Proposed Development which could potentially be built within the same timescales as the Proposed Development are:
 - · Cairn Duhie Wind Farm (Highland);
 - Clash Gour Wind Farm and Meikle Hill Wind Farm (Moray);
 - Clash Gour Wind Farm Grid Connection; and,
 - Elchies (Rothes III) Wind Farm Grid Connection.
- 9.7.21 This does not include Kellas Drum Wind Farm, as explained above.
- 9.7.22 It should be noted that the EIA Report for Meikle Hill Wind Farm was not available on the planning portals, but information on the assessment conclusions was taken from the cumulative impact assessments where it was mentioned in other windfarm EIA Reports.
- 9.7.23 All of the other OHL developments are already constructed and so could not contribute to cumulative construction phase disturbance effects.
- 9.7.24 The residual effects for construction phase disturbance from these other projects is summarised in **Table 9.17**:
 Residual Construction Phase Disturbance Effects from Other Developments within 2 km of the Proposed Development.

Table 9.17: Residual Construction Phase Disturbance Effects from Other Developments within 2 km of the Proposed Development

Receptor	Cairn Duhie Wind Farm	Clach Gour Wind Farm	Meikle Hill Wind Farm	Clach Gour Wind Farm Connection	Elchies (Rothes III) Wind Farm Connection
Inner Moray Firth SPA (osprey)	Not assessed	Not assessed	Unavailable	Not assessed	Not assessed
Moray and Nairn Coast SPA (osprey)	Not assessed	No effects	Unavailable	No effects	Not Significant (negligible)
Moray Basin, Firths and Bays IBA (osprey)	Not assessed	Not assessed	Unavailable	Not assessed	Not assessed
Darnaway and Lethen Forest SPA and IBA (capercaillie)	No effects	No effects	Unavailable	No effects	Not assessed
Osprey	Not assessed	Not Significant (negligible)	Unavailable	Not assessed	Not Significant (negligible)
Red Kite	Not assessed	Not assessed	Unavailable	Not assessed	Not assessed
Goshawk	Not assessed	Not Significant (minor)	Unavailable	Not assessed	Not assessed
Black Grouse	Not assessed	Not Significant (neglgible)	Not assessed	Not assessed	Not assessed
Pink-footed Goose	Not Significant (negligible)	Not assessed	Unavailable	Not assessed	Not assessed
Breeding Waders	Not Significant (negligible)	Not Significant (negligible)	Unavailable	No effects	Not Significant (negligible)



	Cairn Duhie Wind Farm	_	Farm		Elchies (Rothes III) Wind Farm Connection
Common Gull	Not assessed	Not assessed	Unavailable	Not assessed	Not assessed

- 9.7.25 For all of these other consented developments within 2 km of the Proposed Development where assessment information was available, it was concluded that residual construction phase disturbance effects on the same IOFs would not be significant. Where it was specified, the magnitude or geographic scale of those impacts were assessed as being no greater than minor.
- 9.7.26 Since construction phase disturbance effects from the Proposed Development will be avoided or minimised through the implementation of the measures set out in the Applicant's Bird SPP and reinforced for capercaillie through the measures prescribed in the Outline Capercaillie Species Protection Plan, any residual impacts are predicted to be of negligible magnitude. Therefore, the Proposed Development is not expected to contribute to the construction phase disturbance effects of other developments in the nearby and wider surrounding area to an extent that they would give rise to significant cumulative effects (not significant).

Operational Phase Cumulative Impacts

9.7.27 The following sections summarise the findings of the OIA for operational phase impacts for the above listed other projects where these could be found on the relevant planning portals. The EIA Reports for several windfarms were not available on the planning portals, but information on the assessment conclusions was taken from the cumulative impact assessments where it was mentioned in other windfarm EIA Reports.

Collision Risk

- 9.7.28 Table 9.18: Residual Collision Mortality Effects from Other Developments within 10 km of the Proposed Development below summarises the residual effects of collision mortality impacts from these other projects. While many of the EIA Reports for the other projects acknowledge and assess the impacts of collision on many of the same IOFs considered in this OIA for the Proposed Development, almost all conclude that the impacts will not result in significant effects. However, while some of the assessments identify the magnitude of the impacts which lead them to conclude that the effects will not be significant (i.e. minor or negligible), many do not, and simply conclude that effects will be 'not significant'. In a cumulative sense however, numerous impacts of minor magnitude could conceivably act in combination to give rise to a significant cumulative effect.
- 9.7.29 In the case of the Proposed Development, residual effects associated with the collision mortality of IOFs are all concluded to be not significant based on the installation of bird diverters at identified and predicted flight activity hotspots for osprey, red kite and other species, and the management of ground layer vegetation along the OHL wayleave where it passes through Dulsie Wood and associated woodlands for capercaillie. It is therefore concluded that the frequency of collision incidents by the IOFs considered in this OIA for the Proposed Development will be so rare that the Proposed Development will have an inconsequential contribution to any cumulative collision impacts from the windfarms in the nearby and wider surrounding area. Certainly, any collisions are not anticipated to be enough to give rise to significant effects on the relevant IOF populations at a regional or national level. Consequently, cumulative collision effects are considered to be **not significant**.

Displacement

9.7.30 Table 9.19: Residual Displacement Effects from Other Developments within 10 km of the Proposed Development summarises the residual effects of operational displacement impacts from other projects within 10 km of the Proposed Development. While many of the EIA Reports for the other projects acknowledge and assess the impacts of operational displacement on many of the same IOFs considered in this OIA for the Proposed Development, all conclude that the impacts will not result in significant effects. However, while some of the assessments identify the magnitude of the impacts which lead them to conclude that the effects will not be significant (i.e. minor or negligible), many do not, and simply conclude that effects will be 'not significant'. In a



- cumulative sense however, numerous impacts of minor magnitude could conceivably act in combination to give rise to a significant cumulative effect.
- 9.7.31 In the case of the Proposed Development, residual effects associated with the operational displacement of IOFs from nesting or lekking sites, or important foraging or roosting areas, are all concluded to be not significant based on the prediction that impacts will be no worse than small scale and localised in extent. It is also considered that some IOF species are likely to be relatively habituated to the presence of OHLs either in general or to those already in existence along the Proposed OHL Alignment specifically.
- Whilst many of the impact assessments for the other developments do not identify the magnitude of 9.7.32 displacement impacts, it is reasonable to assume that they were also predicted to be small scale and localised in extent, affecting the relevant IOF species populations at no greater scale than those development sites themselves.
- Given the number of operational, consented and applied for developments in the nearby and wider surrounding 9.7.33 area along the Proposed OHL Alignment, it is possible that these Site level displacement impacts could accumulate in wider scale effects on the relevant IOF populations. However, given the scale of the Proposed Development and the area over which the impacts from other projects have been considered (i.e. the 10 km search area) it is considered unlikely that cumulative impacts would affect the relevant IOF populations beyond local geographic scale. Therefore, whilst the Proposed Development may potentially contribute to cumulative displacement effects at a local scale, it is not predicted to give rise to significant effects on the relevant IOF populations at a regional or national level. Consequently, cumulative displacement effects are considered to be not significant.



Table 9.18: Residual Collision Mortality Effects from Other Developments within 10 km of the Proposed Development

Other Projects	Inner Moray Firth SPA (osprey)		Moray Basin, Firths and Bays IBA (osprey)	Darnaway and Lethen Forest SPA and IBA (capercaillie)	Osprey	Red Kite	Goshawk	Black Grouse	Pink- footed Goose	Breeding Waders	Common Gull
Knocknagael - Tomatin 275 kV OHL	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant	Not significant	Not applicable	Not applicable	Not applicable	Not applicable
Moy	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Lynemore	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (negligible)	Not applicable	Not applicable	Not applicable	Not significant (negligible)	Not applicable
Tom nan Clach	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (minor)	Not applicable	Not applicable	Not applicable	Not significant (minor)	Not applicable
Cairn Duhie	Not applicable	Not applicable	Not applicable	No effects	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (negligible)	Not significant (minor)	Not applicable
Ourack	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (minor)	Not significant (minor)	Not significant (minor)	Not significant (negligible)	Not significant (negligible)	Not significant (minor)	Not applicable
Clash Gour	Not applicable	Not significant (minor)	Not assessed	Not significant (minor)	Not significant (negligible)	Not applicable	Not significant (minor)	Not significant (negligible)	Not applicable	Not significant (negligible)	Not applicable
Clach Gour Wind Farm Connection	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	'No adverse effects'	Not applicable
Berry Burn	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant	Not applicable	Not significant	Not significant (negligible)	Not applicable
Berry Burn Extension	Not applicable	Not significant (minor)	Not applicable	Not significant (negligible)	Not significant (minor)	Not applicable	Not applicable	No effects	Not applicable	Not applicable	Not applicable
Pauls Hill I	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Pauls Hill II	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant	Not significant	Not applicable



Other Projects	Inner Moray Firth SPA (osprey)	Moray and Nairn Coast SPA (osprey)	Moray Basin, Firths and Bays IBA (osprey)	Darnaway and Lethen Forest SPA and IBA (capercaillie)	Osprey	Red Kite	Goshawk	Black Grouse	Pink- footed Goose	Breeding Waders	Common Gull
Glaschyle	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	No effects	Not applicable	Not significant	Not significant	Not applicable
Meikle Hill	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant	Not applicable	Not applicable	Not applicable
Kellas Drum	Not applicable	Not applicable	Not applicable	Not applicable	Not significant	Not applicable	Not significant	Not applicable	Not significant	Not significant	Not applicable
Rothes I	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant	Not applicable	Not significant	Not significant	Not applicable
Rothes II	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (negligible)	Not significant	Not applicable
Rothes III (Elchies)	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant ('minor')	Not applicable	Not significant (negligible)	Not significant ('minor')	Not applicable
Elchies (Rothes III) Connection	Not applicable	Negligible / no effects	Not applicable	Not applicable	Negligible /no effects	Not applicable	Not applicable	Not applicable	Not applicable	Negligible / no effects	Negligible / no effects
Aultmore	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant	Not applicable	Not significant
Cairds Hill	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Edintore	Not available	e									
North East 400 kV OHL	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Hill of Towie	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Hill of Towie II	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (negligible)	Not significant (negligible)	Not applicable
Cairnborrow	Not available	e									
Greenmyres	Not available	е									
Glens of Foudland	Not available	е									
Gordonstown Hill	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant	Not applicable



Table 9.19: Residual Displacement Effects from Other Developments within 10 km of the Proposed Development

Other Projects	Inner Moray Firth SPA (osprey)	Moray and Nairn Coast SPA (osprey)		Darnaway and Lethen Forest SPA and IBA (capercaillie)	Osprey	Red Kite	Goshawk	Black Grouse	Pink- footed Goose	Breeding Waders	Common Gull
Knocknagael - Tomatin 275 kV OHL	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Моу	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	No effects	Not applicable	Not applicable	Not applicable
Lynemore	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (negligible)	Not applicable	Not applicable	Not applicable	Not significant (negligible)	Not applicable
Tom nan Clach	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (minor)	Not applicable	Not applicable	Not applicable	Not significant (minor)	Not applicable
Cairn Duhie	Not applicable	Not applicable	Not applicable	No effects	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (negligible)	Not significant (negligible)	Not applicable
Ourack	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (minor)	Not significant (minor)	Not significant (minor)	Not applicable
Clash Gour	Not applicable	Not significant (negligible)	Not applicable	Not significant (minor)	Not significant (negligible)	Not applicable	Not significant (negligible)	Not significant (negligible)	Not applicable	Not significant (minor)	Not applicable
Clach Gour Wind Farm Connection	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Berry Burn	Not applicable	Not applicable	Not applicable	Not significant	Not applicable	Not applicable	Not significant	Not significant	Not significant	Not significant (negligible)	Not applicable
Berry Burn Extension	Not applicable	Not significant (minor)	Not applicable	Not significant (negligible)	Not significant (minor)	Not applicable	Not applicable	Not significant (minor)	Not applicable	Not applicable	Not applicable
Pauls Hill I	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	No effects	Not applicable	Not applicable	Not applicable



Other Projects	Inner Moray Firth SPA (osprey)		Moray Basin, Firths and Bays IBA (osprey)	Darnaway and Lethen Forest SPA and IBA (capercaillie)	Osprey	Red Kite	Goshawk	Black Grouse	Pink- footed Goose	Breeding Waders	Common Gull
Pauls Hill II	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant	Not applicable	Not applicable	Not applicable
Glaschyle	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	No effects	Not applicable	Not significant	Not significant	Not applicable
Meikle Hill	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Kellas Drum	Not applicable	No effects	Not applicable	No effects	Not significant	Not applicable	Not significant	Not applicable	Not significant	Not significant	Not applicable
Rothes I	Not applicable	Not applicable	Not applicable	No effects	Not applicable	Not applicable	No effects	Not significant (negligible)	Not applicable	Not applicable	Not applicable
Rothes II	Not applicable	Not applicable	Not applicable	No effects	Not applicable	Not applicable	Not significant (negligible)	Not significant (negligible)	Not applicable	Not applicable	Not applicable
Rothes III (Elchies)	Not applicable	Not applicable	Not applicable	Not significant ('minor')	Not applicable	Not applicable	Not significant (negligible)	Not significant (negligible)	Not applicable	Not applicable	Not applicable
Elchies (Rothes III) Wind Farm Connection	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Negligible / no effects	Not applicable
Aultmore	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (negligible)	Not applicable	Not applicable	Not applicable
Edintore	Not available	e									
North East 400 kV OHL	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Hill of Towie	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Hill of Towie II	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not significant (negligible)	Not significant (minor)	Not significant (negligible)
Cairnborrow	Not available	е									
Greenmyres	Not available	e									



Other Projects	Moray Firth SPA	SPA (osprey)	Basin,	Darnaway and Lethen Forest SPA and IBA (capercaillie)		Red Kite	Goshawk	Black Grouse	Pink- footed Goose	Breeding Waders	Common Gull
Glens of Foudland	Not available	e									
Gordonstown Hill	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	No effects	Not applicable



Kellas Alternative Alignment

9.7.34 The Kellas Alternative Alignment would only be progressed if the Kellas Drum Wind Farm is consented. As well as passing in close proximity to Kellas Drum Wind Farm, the Kellas Alternative Alignment would also come into proximity with Meikle Hill and Rothes I and Rothes II Wind Farms, albeit at slightly different proximity to the corresponding section of the Proposed Development. However, there is not considered to be any significant difference in the cumulative impacts from Kellas Alternative Alignment and those from these other windfarms, even with the inclusion of impact from Kellas Drum Wind Farm. Therefore, the conclusions of the cumulative impact assessment would remain the same.

9.8 Summary and Conclusions

9.8.1 Table 9.20: Summary of Predicted Construction Phase Impacts, Mitigation and Significance of Residual Effects below provides a summary of the impacts and significance of effects, both prior to and following the application of additional mitigation as and where required, on IOFs during the construction phase of the Proposed Development.

Table 9.20: Summary of Predicted Construction Phase Impacts, Mitigation and Significance of Residual Effects

Receptor	Impact	Effect Significance (Pre-Mitigation)	Additional Mitigation	Residual Effect
Inner Moray Firth SPA /	Habitat loss and degradation	No effect	None	No effect
Ramsar Site, Moray and Nairn Coast SPA / Ramsar Site and Moray Basin, Firths and Bays IBA: osprey only	Disturbance and displacement	Not significant	None	Not significant
Darnaway and Lethen SPA: capercaillie	Habitat loss and degradation	Not significant	Reinforced through habitat management along the wayleave of intersected capercaillie woodlands to reduce operational collision risk	Not significant
	Disturbance and displacement	Not significant	Reinforced through Capercaillie Species Protection Plan	Not significant
Osprey (non- SPA birds)	Habitat loss and degradation	No effect	None	No effect
	Disturbance and displacement	Not significant	None	Not significant
Red kite	Habitat loss and degradation	Not significant	None	Not significant
	Disturbance and displacement	Not significant	None	Not significant
Goshawk	Habitat loss and degradation	Not significant	None	Not significant
	Disturbance and displacement	Not significant	None	Not significant
Black grouse	Habitat loss and degradation	Not significant	None	Not significant
	Disturbance and displacement	Not significant	None	Not significant

Receptor	Impact	Effect Significance (Pre-Mitigation)	Additional Mitigation	Residual Effect
Pink-footed goose	Habitat loss and degradation	Not significant	None	Not significant
	Disturbance and displacement	No effect	None	No effect
Breeding waders	Habitat loss and degradation	Not significant	None	Not significant
	Disturbance and displacement	No effect	None	No effect
Common gull	Habitat loss and degradation	Not significant	None	Not significant
	Disturbance and displacement	No effect	None	No effect

9.8.2 Table 9.21: Summary of Predicted Operational Phase Impacts, Mitigation and Significance of Residual Effects below provides a summary of the impacts and significance of effects, both prior to and following the application of additional mitigation as and where required, on IOFs during the operational phase of the Proposed Development.

Table 9.21: Summary of Predicted Operational Phase Impacts, Mitigation and Significance of Residual Effects

Receptor	Impact	Effect Significance (Pre-Mitigation)	Additional Mitigation	Residual Effect
Inner Moray Firth SPA / Ramsar Site, Moray and Nairn Coast SPA / Ramsar Site and Moray Basin, Firths and Bays IBA: osprey only	Collision	Significant	Installation of bird diverters at identified and anticipated flight activity hotspots.	Not significant
	Displacement	Not significant	None	Not significant
Darnaway and Lethen Forest SPA: capercaillie	Collision	Significant	Habitat management along the wayleave of intersected capercaillie woodlands.	Not significant
	Displacement	Not significant	Reinforced through Management of Recreational Access.	Not significant
Osprey (non- SPA birds)	Collision	Significant (local)	Installation of bird diverters at identified and anticipated flight activity hotspots.	Not significant
	Displacement	Not significant	None	Not significant
Red kite	Collision	Significant (local)	Installation of bird diverters at identified and anticipated flight activity hotspots.	Not significant
	Displacement	Not significant	None	Not significant
Goshawk	Collision	Not significant	None	Not significant
	Displacement	Not significant	None	Not significant
Black grouse	Collision	Not significant	None	Not significant
	Displacement	Not significant	None	Not significant
Pink-footed goose	Collision	Not significant	None	Not significant
	Displacement	Not significant	None	Not significant
	Collision	Not significant	None	Not significant



Receptor	Impact	Effect Significance (Pre-Mitigation)	3	Residual Effect
Breeding waders	Displacement	Not significant	None	Not significant
Common gull	Collision	Not significant	None	Not significant
	Displacement	Not significant	None	Not significant

9.8.3 Overall, with the application of embedded and additional mitigation as described above, potential impacts associated with the Proposed Development when considered both alone and in combination with those from other projects, will not give rise to significant effects on IOFs.