Scottish & Southern Electricity Networks

TRANSMISSION

Scottish and Southern Electricity Networks Transmission

Lairg II Wind Farm Grid Connection

Appendix 4.3 - Protected Species Survey Report

June 2023

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CONTENTS

Glossary

Term	Definition
ECU	Energy Consents Unit
EPS	European Protected Species
FWPM	Freshwater pearl mussel
kV	kilovolt
LOD	Limit of Deviation
OHL	Overhead Line
OS	Ordnance Survey
PRA	Preliminary Roost Appraisal
SAC	Special Area of Conservation
SBL	Scottish Biodiversity List
UGC	Underground Cable
WANE	Wildlife and Natural Environment (Scotland) Act 2011
WCA	Wildlife and Countryside Act 1981 as amended

Executive Summary

Scottish and Southern Electricity Networks Transmission (hereafter referred to as 'SSEN Transmission') is proposing to construct a new 132 kilovolt (kV) underground cable between the consented Lairg II Wind Farm substation and a cable sealing end compound adjacent to the Lairg to Loch Buidhe 132 kV Overhead Line (hereafter referred to as 'the Proposed Development'). The Proposed Development is located approximately 2 km to the south-west of the village of Lairg (hereafter referred to as 'the Site'). WSP UK Ltd. was commissioned by SSEN Transmission to undertake protected species surveys in relation to the Proposed Development.

The Proposed Development and up to a 250 m buffer (hereafter the 'Survey Area') were subject to the following surveys:

- Otter and water vole survey;
- Fish and freshwater pearl mussel habitat suitability survey;
- Badger survey;
- Red squirrel survey;
- Pine marten survey; and
- Preliminary Roost Assessment for bats.

These surveys were undertaken to identify the ecological baseline of the Survey Area.

The protected species surveys identified evidence of otter, water vole and fish within the Survey Area as well as suitable habitat to support badger, red squirrel, pine marten, bats and freshwater pearl mussel.

1 Introduction

1.1 Background

1.1.1 Scottish and Southern Electricity Networks Transmission (hereafter referred to as 'SSEN Transmission') is operating under licence held by Scottish Hydro Electric Transmission plc, who owns, operates and develops the high voltage electricity transmission system in the north of Scotland. SSEN Transmission holds a licence under the Electricity Act 1989 to 'develop and maintain an efficient, co-ordinated and economical electrical transmission system in its licensed area'. It is obliged to offer non-discriminatory terms for connection to the transmission system both for new generation and for new sources of electricity demand.

1.1.2 Lairg II Wind Farm is being developed by Energyfarm UK Lairg II LLP and was consented by the Scottish Government Energy Consents Unit (ECU) in October 2021. There is a need to connect the consented Lairg II Wind Farm to the transmission grid. SSEN Transmission is obliged to provide a connection as the wind farm lies within the area covered by their licence. Therefore, SSEN Transmission is proposing to construct a new 132 kilovolt (kV) underground cable between the consented Lairg II Wind Farm substation and a cable sealing end compound adjacent to the Lairg to Loch Buidhe 132 kV Overhead Line (OHL) (hereafter referred to as 'the Proposed Development').

1.1.3 The Proposed Development is located approximately 2 km to the south-west of the village of Lairg, approximate central Ordnance Survey (OS) Grid Reference: NC 59989 03300 (hereafter referred to as 'the Site'). The Proposed Development comprises three alignment options as shown in **Figure 1 (Appendix A)**:

1.1.4 The Proposed Development includes a 100m buffer around the three Alignment Options as a Limit of Deviation (LOD).

1.2 Scope of Survey

1.2.1 WSP UK Ltd. (WSP) was commissioned by SSEN Transmission to undertake protected species surveys in relation to the Proposed Development. The Proposed Development and up to a 250 m buffer (hereafter the 'Survey Area') were subject to the following surveys:

- Otter *Lutra lutra* survey covering 200 m up and downstream of watercourse crossings;
- Water vole *Arvicola amphibius* covering 100 m up and downstream of watercourse crossings;
- Fish and freshwater pearl mussel *Margaritifera margaritifera* habitat suitability survey;
- Badger *Meles meles* survey up to 100 m from the Proposed Development;
- Red squirrel *Sciurus vulgaris* survey up to 50 m from the Proposed Development where suitable habitat prevails;
- Pine marten *Martes martes* survey up to 250 m from the Proposed Development where suitable habitat prevails; and
- Bat Preliminary Roost Appraisal (PRA) of suitable habitat and features within 30 m of the Proposed Development.

1.2.2 In addition to the main target species listed above, incidental records and habitat appraisal for protected or priority species was also recorded during the survey, when encountered.

1.2.3 These surveys were undertaken to identify the ecological baseline of the Survey Area and to inform the Environmental Alignment Selection Study Report[1] in relation to the Proposed Development.

1.1 Relevant Legislation and Policy

1.1.1 The Study has been compiled with reference to the following relevant nature conservation legislation, planning policy and the Scottish Biodiversity Strategy from which the protection of sites, habitats and species is derived in Scotland:

- Conservation (Natural Habitats etc.) Regulations 1994 (as amended in Scotland) (Habitats Regulations);
- Wildlife and Countryside Act 1981 (as amended) (WCA);
- Nature Conservation (Scotland) Act 2004 (as amended);
- Wildlife and Natural Environment (Scotland) Act 2011 (WANE Act);
- Protection of Badgers Act (1992);
- Wild Mammals (Protection) Act 1996;
- UK Post-2010 Biodiversity Framework (2011-2020)[2];
- Scottish Biodiversity Strategy (2004[3] and 2013[4]) which comprises of: Scotland's biodiversity: it's in your hands and 2020 Challenge for Scotland's Biodiversity;
- Scottish National Planning Framework 4[5];
- Scottish Planning Policy[6];
- Highland Wide Local Development Plan 2012[7]; and
- Highland Nature Biodiversity Action Plan (BAP) 2021-2026[8].

1.1.2 Legislation pertaining to each protected species surveyed is detailed in **Appendix B**.

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[1] WSP (2022a). Lairg II Wind Farm Grid Connection, Environmental Alignment Selection Study Report. Prepared for Scottish and Southern Electricity Networks. November 2022. WSP, Glasgow.

[2] Joint Nature Conservation Committee and Department for Environment, Food and Rural Affairs (2012). The UK Post-2010 Biodiversity Framework (2011-2020). Available at: https://hub.jncc.gov.uk/assets/587024ff-864f-4d1d-a669-f38cb448abdc#UK-Post2010-Biodiversity-Framework-2012.pdf (Accessed November 2022).

[3] Scottish Government (2004). Scotland's biodiversity: it's in your hands. Available: https://www.gov.scot/publications/scotlands-biodiversity---its-in-your-hands/ (Accessed November 2022).

[4] Scottish Government (2013). 2020 Challenge for Scotland's Biodiversity. Available: https://www.gov.scot/publications/2020-challenge-scotlands-biodiversity-strategy-conservation-enhancement-biodiversity-scotland/ (Accessed November 2022).

[5] Scottish Government (2023). National Planning Framework 4. Available at: https://www.gov.scot/publications/national-planning-framework-4/pages/1/ (Accessed May 2023).

[6] Scottish Government (2020). Scottish Planning Policy. Available: https://www.gov.scot/publications/scottish-planning-policy/(Accessed November 2022).

[7] The Highland Council (2012) Highland Wide Local Development Plan. Available: file:///C:/Users/UKSLM007/Downloads/Highland_wide_Local_Development_Plan%20(1).pdf (Accessed November 2022).

[8] Highland Environment Forum (2021). Highland Nature Biodiversity Action Plan 2021 - 2026 Available online: https://www.highlandenvironmentforum.info/wp-content/uploads/2022/01/Highland-Nature-Biodiversity-Action-Plan-2021-2026-_compressed-.pdfl (Accessed November 2022).

2 Methods

2.1 Desk Study

2.1.1 A desk study was carried out in May 2022 by WSP[9] and a summary of the results relevant to protected species are included within this report. The desk study reviewed existing ecological baseline information available in the public domain in addition to record searches from conservation organisations. A review of ecological assessments conducted as part of planning applications for developments adjacent to the Site was undertaken and a search of planning applications within and adjacent to the Site were identified.

2.2 Field Survey

2.2.1 The protected species survey was carried out between the 30th May and 2nd June 2022 and then updated between the 25th and 26th October 2022 following a design change. Surveys were completed by WSP Consultant Ecologists, who are 'capable' level of competence[10] in the ecological assessment of the pertinent species.

Otter

2.2.2 An otter survey was undertaken along the banks of the Torroboll Burn where it occurs within 200 m of the Proposed Development. The survey followed best practice guidelines[11 and 12]. The surveys involved conducting a thorough visual inspection of the banks and immediate vicinity for otters or their field signs. Otter field signs included:

- Resting sites - including temporary and permanent sites;
- Prints - characteristic footprints often observed in soft ground and muddy areas;
- Spraints - otter faeces that may be used to mark territories, often observed on in-stream boulders. They can be present within or outside the entrances of holts and couches. Spraints have a characteristic smell and often contain fish remains. Features with two or more spraints of mixed age are considered to be spraint sites, with signs of regular use;
- Anal jelly - like spraint often observed on prominent in-stream boulders;
- Feeding signs - remains of prey items may be found at preferred feeding stations. Remains of fish, crabs, or skinned amphibians can indicate the presence of otter;

[9] WSP (2022b). LAIRG II WIND FARM CONNECTION, Baseline Ecology Data Report. Prepared for Scottish Hydro Electric Transmission plc, April 2022. WSP, Glasgow.

[10] CIEEM (2019a). Competency Framework. Available: https://cieem.net/wp-content/uploads/2019/02/Competency-Framework-web-FINAL.pdf; and https://cieem.net/i-am/current-projects/raising-standards/ (Accessed November 2022)

[11] Chanin P (2003). Monitoring the Otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No. 10, English Nature, Peterborough

[12]NatureScot (2020 a). Standing advice for planning consultants: Otters. Available: https://www.nature.scot/doc/standing-advice-planning-consultations-otters (Accessed November 2022).

- Paths - terrestrial routes that otters can take when moving between resting sites and watercourses, or at high flow conditions when they will travel along bank sides in preference to swimming; and
- Slides and play areas - typically worn areas on steep slopes where otters slide on their front, often found between holts/couches and watercourses. Play areas are used by juvenile otters and are often evident by trampled vegetation and the presence of slides. These are often in sheltered areas adjacent to natal holt.

2.2.3 Terminology used for resting sites is as follows:

- Resting site - collective term for holts and couches;
- Potential resting site - a site considered to provide suitable resting habitat together with inconclusive signs of use or potential use;
- Holt - an underground, resting site, often underneath heather root matrices or within tree roots;
- Couch - an above-ground resting site that can be used for sleeping or grooming;
- Breeding site - a term used to identify an area of land in which otters breed, within which a natal holt (see below) is located;
- Natal holt - a discrete holt that is used by the female to birth the cubs and where they can remain for up to three months; and
- Nursery area - an area within a breeding site with high levels of activity associated with cubs. Holts within these areas are considered unlikely to be the primary natal holts where cubs are born.

Water Vole

2.2.4 A water vole survey was undertaken following industry-standard methodology[13, 14 and 15] to areas of the Torroboll Burn occurring within 100 m of the Proposed Development. The survey involved walking the applicable lengths of the watercourse to conduct a thorough visual inspection of the banks and immediate vicinity for water voles or their field signs. Water vole field signs included the following:

- Faeces - recognisable by their size, shape and content. If not too dried-out, these are also distinguishable from rat droppings by their colour;
- Latrines - faeces deposited at discrete location such as dead driftwood, raised banks, or at the entrance of burrows or along runways;

[13]Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016). The Water Vole Mitigation Handbook (The Mammal Society Mitigation Gui dance Series). Eds Fiona Matthews and Paul Chanin. The Mammal Society, London.

[14] NatureScot (2020 b). Standing advice for planning consultants: Water vole https://www.nature.scot/doc/standing-advice-planning-consultations-water-voles (Accessed November 2022).

[15] Strachan, R., Moorhouse, T. & Gelling, M. (2011) Water Vole Conservation Handbook (3rd Edition), Wildlife Conservation Research Unit, University of Oxford.

- Feeding stations - food items are often brought to feeding stations along pathways and hauled onto platforms. Recognisable as neat piles of vegetation, chewed at a 45-degree angle and up to 10 cm long;
- Burrows - appear as a series of holes along the water's edge, distinguishable from rat burrows by size and position;
- Lawns - may appear grazed areas around land holes;
- Nests - where the water table is high above ground, woven nests may be found;
- Footprints - tracks may occur at the water's edge and lead into bankside vegetation. May be distinguishable from rat footprints by size; and,
- Runways in vegetation: low tunnels pushed through vegetation near the water's edge; these are less obvious than brown rat runs.

2.2.5 Additionally, any field signs or evidence relating to other relevant wildlife that may preclude the presence of water vole (for example American mink *Neovison vison* or brown rat *Rattus norvegicus*) was recorded.

Fish and Freshwater Pearl Mussel

2.2.6 Watercourses encountered were assessed for their overall suitability to support fish[16] and FWPM[17]. Details of the channel, substrate composition and bank characteristics were recorded where suitable was habitat encountered.

Badger

2.2.7 A badger survey was conducted up to 100 m from the Proposed Development with reference to industry-standard methodology[18] and standing advice for planning consultants from NatureScot[19].

2.2.8 Where present, evidence indicative of badgers was recorded, including:

- Setts;
- Dung pits and latrines;
- Prints;
- Mammal paths;
- Hairs; and
- Other evidence including snuffle holes, feeding remains and scratching posts.

[16] Hendry, K., & Cragg-Hine, D. (1997). Restoration of Riverine Salmon Habitats: A Guidance Manual. R&D Technical Report W44. Environment Agency, Bristol.

[17] NatureScot (2020 c). Standing advice for planning consultants: Freshwater Pearl Mussels. Available: https://www.nature.scot/doc/standing-advice-planning-consultations-freshwater-pearl-mussels (Accessed November 2022).

[18] Scottish Badgers (2018). Surveying for Badgers: Good Practice Guidelines, Version 1. Scottish Badgers, Forfar, Angus.

[19] NatureScot (2020 d). Standing advice for planning consultants: Badgers. Available: https://www.nature.scot/doc/standing-advice-planning-consultations-badgers (Accessed November 2022).

2.2.9 Where setts were recorded, their status and level of activity were noted. Sett status is broadly categorised as follows:

- Main - generally, the largest sett within a badger social group home range, with a relatively large number of sett entrances with well-worn pathways between them, and conspicuous spoil mounds. This type of sett tends to be occupied throughout the year and be used for breeding.
- Annex - normally found within 150 m of the main sett and comprising multiple entrances, this type of sett is connected to the main sett by one or more obvious well-worn pathways. It may not be occupied throughout the year and can be used for breeding if there is more than one breeding sow within the social group.
- Subsidiary - similar to an annex sett, but typically located further from the main sett (at least 50 m away). This type of sett will not be occupied throughout the year and lacks the well-worn paths connecting it to another sett that are associated with main and annex setts.
- Outlier - normally consisting of one or two entrances, often with little spoil outside and with no obvious path connecting it to another sett. This type of sett will tend to be found furthest from the main sett and will only be used sporadically throughout the year.

2.2.10 In addition to sett entrances there may be:

- Collapses - where a tunnel has collapsed in on itself.
- Air holes - where badgers have made a small hole in a tunnel roof from below which is visible from above.

2.2.11 Sett use or level of activity was broadly categorised as follows[18]:

- Well-used sett/hole - shows evidence of current use, such as fresh spoil or bedding, well-worn pathways between entrances and the presence of badger hair.
- Partially used sett/hole - no evidence present indicating current occupation (as distinct from current use), though hairs may be present, as these can persist for some time. The sett may be occupied intermittently and cannot be categorically described as dis-used. It could easily be re-occupied; for example, it may contain some leaves or sticks in tunnel entrances, but entrances are not blocked, and it would take little effort for a badger to reoccupy it. Badger field signs may not have decayed to the extent they can be categorically considered to no longer indicate current use.
- Disused sett/hole - a badger sett that appears to have been abandoned by a badger social group is described as ‘disused’; these differ from partially used setts which can be temporarily disused (not in current occupation, but in current use). Disused setts are often completely blocked with vegetation or have collapsed, and badger field signs are no longer present, or have decayed to the extent they do not indicate current use.

Red Squirrel

2.2.12 A red squirrel survey was completed taking into account industry standard guidance[20, 21 and 22] which comprised a systematic search of the woodland for field signs within 50 m of the Proposed Development. In addition to noting any visual observations of individual red squirrels:

- Visual sightings;
- Prints;
- Foraging signs, including chewed or stripped cones with top section remaining untouched, which are often discarded on prominent features at feeding stations; and
- Dreys: nest sites within trees (can be conifer or broadleaf species) and comprising of spherical collections (c. 0.3 m) of twigs and leaves and usually located at least 3 m up, in the fork of branches closes to the trunk.

2.2.13 Incidental sightings of grey squirrel *Sciurus carolinensis* (if present) were recorded.

Pine Marten

2.2.14 A pine marten survey was completed taking into account industry standard guidance[23 and 24] which comprised a search for signs within 250 m of the Proposed Development where suitable habitat prevailed. This search involved looking for the following field signs:

- Den sites: such as elevated tree cavities, roof voids of buildings or barns, owl boxes, large raptor or corvid nests, squirrel dreys, root plates of fallen trees and rocky outcrops with elevated crevices. In the absence of elevated den sites, a large diversity of den sites will be utilised. Current use may be indicated by the presence of scats beneath the entrance.
- Scats: highly variable size and shape depending on their contents. Typically found on pathways, rides and tracks through woodland or rocky habitat; and
- Prints: more likely to be present in snow as pine marten generally avoid mud.

[20] Gurnell, J., Lurz, P., McDonald, R. and Pepper, H. (2009). Practical Techniques for Surveying and Monitoring Squirrels. Practice Note. Forestry Commission, Edinburgh.

[21] Cresswell WJ, Birks J, Dean M, Pacheco M, Trewhella WJ, Wells D and Wray S (2012). UKBAP Mammals: Interim Guidelines for Survey Methodologies, Impact Assessment and Mitigation. The Mammal Society, Southhampton.

[22] NatureScot (2020 e). Standing Advice for Planning Consultations, Protected Species: Red Squirrel. Available at: https://www.nature.scot/doc/standing-advice-planning-consultations-red-squirrels (Accessed November 2022).

[23] O'Mahony, D., O'Reilly, C. and Turner, P. (2005). National Pine Marten Survey of Ireland 2005. Available online at: https://pinemarten.ie/wp-content/uploads/2018/11/2005-National-Pine-Marten-Survey-Ireland.pdf (Accessed November 2022).

[24] NatureScot (2020 f). Standing Advice for Planning Consultations, Protected Species: Pine Marten. Available at: https://www.nature.scot/doc/standing-advice-planning-consultations-pine-martens (Accessed November 2022).

Bat Preliminary Roost Appraisal

2.2.15 Habitats encountered were assessed for their overall suitability to support bats. A Preliminary Roost Assessment (PRA) was undertaken from ground level of the trees and structures occurring within 30 m of the Proposed Development (safe access permitting) to identify features with the potential to support roosting bats (Potential Roost Features [PRFs]). Where PRFs were identified that could be used by roosting bats they were recorded and classified as 'low', 'moderate' or 'high' suitability following best practice guidance[25 and 26]. See **Appendix C** for category descriptions.

Other Priority and Protected Species

2.2.16 During the protected species survey, any incidental records of protected or priority species were recorded as well as any habitat to support such species.

2.3 Notes and Limitations

2.3.1 Every effort has been made to provide a comprehensive description of the Survey Area; however, the following specific limitations apply to this assessment:

- Ecological survey data is typically valid for 18 months, unless otherwise specified. This is due to the potential for conditions on Proposed Development to change due to ecological processes or anticipated changes in management.
- During the update survey in October 2022, the water vole survey was only able to indicate presence and not absence as it was out with the core survey season (April to September).
- No access was available to the woodland to the north-west of the Site as it was beyond deer fencing. This does not affect the validity of the results as the suitability of the habitat to support protected species could be assessed from the perimeter.
- No access was taken into the farmland to the south-west of the Site as cattle and sheep were grazing. This does not affect the validity of the results as the suitability of the habitat to support protected species could be assessed from the perimeter.

[25] Collins J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). The Bat Conservation Trust, London.

[26] NatureScot (2020 g). Standing advice for planning consultations – Bats. Available online: https://www.nature.scot/doc/standing-advice-planning-consultations-bats (Accessed November 2022).

3 Results

3.1 Desk Study

3.1.1 The desk study carried out in April 2022[27] identified records of the following species within 2 km of the Site:

- Bats (Brown long-eared bat *Plecotus auritus*, Daubenton's bat *Myotis daubentonii*, common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus*);
- Red squirrel;
- Pine marten;
- Otter;
- Water vole; and
- Fish (salmon *Salmo salar*, trout *Salmo sp*., eel *Anguilla anguilla* and three-spined stickleback *Gasterosteus aculeatus*).

3.1.2 Additionally, records of badger were identified within 10 km of the Site following a review of planning application supporting documents.

3.1.3 The results of the protected species survey are shown in **Figure 1** (**Appendix A**) and Target Notes (TN) providing further detail are detailed in **Appendix D**.

3.2 Field Survey

Otter

3.2.1 Evidence of otter was identified along the Torroboll Burn. A non-breeding resting site and several spraints were identified under the bridge to the south-east of the Alignment Options (TN01, 02). Located c.115 m from the Alignment Options at its closest point. Additionally, a potential resting site was recorded under an overhanging bank of the Torroboll Burn (TN03), located c.120 m from the Alignment Options at the closest point. However, no evidence to confirm use by otter was recorded.

3.2.2 The general habitat surrounding the Torroboll Burn within the Survey Area was considered to be optimal habitat for otter, including suitable banksides and overhanging heathland vegetation suitable for resting sites.

Water Vole

3.2.3 Several burrows, paths and nibbled vegetation of suitable size and character for water vole were identified to the south-east of the Survey Area (TN04, 05 and 06), located c. 119 m from the Alignment Options at the closest point. However, no evidence, such as droppings or footprints, to confirm presence of water vole was recorded.

27 WSP (2022). LAIRG II WIND FARM CONNECTION, Baseline Ecology Data Report. Prepared for Scottish Hydro Electric Transmission plc, April 2022. WSP, Glasgow.

3.2.4 Overall, the habitat within the Survey Area was optimal for water vole. The banks were suitable for burrowing and the flow was slow-moderate throughout.

Fish and Freshwater Pearl Mussel

3.2.5 The habitat within the Survey Area was deemed to be suitable to support fish, with a single fish being recorded during the protected species survey (TN07). The Site also had suitability to support FWPM and given the distance and connectivity to the River Oykel SAC (6.5 km) which is designated for FWPM, the presence of the species cannot be ruled out.

Badger

3.2.6 No evidence of badger was identified within the Survey Area. The Site and surrounding Survey Area was predominantly comprised of the blanket bog and wet heath habitats which could be used for sett construction. The Site was also suitable for foraging and commuting with no natural or manmade barriers preventing access to the Proposed Development from the wider area.

Red Squirrel and Pine Marten

3.2.7 No evidence of red squirrel or pine marten was recorded within the Survey Area. Additionally, no trees or woodland to support these species was recorded within the Survey Area, and as such the areas was considered to have negligible suitability to support dreys or dens for these species. However, the area could still be used for foraging and commuting by pine marten.

Bats

3.2.8 No features suitable for roosting bats were recorded within 30 m of the Proposed Development. Linear features, including Torroboll Burn, within the Survey Area could provide suitable foraging and commuting habitat for bats.

Other Protected and Priority Species

3.2.9 The wetland habitats present within the Survey Area could support amphibians including common frog *Rana temporaria* and common toad *Bufo bufo*. An incidental record of common frog was recorded during the protected species survey (TN08). No ponds are present within the Survey Area to support breeding newts and great crested newts *Triturus cristatus* are not know in the area[9].

3.2.10 The heathland and degraded bog as well as stone tracks and rock outcrop for basking provides suitable habitat for reptiles including common lizard *Zootoca vivipara*, slow worm *Anguis fragilis* and adder *Vipera berus*.

3.2.11 The habitat recorded within the Survey Area could be suitable for brown hare *Lepus europaeus* and mountain hare *Lepus timidus*. However, is unlikely to support hedgehog *Erinaceus europaeus* due to its upland nature.

3.2.12 Lastly, several bird species (TN09, 10) were recorded within the Survey Area and could utilise the heathland and woodland habitats.

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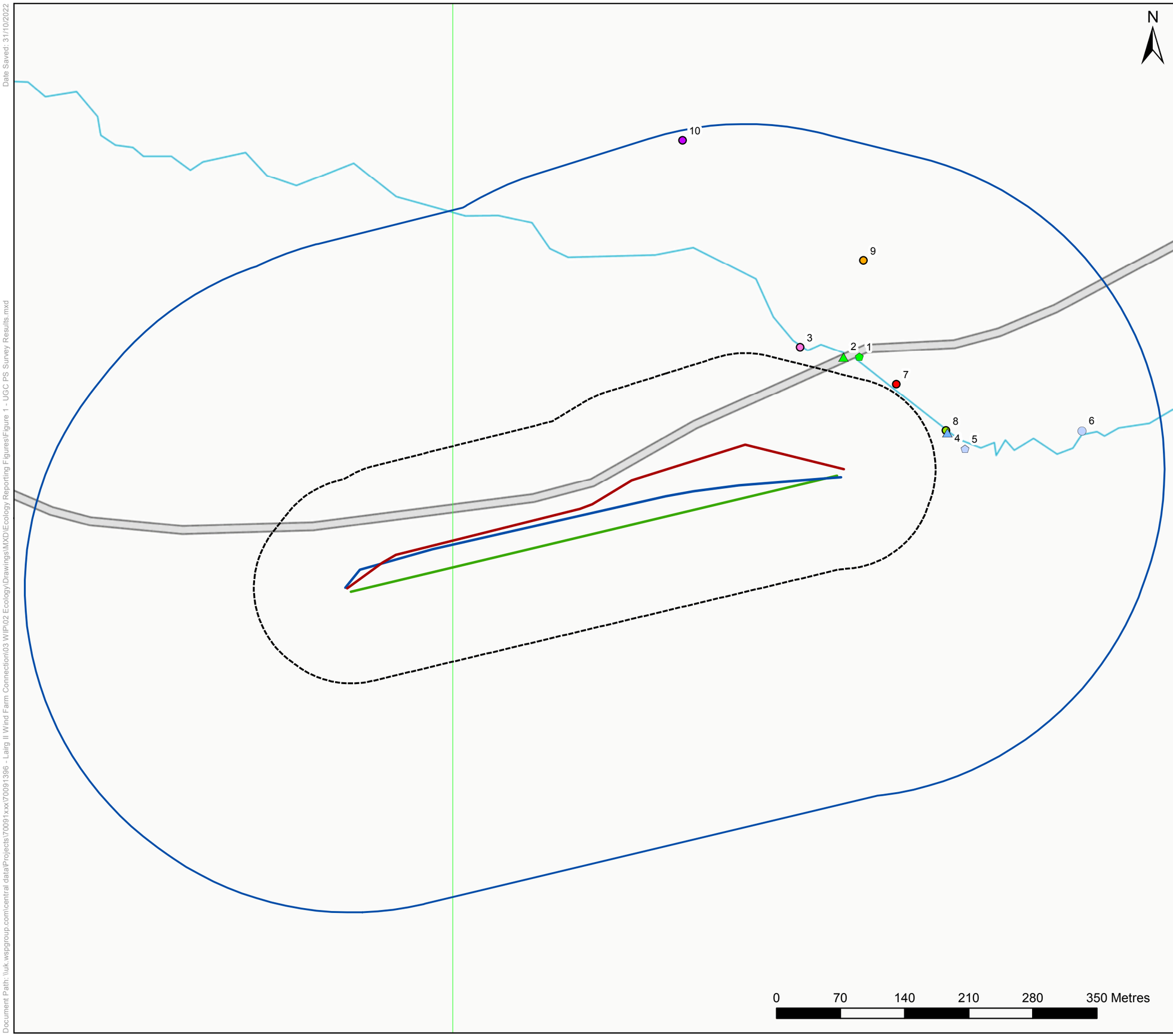
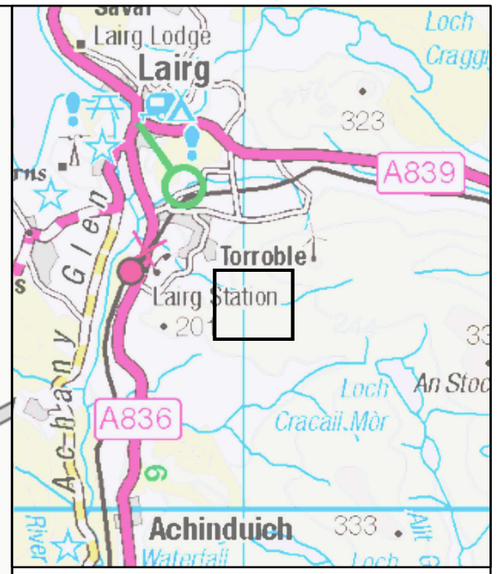
Appendix A – Figures

Figure 1: Protected Species Results





Legend

- UGC Alignment Option 1
- UGC Alignment Option 2
- UGC Alignment Option 3
- Limit of Deviation
- Survey Area

Protected Species Survey Results

Species, Evidence

- Common frog, Sighting
- Common lizard, Sighting
- Curlew, Sighting
- Fish, Sighting
- Otter, Spraint
- Otter, Potetnial resting site
- Otter, Spraint and resting site
- Skylark, Sighting
- Water vole, Burrow path
- Water vole, Hole path burrow
- Water vole, Tunnel

Client: Scottish & Southern Electricity Networks TRANSMISSION

Project: Lairg II Wind Farm Grid Connection

Title: Protected Species Survey Report

Figure 1: Protected Species Survey Results

Date: 31 October 2022 Scale: 4,000 @ A3

Drawn: AG Checked: SK Approved: AH

Date Saved: 31/10/2022

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Appendix B – Protected Species Legislation

Otter

As European Protected Species (EPS), otter are fully protected under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

It is an offence to deliberately or recklessly:

- Capture, injure or kill an otter;
- Harass an otter or group of otters;
- Disturb an otter in a holt or any other structure or place it uses for shelter or protection;
- Disturb an otter while it is rearing or otherwise caring for its young;
- Obstruct access to a holt or other structure or place otters use for shelter or protection, or otherwise deny the animal use of that place;
- Disturb an otter in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species; and
- Disturb an otter in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young.

It is also an offence to:

- Damage or destroy a breeding site or resting place of such an animal (whether or not deliberately or recklessly); and
- Keep, transport, sell or exchange, or offer for sale or exchange any wild otter (or any part or derivative of one) obtained after 10 June 1994

Otter shelters are legally protected whether or not an otter is present.

Water vole

The water vole receives partial protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

In Scotland, this legal protection is currently restricted to the water vole's places of shelter or protection and doesn't extend to the animal itself. Full protection, to also cover the animal, is proposed.

It is an offence to intentionally or recklessly:

- Damage, destroy or obstruct access to any structure or place that water voles use for shelter or protection; and
- Disturb a water vole while it is using any such place of shelter or protection.

Fish

For fully protected Schedule 5 species, it's an offence to:

- Intentionally or recklessly kill, injure or take fish;
- Possess or sell fish; and
- Intentionally or recklessly disturb or harass fish.

Allis shad *Alosa alosa* and twaite shad *Alosa fallax* are protected under Schedule 5 only in terms of regulating how they can be killed or taken.

For Schedule 3 species, it's an offence to use certain methods to catch or take fish in freshwater.

Freshwater pearl mussel

FWPM is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

It is an offence to intentionally or recklessly:

- Kill, injure or take a wild animal;
- Damage, destroy or obstruct access to any structure or place which such an animal uses for shelter or protection; and
- Disturb such an animal when it is occupying a structure or place for shelter or protection.

It is also an offence to:

- Possess or control a living or dead FWPM; and
- Sell, offer for sale, or possess or transport for the purpose of sale any living or dead FWPM (or any such derivatives).

Knowingly causing or permitting any of the above acts to be carried out is also an offence.

Badger

Both badgers and their setts are protected under the Protection of Badgers Act 1992 as amended by the Wildlife and Natural Environment (Scotland) Act 2011.

Offences under the Act include:

- Wilfully taking, injuring or killing a badger;
- Cruelty to a badger;
- Intentional or reckless interference with a badger sett;
- Sale or possession of a badger; and
- Marking or ringing of a badger.

Interfering with a badger sett includes:

- Damaging or destroying a sett or any part of it;
- Obstructing access to a sett;
- Disturbing a badger while it is in a sett; and
- Causing or allowing a dog to enter a badger sett.

The 1992 Act defines a badger sett as "*any structure or place which displays signs indicating current use by a badger*". There is no case law to clarify what signs of current use means, however NatureScot considers the presence of "*field signs such as bedding, fresh spoil heaps, signs of recent digging, hair, latrines, or*

footprints in or around the potential sett or evidence of badgers entering or exiting the structure or place in question" as indication of current use[28].

Red squirrel

Red squirrels and their dreys (resting places) receive full protection under Schedules 5 and 6 of the Wildlife and Countryside Act 1981 (as amended).

It is an offence to intentionally or recklessly:

- Kill, injure or take a red squirrel;
- Damage, destroy or obstruct access to a drey or any other structure or place which a red squirrel uses for shelter or protection; and
- Disturb a red squirrel when it is occupying a structure or place for shelter or protection.

This protection does not apply to areas where red squirrels only feed.

It is also an offence to possess or control, sell or offer for sale, or possess or transport for the purpose of sale any living or dead red squirrel or any derivative of such an animal.

Knowingly causing or permitting any of the above acts to be carried out is also an offence.

Pine marten

Pine marten receives full protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Certain methods of killing or taking pine martens are illegal under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

It is an offence to intentionally or recklessly:

- Kill, injure or take a pine marten;
- Damage, destroy or obstruct access to a nest or den – i.e. any structure or place which such an animal uses for shelter or protection; and
- Disturb such an animal when it is occupying a nest or den for shelter or protection (except when this is inside a dwelling house).

Possession, sale and transport offences are ones of strict liability (they don't require intention or recklessness). It is an offence to:

- Possess or control, sell, offer for sale or possess or transport for the purpose of sale any living or dead pine marten or any derivative of such an animal

It is also an offence to knowingly cause or permit any of the above acts to be carried out.

[28] NatureScot (2020). Guidance Licensing - Badgers - What is a Badger sett? Available at: https://www.nature.scot/doc/guidance-licensing-badgers-what-badger-sett (Accessed November 2022)

Bats

All bat species found in Scotland are classed as EPS and receive full protection under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

For any wild bat species, it is an offence to deliberately or recklessly:

- Capture, injure or kill a bat;
- Harass a bat or group of bats;
- Disturb a bat in a roost (any structure or place it uses for shelter or protection);
- Disturb a bat while it is rearing or otherwise caring for its young;
- Obstruct access to a bat roost or otherwise deny an animal use of a roost;
- Disturb a bat in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species;
- Disturb a bat in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young; and
- Disturb a bat while it is migrating or hibernating.

It's also an offence to:

- Damage or destroy a breeding site or resting place of such an animal (whether or not deliberately or recklessly); and
- Keep, transport, sell or exchange, or offer for sale or exchange any wild bat (or any part or derivative of one) obtained after 10 June 1994.

Appendix C - Bat Roost Feature Suitability

Table C1 : Bat Roost Feature Suitability (taken from best practice guidelines[29])

Suitability	Description	
	Roosting habitats	**Commuting and foraging habitats**
Negligible	Negligible habitat features on site likely to be used by roosting bats	Negligible habitat features on site likely to be used by commuting or foraging bats
Low	A structure with one or more potential roost sites that could be used opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis (i.e. unlikely to be suitable for maternity or hibernation roosts). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but not isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A tree or structure with one or more potential roost sites that are obviously suitable for use by large number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourses and grazed parkland. Site is close to and connected to known roosts.

[29] Collins J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). The Bat Conservation Trust, London.

Appendix D – Target Notes

Table D1 : Target Notes

Target Note (TN)	Grid Reference	Species	Description
01	NC 60444 03508	Otter	   Otter spraints identified on rocks within and along the edge of the Torroboll Burn as it flows under the bridge within the Survey Area. The banks on either side of the Burn provide suitable non-breeding resting sites for otter, and had spraints located along them confirming use by otter.
02	NC 60426 03507	Otter	Otter spraint was identified on a rock under the bridge.

Target Note (TN)	Grid Reference	Species	Description
03	NC 60379 03518	Otter	 A potential resting under the overhangning bank of the Torroboll Burn. The earth had been flattened and there was a slide into the watercourse, however, there was no evidence to confirm use by otter. When the update surveys were undertaken in October 2022, the water level was higher and the feature submerged.
04	NC 60540 03425	Water vole	  

Target Note (TN)	Grid Reference	Species	Description
			Several potential burrows (5-6cm width), runs and paths along the Torroboll Burn. The water was up to 1 m in depth with slow flow and therefore suitable for water vole. Nibbled vegetation at a 45 degree angle was recorded which is indicative of water vole.
05	NC 60559 03407	Water vole	Several tunnels but no definitive evidence to confirm use by water vole.
06	NC 60687 03427	Water vole	Several holes and runs along the banks of the Torroboll Burn, however, no evidence to confirm use by water vole was recorded.
07	NC 60485 03478	Fish	 A small fish (approx 5 cm in length) was recorded in Torroboll Burn. The Burn had moderate suitability for salmonoids as it had slow – moderate flow, the channel was between 4 m and 30 cm wide in places and had variable depth throughout.
08	NC 60538 03427	Common frog	Sighting.
09	NC 60449 03613	Curlew	Several curlew were recorded flying overhead. Likely nests in the vicinity.
10	NC 60251 03744	Skylark	A skylark was recorded at the edge of the Site.