

Consultation Document (Route Options)
Loch Kemp Storage Scheme 275 kV Grid
Connection
October 2024

REF: LT366



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GLOSSARY

Term	Definition
Alignment	A centre line of an overhead line OHL, along with location of key angle structures.
Alignment (preferred)	An alignment for the overhead line taken forward to stakeholder consultation following a comparative appraisal of alignment options.
Alignment (proposed)	An alignment taken forward to consent application. It comprises a defined centre line for the overhead line and includes an indicative support structure (tower or pole) schedule, also specifying access arrangements and any associated construction facilities.
Amenity	The natural environment, cultural heritage, landscape and visual quality. Also includes the impact of SSEN Transmission's works on communities, such as the effects of noise and disturbance from construction activities.
Ancient Woodland	In Scotland, Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750.
Ancient Woodland Inventory (AWI)	The Ancient Woodland Inventory (AWI) is a provisional guide to the location of Ancient Woodland. It contains three main categories of woodland, all of which are likely to be of value for their biodiversity and cultural value by virtue of their antiquity.
Biodiversity Net Gain (BNG)	A process intended to leave nature in a better state than it started using good practice principles established by the Business and Biodiversity Offset Programme (BBOP) and organisations including CIRIA, CIEEM and IEMA.
Conductor	A metallic wire strung from structure to structure, to carry electric current.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views and, normally, with the objective of influencing decisions, policies or programmes of action.
Corridor	A linear area which allows a continuous connection between the defined connection points. The Corridor may vary in width along its length; in unconstrained areas it may be many kilometres wide.
Drinking Water Protected Area (DWPA)	An area that is protected to ensure a supply of water for human consumption. DWPAs are identified by the Water Framework Directive and include areas where water is abstracted for drinking, cooking, or food preparation.
Environmental Appraisal (EA)	When a Proposed Development is unlikely to give rise to significant environmental effects and is not considered an EIA development it would not be subject to an EIA and the preparation of an EIA Report. In this circumstance, an optional Environmental Appraisal (EA) detailing the results of surveys, and any appropriate mitigation, can accompany a consent application.
Environmental Impact Assessment (EIA)	Environmental Impact Assessment. A formal process codified by EU directive 2011/92/EU, and subsequently amended by Directive 2014/52/EU. The national regulations relevant to electricity developments are set out in The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 for overhead transmission lines and The Town and Country Planning Works (Environmental Impact Assessment) (Scotland) Regulations 2017 for substations and underground cables, as required. The EIA process includes the preparation of an EIA Report by the developer to systematically identify, predict, assess and report on the likely significant environmental effects of a proposed project or development.

Term	Definition
Habitat	Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities.
Highland Historic Environment Record (HER)	A database containing over 100,000 archaeological records detailing the heritage of The Highland Council area from the earliest human activity to the Cold War, which is managed and maintained by The Highland Council Historic Environment Team.
Historic Environment Scotland (HES) (Canmore)	An online catalogue of Scotland's archaeology, containing more than 320,000 records and 1.3 million catalogue entries for archaeological sites, buildings, industry and maritime heritage across Scotland managed and maintained by Historic Environment Scotland.
Kilovolt (kV)	One thousand volts.
Long Established of Plantation Origin (LEPO)	Interpreted on the Ancient Woodland Inventory (AWI) as plantation from maps of 1750 (1b1) or 1860 (2b) and continuously wooded since. Many of these sites have developed semi-natural characteristics, especially the oldest ones, which may be as rich as Ancient Woodland.
Listed Building	Building included on the list of buildings of special architectural or historic interest and afforded statutory protection under the 'Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997' and other planning legislation. Classified categories A – C(s).
Micrositing	The process of positioning infrastructure to avoid localised environmental or technical constraints.
National Cycle Route (NCR)	A signposted cycling route which forms part of the National Cycle Network.
Mitigation	Term used to indicate avoidance, remediation or alleviation of adverse impacts.
National Planning Framework 4 (NPF4)	The Scottish Government's national spatial strategy for Scotland. It sets out spatial principles, regional priorities, national developments and national planning policy.
Native Woodland	Woodland, as listed on the Native Woodland Survey of Scotland, where the canopy cover is composed mainly of native species (i.e. over 50%).
Nearly Native Woodland	Woodland, as listed on the Native Woodland Survey of Scotland, where native species make up between 40% and 50% of the canopy. These are woods that could have potential to be converted into native woodlands by altering their species mix.
Overhead Line (OHL)	An electric line installed above ground, usually supported by steel lattice towers or wood poles.
Plantation on Ancient Woodland Site (PAWS)	Areas where ancient woodlands were cleared and replaced with non-native, usually commercial woodland.
Plantation Woodland	Woodland of any age that obviously originated from planting.
Route	A linear area of approximately 1 km width (although this may be narrower/wider in specific locations in response to identified pinch points / constraints), which provides a continuous connection between defined connection points.
Route (preferred)	A route for the overhead line or UGC taken forward to stakeholder consultation following a comparative appraisal of route options.
Route (proposed)	A route taken forward following stakeholder consultation to the alignment selection stage of the overhead line or UGC routeing process.
Routeing	The work undertaken which leads to the selection of a proposed alignment, capable of being taken forward into the consenting process.

Term	Definition
Scheduled Monument	A monument which has been scheduled by the Scottish Ministers as being of national importance under the terms of the 'Ancient Monuments and Archaeological Areas Act 1979'.
Semi-natural Woodland	Woodland that does not obviously originate from planting. The distribution of species will generally reflect the variations in the site and the soil. Planted trees must account for less than 30% of the canopy composition.
Sites of Special Scientific Interest (SSSI)	Areas of national importance. The aim of the SSSI network is to maintain an adequate representation of all natural and semi-natural habitats and native species across Britain.
Skylining	The appearance of features above the skyline or the horizon.
Special Area of Conservation (SAC)	An area designated under the EC Habitats Directive to ensure that rare, endangered or vulnerable habitats or species of community interest are either maintained at or restored to a favourable conservation status.
Special Landscape Area (SLA)	Landscapes designated by The Highland Council which are considered to be of regional/local importance for their scenic qualities.
Special Protected Area (SPA)	An area designated under the EC Birds Directive to protect one or more rare, threatened or vulnerable bird species listed in Annex I, or certain regularly occurring migratory species.
Stakeholders	Organisations and individuals who can affect or are affected by SSEN Transmission works.
Study Area	The area within which the Corridor, route and alignment study takes place.
The National Grid	The electricity transmission network in Great Britain.
Underground Cable (UGC)	An electric cable installed below ground, protected by insulating layers and marked closer to the surface to prevent accidental damage through later earthworks.
Volts	The international unit of electric potential and electromotive force.
Wayleave	A voluntary agreement entered into between a landowner upon whose land an overhead line is to be constructed and SSEN Transmission.

PREFACE

This Consultation Document has been prepared by ASH design+assessment Ltd. (ASH) on behalf of Scottish Hydro Electric Transmission plc ("the Applicant") who, operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission), owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands.

This Consultation Document has been prepared to seek comments from all interested parties on the preferred route identified for a new 275 kV underground cable (UGC) connection between the proposed Loch Kemp Storage Scheme and the existing Foyers Switching Station, near Foyers, within the Local Authority area of The Highland Council (THC). The project, referred to in this Consultation Document as the 'Proposed Development', is required to connect the Loch Kemp Storage Scheme to the National Grid.

The Consultation Document is available online at the project website: <https://www.ssen-transmission.co.uk/loch-kemp>

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All comments are requested by **7 March 2025**

EXECUTIVE SUMMARY

An application for consent under Section 36 of the Electricity Act 1989 was submitted by Loch Kemp Storage Ltd on behalf of Statera Ltd in November 2023 to construct and operate a pumped storage hydro (PSH) scheme referred to as the 'Loch Kemp Storage Scheme', on Dell Estate on the eastern bank of Loch Ness in the Scottish Highlands. A decision on this application from Scottish Ministers is currently awaited.

The Loch Kemp Storage Scheme would have a potential capacity of up to 600 MW and would require connection to the electricity transmission network at the existing Foyers Switching Station by October 2030. It is proposed that this would be achieved via the construction and operation of a new 275 kV underground cable (UGC). This Consultation Document invites comments from all interested parties on the preferred UGC grid connection route identified.

A Study Corridor ('the Corridor') was identified within which the identification and assessment of route options could be completed (see **Figure 1**). The Corridor was developed to encompass a range of feasible route options between the connection points at the proposed switching station for the Loch Kemp Storage Scheme and the existing Foyers Switching Station (see **Figure 2**).

Appraisal of potential route options has been undertaken, a summary of which is provided within this Consultation Document. The preferred route identified has been selected to provide an optimum balance of environmental, technical and economic factors. Following review of the consultation responses received on the route options considered, SSEN Transmission would seek to confirm a proposed route, within which the consideration of potential UGC alignments will be undertaken.

When providing comments and feedback on this Consultation Document, SSEN Transmission would be grateful for your consideration of the questions below:

- Has the need for the project been clearly explained?
- Have we explained the approach taken to select the preferred route adequately?
- Are there any factors, or environmental features, that you consider may have been overlooked during the preferred route selection process?
- Do you feel, on balance, that the preferred route selected is the most appropriate for further consideration at the alignment selection stage?

1. INTRODUCTION

1.1 Purpose of Document

- 1.1.1 This Consultation Document has been prepared by ASH design+assessment Ltd. (ASH) on behalf of Scottish Hydro Electric Transmission plc ("the Applicant") who, operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission), owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands. In this Consultation Document, the Applicant and SSEN Transmission are used interchangeably unless the context requires otherwise.
- 1.1.2 This Consultation Document invites comments from all interested parties on the preferred route for a new 275 kV underground cable (UGC) between the proposed Loch Kemp Storage Scheme and the existing Foyers Switching Station, where the pumped storage hydro (PSH) scheme would connect to the National Grid. The project is known as the 'the Loch Kemp Storage Scheme 275 kV Grid Connection' and is referred to in this Consultation Document as the 'Proposed Development'.
- 1.1.3 This Consultation Document describes the route options appraisal undertaken, the alternatives considered during the selection of route¹ options, and the identification of a preferred route. Comments are now sought from statutory authorities, key stakeholders, elected representatives and the public on the route selection process and the preferred route identified.
- 1.1.4 All comments received will inform further consideration of the preferred route prior to selecting a proposed route, and subsequent alignment² options therein.

1.2 Document Structure

- 1.2.1 This report comprises the following sections:
- 1: Introduction – setting out the purpose of the Consultation Document and the document structure;;
 - 2: The Proposals – describes the need for the project, the proposed technology solution and the typical construction methods and programme;
 - 3: Route Selection Process – sets out the process that has been applied in the selection and appraisal of route options;
 - 4: Baseline Conditions – describes the local environmental and engineering context;
 - 5: Description of Routes – describes the route options that have been identified;
 - 6: Comparative Appraisal of Route Options – appraises each route option against a series of environmental, technical and economic considerations to arrive at a preferred route; and
 - 7: Consultation on the Proposals and Next Steps – invites comments on the route appraisal process and the identification of a preferred route, and outlines the next steps.
- 1.2.2 The main body of this document is supported by a series of figures and one appendix.

¹ A linear area of approximately 1 km – 2km width which provides a continuous connection between defined connection points.

² A centre line of an overhead line, along with the location of key angle structures.

2. THE PROPOSALS

2.1 Project Need

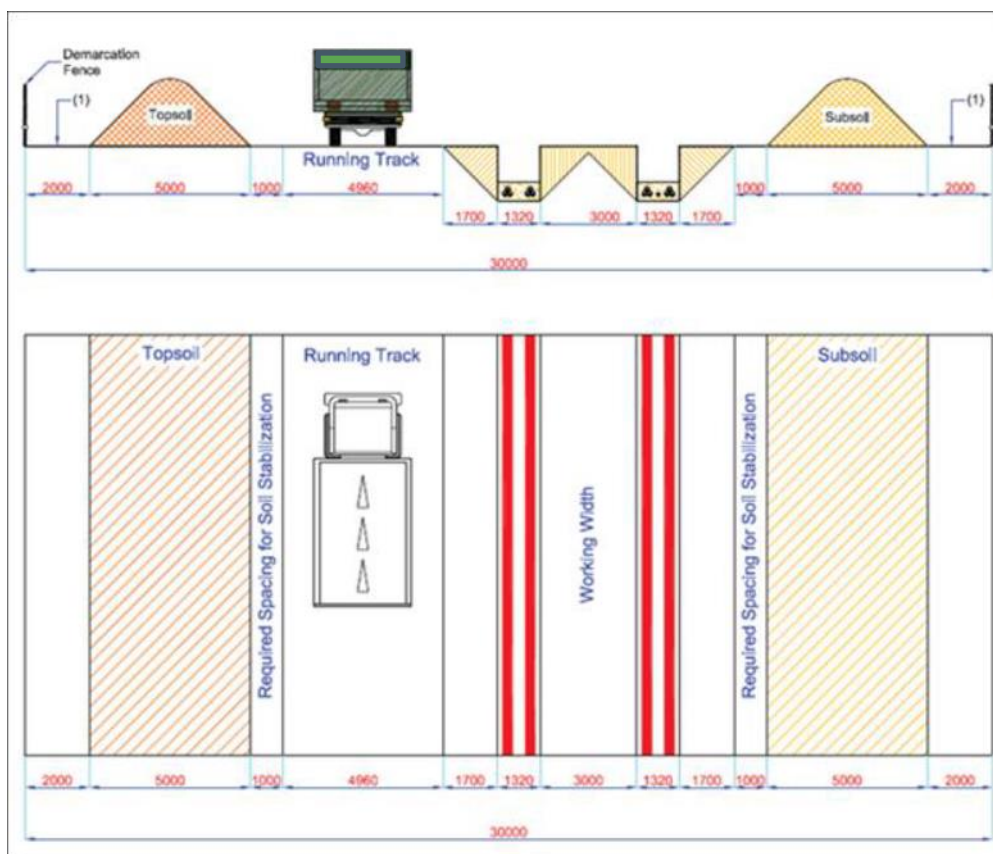
- 2.1.1 SSEN Transmission has a statutory duty under Schedule 9 of the Electricity Act 1989 to develop and maintain an efficient, co-ordinated and economical transmission system in its licenced areas. SSEN Transmission has obligations to offer non-discriminatory terms for connection to the transmission system.
- 2.1.2 Loch Kemp Storage Scheme would have a potential capacity of up to 600 MW and would require connection to the electricity transmission network at the existing Foyers Switching Station by October 2030. The new connection would be routed between the proposed Point of Connection (PoC) and the existing Foyers Switching Station, as shown on **Figure 1**. The Foyers switching station was selected as the connection point for the Pumped Hydro Storage scheme due to being the nearest connection point with adequate capacity on the wider network

2.2 Technology Solution

- 2.2.1 The proposed technology solution for the grid connection is a new 275 kV UGC. The proposed connection is in accordance with agreements between SSEN Transmission, National Grid Electricity System Operator (as operator of the National Grid), and Loch Kemp Storage Ltd., as developer of the PSH scheme.
- 2.2.2 It is assumed that the PoC for all options considered within this appraisal is at a 275 kV Air Insulated Switchgear (AIS) switching substation, located on Dell Estate, near Dell Farm, as shown on **Figure 2**. **Plate 2.1** shows a diagram of a typical UGC construction corridor.
- 2.2.3 To facilitate the connection, the main construction elements associated with the development are anticipated to include:
- Establishment of one or more construction compounds;
 - Establishment of suitable laydown areas for materials;
 - Establishment of a temporary working corridor approximately 30 m wide;
 - Installation of an access haul road and temporary bridges where required;
 - Strip topsoil and shallow peat layers to facilitate cable trenching and Horizontal Directional Drilling (HDD) (If required);
 - Excavate a trench up to 2 m in depth and 2 m wide, widening through benching and battering where stability and safety concerns arise;
 - Clear out all materials likely to damage cable ducts, e.g. clods, rocks, stones and organic debris, and employ use of pumps to remove any water;
 - Installation of ducting within the trench, surrounded by engineered backfill in suitable layers for protection, with protection tile and warning tape placed above the cable line, reinstatement to sub-soil level;
 - Excavation and formation of power cable joint bays with above ground electrical link pillars and associated demarcation;
 - Transportation of and installation of power cable and telecoms cable(s);
 - Mobilisation of jointing containers and jointing of power cable;
 - Reinstatement of joint bays and installation of fencing at link pillar locations;
 - Reinstatement excavated surface layers in reverse order; and
 - Commissioning of cable system.

- 2.2.4 **Plate 2.1** shows a diagram of a typical UGC construction corridor.

Plate 2.1: Typical UGC Construction Corridor setup (based on 30m width)



2.3 Forestry Removal

- 2.3.1 Construction of the Proposed Development would likely require the removal of areas of commercial forest and native woodland. Felling would be undertaken in consultation with affected landowners. Scottish Forestry (SF) would also be consulted throughout the development of the Proposed Development and the Proposed Development would seek to adhere to Scottish Government's Control of Woodland Removal Policy (CoWRP)³.
- 2.3.2 After felling, any timber removed that is commercially viable would likely be sold, with the remaining forest material such as arisings / brash would be mulched on.
- 2.3.3 An Operational Corridor (OC) would be required to enable the safe operation and maintenance of the UGC. In areas of woodland, the width of the OC could vary depending on the type of woodland (based on species present) in proximity to the UGC.

2.4 Access Strategy

- 2.4.1 A construction haul road would be required within the UGC construction corridor to facilitate its construction. Once the UGC is installed, it is anticipated that the construction corridor would be reinstated, with an OC of approximately 20 m being maintained. Out with the construction corridor, existing tracks would be utilised where practicable during construction of the Proposed Development. Permanent access tracks may be required to cable joint bays along the alignment.

³ Forestry Commission Scotland (2009) Control of Woodland Removal Policy

2.5 Programme

- 2.5.1 It is anticipated that construction of the Proposed Development would take place over a 24-month period. Detailed programming of the works would be the responsibility of the Contractor in agreement with SSEN Transmission.

3. ROUTE SELECTION PROCESS

3.1 Overview

- 3.1.1 The approach to route selection was informed by SSEN Transmission's guidance 'Procedures for Routeing Overhead Lines and Underground Cables of 132 kV and above' (September 2020). The guidance sets out SSEN Transmission's approach to selecting a route for an Overhead Line (OHL) or UGC. This document helps SSEN Transmission to meet its obligations under Schedule 9 of the Electricity Act 1989, which requires transmission license holders:
- to have a regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interests; and
 - to do what they reasonably can to mitigate any effect that the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.
- 3.1.2 The guidance develops a process which aims to balance these environmental considerations with technical and economic considerations throughout the route options process.
- 3.1.3 The guidance splits a project into six stages, as follows:
- Pre-Routeing Activities: Selection of proposed connection option;
 - Stage 0: Routeing strategy development;
 - Stage 1: Corridor Selection;
 - Stage 2: Route Selection;
 - Stage 3: Alignment Selection; and
 - Stage 4: Environmental Impact assessment (EIA) and consenting (where applicable).
- 3.1.4 The stages that are carried out can vary depending on the type, nature and size of a project and consultation is carried out at each stage of the process as appropriate. For this project Stage 1: Corridor Selection, has occurred simultaneously with Stage 2: Route Selection, and both stages are detailed in this Consultation Document. The objective at the end of Stage 2: Route Selection is to identify a preferred route within the Study Corridor (identified at Stage 1: Corridor Selection) for the likely/preferred connection to be taken forward for consultation prior to selection of a Proposed Route.
- 3.1.5 In consideration of the principles outlined in the guidance document, the method of identifying a preferred route in this study has involved the following four key tasks:
- Identification of the baseline situation;
 - Identification of route options;
 - Appraisal of route options against a series of environmental, technical and cost considerations; and
 - Identification of a preferred route.
- 3.1.6 Desk-based studies were supplemented by preliminary walkover surveys by environmental and engineering specialists between December 2022 and February 2023. These walkover surveys obtained further site data and observations of localised constraints.

3.2 Corridor Selection

- 3.2.1 A Study Corridor was identified within which the identification and assessment of route options could be completed (see **Figure 1**). The Corridor was developed to encompass a range of feasible route options between the proposed PoC and the existing Foyers Switching Station.

3.3 Route Identification and Selection Methods

3.3.1 Two route options have thus been identified within the Study Corridor; each 1 km or more in width (see **Figure 2 and Plate 3.1**). Taking account of physical and development constraints, route widths have increased in places, up to approximately 2 km.

3.3.2 A route through Loch Ness for a sub-loch cable was initially considered as a potential route option during the early stages of the route selection process, which is why the Corridor (illustrated in **Figure 1**) extends across to the western shore of Loch Ness. However, a sub-loch cable was discounted as a feasible connection option by SSEN Transmission on technical grounds at an early stage of the route selection process, and has therefore not been included for further consideration as part of the route selection process. Further details on the technical constraints associated with a sub-loch cable are provided in Section 5.4 of this report.

3.3.3 In accordance with the steps outlined in the Holford Rules⁴ and SSEN Transmission's guidance 'Procedures for Routeing Overhead Lines and Underground Cables of 132 kV and above', the following principles have been taken into account, as far as is practicable at this routeing stage (and where relevant to the connection solution⁵) and will be considered in more detail during Stage 3 (Alignment Selection):

- Avoid if possible major areas of highest amenity value (including those covered by national and international designations and other sensitive landscapes);
- Avoid by deviation, smaller areas of high amenity value;
- Try to avoid sharp changes of direction and reduce the number of larger angle towers required;
- Avoid skylining the route in key views and where necessary, cross ridges obliquely where a dip in the ridge provides an opportunity;
- Target the route towards open valleys and woods where the scale of poles will be reduced and views broken by trees (avoid slicing through landscape types and try to keep to edges and landscape transitions);
- Consider the appearance of other lines in the landscape to avoid a dominating or confusing wirescape effect; and
- Approach urban areas through industrial zones and consider the use of undergrounding in residential and valued recreational areas.

3.4 Appraisal Method

3.4.1 Appraisal of route options has involved systematic consideration against the environmental, engineering and economic topic areas included in **Table 3.1**.

Table 3.1: Environmental, Engineering and Economic Topic Areas Considered

	Category	Sub-Topic
Environmental	Natural Heritage	Designations
		Protected Species
		Habitats
		Ornithology
		Geology, Hydrology and Hydrogeology
	Cultural Heritage	Designations
		Cultural Heritage Assets
	Landscape and Visual	Designations

⁴ Scottish Hydro Electric Transmission Limited (SHETL). (October 2004). The Holford Rules: Guidelines for the Routeing of New High Voltage Overhead Transmission Lines with NGC 1992 and SHETL 2003 Notes; Revision 1.01

⁵ Note that the Holford Rules were written predominantly for routeing OHLs, however there are aspects that also relate to the routeing of UGC's.

	Category	Sub-Topic
		Character
		Visual
	Land Use	Agriculture
		Forestry
		Recreation
	Planning	Policy
		Proposals
Engineering	Infrastructure Crossings	Major Crossings (132kV, 275kV, Rail, river, navigable canal, gas or hydro pipeline)
		Road Crossings
	Environmental Design	Elevation
		Atmospheric Pollution
		Contaminate Land
		Flooding
	Ground Conditions	Terrain
		Rock
		Peat
	Construction / Maintenance	Access
		Angle of Deviation
		Cable Haul Road
	Proximity	Clearance Distance
		Windfarms
		Communication masts
		Urban environments
		Metallic pipeline
	Design	Reactive Compensation
		Joint bays and Link Box chambers
Economic	Capital	Construction, Diversions, Public Road Improvements, Felling, Land Assembly, and Consents Mitigations
	Operational	Inspections and Maintenance

Red-Amber-Green (RAG) Rating

- 3.4.2 For route selection, a RAG rating has been applied to each topic area within each section, indicating potential constraint(s) to development. A high-level convention for assigning RAG ratings is shown in **Plate 3.1** below.

Plate 3.1: RAG Ratings

Performance	Comparative Appraisal
Most Preferred  Least Preferred	Low potential for the development to be constrained
	Intermediate potential for the development to be constrained
	High potential for the development to be constrained

Identification of Preferred Route

- 3.4.3 The overall objective throughout the appraisal of route options, has been to take full consideration of all environmental factors, to minimise any potential adverse impacts on the environment whilst also taking into account technical and cost considerations. Following review of route options, and appraisal of each against the environmental, engineering and cost topics noted in **Table 3.1**, a preferred route is identified.

4. BASELINE CONDITIONS

4.1 Introduction

- 4.1.1 This section provides a summary of the environmental and technical baseline conditions and constraints associated with the Study Corridor (hereafter referred to as 'the Corridor'), as illustrated in **Figure 1**. This section refers to **Figures 3 to 11** which display the various designations and environmental features discussed throughout this section

4.2 Local Context

- 4.2.1 The Corridor (illustrated on **Figure 1**) extends from just north of Loch Knockie, in the south, to near Inverfarigaig in the north, and encompasses Whitebridge, Foyers and part of the eastern shoreline of Loch Ness. The Corridor extends approximately 11 km in length and 5 km in width, at its widest points.
- 4.2.2 Within the Corridor, the largest settlement is the village of Foyers which has a variety of tourist attractions and facilities including hotels, cafes and the Loch Ness Shores camping and caravanning club.
- 4.2.3 The Corridor also includes the smaller settlements of Whitebridge, Easter Drummond and Easter Boleskin, as well as other individual properties scattered throughout the Corridor that branch off from the B862 (General Wades Military Road) from Fort Augustus to Inverness, and the B852 which runs along Loch Ness from Dores to Inverfarigaig.
- 4.2.4 The Corridor spans approximately 10 km southwest to northeast and approximately 5-6 km from west to east. It extends approximately 1 km into Loch Ness along its eastern shoreline and is partly bordered by Loch Mhor along its northeastern edge. The Corridor is largely shaped in its southwestern and northeastern extents by the PoC at the proposed Loch Kemp Storage Scheme and the connection into the existing Foyers Switching Station. Within the vicinity of the PSH scheme, the Corridor extends further to the south to take into account a particularly steep area comprising several peaks and small lochans including Meall na Targais and Lochan nan Nighean. Along its eastern border, the Corridor is constrained by steep topography and other peaks including Meall an Tarsaid, Beinn Sgurrach and Carn Gairbhthinn. The Corridor is also constrained on the east by Loch Mhor.
- 4.2.5 Land uses within the Corridor include commercial forestry, recreational routes, commercial highland sport activities, tourist attractions and facilities, and residential areas. The Corridor overlaps with Loch Ness and part of the Caledonian Canal, which are used for a variety of recreational purposes, including water sports such as sailing, canoeing and fishing.
- 4.2.6 Within the Corridor, electrical and hydro infrastructure is present in the form of OHL (transmission and distribution) and the Foyers Pumped Storage Scheme. In the wider area, other hydro and wind farm developments are present and visible within the landscape.

4.3 Environmental Designations

- 4.3.1 Within the Corridor, the following environmentally designated sites are present (see **Figure 3**):
- Ness Woods Special Area of Conservation (SAC) (site code: 8337); designated as one of the best examples of a ravine woodland in Scotland. Qualifying habitats of the SAC include Western oak acidic woodland (H91A0), which runs along much of the shoreline of Loch Ness, as well as habitats of upland wet heath (H4010), and upland dry heath (H4030). Qualifying species of the SAC include otter (*Lutra lutra*). Notable plant species within the SAC (and Annex 1 Habitat) comprise a canopy which is a mixture of alder (*Alnus glutinosa*), ash (*Fraxinus excelsior*), and wych elm (*Ulmus glabra*) with a locally abundant hazel (*Corylus avellana*) shrub layer. The ground flora is rich in ferns, mosses and

herbaceous plants, and the woods have a luxuriant epiphytic flora of lichens, liverworts, and mosses with Atlantic affinities. Further Annex I habitat present is old sessile oak woods with Ilex and Blechnum.

- Easter Ness Forest SSSI (site code 591) is a large area of broadleaved woodland covering an 11 km stretch of steep northwest facing slopes along the south side of Loch Ness. The notified features of the SSSI for which it is designated are upland oak woodland and upland mixed ash woodland. The SSSI shares the same boundary as part of the Ness Woods SAC. The site is unique in that it has varied geology and are both acidic and have lime-rich soil conditions present in the same location, leading to Moine Schists rock formations. Where acidic soil occurs, the ground flora consists of blaeberry (*Vaccinium myrtillus*), and wavy hairgrass (*Deschampsia flexuosa*) with bell heather (*Erica cinerea*) and cow-wheat (*Melampyrum pratense*). In locations where soils are more lime-rich, ground flora consists of false-brome (*Brachypodium sylvaticum*), dog's mercury (*Mercurialis perennis*), bugle (*Ajuga reptans*) and common valerian (*Valeriana officinalis*). On thin, rocky soil, with both lime-rich and acidic soils occurring in the same place, an unusual woodland with a mix of Scots pine, ash, aspen and oak has developed. The ground flora reflects this variation in conditions with juniper, holly and wood sage (*Teucrium scorodonia*), alongside dog's mercury, woodruff (*Galium odoratum*) and wild strawberry (*Fragaria vesca*) present.
- Loch Bran SSSI (site code 967) is a small irregular shaped shallow lochan, situated to the southeast of Loch Ness. Designated for its dragonfly assemblage; supporting eleven species. Loch Bran is also of local interest for supporting three nationally scarce crane fly and a summer diver bird population, including the Slavonian Grebe (*Podiceps Auritus*), which has been recorded at the site. The SSSI comprises conifer plantation subject to forest management operations, aiming to regenerate the loch to allow for mixed native broadleaves. The south and southwest side of the loch are dominated by broad-leaved woodland (birch and willow) which is not actively managed.
- Loch Knockie and nearby lochs Special Protected Area (SPA) (site code 8529) comprises a group of lochs at the southeast of the Great Glen within the Highland Region. The area supports an undisturbed aquatic plant community, which include extensive sedge beds, with lochs surrounded by mire, heath and mixed woodland/agricultural land. This area qualifies as an SPA due the presence of Slavonian grebe, as Annex 1 (European Important) species under the Birds Directive (1979):.
- Knockie Lochs SSSI (site code 880) is part of Loch Knockie and nearby lochs SPA, which consists of two deep lochs of moderate nutrient status, Loch Lann (23.5 ha) and Loch Knockie (68.5 ha). This site lies approximately 4 km south of Whitebridge, on the southeast side of the Great Glen. The lochs are surrounded by areas of broad-leaved woodland, conifer plantations and some improved grassland. Loch Knockie contains numerous small, wooded islands. The site is designated due to the breeding population of Slavonian Grebe. Both lochs contain extensive beds of emergent vegetation including long-stalked pondweed (*Potamogeton praelongus*). The sedge beds are dominated by bottle sedge (*Carex rostrata*) and slender sedge (*C. lasiocarpa*). These habitats provide nesting and brood-rearing areas for the birds.

4.3.2 In addition, the following environmentally designated sites are present within the wider area (see **Figure 3**):

- Inverfarigaig SSSI (site code 813) situated on the eastern shore of Loch Ness within Ness Woods SAC, to the North of the Corridor. The site is one of the best examples of gorge woodland in the Inverness-shire area. Designated for its mixed woodland habitat which sits on base-rich soils associated with rocky slopes, Western acidic oak woodland and the presence of otter.

- Within the Corridor (predominantly located on the banks of Loch Ness, there are several areas included on the AWI, defined as land that has been continually wooded, at least since 1750. Within the Corridor, there are woodlands included on the AWI classified as being of both plantation and semi-natural origin.

4.4 Natural Heritage

Protected Species

4.4.1 Based upon the presence of suitable habitats, qualifying features of nearby designated sites, desk-based studies, and the findings of ecological walkover surveys to inform this appraisal, the protected species likely to be present within the Corridor are described below:

- Site surveys undertaken in January 2023 indicate widespread signs of otter along the banks of Loch Ness and the surrounding area. Otters may also come inland from the loch and along the River Foyers, which also has potential to support beavers (*Castor fiber*). Otter is also a qualifying feature of the Ness Woods SAC and a notified feature of the Inverfarigaig SSSI.
- UK BAP⁶ species likely to utilise terrestrial habitats within the Corridor include pine marten (*Martes martes*) and red squirrel (*Sciurus vulgaris*), which have previously been recorded within the Corridor. Woodland habitats also have a high potential to support bat species and Scottish wildcat (*Felis silvestris silvestris*). Adder (*Vipera berus*) and common lizard (*Zootoca vivipara*) have previously been recorded in the open upland area. Hedgehog (*Erinaceus europaeus*), badger (*Meles meles*) and brown hare (*Lepus europaeus*) have previously been recorded in the lowland agricultural/residential areas.
- Loch Ness has potential for UK BAP aquatic species including Atlantic salmon (*Salmo salar*), trout species, lamprey species and European eel (*Anguilla anguilla*). Some smaller watercourses have the potential for water vole (*Arvicola amphibius*). Great crested newt (*Triturus cristatus*) has also previously been recorded in this area and could be present in smaller ponds and lochs within the Corridor. The River Foyers also has the potential for Atlantic salmon, trout species and lamprey species.

Habitats

- 4.4.2 Desk-based review of publicly available data, together with aerial imagery and data from a high-level walkover conducted in January 2023, was used to inform an understanding of habitats likely to be present within the Corridor (see **Figure 4**).
- 4.4.3 Ness Woods SAC and Easter Ness Forest SSSI are both partially located within the Corridor. Ness Woods SAC is composed of three areas of woodland running along the south of Loch Ness, containing a mix of woodland habitats and several water courses, which are noted as suitable for otters. Easter Ness Forest SSSI is situated within Ness Woods SAC and contains a wide range of woodland habitats. Both sites support the Annex 1 habitats discussed in paragraph 5.4.5.
- 4.4.4 The Corridor also comprises woodland recorded on the AWI, with a mix of native and PAWS woodland. There are also areas of conifer plantation and some semi-natural broadleaved woodland habitats surrounding Loch Bran. Some areas of plantation forestry are categorised as Long Established of Plantation Origin (LEPO) on the AWI.

⁶ Habitats and species identified as being most threatened and requiring conservation action under the UK Biodiversity Action Plan.

4.4.5 The following Annex 1 habitats (which are afforded greater protection through their inclusion in Annex 1 of the EU Habitats Directive 92/43/EEC) are likely to be present throughout the Corridor (particularly along the shoreline of Loch Ness, within Ness Woods SAC and Easter Ness Forest SSSI):

- H91A0 Western Oak Acidic Woodland;
- H4010 Northern Atlantic wet heaths with *Erica tetralix*; and
- H4030 Upland Dry Heath.

4.4.6 All waterbodies identified in the Corridor (see **Figure 4**, UK Habitat Classification r1a - Eutrophic Standing Water), could be categorised as Annex 1, subject to further assessment, including Loch Kemp, Loch Paiteag, Lochan Scristan, Lochan a' Choin Uire, Lochan Nan Nighean, Loch Bran, Loch Ruairidh and several other smaller lochan and ponds.

4.4.7 Annex I Habitat 91C0 Caledonian forest, is present out with the Corridor on the northwest banks of Loch Ness. Further assessment may reveal some presence of this habitat within the Corridor.

Peatlands

4.4.8 The carbon and peatland map 2016⁷ indicates that discrete areas of Class 1 and Class 2 peatland habitats are present within the Corridor, typically in the southern part (see **Figure 7**).

4.4.9 Class 1 and 2 peatlands are nationally important carbon-rich soils and are afforded protection within Policy 5 of National Planning Framework 4 (NPF4) (February 2023)⁸.

Ornithology

4.4.10 There are no designated sites for the protection of birds located within the Corridor. However, the Corridor is located approximately 0.5 km to the northeast of Loch Knockie and nearby lochs SPA, and Knockie Lochs SSSI (site code 880). Both sites are designated due to supporting a breeding population of Slavonian Grebe. The lochs that make up the group are surrounded by areas of broad-leaved woodland, conifer plantations and some improved grassland.

4.4.11 Extensive woodland habitat and areas of commercial forestry provide suitable habitat for nesting Schedule 1⁹ species such as Goshawk (*Accipiter gentilis*) and Crossbill (*Loxia spp.*), and could support species such as Spotted Flycatcher (*Muscicapa striata*), Mistle Thrush (*Turdus viscivorus*) and Tree Pipit (*Anthus trivialis*) (Red listed species of conservation concern), as well as Redstart (*Phoenicurus phoenicurus*), Willow Warbler (*Phylloscopus trochilus*), Wren (*Troglodytes troglodytes*), Song Thrush (*Turdus philomelos*) and Dunnock (*Prunella modularis*) (Amber listed species of conservation concern¹⁰). In addition, species such as Skylark (*Alauda arvensis*) and Starling (*Sturnus vulgaris*) (Red listed birds of conservation concern¹⁰) could use the agricultural and wooded (including commercial forestry) areas for breeding.

4.4.12 The open moorland habitats throughout the Corridor could support opportunities for breeding and foraging for Schedule 1 species⁹, including Merlin (*Falco Columbarius*) (also a Red listed species of conservation concern¹⁰), and Wheatear (*Oenanthe Oenanthe*) (also an Amber listed species of conservation concern). Black Grouse

⁷ Scottish Natural Heritage (2016) Carbon and Peatland Map. Available online: https://map.environment.gov.scot/soil_maps/

⁸ National Planning Framework 4 (February 2023) available online: <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf> [last accessed 12/08/2024]

⁹ Schedule 1 birds are a group of birds that are protected under the Wildlife & Countryside Act 1981

¹⁰ As listed on the UK Red List for birds. See Stanbury, A.J., Eaton, M.A., Aebischer, N.J., Balmer, D., Brown, A.F., Douse, A., Lindley, P., McCulloch, N., Noble, D.G. & Win, I 2021, Birds of Conservation Concern 5. British Birds Volume: 114. Available at: <https://britishbirds.co.uk/content/status-our-bird-populations>

(*Lyrurus tetrix*) (a Red listed species of conservation concern¹⁰) could also potentially use the open areas (adjacent to areas of woodland) for lekking.

- 4.4.13 There is the potential for Common Sandpiper (*Actitis Hypoleucos*) and Grey Wagtail (*Motacilla cinerea*) (Amber listed birds of conservation concern¹⁰) to be present along the eastern shoreline of Loch Ness.
- 4.4.14 Ornithological surveys undertaken for the proposed Loch Kemp Storage Scheme, recorded Golden Eagle (*Aquila chrysaetos*) flights around Meall na Targaid, approximately 1.5 km southeast of the Corridor. Kestrel (*Falco Tinnunculus*) and Red Kite (*Milvus milvus*) are also potentially present in the vicinity, and Osprey (*Pandion haliaetus*) may use Loch Kemp and Lochan an Chioin Uire as a feeding resource. No Red-throated Divers (*Gavia stellata*) or Black-throated Divers (*Gavia arctica*) were recorded on Loch Kemp, as part of these surveys.

Water and Soils Environment

- 4.4.15 The Corridor is located entirely within the Loch Ness surface water catchment, and comprises the River Fechlin, the Allt an Loin and the River Foyers (see **Figure 6**). The River Farigaig is located just outwith the Corridor.
- 4.4.16 The Scottish Environment Protection Agency (SEPA) floodplain mapping shows floodplains associated with the larger watercourses, with flood extents generally confined to the watercourse channels.
- 4.4.17 Review of SEPA records indicate that the Corridor is located within the Northern Highlands groundwater body (ID: 150701) in the southwestern extent of the Corridor, whilst the remainder of the Corridor is located within the Inverness groundwater body (ID: 150670). The Corridor also comprises the Loch Ness Drinking Water Protected Area (DWPA), which supplies the Invermoriston Water Treatment Works (WTW).
- 4.4.18 Superficial deposits within the Corridor mostly comprise psammities and igneous intrusions bedrock, progressing into superficial deposits of hummocky glacial deposits and lacustrine deposits to the east, with areas of peat to the west. Areas of peat are not considered to be extensive within the Corridor. With the exception of peat, neither the superficial or solid geology are rare, or considered of high value.

4.5 Cultural Heritage

- 4.5.1 Baseline information of known cultural heritage assets, recorded within the Corridor, was obtained from datasets curated by Historic Environment Scotland (HES) (Canmore) and the Highland Historic Environment Record (HER). **Figure 3** illustrates cultural heritage considerations.

Designated Cultural Heritage

- 4.5.2 There is one Scheduled Monument (SM) within the Corridor; Dell Farm, burial mounds 350 m NE of (SM 4536), a cemetery dated of first millennium AD. Other SMs are located outwith the Corridor, which include Dun Scriben Fort SM, 'Crusader' the remains of a speedboat in Loch Ness SM, Farraline Enclosure SM, and Dun Deardall Forts SM.
- 4.5.3 There are also a number of listed buildings within the Corridor, predominantly situated at Foyers Village, and to its north, including those associated with the Foyers Hydro Scheme.

Cultural Heritage Assets

- 4.5.4 The Highland HER contains details of a number of non-designated assets of archaeological and cultural heritage interest within the Corridor. These assets are discussed further in **Appendix 1** in relation to the appraisal of route options, and include townships, burial grounds, medieval / post medieval farmsteads and part of General Wade's Military Road.

4.6 Landscape Character and Visual Amenity

Protected and Designated Landscapes

- 4.6.1 Most of the Corridor is located within Loch Ness and Duntelchaig Special Landscape Area (SLA), as illustrated on **Figure 8**. Landscape value is considered to be generally medium throughout the SLA but may be locally high where the intimate diverse landscape elements of changing visual interest can be experienced on a local level or as an important backdrop for local communities.
- 4.6.2 There are no other designated or protected landscapes within the vicinity of the Corridor.

Landscape Character Types (LCTs)

- 4.6.3 The Landscape Character Assessment of Scotland, undertaken by NatureScot¹¹ identifies three Landscape Character Types (LCTs) within the Corridor, as illustrated on **Figure 9** and summarised in **Table 4.1** below:

Table 4.1: LCT Sensitivity

LCT	Summary	Sensitivity Rating
LCT 224: of Farmed and Wooded Foothills	The character in this LCT is strongly influenced by the nature and pattern of its conifer forests, which is evolving, due to continual restructuring. The single species of conifer forests which cover many of the lower slopes, create a simple pattern. The LCT character type comprises a ridge of low rocky hills which background the side of the Great Glen. To the south, this ridge encloses the Farmed Strath LCT. The complex underlying geology of metamorphosed sandstones and schists, with granite intrusions, gives rise to a landscape typified by low rocky hills, with a complex irregular landform of steep sided slopes. Small settlements are often associated with road junctions, and single farmsteads, or crofts in more isolated settings. Due to the terrain, buildings tend to be sited low in the landscape, often sheltering within undulations of the landform. These farmed landscapes include stone dykes and hedgerow field boundaries.	Low – Medium
LCT 225: Broad Steep Sided Glen	This LCT encompasses the Great Glen and Loch Ness, which combine to form the district's largest individual landscape feature. Conifer forests dominate large areas of the lower glen slopes, interspersed with small open areas of heather moorland, rough grassland and craggy outcrops while semi—natural woodlands frequently line the loch edges on both sides. Due to the prevailing topography, agricultural land use is restricted to intersections of side glens where the terrain becomes flatter and in some areas of gentler higher slopes. Likewise, settlements are located at glen-side intersections or local areas of gentler slopes. Most settlements have a concentrated core, and some are associated with a wider pattern of farmsteads and crofts. This is the case for Foyers settlement and outlying cluster groups and individual properties along the B852.	High
LCT 227 Farmed Strath – Inverness	This LCT occurs in two locations, encompassing both Strathnairn/Stratherrick and Strathglass, forming a linear to sinuous channel through the surrounding upland landscape. The straths are characterised by mainly open-farmed valley floors and a central meandering river contained within steep, rocky side slopes, mainly consisting of forestry and woodland. Both straths	Low

¹¹ Scottish Natural Heritage. (2019). Scottish Landscape Character Types Map and Descriptions [online] Available at: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions>

LCT	Summary	Sensitivity Rating
	differ in relationship to the surrounding landscape. Strathglass extends into a higher, well-defined glen towards the LCT of Rugged Massif – Inverness and Rocky Moorland Plateau – Inverness, which is further enclosed by the presence of extensive forests. Strathnairn gradually opens out to become a broad u-shaped strath, with shallow, gently undulating sides. The LCT area of Strathnairn consists of broadleaf woodlands, generally small in size, and occurring infrequently, with the predominant open character remaining. Small areas of over-grazed open birch woodland form patches in sheltered areas along the lower strath sides, with thin bands of scrubby trees occasionally lining rivers and field boundaries. Small blocks of conifer forest are scattered at intervals throughout the LCT. Land use is a mix of farming and forestry, with overhead electricity pylons aligned with the valley floor sides. Settlement within the LCT consists of estate buildings and farmsteads grouped together at the end of single-track roads, which are typically found at the base of the straths.	

Potential Visual Receptors

- 4.6.4 Settlement is mostly focused towards the south (around Whitebridge) and northeast of the Corridor around Foyers and Inverfarigaig, with other individual properties and small property clusters present within the Corridor.
- 4.6.5 Routes within the Corridor include the B852, which is single track in places and runs along the eastern shores of Loch Ness, affording views across the water. The B862, which runs from Inverness to Fort Augustus, also travels down the east side of Loch Ness but further inland from the B852. The full extent of the B852 and the southernmost section of the B862 within the Corridor, form part of National Cycle Route (NCR) 78. Short sections of the B852, the B862 as well as other minor roads within the Corridor, also form part of recreational routes such as the South Loch Ness Trail, (part of the Loch Ness 360)), the Trail of the Seven Lochs (e.g., near Torness) and several other Core Paths, as detailed in **Appendix 1**. The remaining sections of these recreational routes within the Corridor are formed of off-road paths. The A82 and the Great Glen Way run along the western side of the Loch Ness, although both are located outside the Corridor.

4.7 Land Use and Recreation

- 4.7.1 This section considers land use and recreation within the Corridor, specifically forestry, agriculture, recreational use and amenity. Forestry can be seen in **Figure 10**, and recreational amenities can be seen on **Figure 11**.

Forestry

- 4.7.2 Forestry is a common land use within the Corridor. The conifer woodlands include Native Caledonian Pinewood and PAWS. The northern part of the Corridor in particular, is highly wooded and includes parts of Farigaig Forest, which is managed within the National Forest Estate South Loch Ness Land Management Plan¹². The coniferous plantations throughout the Corridor include felled areas replanted or awaiting replanting or regeneration.
- 4.7.3 Native Woodland, defined as woodlands where the canopy cover is composed mainly of native species (i.e. over 50 %), and Nearly-native Woodland, defined as woodlands where the canopy is composed of 40%-50% native species, have been identified through review of the Native Woodland Survey of Scotland (NWSS), as illustrated on **Figure 10**. Native Woodlands within the Corridor, largely occur along the eastern shore of Loch

¹² Available [online] at: <https://forestryandland.gov.scot/what-we-do/planning/consultations/south-loch-ness-imp#:~:text=Through%20the%20new%20plan%20we,value%20is%20retained%20and%20enhanced> (last accessed 01/10/2024)

Ness, progressing along the banks of the River Fechlin. A few concentrated pockets of Nearly-native Woodland are located to the north and northeast of Foyers Village.

- 4.7.4 Ancient Woodland in the Corridor, defined as land that is currently wooded and has been continually wooded since at least 1750, has been identified on the AWI¹³. Areas of woodland listed on the AWI, within the Corridor, include those recorded as semi-natural woodland from maps of 1750 (1a) and 1860 (2a), as well as areas of LEPO 1860 (2b) and other woodlands on Roy maps.

Agriculture

- 4.7.5 Areas of agricultural land are classified by The Macaulay System of Land Capability for Agriculture¹⁴ which ranks land, based on its potential for productivity and cropping flexibility. There are seven classes in total, where Class 1 has the highest potential for agriculture, with Class 7 having the lowest.
- 4.7.6 The most common agricultural land use within the Corridor is 'Land Capable of Supporting Only Rough Grazing' (Classes 6.3, 6.2 and 6.1) on typically low value grazing land. Some land capable of producing a narrow range of crops (Class 4.1), is present within the vicinity of Foyers Village and to the southwest near Dell Estate. There are also some areas within the Corridor classed as 'Land Capable of Supporting Improved Grassland' (Classes 5.1, 5.2 and 5.3).

Recreation

- 4.7.7 Loch Ness is a popular centre for recreation with short and long-distance walking routes, mountain bike trails and water sports.
- 4.7.8 Within the Corridor, there are a number of recreational routes including the South Loch Ness Trail, which forms part of the Loch Ness 360 route, the Trail of the Seven Lochs, NCR 78 and a number of Core Paths.
- 4.7.9 Tourist facilities and attractions within the Corridor include hotels and holiday accommodation (situated in Foyers Village and Whitebridge), as well as the loch side caravan and campsite, the Falls of Foyers, and a tearoom and farm shop located at Glenlia Farm.

4.8 Planning

National Policy

- 4.8.1 NPF4 was published by the Scottish Government on 13th February 2023. NPF4 is a long-term strategy for Scotland and is the spatial expression of the Government's Economic Strategy¹⁵ and plans for development and investment in infrastructure.
- 4.8.2 The Proposed Development is identified in NPF4¹⁶ as a 'National Development' under National Development (ND) 3 Strategic Renewable Electricity Generation and Transmission Infrastructure' which recognises that "the electricity transmission grid will need substantial reinforcement including the addition of new infrastructure to connect and transmit the output from new on and offshore capacity." Furthermore, 'Pumped Hydro Storage', for which this Proposed Development would facilitate a connection to the grid, is also identified as National

¹³ NatureScot [online] available at: <https://www.nature.scot/doc/guide-understanding-scottish-ancient-woodland-inventory-awi> (last accessed 23/06/2023)

¹⁴ The Macaulay Land Use Research Institute, Craigiebuckler, Aberdeen; June 2010. Land Capability for Agriculture Available [online] at: https://www.hutton.ac.uk/sites/default/files/files/soils/lca_leaflet_hutton.pdf [Last Accessed 01/10/2024]

¹⁵ Scottish Government (2022). Scotland's National Strategy for Economic Transformation. Available [online] at: <https://www.gov.scot/collections/economy-strategy/> [Last Accessed 01/10/2024]

¹⁶ Scottish Government (2023), National Planning Framework 4. Available [online] at: <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf> [Last Accessed 01/10/2024]

Development under ND2 of NPF4. The Proposed Development, therefore, forms a vital element to deliver network and grid infrastructure required to deliver the Government's legally binding targets for net zero emissions and renewable energy electricity generation objectives.

Regional and Local Policy

- 4.8.3 The Scottish Development Plan system is comprised of Strategic Development Plans (SDPs) and Local Development Plans (LDPs). SDPs cover the four largest city regions and provide strategic policy direction on the management of land use and new development. LDPs cover all local authority areas and provide detailed and site-specific planning policy for an area, in accordance with the SDP, where applicable.
- 4.8.4 The current Development Plans for the area within the Corridor comprises the Highland-wide Local Development Plan¹⁷ (HwLDP) which was adopted in April 2012 and the Inner Moray Firth Local Development Plan (IMFLDP), adopted in July 2015. The IMFLDP is one of three LDPs in THC local authority area.
- 4.8.5 The HwLDP sets out both the broad strategic themes in its vision statement, as well as local planning matters.
- 4.8.6 The HwLDP notes that "additional electricity transmission and distribution infrastructure will need to be developed in Highland in order to realise the region's potential contribution to renewable electricity generation and serve local needs" (pg. 121). Policy 69 of the HwLDP details THC's policy on Electrical Transmission Infrastructure and states that the Council will support projects which do not have an unacceptable significant impact on the environment when considering their strategic significance. It also notes that in sensitive locations, mitigation should be considered as part of the preparation of proposals. The HwLDP contains policies regarding the protection of the natural and cultural heritage, residential amenity, flooding and other issues which are relevant for this Proposed Development.
- 4.8.7 The IMFLDP sets out a guide for development of the Inner Moray Firth area over a 20-year period from 2015 and includes information on both Whitebridge and Foyers within the Corridor, as well as the near-by settlement of Gorthleck. No areas in these settlements have been allocated for any particular use, such as housing or community and business, in the IMFLDP, but the plan does state that THC supports the delivery of the Stratherrick and Foyers Community Action Plan¹⁸. This action plan was finalised in late 2021 and establishes a shared vision for the area and sets out key priorities and planning issues, including the need to increase affordable housing, protect the environment and improve transport infrastructure.
- 4.8.8 The Emerging Highland-wide Local Development Plan (EHwLDP) Main Issues Report was consulted upon in September 2015; however, progress was halted in summer 2016 to allow the emerging area Local Plans to progress. In December 2017 the Scottish Government published a Planning Bill outlining potential changes to the Scottish planning system. This included possible changes to the content of Local Development Plans and how they are prepared, and a broadening of the issues covered by national policy. As such, THC postponed the review of the HwLDP until the implications of the Planning Bill were more clearly understood.
- 4.8.9 The Scottish Government published NPF4 in February 2023 and further details of new arrangements were released in May 2023 through in the Act for Development Plans. THC are now taking forward the review of the HwLDP and their three area LDPs, including the IMFLDP, by preparing a new, single Highland Local Development Plan, the first stage of which is evidence gathering.

¹⁷ The Highland Council (2012), Highland-wide Local Development Plan. Available [online] at:

https://www.highland.gov.uk/info/178/development_plans/199/highland-wide_local_development_plan [Last Accessed 01/10/2024]

¹⁸ Available at: <https://www.communityfuture.net/community-action-plan> [Last Accessed 07/08/2024]

Planning Proposals

- 4.8.10 The identification of planning proposals has been limited to those within or adjacent to the route options under consideration, rather than the full Corridor, as applications outwith the route options are not likely to be affected by a new UGC.
- 4.8.11 The Loch Kemp Storage Scheme itself, for which this Proposed Development is required to connect to the National Grid, is proposed on Kemp Estate. The proposals are for the construction and operation of an up to 600 MW pumped storage scheme, utilising Loch Kemp as the upper reservoir, and Loch Ness as the lower reservoir. A Section 36 application for this development was made to the Energy Consents Unit (ECU) of the Scottish Government in November 2023 (Planning Ref: ECU00003398). Consent for ground investigation works associated with the Loch Kemp Storage Scheme have also been consented (Planning Ref: 23/04565/PNO).
- 4.8.12 Similarly, a screening request (23/06064/SCRE) and a Proposal of Application Notice (PAN) (24/01379/PAN) have been submitted in relation to future plans to extend the existing Foyers Switching Station, where this Proposed Development would connect to the National Grid.
- 4.8.13 A request for a formal Scoping Opinion (Planning Ref: 24/02045/SCOP) has been submitted for another PSH scheme at Glen Earrach / Loch nam Breac Dearga, opposite Foyers village. This PSH scheme would also use Loch Ness as the lower reservoir. A Section 36 Application for the re-design of the proposed Dell 2 Wind Farm (Planning Ref: 24/00933/S36) has also been submitted. Part of the site boundary of this development is located just outside the southern extent of the Corridor.
- 4.8.14 Other relevant planning proposals identified either on the THC or ECU Planning Portals¹⁹ within the Corridor at routeing stage are limited to an application relating to the construction of three new holiday cabins in Foyers village (24/02353/FUL).

¹⁹ Based on Map Search of the Highland Council and the Scottish Government's Planning Portal. Excludes extensions or modifications to existing infrastructure, buildings or sites, as existing buildings would be avoided. Minor developments (e.g. construction of outbuildings within the grounds of an existing property) are also excluded, as it is anticipated such developments could be avoided through micro siting during the alignment stage and/or detailed design phase.

5. DESCRIPTION OF ROUTES

5.1.1 The route options appraised for the proposed connection are shown on **Figure 2** and are described in this section of this Report.

5.2 Route Option 1

5.2.1 Route Option 1 would involve routeing an UGC in a northeasterly direction for approximately 5 km from the proposed PoC at the Loch Kemp Pump Storage Scheme at Dell Farm to the existing Foyers Switching Station.

5.2.2 Travelling northeast from the PoC, Route Option 1 extends to approximately 2.5 km in width at its widest point. The route option would initially cross areas largely comprised of agricultural land, which additionally includes a church, burial ground and several properties, before crossing the South Loch Ness Trail. The route option would also initially cross other recreational routes and several watercourse crossings, until eventually meeting the public road to Foyers Village (B852). Popular amenities along this stretch of the B852 include a picnic area, the Foyers Falls power station (which comprises two Category B Listed Buildings) and a farm shop and café, as well as several properties.

5.2.3 To the east of the B852, Route Option 1 would largely run parallel to the minor road through Glean Liath (a back road between Foyers and Inverfargaig), which the South Loch Ness Trail also follows. Other woodland recreational routes, including the Trail of the Seven Lochs and a Core Path, transect Glean Liath within Route Option 1. The area to the east of the B852 is dominated by commercial forestry (largely managed by Forestry Land Scotland (FLS)) and other woodlands, although the route would also cross agricultural land at Glenlia Farm (on the approach to Foyers) and along the B862 near Bailebeag. The route excludes Loch Bran, which is designated as a Site of Special Scientific Interest (SSSI). The final stretch of Route Option 1 would progress in a northerly direction for approximately 2 km through an area of commercial forestry, before crossing the B852 between Foyers and Inverfargaig and connecting into the existing Foyers Switching Station.

5.3 Route Option 2

5.3.1 Route Option 2 would involve routeing an UGC in a northerly direction for approximately 5 km from the proposed PoC, to the existing Foyers Switching Station.

5.3.2 Route Option 2 extends to approximately 1 km in width at its widest point. For approximately 2 km to the north of the PoC, the route option would run approximately parallel to the River Fechlin / River Foyers and the South Loch Ness Trail, crossing areas of woodland, open moorland and agricultural land on Dell Estate. The Route Option would then enter an area of largely commercial woodland at Carn Dearg, which is managed by FLS and extends to the eastern slopes of Loch Ness. This woodland is listed on the Ancient Woodland Inventory (AWI) and contains areas of Plantations on Ancient Woodland Sites (PAWS), Native Woodland and Nearly Native Woodland. Due to the steep slopes along the Loch Ness shoreline, it is likely that extensive earthworks would be required to facilitate construction access and cable installation within this route option.

5.3.3 The route option would continue through the forestry for approximately 1 km in a northerly direction, crossing a Core Path, before approaching Foyers village. Amenities in this area include the Falls of Foyers, a campsite, hotels, cafes and shops, as well as properties and community facilities. The village contains a mixture of Category A, B and C Listed Buildings. As well as Foyers village, this section of Route Option 2 would likely cross both the River Foyers and the B852. To the north of Foyers village, Route Option 2 would follow the route of the B852 and the South Loch Ness Trail between Foyers and Inverfargaig, parallel to the eastern shore of Loch Ness, to approach the existing Foyers Switching Station. This section of the Route Option would largely pass through commercial forestry and woodland managed by FLS. The woodland along the Loch Ness shoreline is listed on the AWI and this section of the route would contain areas of PAWS, Native Woodland and

Nearly Native Woodland. There is also a cluster of six Category B Listed Buildings along the B852 to the south of the connection into the existing Foyers Switching Station, which would be located within Route Option 2.

5.4 Sub-Loch Cable Option

5.4.1 Given the technical constraints associated with a sub-loch cable through Loch Ness, SSEN engineers have discounted it as viable route option for this Proposed Development. The engineering justification for discounting a sub-loch cable is detailed below:

- Due to the steepness of the slope along the eastern shore of Loch Ness and the presence of the Ness Woods SAC between the proposed location of the PoC and the shoreline, where a cable would enter Loch Ness, the 275 kV cable would have to be routed down a tunnel / shaft associated with the powerhouse for the proposed Loch Kemp Storage Scheme on the shoreline of Loch Ness. This would introduce operational and maintenance complications which cannot be facilitated by SSEN Transmission;
- The subterranean gradient of Loch Ness is very steep and unlikely to be compatible with the requirements of a subsea cable landing position;
- Difficulties are anticipated in transporting a subsea cable laying vessel to Loch Ness; and
- Subsea cables voltages are generally 220 kV. The grid connection point at Foyers is 275 kV and so substantial alterations to Foyers Switching Station would be required to facilitate the connection.

6. COMPARATIVE APPRAISAL OF ROUTE OPTIONS

6.1 Introduction

- 6.1.1 This section provides a summary of the potential environmental, technical and economic effects identified for each route option following the topic areas shown in **Table 3.1**. Reference should also be made to **Figures 2 to 11** of the Environmental Route Options Report²⁰, which illustrate potential environmental baseline constraints identified under each topic.

6.2 Environmental Topic Areas

Natural Heritage

Designations

- 6.2.1 Both route options would avoid passing directly through the Ness Woods SAC and Easter Ness Forest SSSI (see **Figure 3**). Route Option 1 would also avoid passing directly through the Loch Bran SSSI as this designated site has been excluded from the Corridor to avoid direct effects upon it. Whilst direct effects would be avoided, the potential for indirect effects cannot be ruled out at this stage. Furthermore, both route option would also pass through woodland recorded on the AWI. Woodland areas within Route Option 1 are mostly dominated by non-native conifer plantation, although these areas are still listed on the AWI. Some areas of native woodland, which are listed on the AWI, are also present within Route Option 1 but it is anticipated these areas of woodland could be avoided. The woodland recorded on the AWI that would require felling within Route Option 2 is dominated by non-native conifer plantation. However, smaller areas of native woodland are also present within this route, which would likely be unavoidable.
- 6.2.2 Given the potential for indirect effects on designated sites, and the potential to compromise areas of woodland recorded on the AWI, an **Amber** rating has been applied to Route Option 1. As felling of woodland listed as native woodland on the AWI would likely be unavoidable within Route Option 2, a **Red** RAG rating has been applied to this route option.

Protected Species

- 6.2.3 Both route options pass through, to varying degrees, a mix of woodland and / or heathland habitats that could support protected species such as bat, pine marten and red squirrel, and would cross a number of watercourses that could support otter, beaver and water vole, as well as Atlantic salmon, trout and lamprey. The potential for constraint at this stage across Route Options 1 and 2 is comparable and both have been allocated a RAG rating of **Amber** for protected species. Minimising effects on habitats of importance to protected species will need to be considered during the alignment selection stage.

Habitats

- 6.2.4 Both route options would cross areas of Annex 1 habitats including upland wet heath (H4010) and upland dry heath (H4030). Several types of loch/ponds within both route options are categorised as Annex 1 waterbodies but it is anticipated that these areas could be avoided. No GWDTEs were detected within either of the route options during the overview survey, however GWDTEs tend to be small features only detected during detailed surveys and have potential to be present.
- 6.2.5 Although both route options pass over Annex 1 habitats of upland wet heath; H4010, and upland dry heath; H4030, it is considered that it would be more difficult to avoid these habitat types in Route Option 2 than Route

²⁰ Environmental Route Options Report – Achany Wind Farm Extension Grid Connection (October 2022)

Option 1. Route Option 1 has therefore been allocated an **Amber** rating and Route Option 2 has been allocated a **Red** rating.

Biodiversity

- 6.2.6 Both route options pass through habitats of varying distinctiveness (see **Figure 5**), as determined from the Biodiversity Site Optioneering Toolkit v1.1. Areas of ancient woodland and peatland habitat are designated as Very High distinctiveness, while areas of acid flush, dry dwarf shrub heath, wet dwarf shrub heath, wet modified bog, dry modified bog, swamp and semi-natural woodland are of high distinctiveness. The biodiversity units (BU) and BU / Ha of each option are as set out in **Table 6.1**. **Appendix 1** shows the full Route Optioneering Biodiversity Net Gain (BNG) Report. Note the 'Biodiversity' topic falls within the wider 'Habitats' category in the RAG assessment, as presented in **Appendix 1** and summarised in **Table 6.2**.

Table 6.1: Route Options Biodiversity Scores

Option	Biodiversity Units (BU)	BU per Hectare (BU / Ha)
Route Option 1	8105	6.7
Route Option 2	4039	6.66

- 6.2.7 Route Options 1 is primarily comprised of non-native coniferous woodland. Western oak acidic woodland, upland wet heath and dry heath within this route option are all designated as Annex 1 protected habitats. Western oak acidic woodland, upland wet heath and dry heath, neutral grassland, natural lakes and ponds and upland acid grassland are all classified as habitats of high distinctiveness, with high value in terms of Biodiversity Units within the Biodiversity Net Gain SSEN Transmission Metric. It is anticipated that impacts on some high distinctiveness habitats could be avoided or minimised for this route option, however some impact, particularly to high distinctiveness grassland habitats would be unavoidable. This route option would not be able to achieve No Net Loss of biodiversity without implementation of appropriate mitigation and compensation. Potential impacts within this route could be minimised by avoiding Annex 1 habitats and areas of high distinctiveness.
- 6.2.8 Route Option 2 contains upland wet heath and dry heath, both Annex 1 protected habitats. Upland wet heath and dry heath, neutral grassland, natural lakes and ponds and upland acid grassland, are also classified as habitats of high distinctiveness, with high value in terms of BU within the BNG SSEN Transmission Metric. It is anticipated that impacts on some Annex 1 and high distinctiveness habitats could be avoided or minimised for this route option, however some impact, particularly to Annex 1 heath and to high distinctiveness grassland habitats will be unavoidable. The Proposed Development would not be able to achieve No Net Loss of biodiversity without implementation of appropriate mitigation and compensation, mitigation and compensation. Potential impacts within this route could be minimised by avoiding Annex 1 habitats and areas of high distinctiveness.
- 6.2.9 Although both route options pass over Annex 1 habitats and habitats of High distinctiveness, it is considered that it would be more difficult to avoid these habitat classifications in Route Option 2 than Route Option 1. Route Option 1 has therefore been allocated an **Amber** rating and Route Option 2 has been allocated a **Red** rating.

Ornithology

- 6.2.10 Woodland habitats crossed by all route options could provide opportunities for nesting Schedule 1 species such as Goshawk and Crossbill, as well as several woodland species such as Willow Warbler, Wren, Song Thrush, Dunnock etc (Amber listed species of conservation concern) could use the wooded areas for breeding. Species such as Mistle Thrush Skylark and Starling (Red listed birds of conservation concern) could also use the agricultural (and wooded) areas for breeding.

- 6.2.11 There is therefore potential for disturbance to and loss of suitable habitat for Schedule 1 species and birds of conservation concern. As such, both route options have been allocated a RAG rating of **Amber** for ornithology.

Geology, Hydrology and Hydrogeology

- 6.2.12 Priority peatland mapping highlights that both Route Options would pass through discrete areas of Class 1 peatlands (see **Figure 7**). The presence of peat is not considered to be a significant development constraint as these areas can largely be avoided and micro-siting can be used to mitigate potential effects.
- 6.2.13 Both route options intersect with the Loch Ness DWPA to some extent (see **Figure 6**), and appropriate mitigation measures would be required to minimise impacts. Watercourse crossings would be necessary for both route options, and any permanent structures would need to be set back from the watercourse channel to protect against exposure from natural processes leading to watercourse meandering and migration.
- 6.2.14 SEPA floodplain mapping shows floodplains associated with the larger watercourses, with flood extents generally confined to the watercourse channels. Wider flood extents are noted along the banks of the River Foyers and the Allt Chearc (a tributary of the River Farigaig) within Route Option 1 and along the shores of Loch Ness and banks of the River Foyers within Route Option 2. Potential for flood risk during the construction stage and the siting of construction related infrastructure would need to be given appropriate consideration for both route options.
- 6.2.15 Both route options have been allocated a RAG rating of **Amber** for Geology, Hydrology and Hydrogeology.

Cultural Heritage

Cultural Heritage Designations

- 6.2.16 Cultural Heritage Designations are generally limited to listed buildings in both Route Options, with the exception of Dell Farm, burial mounds 350m NE of (SM 4536) at Whitebridge (MHG 2637) (see **Figure 3**). It is anticipated that all designated cultural heritage sites would be avoided through design during the alignment selection stage. A **Green** RAG rating has therefore been applied to all route options.

Cultural Heritage Assets

- 6.2.17 There are 50 non-designated heritage assets that lie wholly or partly within Route Option 1, including an area of pre-historic settlement, hut circles, townships and medieval/post medieval farmsteads (see **Figure 3**). Most assets are considered readily avoidable through design but given the presence and distribution of a number of assets within this route option, an **Amber** RAG rating has been applied.
- 6.2.18 There are 19 non-designated heritage assets that lie wholly or partly within Route Option 2, including a former farmstead, a cemetery and burial ground and a collection of buildings in and around Foyers village. Most assets are considered readily avoidable through design and therefore a **Green** RAG rating is applied.

Landscape and Visual

Designations

- 6.2.19 Both Route Options would be located in and pass through the Loch Ness and Duntelchaig SLA (see **Figure 8**). Route Option 2 has the potential to result in a degree of localised change in the landscape given the potential felling and ground disturbance requirements associated with this route given the steep slopes, topography and woodland cover which could affect a small proportion of the SLA, and as such an **Amber** RAG rating has been applied to Route Option 2. Whilst some disturbance would also be experienced with Route Option 1, this would be to a lesser extent, and therefore a **Green** RAG rating is applied for this option.

Landscape Character

- 6.2.20 Route Option 1 would be situated within LCT 224: Farmed and Wooded Foothills, LCT 227: Farmed Strath – Inverness (majority) and LCT 225: Broad Sided Steep Glen (see **Figure 9**). These LCTs generally provide good opportunity to route linear features, although there would be temporary disturbance during the construction stage, and the operational corridor may be noticeable passing through woodland, resulting in some localised changes. However, it is not considered that this would affect the key landscape characteristics. There would be some adverse effects during construction, and potential for an operational corridor through areas of woodland and plantation, depending on alignment chosen. An overall **Green** RAG rating has been applied to Route Option 1 for landscape character.
- 6.2.21 The southern extent of Route Option 2 would pass through the transition between LCT 227: Farmed Strath – Inverness and LCT 224: Farmed and Wooded Foothills (see **Figure 9**). The northwestern end of the route would pass through LCT 225: Broad Steep Sided Glen, which encompasses the Great Glen and Loch Ness, which combine to form the district's largest individual landscape feature (see **Figure 9**). While the presence of the existing Foyers Switching Station and the associated OHLs are noticeable and reduce sensitivity within this part of the route, the steep slopes leading down to Loch Ness are generally more sensitive. Felling on the hill slope above the loch may be noticeable in important views along and across the glen. This has the potential to result in temporary disturbance during the construction stage, and the OC may be noticeable passing through woodland, resulting in some localised changes. Overall, it is not considered that this would affect the key landscape characteristics in the long term. Given the steep slopes and woodland felling requirements for Route Option 2, the effects on landscape character during both the construction and operational period could be quite noticeable, albeit over a small part of the LCTs. As such, an **Amber** RAG rating has been applied.

Visual

- 6.2.22 Visual receptors within Route Option 1 include a small number of individual properties and small property clusters within Stratherrick and on the outskirts of Foyers, the B852 and B862, NCR 78 and other recreational routes such as the South Loch Ness Trail (see **Figure 8**). Whilst there would be some disruption to visual receptors during construction as a result of tree felling and cable works, it is not considered that there would be any significant long term impact on visual receptors. A **Green** RAG rating has been applied to Route Option 1.
- 6.2.23 For Route Option 2, visual receptors include the B852, the settlement of Foyers, NCR 78 and other recreational routes such as the South Loch Ness Trail (see **Figure 8**). Other receptors include views from Loch Ness, as well as the A82 and Great Glen Way along the western shore of the loch. Given the steep slopes and woodland felling requirements, particularly in the southwestern part of this route option, the visual effects during both construction and operation could be quite noticeable, albeit within a localised area. As such, an **Amber** RAG rating has been applied.

Land Use

Agriculture

- 6.2.24 Based on the Macaulay System of Land Capability for Agriculture, both route options would mainly pass through land suited for rough grazing, which generally provides grazing of low value or moderate value, with some small, scattered areas of land capable of producing a narrow range of crops. However, large expanses within both route options are dominated by commercial forestry and other woodlands and are therefore not available for agriculture use. The PoC on Dell Estate is situated near Dell Farm, adjacent to fields that are used primarily for livestock (sheep) grazing. Construction of the PoC would have some potential to disrupt the use of these fields for both route options. However, these impacts would temporary and localised.

Neither of these route options are likely to impact any areas of highly productive agricultural land. A **Green** RAG rating is therefore applied to both route options.

Forestry

- 6.2.25 The central and northern parts of Route Option 1 comprise broadleaved woodland and areas of commercial plantation. Within these woodlands, the dominant categories of AWI are LEP1860 and ASNO 1860 with some small components of Other (on Roy maps). There is also a very small area of semi-natural woodland listed on the AWI as ASNO 1750 in the northwestern periphery of the route. The northern part of the route in particular is heavily wooded and includes parts of Farigaig Forest. The large coniferous plantations include felled areas replanted or awaiting replanting or regeneration. Felling would be required for this route option, although some opportunities exist to reduce impacts on commercial plantations and AWI woodland. As such, an **Amber** RAG rating has been applied to this route option.
- 6.2.26 Within Route Option 2, several broadleaved woodland blocks are present, including along the access to the Foyers cemetery. Much of this is also designated within the AWI as being of semi-natural origin, ASNO 1750 with some areas designated as LEPO at the northern end and southeast of Foyers. The NWSS lists the conifer plantations as PAWS (see **Figure 10**). Other NWSS includes upland birchwood, upland oakwood, native pinewood and nearly native woodland. Given the likely felling requirements through both conifer plantation and areas of AWI, a **Red** RAG rating has been applied to this route option.

Recreation

- 6.2.27 Route Option 1 would pass near to or cross a number of Core Paths, the South Loch Ness Trail, which forms part of the Loch Ness 360 route and the Trail of the Seven Lochs (see **Figure 11**). Associated construction works may have indirect influence on visual amenity of these recreational routes. Other attractions within this route option that may experience indirect effects as a result of construction, including tree felling, include a tearoom and farm shop located at Glenlia Farm and a picnic area located along the banks of the River Foyers. However, it is not considered that there would be any significant long-term impact on the visual amenity of recreational receptors. Where crossings of recreational routes are required within Route Option 1, no long-term effects are anticipated. A **Green** RAG rating has been applied to this route option.
- 6.2.28 Route Option 2 would pass near to and cross a number of Core Paths around Foyers village, as well as the South Loch Ness Trail which forms part of the Loch Ness 360 route (see **Figure 11**). Other sensitive recreational receptors include Loch Ness and Great Glen Way along its western shore. Where crossings are required within Route Option 2, no long-term effects are anticipated. However, given the steep slopes and woodland felling that would be required within this route option, effects on visual amenity of recreational receptors during both the construction and operational period could be quite noticeable, albeit over a localised area. Additionally, of the two route options, it is considered that it would be easier to minimise disruption to users of recreational routes within Route Option 1, as they are less condensed than compared to Route Option 2, particularly around Foyers village. As such, an **Amber** RAG rating has been applied to Route Option 2.

Planning Context

Policy

- 6.2.29 Adherence to national, regional and local planning policy will in large part depend on avoiding or minimising potential constraints noted, particularly in relation to potential impacts on the natural environment given the presence of designated sites and areas of landscape importance. Relevant policies within National Planning Framework 4 (NPF4) include Policy 3: Biodiversity, Policy 4: Natural Places; Policy 5: Soils; Policy 6: Forestry, Woodland, and Trees; and Policy 7: Historic Assets and Places.

6.2.30 Route Option 1 has been allocated an **Amber** RAG rating given the potential for constraint in some topic areas, particularly in relation to potential loss of woodland. It should be noted that whilst Route Option 1 does contain woodland listed in the AWI as ASNO 1860, this woodland did not exist in 1750 and therefore would not be considered to be truly ancient under Policy 6 of NPF4.

6.2.31 Route Option 2 would encounter considerable policy challenges. Despite this Proposed Development being identified in NPF4 as a ND under ND3 'Strategic Renewable Electricity Generation and Transmission Infrastructure', as routeing a cable through areas of woodland listed on the AWI and Annex 1 habitats could cause conflict with different NPF4 policies. A **Red** RAG rating has therefore been allocated to Route Option 2.

Proposals

6.2.32 There are few proposals within the route options that would be likely to pose a constraint to the Proposed Development. The Application for the Loch Kemp Storage Scheme was submitted in November 2023 (Planning Ref: ECU00003398) and there is a screening request submitted ahead of a future application to extend the existing Foyers Switching Station (23/06064/SCRE). However, as these projects are both related works to the Proposed Development, they would not pose a development constraint. As such, a **Green** RAG rating has been allocated to both route options.

6.3 Engineering Topic Areas

Infrastructure Crossings

Major Crossings

6.3.1 Major water crossings can increase the likelihood that complex installation methods, such as horizontal directional drilling (HDD) are required to facilitate construction. Therefore, it is advantageous to avoid multiple major water crossings if possible. Route Option 1 has been assigned a **Red** rating on the RAG assessment, as the route includes three water crossings. Route Option 2 has been assigned an **Amber** rating on the assessment as it contains only one major water crossing.

6.3.2 Minor water crossings can present construction challenges as well and may require bespoke designs to be produced. They do however usually have the potential to be crossed using simpler open cut techniques. The number of minor water crossings have therefore been considered. Route Option 1 has been assigned a **Red** rating due to 12 minor water crossings being required. Route Option 2 contains seven minor watercourse crossings and so has been assigned an **Amber** rating.

Road Crossings

6.3.3 Both route options would cross the B852. Additionally, Route Option 1 would cross two small roads and Route Option 2 would cross three roads in the village of Foyers. Therefore, Route Option 1 has been assigned a **Green** RAG rating and Route Option 2 has been assigned an **Amber** RAG rating.

Environmental Design

Elevation

6.3.4 Both route options include greater than 25% of the route above 200 m AOD and therefore have been assigned a **Red** RAG rating.

Atmospheric Pollution

6.3.5 As both of the route options are more than 3 km from the coast, they have been assigned a **Green** RAG rating.

Contaminated Land

- 6.3.6 As neither of the route options are located within contaminated land, both have been assigned a **Green** RAG rating.

Flooding

- 6.3.7 There are three types of flooding which must be considered; coastal, surface and river. Potential for flood risk has been based on SEPA publicly available data to determine if less than 2% of the length of any route options was found to be within the 1:200 year flood zone.²¹

- 6.3.8 Route Option 1 would cross River Fechlin however, the desk-based review of SEPA flood maps indicated that flood extents are generally confined to the watercourse channels and immediate boundaries. Route Option 2 would have to cross the River Foyers around Foyers, and although the route runs parallel with the shoreline of Loch Ness, a likely alignment within this route would be far enough from shoreline such that SEPA flood map areas of concern are not overlapping. Therefore, a **Green** RAG rating has been allocated to each route option.

Ground Conditions

Terrain

- 6.3.9 Unfavourable terrain can lead to many design and construction related challenges for new UGC builds. Steep slopes, mountainous terrain and / or cliffs create difficult challenges for UGC and it is therefore preferred to limit construction in this terrain where possible.

- 6.3.10 Both route options contain significant slopes, with a maximum slope of greater than 20%. Consequently, both route options are considered to be similarly constrained by slope and gradients and therefore assigned a **Red** RAG rating.

Rock

- 6.3.11 Both proposed route options have areas of shallow rock/no superficial deposits due to the width of the routes. Areas of shallow rock would be confirmed through ground investigation and micro siting would be used to avoid any problematic areas. Therefore, both route options have been assigned an **Amber** RAG rating.

Peat

- 6.3.12 Construction in areas of peat can pose engineering challenges during both the design and construction stages of an UGC build. In addition, construction in areas of peat can lead to increased construction and maintenance costs and therefore, should be reduced or avoided where possible. The exact extents of the lengths and depth of the peat will be determined through the ground investigation works. At this stage, **Green** RAG ratings have been applied to each route option.

Construction / Maintenance

Access

- 6.3.13 Access shall be required to certain joint bay and link box/pillars along the UGC circuit over the lifetime of its operation. As there are limited existing tracks which can be used, an **Amber** RAG rating has been applied to both route options.

Angles of Deviation

- 6.3.14 Multiple angles of deviation introduced into an UGC route can create issues during installation and may not represent the most efficient routing solution due to increases in length. However, it is assumed that angles of

²¹ Scottish Environmental Protection Agency. *SEPA Flood Maps* [online] Available at: <http://map.sepa.org.uk/floodmap/map.htm>

deviation would be of little impact on the cable system, providing that the mechanical limits of the cable are respected during installation and operation, and that the introduction of angles of deviation doesn't result in substantially increased cable route lengths.

- 6.3.15 An **Amber** RAG rating has been assigned to both route options due to the likelihood that some deviations would be required.

Cable Haul Road

- 6.3.16 A temporary haul road would be required to facilitate the construction and installation of the UGC. The complexity of the haul road construction would depend on the ground conditions.

- 6.3.17 More information on the ground investigation would be available following ground investigation works, however based on the desktop study, both route options have been assigned an **Amber** RAG rating.

Proximity

Clearance Distance

- 6.3.18 The clearance distance assessment is considered similar for both options. On this basis, a **Green** RAG rating has been awarded to both route options.

Windfarms

- 6.3.19 The clearance distance assessment from windfarms is the same for both route options. Given that the proximity to the nearest windfarm is greater than 500 m, a **Green** RAG rating has been assigned to both route options.

Communication Masts

- 6.3.20 The clearance distance assessment from existing communication masts is similar for both route options. On this basis, a **Green** RAG rating has been assigned to both route options.

Urban Environments

- 6.3.21 Given the rural environment that Route Option 1 traverses, it has been given a **Green** RAG rating. Route Option 2, which is partially routed through Foyers village, has been assigned an **Amber** RAG rating.

Metallic Pipelines

- 6.3.22 UGCs laid in close proximity to metallic pipes can lead to induction on the metallic pipe. Additionally, cathodic protection can be required on the metallic pipe. Although the depth of installation of the metallic intake pipe feeding Foyers Hydro Station from Loch Mhor is such that it is unlikely to create an interface issue with the proposed routes, both route options may result in interface issues. An **Amber** RAG rating has therefore been assigned to both route options on a precautionary basis.

Design

Reactive Compensation

- 6.3.23 A study to determine the requirement for reactive compensation cannot be concluded until the UGC design is further progressed. However, given that circuit length is a key component in calculating the requirement for reactive compensation and given that Route Options 1 and 2 are relatively long circuits, an **Amber** RAG rating has been assigned to each option.

Joint Bays and Link Box Chambers

6.3.24 Future access to joint bays and link box pillars is required as part of the ongoing maintenance of the circuit once energised. Given that there will be restrictions on joint bay and link box placement due to the potential requirement of HDDs on each route option, an **Amber** RAG rating has been applied to both route options.

6.4 Cost Topic Areas

6.4.1 Costs were not assessed in detail as part of this route selection process however a high-level summary is included below. These would be considered in more detail at the alignment stage when the technical and engineering specifications required for the development become clearer.

6.4.2 From an economic perspective, both route options cover a similar distance between the proposed Loch Kemp Storage Switching Station and the Foyers Switching Station. However, Route Option 1 likely takes the most cost-effective route, by potentially avoiding environmental areas of interest, larger areas of settlement and less challenging terrain. Route Option 2 is a more direct route, however the terrain along the side of the loch would be very challenging to install a cable and subsequently, it is considered would cost more than Route Option 1. This difference is however generally not considered significant enough, other than for tree felling, to see a difference in RAG ratings between the two route options considered.

6.4.3 Route Option 1 would likely allow easier access to the cable installation from various points off the public road (B852 and other local classified roads). This would reduce the requirement for access tracks to be constructed during the construction phase, ultimately reducing the cost. It is anticipated that a greater volume of tree felling would be required for Route Option 2 and as such the cost for this option would be greater.

6.4.4 Overall, it is considered Route Option 1 is likely to present the lower cost option.

6.4.5 The cost appraisal RAG summary is provided in **Table 6.2**

6.5 Comparative Analysis Summary

6.5.1 **Table 6.2** provides a summary of the environmental, engineering and cost appraisal RAG ratings for the route options considered.

Table 6.2: RAG Ratings

	Category	Sub-Topic	Route Option 1 Rating	Route Option 2 Rating
Environmental	Natural Heritage	Designations		
		Protected Species		
		Habitats		
		Ornithology		
		Geology, Hydrology and Hydrogeology		
	Cultural Heritage	Designations		
		Cultural Heritage Assets		
	Landscape and Visual	Designations		
		Character		
		Visual		
	Land Use	Agriculture		
		Forestry		
		Recreation		
	Planning	Policy		
		Proposals		

	Category	Sub-Topic	Route Option 1 Rating	Route Option 2 Rating
Engineering	Infrastructure Crossings	Major Crossings (132kV, 275kV, 400 kV, HVDC, rail, bridges, rivers, canals, oil and gas pipelines or hydro pipeline)		
		Road Crossings		
	Environmental Design	Elevation		
		Atmospheric Pollution		
		Contaminated Land		
		Flooding		
	Ground Conditions	Terrain		
		Rock		
		Peat		
	Construction and Maintenance	Access		
		Angles of Deviation		
		Cable Haul Road		
	Proximity	Clearance Distance		
		Windfarms		
		Communication masts		
		Urban environments		
		Metallic pipelines		
	Design	Reactive Compensation		
		Joint bays and Link Box Chambers		
Cost	Capital	Construction		
		Diversions		
		Public Road Improvements		
		Felling		
		Land Assembly		
		Consent Mitigations		
	Operational	Inspections		
		Maintenance		

6.6 Preferred Route

- 6.6.1 Following consideration of both engineering and engineering appraisal, it is considered that Route Option 1 should be taken forward for consultation as the preferred route (see **Figure 12**). Due to numerous environmental and engineering constraints, Route Option 2 should be discounted from the process and not progressed as a viable route option.

7. CONSULTATION ON THE PROPOSALS

7.1 Consultation

- 7.1.1 SSEN Transmission places great importance on, and is committed to, consultation and engagement with all parties, or stakeholders, likely to have an interest in proposals for new projects such as this. Stakeholder consultation and engagement is an essential part of an effective development process.

7.2 Questions for Consideration by Consultees

- 7.2.1 When providing your comments and feedback, SSEN Transmission would be grateful for your consideration of the questions below:
- Has the need for the project been clearly explained?
 - Have we explained the approach taken to select the preferred route adequately?
 - Are there any other factors, or environmental features, that you consider may have been overlooked during the preferred route selection process?
 - Do you feel, on balance, that the preferred route selected is the most appropriate for further consideration at the alignment selection stage?

7.3 Next Steps

- 7.3.1 Consultation will be undertaken as detailed in the preface of this document. The responses received from consultation, and those sought from statutory consultees and other key stakeholders, will inform further consideration of route options prior to identification of a proposed route to take forward to the next stage in the routing process (alignment selection).
- 7.3.2 All comments are requested by **7 March 2025**. Following consultation and a review of consultation responses, a Report on Consultation will be produced which will document the consultations received, and the decisions made in light of these responses to inform the selection of a preferred alignment.
- 7.3.3 Following the identification and confirmation of a proposed route, further technical and environmental surveys (e.g. Phase 1 Habitat / NVC surveys, protected species surveys and further input by landscape, ecology, cultural heritage and hydrology specialists) would be undertaken to identify a preferred alignment.

FIGURES

APPENDIX 1: ENVIRONMENTAL APPRAISAL OF ROUTE OPTIONS (RAG ASSESSMENT)

Appendix 1 – Environmental Appraisal of Route Options (RAG Assessment)

Route Option 1

Description:		
Route Option 1 would involve routeing an underground cable (UGC) in a northeasterly direction from the proposed point of connection (PoC) for Loch Kemp Pump Storage Scheme at Dell Farm to the existing Foyers Switching Station, across a mix of open moorland, agricultural land, woodland and forestry. The UGC would require a construction corridor of approximately 40 m in width to facilitate its construction. Once installed, an Operational Corridor of approximately 30 m would be required along the length of the cable route. For approximately 1-2.5 km to the northeast of the PoC, the route option would cross areas of woodland, open moorland and agricultural land on Dell Estate before crossing the South Loch Ness Trail, the River Foyers and the public road to Foyers Village (B852). Amenities along this stretch of the B852 include a picnic area, the Foyers Falls power station (which comprises two Category B Listed Buildings) and a farm shop and café, as well as several properties. The route option would also extend approximately 1.5 km east of the PoC, crossing the B862, the River Fechlin and the River Gourag to the north of Whitebridge. This area is largely comprised of agricultural land and includes a church, burial ground and several properties. To the east of the B852, Route Option 1 would largely run parallel to the minor road through Glean Liath (a back road between Foyers and Inverfargaig), which the South Loch Ness Trail also follows. Other woodland recreational routes, including the Trail of the Seven Lochs and a Core Path, transect Glean Liath within Route Option 1. The area to the east of the B852 is dominated by commercial forestry (largely managed by FLS) and other woodlands, although the route would also cross agricultural land at Glenlia Farm (on the approach to Foyers) and along the B862 near Bailebeag. The route excludes Loch Bran, which is designated as a Site of Special Scientific Interest (SSSI). The final stretch of Route Option 1 would progress in a northerly direction for approximately 2 km through an area of commercial forestry, before crossing the B852 between Foyers and Inverfargaig and connecting into the existing Foyers Switching Station.		
Review of Environmental Constraints:		
Natural Heritage		
Topics	Potential Constraints	RAG Rating
Designations	<u>International, European or National Designations</u> This route option would commence from the proposed PoC, which lies approximately 1 km east of the most northerly extent of the Ness Woods Special Area of Conservation (SAC) and Easter Ness Forest SSSI. Ness Woods SAC (site code: 8337) is noted as one of the best examples of a ravine woodland in Scotland. Qualifying habitats of the SAC include Western acidic oak woodland H91A0, which runs along much of the shoreline of Loch Ness, as well as habitats of upland wet heath; H4010, and upland dry heath; H4030. Qualifying species of the SAC include otter. Easter Ness Forest SSSI (site code 591) covers the same area as Ness Woods SAC, with notified features being upland mixed ash woodland and upland oak woodland. A smaller area of the Ness Woods SAC is also located approximately 1.5 km northeast of the PoC at the existing Foyers Switching Station. Inverfargaig SSSI (site code 813) covers the same area as this part of the Ness Woods SAC, with notified features being upland mixed ash woodland. No direct impacts on these designated sites are anticipated. The PoC is also located approximately 2 km northeast of the Loch Knockie and nearby Lochs Special Protection Area (SPA) (site code 8529) / Knockie Lochs SSSI (site code 880). These are a group of lochs including Loch Knockie and Loch nan Lann which are designated for breeding Slavonian grebe (<i>Podiceps auritus</i>), a species red listed on the UK Birds of Conservation Concern and listed on Annex 1 of the Wildlife and Countryside Act. No direct or indirect impacts on the qualifying feature of this designated site are anticipated.	 A

	The route option would also pass within the vicinity of Loch Bran SSSI (site code 967), a small irregular shaped shallow lochan, situated to the south-east of Loch Ness. Designated as a splendid example of a good dragonfly <i>Anisoptera</i> site, which is a nationally scarce species. Loch Bran is also of local interest for supporting three nationally scarce crane fly and a diver summer bird population, including the Slovenian Grebe, which has also been recorded at the site. This designated site has been excluded from the route option to ensure no direct effects on this SSSI would occur. Potential for indirect effects cannot be ruled out for these sites, but it is anticipated that such effects could be mitigated through the implementation of best practice construction and pollution prevention measures. <u>Regional or Local Designations</u> No regional or local designations are present along this route. <u>Ancient Woodland</u> There are areas of ancient woodland recorded on the AWI along this route. Woodland areas within Route Option 1 are mostly dominated by non-native conifer plantation, although these areas are still listed on the AWI. Some areas of native woodland, which are listed on the AWI, are also present within the route. See Forestry Section below for more details. Given the potential for indirect effects on designated sites, and the potential to compromise areas of ancient woodland, an Amber rating has been applied.	
Protected Species	<u>European Protected Species</u> Woodland present in this route option has high potential to support Bat species and Scottish wildcat. Otter have previously been recorded at Loch Ness, Loch Kemp, the River Foyers and Loch Bran within the vicinity of this route option, with the beaver species potentially being present within Loch Ness, Loch Bran and the River Foyers. Great crested newt has also previously been recorded in this area and could be present in smaller water bodies along this route. <u>UK Biodiversity Action Plan Species</u> In addition to the above EU protected species, pine marten and red squirrel have previously been recorded in this area. The River Foyers and Loch Ness have the potential to support Atlantic salmon, trout species and lamprey. Some smaller watercourses have the potential for water vole. Hedgehog, badger, brown hare and mountain hare, adder and common lizard have previously been recorded in the open upland and lowland area, as well as agricultural/residential areas. On the assumption that disruption to habitats where such species live (e.g. dens, ponds, setts etc.) can be avoided, and with the implementation of best practice measures as set out in the Applicant's SPPs and appropriate pre-works surveys, an Amber RAG rating has been applied to this route option.	A
Habitats	<u>Annex 1 Habitats</u> Route Option 1 would cross areas of Annex 1 habitats including upland wet heath (H4010) and upland dry heath (H4030). Several types of loch/ponds are categorised as Annex 1 waterbodies, but it is anticipated that these areas can be avoided. Degraded blanket bogs are not considered Annex 1 habitats due to their poor condition, however these peat-based habitats still have high biodiversity and environmental value, and should be avoided.	A

	<u>GWDTE</u> No GWDTEs were detected during the overview survey, however GWDTEs tend to be small features only detected during detailed surveys and have potential to be present. If present, cable routes should avoid GWDTEs where practicable. <u>Biodiversity</u> Route Option 1 contains a total of 8105 Biodiversity Units (BU) (6.7 BU / Hectare), as discussed in Appendix 2. Route Option 1 is primarily comprised of non-native coniferous woodland. Western oak acidic woodland and upland wet heath and dry heath are both Annex 1 protected habitats. Western oak acidic woodland, upland wet heath and dry heath, neutral grassland, natural lakes and ponds and upland acid grassland are all classified as habitats of High distinctiveness, with high value in terms of Biodiversity Units within the Biodiversity Net Gain SSE Metric. It is anticipated that impacts on some high distinctiveness habitats can be avoided or minimised for this route option, however some impact, particularly to high distinctiveness grassland habitats will be unavoidable. The project would not be able to achieve No Net Loss of biodiversity without implementation of appropriate mitigation and compensation, mitigation and compensation requirements could be minimised within this route option by avoiding high distinctiveness habitats. Given constraints posed by Annex 1 Habitats, high distinctiveness habitats, GWDTE, an Amber RAG rating has been applied to this route option.	
Ornithology	<u>Schedule 1 Bird Species</u> Golden Eagle (<i>Aquila chrysaetos</i>) has been recorded around Meall na Targaid, approx. 1.5 km south-west of Route Option 1. It is not currently known if they breed in the area. Red Kite (<i>Milvus milvus</i>) is possibly present in the vicinity and Osprey (<i>Pandion haliaetus</i>) may use Loch Kemp and Lochan an Chioin Uire to the west of the PoC as a feeding resource. No Red-throated (<i>Gavia stellata</i>) or Black-throated Divers (<i>Gavia arctica</i>) were recorded on Loch Kemp during breeding surveys at the site. Along the route there is the potential for Schedule 1 species such as Merlin (<i>Falco columbarius</i>) and Red Kite to be using the area for foraging. Merlin could use the open moorland for breeding. Black Grouse (<i>Tetrao tetrix</i>) (not a Schedule 1 bird) could also potentially use the open areas (adjacent to areas of woodland) for lekking. Towards the north of the route option there is potential for Goshawk to be present in the commercial forestry (Faragaig forest). Crossbills are also likely to be present as a breeding species within the commercial forestry. <u>Birds of Conservation Concern</u> Commercial forestry could support species such as Spotted Flycatcher (<i>Muscicapa striata</i>), Mistle Thrush (<i>Turdus viscivorus</i>) and Tree Pipit (<i>Anthus trivialis</i>) (Red listed species of conservation concern) and Willow Warbler (<i>Phylloscopus trochilus</i>), Wren (<i>Troglodytes troglodytes</i>), Song Thrush (<i>Turdus philomelos</i>) and Dunnock (<i>Prunella modularis</i>) (Amber listed species of conservation concern). Species such as Mistle Thrush (<i>Turdus viscivorus</i>), Skylark (<i>Alauda arvensis</i>) and Starling (<i>Sturnus vulgaris</i>) (Red listed birds of conservation concern) could use the agricultural and wooded (including commercial forestry) areas for breeding. Species such as Willow Warbler, Wren, Song Thrush, Dunnock etc (Amber listed species of conservation concern) could use the wooded areas for breeding. The open moorland habitat could support breeding Wheatear (<i>Oenanthe oenanthe</i>) (Amber listed species of conservation concern). Given these potential constraints, an Amber RAG rating has been applied to this route option.	

Geology, Hydrology and Hydrogeology	Route Option 1 is located entirely within the Loch Ness surface water catchment. The southern part of the route is located within the River Foyers sub catchment, whilst the northern extent of the route is located within the River Farigaig sub catchment. The route would cross the River Foyers. SEPA published flood mapping shows that the route is largely out with the 1:200 floodplain, however, a 1:200 floodplain is noted along the banks of the River Foyers (which extends wider than the immediate watercourse corridor) and the Allt Chearc (a tributary of the River Farigaig). BGS mapping indicates that Route Option 1 is generally underlain by psammities and igneous intrusions bedrock, with northern most extent of the route option underlain by breccias, conglomerates and sandstones. Superficial deposits, where mapped comprise of hummocky glacial deposits, alluvium and glacial till deposits. <u>Peat</u> BGS superficial mapping indicates that Route Option 1 intersects a small, isolated area of peat, to the south of Creag Mhor, but for the remainder the route is not underlain by peat deposits. Priority peatland mapping also indicates that the route option (predominantly to the west) will cross several areas designated as Class 1 priority peatland, however, with appropriate alignment design, it might be possible to avoid these areas. <u>Drinking Water Protected Areas</u> All of Scotland's groundwater bodies have been designated as DWPAs. SEPA indicate that the majority of the route option is located within the Northern Highlands groundwater body (ID: 150701) with the northwestern extent of the route option located within the Inverness groundwater body (ID: 150670). The northwestern extent of the route option is located within the Loch Ness DWPA which supplies the Invermoriston WTW and supplies water to Inverness and surrounding areas. Subject to appropriate mitigation measures, it is considered unlikely that the presence of the DWPA will pose a significant development constraint. <u>Aquifer Providing Regional / Local Resources</u> The igneous and metamorphic bedrock which underlies the route has been designated by BGS as a low productive aquifer whereby small amounts of groundwater may be present in near surface weathered zones and secondary fractures. The sedimentary bedrock deposits have been classified as a moderately productive aquifer with potential to sustain local groundwater yields and small amounts of groundwater. THC private water supply database and SEPA environmental database indicates the route may intercept private water supplies or CAR authorisations. Subject to appropriate mitigation measures, it is considered unlikely that the presence of abstractions will pose a significant development constraint, however further assessment is required. <u>Surface Water or Aquifer Providing Water for Agricultural or Industrial Use</u> SEPA environmental database indicates that the route option may intercept several CAR licences near Foyes. Subject to appropriate mitigation measures, it is considered unlikely that the presence of abstractions for agricultural or industrial use will pose a significant development constraint, however further assessment is required.	A
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	An Amber rating has therefore been applied to this route option, given the Loch Ness DWPA, presence of priority peatland and potential private water supplies. Subject to selection of an appropriate alignment and adherence to best practice during construction, and appropriate mitigation it is likely that impacts can be mitigated at the alignment stage.	
Cultural Heritage		
Topics	Potential Constraints	RAG Rating
Designations	There is one scheduled monument that lies within the route option: Dell Farm, burial mounds 350m NE of (SM 4536) at Whitebridge (MHG 2637), a cemetery of first millennium AD date. There are also five Listed Buildings within this route option: three of Category B (Boleskine Parish Church and Burial Ground (LB 1846) and Manse (LB 1848) and Dell Lodge (LB 1860), and two of Category C (both buildings associated with Foyers Hydroelectric Power Scheme (LB 1882 and LB 51701). It is anticipated that direct effects on these designated assets would be avoided through design, thus a Green RAG rating has been applied to this route option.	
Cultural Heritage Assets	There are 50 non-designated heritage assets that lie wholly or partly within the route option, three of which are directly associated with the Dell Farm, burial mounds 350m NE of (SM 4536) scheduled monument. These are MHG 2637, MHG 40187 and MHG 40188 at Whitebridge. There is also an area of prehistoric settlement (MHG 2725) at Lochbranside, a hut circle (MHG 2715) at Bailbeag and an abandoned medieval/post-medieval farmstead recorded at Bailbeag (MHG 25438). There is also the remains of an abandoned township (MHG 25439) and the site of a possible prehistoric hut circle and cairn (MHG 26054) at Druim an Tachair. Towards the end of the route are the remains of abandoned medieval/post-medieval farmsteads (MHG 25434 and 25435) and the site of a building (MHG 26258) of probable post-medieval date. In addition to these, the route of a Military Road passes through the western part of the route, on a roughly north-south alignment, partly following an existing road alignment and partly following tracks through woodland. Most assets are considered readily avoidable through design but given the presence of a number of assets in this route option an Amber RAG rating has been applied to this route option.	
Landscape and Visual		
Topics	Potential Constraints	RAG Rating
Designations	The western edge of this route option is situated within the Loch Ness and Duntelchaig SLA, identified and designated by The Highland Council in its document 'Assessment of Highland Special Landscape Areas', 2011. This route option would follow the edge of the SLA, mainly passing through areas of rough improved pasture, rocky knolls and small woodland blocks. The southern side of the loch generally has a more quiet and intimate character due to the more limited settlement, potentially making it more sensitive to new development. However, sensitivity is reduced by the presence of existing development particularly within the vicinity of Foyers, including the Foyers Pumped Storage scheme and Foyers powerhouse which the route would connect into. There would be an element of disturbance to facilitate the construction of the works which would lead to a degree of localised change along the route, but on the whole the characteristics and valued landscape resource would not be lost as a result of the UGC. As such, a Green RAG rating has been applied to this route option.	
Landscape Character	The south-eastern extent of this route passes through LCT 227: Farmed Strath – Inverness, which is characterised by open farmed valley floors, small scale broadleaf woodland and forestry blocks. The route would then pass through LCT 224: Farmed and	

	Wooded Foothills which encompasses a ridge of low rocky hills which provide a backdrop to the south side of the Great Glen, with a high degree of forest cover interspersed with areas of open pasture and moorland. At the north-western end where the route connects into Foyers Switching Station it would pass through a small area of LCT 225: Broad Steep Sided Glen, including some of the steep forested slopes which flank Loch Ness on its southern side, and Foyers Switching Station which allows for open views towards the loch, flanked on either side by woodland block. The presence of the existing Switching Station and the associated OHLs are noticeable and reduce sensitivity within this part of the route. These LCTs generally provide good opportunity to route linear features, although there would be temporary disturbance during the construction stage, and the operational corridor may be noticeable passing through woodland, resulting in some localised changes, but overall it is not considered that this would affect the key landscape characteristics. As such, a Green RAG rating has been applied to this route option	
Visual	Visual receptors within this route option include a small number of individual properties and small property clusters within Stratherrick and on the outskirts of Foyers, the B852 and B862, National Cycle Route (NCR) 78 and other recreational routes such as the South Loch Ness Trail and the Trail of the Seven Lochs. There may be some disruption to visual receptors during construction as a result of tree felling, and cable works but overall, it is not considered that there would be any significant long term impact on visual receptors. A Green RAG rating has therefore been applied to this route option.	
Land Use		
Topics	Potential Constraints	RAG Rating
Agriculture	Large areas within this route option are currently dominated by commercial forestry and other woodland and are therefore not available for agriculture. Based on the Macaulay System of Land Capability for Agriculture, which ranks land based on its potential for productivity and cropping flexibility, this route option would mainly pass through land suited for rough grazing, which generally provides grazing of low value (6.3) or moderate value (6.2), with some small, scattered areas of land capable of producing a narrow range of crops (4.1). No grade 1, 2 or 3 agricultural land is present in the vicinity of the route. The PoC on Dell Estate is situated near Dell Farm, adjacent to some fields that are used primarily for livestock (sheep) grazing. This route option would have some potential to disrupt the use of these fields during construction. However, these impacts would be temporary and localised. This route is unlikely to impact any areas of highly productive agricultural land and any disruption to the use of farmland available for livestock grazing near the PoC at Dell Farm would be short-term and localised. A Green RAG rating has therefore been applied to this route option.	
Forestry	The central and northern parts of this route option comprise broadleaved woodland and areas of commercial plantation. The native woodlands are mainly upland birchwood, with areas of native pinewood. Woodland included on the AWI comprises a very small area of ASNO 1750 in the northwestern periphery of the route, whilst ASNO 1860 with some small components of Other (on Roy maps) and LEPO 1860 are the dominant categories within this route. The conifer woodlands include native pinewood and PAWS. The northern part of the route in particular is highly wooded and includes parts of Farigaig Forest, which is managed within the National Forest Estate South Loch Ness Land Management Plan. The large coniferous plantations include felled areas replanted or awaiting replanting or regeneration.	

	Felling would be required for this route option, although some opportunities exist to reduce impacts on commercial plantations and AWI woodland. In Scotland, Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750. This relates to Ancient semi-natural origin woodland (ASNO1750) or category 1a in the Inventory. The areas listed in the Inventory as ASNO1860 did not exist in 1750 and would not be considered to be truly ancient under Policy 6 bi) of National Planning Framework 4 (NPF4). As such, an Amber RAG rating has been applied to this route option.	
Recreation	This route option would cross the South Loch Ness Trail which forms part of the Loch Ness 360 route, the Trail of the Seven Lochs, NCR 78 and part of Core Paths IN17.06, IN17.12, IN25.03 and IN17.13 and may have indirect influence on recreation due to visual effects, and potential short-term disruption during construction works. Attractions within this route option include a tearoom and farm shop located at Glenlia Farm and a picnic area located along the banks of the River Foyers. There may be short term visual effects to visitors at these facilities during construction; however no long-term effects are anticipated to the recreational use of these routes and attractions. This route option would also have some potential to disrupt commercial highland sport activities on Dell Estate, such as grouse shooting and deer stalking, during construction. However, these impacts would temporary and localised. Given the availability of and available in the wider estate for sporting purposes, it is not anticipated that the construction of a cable within this route option would cause a significant constraint to sporting activities on Dell Estate A Green RAG rating has been applied to this route option.	G
Planning		
Topics	Potential Constraints	RAG Rating
Policy	Adherence to National, Regional and Local planning policy will in large part depend on avoiding or minimising potential constraints noted above. However, the national policy position set out in NPF4 places particular support for the delivery of electricity infrastructure that will assist in the delivery of the Government's legally binding 'net zero' commitments. The Proposed Development is identified in NPF4 as a National Development (ND) under ND3 Strategic Renewable Electricity Generation and Transmission Infrastructure' which recognises that "the electricity transmission grid will need substantial reinforcement including the addition of new infrastructure to connect and transmit the output from new on and offshore capacity." Furthermore, pumped hydro storage, for which this project would facilitate a connection to the grid, is also identified as National Development under ND2 'Pumped Hydro Storage'. The Proposed Development therefore forms a vital element to deliver network and grid infrastructure required to deliver the Government's legally binding targets for net zero emissions and renewable energy electricity generation objectives. Relevant policies within NPF4 to this route option include Policy 3: Biodiversity, Policy 4: Natural Places; Policy 5: Soils; Policy 6: Forestry, Woodland, and Trees; and Policy 7: Historic Assets and Places. The areas listed in the AWI as ASNO1860 within this route option did not exist in 1750 and therefore would not be considered to be truly ancient under Policy 6 bi) of the NPF4 (see Forestry section above). The Highland Wide Local Development Plan (HwLDP) policies are supportive of projects adhering to the principles of sustainable design (Policy 28), are compatible with landscape character and capacity (Policy 36), avoid unnecessary disturbance of peat soils (Policy 55), and safeguard the environment (Policies 57 – 64). Policy 69 of the HwLDP specifically relates to development of electricity transmission infrastructure, and The Highland Council will support such projects where they do not have an unacceptable significant impact on the environment.	A

	Given the potential constraints noted above, an Amber RAG rating has been applied to this route option.	
Proposals	The Application for the Loch Kemp Storage Scheme (Planning Ref: ECU00003398) and associated ground investigation (GI) works (Planning Ref: 23/04565/PNO) have been submitted but as these are related works, these applications would not pose a development constraint. There is also a screening request (23/06064/SCRE) and a Proposal of Application Notice (PAN) (24/01379/PAN) submitted ahead of a future application to extend the existing Foyers Switching Station. Again, as this is related works, it is not anticipated that these works would pose a development constraint. No other relevant planning proposals have been identified on the THC or ECU Planning Portals¹ within Route Option 1. A Green RAG has therefore been applied to this route option.	

¹ Based on Map Search of the Highland Council and the Scottish Government's Planning Portal. Excludes extensions to / modifications of existing infrastructure, buildings or sites, as existing buildings would be avoided. Minor developments (e.g. construction of outbuildings within the grounds of an existing property) are also excluded, as it is anticipated such developments could be avoided through micro siting during the alignment stage and/or detailed design phase.

Route Option 2

Description:		
Route Option 2 would involve routing an UGC in a northerly direction for approximately 5 km from the proposed PoC for the proposed Loch Kemp Pump Storage Scheme Switching Station at Dell Farm, to the existing Foyers Switching Station. The UGC would require a construction corridor of approximately 40 m in width to facilitate its construction. Once installed, an Operational Corridor of approximately 30 m would be required along the length of the cable route. For approximately 2 km to the north of the PoC, the route option would run approximately parallel to the River Fechlin / River Foyers and the South Loch Ness Trail, crossing areas of woodland areas, open moorland and agricultural land on Dell Estate. The route option would then enter a vast area of largely commercial woodland at Carn Dearg, which is managed by FLS and extends to the western slopes of Loch Ness. This woodland is listed on the AWI and contains areas of PAWS and Native Woodland. Due to the steep slopes along the Loch Ness shoreline, it is likely that extensive earthworks would be required to facilitate construction access and cable installation within this route option. The route would continue through the forestry for approximately 1 km, crossing a Core Path, before approaching Foyers village. Amenities in this area include the Falls of Foyers, a campsite, hotels, cafes and shops, as well as properties and community facilities. The village contains a mixture of Category A, B and C Listed Buildings. As well as Foyers village, this section of Route Option 2 would need to cross both the River Foyers and the B852. To the north of Foyers village, Route Option 2 would follow the route of the B852 and the South Loch Ness Trail between Foyers and Inverfarigaig, parallel to the western shore of Loch Ness, to approach the existing Foyers Switching Station. The section of the Route Option would largely pass through commercial forestry and woodland managed by FLS. The woodland along the Loch Ness shoreline is listed on the AWI and this section of the route would contain areas of PAWS, Native Woodland and Nearly Native Woodland. There is also a cluster of Category B Listed Buildings along the B852 to the south of the PoC at the existing Foyers Switching Station, which would be located with Route Option 2.		
Review of Environmental Constraints:		
Natural Heritage		
Topics	Potential Constraints	Overall RAG Rating
Designations	This route option would commence from the proposed PoC, which lies approximately 1 km east of the most northerly extent of Ness Woods SAC and Easter Ness Forest SSSI. Ness Woods SAC (site code: 8337) is noted as one of the best examples of a ravine woodland in Scotland. Qualifying habitats of the SAC include Western acidic oak woodland H91A0, which runs along much of the shoreline of Loch Ness, as well as habitats of upland wet heath; H4010, and upland dry heath; H4030. Qualifying species of the SAC include Otter. Easter Ness Forest SSSI (site code 591) covers the same area as this part of the Ness Woods SAC, with notified features being upland mixed ash woodland and upland oak woodland. A smaller area of the Ness Woods SAC is also located approximately 1.5 km northeast of the PoC at the existing Foyers Switching Station. Inverfarigaig SSSI (site code 813) covers the same area as this part of the Ness Woods SAC, with notified features being upland mixed ash woodland. No direct impacts on any of these designated sites is anticipated. The PoC is also located approximately 2 km northeast of the Loch Knockie and nearby Lochs Special Protection Area (SPA) (site code 8529) / Knockie Lochs SSSI (site code 880). These are a group of lochs including Loch Knockie and Loch nan Lann which are designated for breeding Slavonian grebe (<i>Podiceps auratus</i>), a species red listed on the UK Birds of Conservation Concern and listed on Annex 1 of the Wildlife and Countryside Act. No direct or indirect impacts on the qualifying feature of this designated site are anticipated. <u>Regional or Local Designations</u> No regional or local designations are present along this route.	

	<u>Ancient Woodland</u> The route would pass through areas of ancient woodland recorded on the AWI. Such sites are mostly dominated by non-native conifer plantation, although there are some areas of native woodland present within the route which would be unavoidable. See Forestry Section below for more details. Given the potential for indirect effects on designated sites, and the potential direct impacts on areas of ancient woodland, a Red rating has been applied.	
Protected Species	<u>European Protected Species</u> Woodland present in this route option has high potential to support bat species and Scottish wildcat. Otter have previously been recorded in Loch Ness along the edge of this route option where otters may come inland from the loch, and along the River Foyers. Otter is also a qualifying feature of the Ness Woods SAC. The river also has potential to support beavers. Great crested newt have previously been recorded in this area and could be present in smaller ponds along this route option. <u>UK Biodiversity Action Plan Species</u> In addition to the above EU protected species, pine marten and red squirrel have previously been recorded along the length of this route option. The River Foyers has the potential for Atlantic salmon, trout species and lamprey species. Some smaller watercourses have the potential for water vole. Mountain hare, adder and common lizard have previously been recorded in the open upland area. Hedgehog, badger and brown hare have previously been recorded in the lowland agricultural/residential areas. On the assumption that disruption to habitats where such species live (e.g. dens, ponds, setts etc.) can be avoided or minimised, and with the implementation of best practice measures as set out in the Applicant's SPPs and appropriate pre-works surveys, an Amber RAG rating has been applied.	A
Habitats	<u>Annex 1 Habitats</u> This route option would pass through Annex 1 habitats including upland wet heath; H4010, and upland dry heath; H4030. Several types of loch/ponds are categorised as Annex 1 waterbodies but it is anticipated that these areas can be avoided. <u>GWDTE</u> No GWDTEs were detected during the overview survey, however GWDTEs tend to be small features only detected during detailed surveys and have potential to be present. If present, cable routes should avoid GWDTEs. <u>Biodiversity</u> Route Option 2 contains a total of 4039 Biodiversity Units (BU) (6.66 BU / Hectare), as discussed in Appendix 2. Route Option 2 contains upland wet heath and dry heath, both Annex 1 protected habitats. Upland wet heath and dry heath, degraded blanket bog, neutral grassland, natural lakes and ponds, and upland acid grassland are all classified as habitats of High distinctiveness, with high value in terms of Biodiversity Units within the Biodiversity Net Gain SSE Metric. It is anticipated that impacts on some Annex 1 and high distinctiveness habitats can be avoided or minimised for this route option, however some impact, particularly to Annex 1 heath and to high distinctiveness grassland habitats will be unavoidable. The project would not be able to achieve No Net Loss of biodiversity without implementation of appropriate mitigation and	R

	compensation, mitigation and compensation requirements could be minimised within this route option by avoiding high distinctiveness habitats. Given constraints posed by Annex 1 Habitats, GWDTE and biodiversity, a Red RAG rating has been applied to this route option.	
Ornithology	<u>Schedule 1 Bird Species</u> Golden Eagle has been recorded around Meall na Targaid, approx. 1.5 km south-west of Route Option 2. It is not currently known if they breed in the area. Red Kite is possibly present in the vicinity and Osprey may use Loch Kemp and Lochan an Chioin Uire to the west of the PoC as a feeding resource. No Red-throated or Black-throated Divers were recorded on Loch Kemp during breeding surveys at the site. Merlin could use the open moorland area in the route for breeding. Black Grouse (not a Schedule 1 bird) could also potentially use the open areas (adjacent to areas of woodland) for lekking. There is the potential for Goshawk (<i>Accipiter gentilis</i>) to be present in the commercial forestry (Faragaig forest). Crossbill (<i>Loxia curvirostra</i>) are also likely to be present as a breeding species within the commercial forestry. There are unlikely to be Schedule 1 breeding species within Loch Ness along the eastern shoreline (e.g., Red-throated and Black-throated Diver, Slavonian Grebe (<i>Podiceps auratus</i>) and Common Scoter (<i>Melanitta nigra</i>)). <u>Birds of Conservation Concern</u> There is the potential for Common Sandpiper (<i>Actitis hypoleucos</i>) and Grey Wagtail (<i>Motacilla cinerea</i>) (Amber listed birds of conservation concern) to be present along the eastern shoreline of Loch Ness. However, these species do not represent a development constraint. Species such as Mistle Thrush, Skylark and Starling (Red listed birds of conservation concern) could use the agricultural and wooded (including commercial forestry) areas for breeding. Species such as Willow Warbler, Wren, Song Thrush, Dunnock etc (Amber listed species of conservation concern) could use the wooded areas (including commercial forestry) for breeding. The open moorland habitat could support breeding Wheatear (Amber listed species of conservation concern). Due to the felling requirements, habitat loss and potential for disturbance during construction, an Amber RAG rating has been applied for this route option.	A
Hydrology / Geology / Hydrogeology	This route option is located entirely within the Loch Ness surface water catchment. The southern extent of the route is located within the River Foyers sub catchment. The route option will cross the River Foyers. SEPA published flood mapping shows a 1:200 floodplain associated with the River Foyers. A wider floodplain, outside of the immediate channel, is noted for the River Foyers. The northern boundary of the route option is also partially located within the floodplain for Loch Ness. BGS mapping indicates that this route option is generally underlain by psammities and igneous intrusions to the south and northeastern extent of the route and several sedimentary rocks units (sandstones, conglomerates, feldspathic arenites and breccias) within the northwestern extent of the route. The bedrock is shown to be overlain by hummocky glacial deposits and alluvium superficial deposits with small areas of glacial till and alluvial fan deposits. It is noted that no superficial deposits have been mapped by BGS within the northern extent of the route. <u>Peat</u>	A

	BGS superficial mapping indicates that the southern extent of the route option intersects a small, isolated area of peat, to the south of Creag Mhor but for the remainder the route is not underlain by peat deposits. Priority peatland mapping also indicates that the route option (predominantly to the south) will cross two areas designated as Class 1 priority peatland, however, with appropriate alignment design, it might be possible to avoid these areas. <u>Drinking Water Protected Areas</u> All of Scotland's groundwater bodies have been designated as DWPA. SEPA indicate that the southern extent of this route option is located within the Northern Highlands groundwater body (ID: 150701, whilst the northern extent of the route is located within the Inverness groundwater body (ID: 150670). The north and northwestern extent of this route option is located within the Loch Ness DWPA. The DWPA supplies the Invermoriston WTW. Subject to appropriate mitigation measures, it is considered unlikely that the presence of the DWPA will pose a significant development constraint, however further assessment is required. <u>Aquifer Providing Regional / Local Resources</u> The igneous and metamorphic bedrock which underlies the route has been designated by BGS as a low productive aquifer whereby small amounts of groundwater may be present in near surface weathered zones and secondary fractures. The sedimentary bedrock deposits have been classified as a moderately productive aquifer with potential to sustain local groundwater yields and small amounts of groundwater. THC private water supply database and SEPA environmental database indicates this route option may intercept private water supplies and CAR authorisations particularly within the northern extent of the route, near Foyers and the existing Foyes Switching Station. Subject to appropriate mitigation measures, it is considered unlikely that the presence of abstractions or PWSs will pose a significant development constraint, however further assessment is required. <u>Surface Water or Aquifer Providing Water for Agricultural or Industrial Use</u> SEPA environmental database indicates that the route option may intercept several CAR licences near Foyes and the existing Foyes Switching Station. Subject to appropriate mitigation measures, it is considered unlikely that the presence of abstractions for agricultural or industrial use will pose a significant development constraint, however further assessment is required. An Amber rating has therefore been applied to this route option, given the length of the route option which drains to Loch Ness DWPA, and potential presence of private water supplies. Subject to selection of an appropriate alignment and adherence to best practice during construction, and appropriate mitigation it is likely that impacts can be reduced.	
Cultural Heritage		
Topics	Potential Constraints	RAG Rating
Designations	There is one scheduled monument within this route option: Dell Farm, burial mounds 350m NE of (SM 4536) at Whitebridge (MHG 2637), a cemetery of first millennium AD date. There are 11 Listed Buildings within this route option: One Category A (British Aluminium Factory, Foyers (LB 1880); eight of Category B (including six as a group around Boleskine House); and two of Category C. All designations are readily avoidable through design therefore a Green RAG rating has been applied to this route option.	

Cultural Heritage Assets	There are 19 non-designated heritage assets within this route option corridor that are not directly associated with the designated heritage assets described above. These include the site of a former farmstead (MHG 23334), a cemetery (MHG 28423) and burial ground (MHG 49543), a collection of buildings in and around Foyers village (MHG 37287), a ventilation or surge shaft (MHG 49551) for Foyers Power Station (MHG 49550), and the site of a former inn (MHG 17496) said to have been built specifically for General Wade to superintend the Military Road works. The route of a former Wade Military Road passes through the route option, largely following the line of modern roads. Most constraints are readily avoidable through design therefore a Green RAG rating has been applied to this route option.	
Landscape and Visual		
Topics	Potential Constraints	RAG Rating
Designations	The majority of this route is situated within the Loch Ness and Duntelchaig SLA, identified and designated by The Highland Council in its document 'Assessment of Highland Special Landscape Areas', 2011. This route option would pass through areas of rough improved pasture, rocky knolls and small woodland blocks at the southern end before crossing some of the steep wooded slopes above Loch Ness, encompassing the Falls of Foyers which are mentioned as part of the special qualities of this SLA. The southern side of the loch generally has a more quiet and intimate character due to the more limited settlement, potentially making it more sensitive to new development. However, sensitivity is reduced by the presence of existing development particularly within the vicinity of Foyers, including the Foyers Pumped Storage scheme and Foyers powerhouse which the route would connect into. There would be some disturbance during construction which would lead to a degree of localised change along the route. Given the steep slopes and woodland felling requirements, the landscape effects during both the construction and operational period could be quite noticeable, albeit very localised to a small part of the SLA. As such, an Amber RAG rating has been applied to this route option.	
Landscape Character	The southern extent of this route passes through the transition between LCT 227: Farmed Strath – Inverness, which is characterised by open farmed valley floors, small scale broadleaf woodland and forestry blocks, and LCT 224: Farmed and Wooded Foothills which encompasses a ridge of low rocky hills which provide a backdrop to the south side of the Great Glen, with a high degree of forest cover interspersed with areas of open pasture and moorland. At the north-western end it would pass through LCT 225: Broad Steep Sided Glen, which includes some of the steep forested slopes which flank Loch Ness on its southern side as well as the settlement of Foyers. While the presence of the existing Foyers Switching Station and the associated OHLs are noticeable and reduce sensitivity within this part of the route, the steep slopes leading down to Loch Ness are generally more sensitive, as felling on the hill slope may be noticeable in important views along and across the glen. This has the potential to result in temporary disturbance during the construction stage, and the operational corridor may be noticeable passing through woodland, resulting in some localised changes, but overall it is not considered that this would affect the key landscape characteristics in the long term. As such, an Amber RAG rating has been applied to this route option.	
Visual	Visual receptors within this route option are focussed to the north, and comprise the B852, the settlement of Foyers, NCR 78 and other recreational routes such as the South Loch Ness Trail. Other receptors include views from Loch Ness, as well as the A82 and Great Glen Way along its western shore.	

	As described for the Loch Ness and Duntelchaig SLA above, there would be some disturbance during construction which would lead to a degree of localised change along the route. Given the steep slopes and felling requirements, this has the potential to result in temporary disturbance during the construction stage, and the operational corridor may be visible passing through woodland, resulting in some localised changes. As such, an Amber RAG rating has been applied to this route option.	
Land Use		
Topics	Potential Constraints	RAG Rating
Agriculture	Large areas within this route option are currently dominated by commercial forestry and other woodland and are therefore not available for agriculture. Based on the Macaulay System of Land Capability for Agriculture, which ranks land based on its potential for productivity and cropping flexibility, this route mainly passes through areas of land suited for rough grazing, which generally provides grazing of low value (6.3) or moderate value (6.2). Some grade 4.1 land capable of producing a narrow range of crops is present within the vicinity of Foyers. No grade 1, 2 or 3 agricultural land is present in the vicinity of the route. The PoC on Dell Estate is situated near Dell Farm, adjacent to some fields that are used primarily for livestock (sheep) grazing. This route option would have some potential to disrupt the use of these fields during construction. However, these impacts would be temporary and localised. This route is unlikely to impact any areas of highly productive agricultural land and any disruption to the use of farmland available for livestock grazing near the PoC at Dell Farm would be short-term and localised. A Green RAG rating has therefore been applied to this route option.	
Forestry	This route option includes approximately 60% woodland. Several broadleaved woodland blocks are present throughout this route option including notable policy woodlands on the access to the Foyers cemetery. Much of this is also ancient woodland, designated within the Ancient Woodland Inventory (AWI) as being of semi-natural origin, ASNO 1750 with some areas designated as long established of plantation origin (LEPO) at the northern end and south-east of Foyers. The Native Woodland Survey of Scotland (NWSS) lists the conifer plantations as Plantations on Ancient Woodland Sites (PAWS). Other NWSS includes upland birchwood, upland oakwood, native pinewood and nearly native woodland. In Scotland, Ancient Woodland is defined as land that is currently wooded and has been continually wooded, at least since 1750. This relates to Ancient semi-natural origin woodland (ASNO1750) or category 1a in the Inventory. This route includes areas of woodland identified as ASNO 1750. Given the likely felling requirements through both conifer plantation and areas of Ancient Woodland, a Red RAG rating has been applied to this route option.	
Recreation	This route option would pass near to and cross a number of Core Paths around Foyers, including IN25.03, IN17.08, IN17.09, IN17.02, IN17.13 as well as the South Loch Ness Trail which forms part of the Loch Ness 360 route, and may have indirect influence on recreational routes due to visual effects, although these would likely be limited due to high degree of tree cover, and potential short-term disruption during construction works. Other potential visual impacts from recreational receptors include views from Loch Ness, as well as the A82 and Great Glen Way along its western shore. Some tourism facilities and attractions can be found in Foyers, including hotels and cafes, as well as the Lochside caravan and campsite and the Falls of Foyers. However, no long-term effects are anticipated to the recreational use of these routes and attractions.	

	This route option would also have the potential to affect commercial Highland sports, such as grouse shooting and deer stalking on Dell Estate during construction. However, these impacts would temporary and localised. Given the availability of land available in the wider estate for sporting purposes, it is not anticipated that the construction of a cable within this route option would cause a significant constraint to sporting activities on Dell Estate. An Amber RAG rating has therefore been applied to this route option.	
Planning		
Topics	Potential Constraints	RAG Rating
Policy	Adherence to National, Regional and Local planning policy will in large part depend on avoiding or minimising potential constraints noted above. However, the national policy position set out in NPF4 places particular support for the delivery of electricity infrastructure that will assist in the delivery of the Government's legally binding 'net zero' commitments. The Proposed Development is identified in NPF4 as a ND under ND3 Strategic Renewable Electricity Generation and Transmission Infrastructure' which recognises that "the electricity transmission grid will need substantial reinforcement including the addition of new infrastructure to connect and transmit the output from new on and offshore capacity." Furthermore, pumped hydro storage, for which this project would facilitate a connection to the grid, is also identified as National Development under ND2 'Pumped Hydro Storage'. The Proposed Development therefore forms a vital element to deliver network and grid infrastructure required to deliver the Government's legally binding targets for net zero emissions and renewable energy electricity generation objectives. The HwLDP policies are supportive of projects adhering to the principles of sustainable design (Policy 28), are compatible with landscape character and capacity (Policy 36), avoid unnecessary disturbance of peat soils (Policy 55), and safeguard the environment (Policies 57 – 64). Policy 69 of the HwLDP specifically relates to development of electricity transmission infrastructure, and The Highland Council will support such projects where they do not have an unacceptable significant impact on the environment. This route option would encounter considerable policy challenges, despite it being identified in NPF4 as a National Development (ND) under ND3 Strategic Renewable Electricity Generation and Transmission Infrastructure'. Relevant policies within NPF4 to this route option include Policy 3: Biodiversity, Policy 4: Natural Places; Policy 5: Soils; Policy 6: Forestry, Woodland, and Trees; and Policy 7: Historic Assets and Places. The routeing through areas of ancient woodland and Annex 1 habitats could cause conflict with these policies, albeit all policies in NPF4 need to be considered in the round. This is also the case with relevant local policies identified within the HwLDP. Given the likely felling requirements through areas of Ancient Woodland and other potential constraints noted above, a Red RAG rating has been applied to this route option.	
Proposals	The Application for the Loch Kemp Storage Scheme (Planning Ref: ECU00003398 / 23/06025/S36) and GI works (Planning Ref: 23/04565/PNO) have been submitted but as these are related works, these applications would not pose a development constraint. There is also a screening request (23/06064/SCRE) and a Proposal of Application Notice (PAN) (24/01379/PAN) submitted ahead	

	of a future application to extend the existing Foyers Switching Station. Again, as this is related works, it is not anticipated that these works would not pose a development constraint The only other planning proposals identified within Route Option 2 either the THC or ECU Planning Portals² is an application relating to the construction of three new holiday cabins in Foyers village (Planning Ref: 24/02353/FUL). However, it is anticipated that any potential impacts or disruption to this application could be avoided and/or mitigated. As such, a Green RAG rating has been applied to this route option.	
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² Based on Map Search of the Highland Council and the Scottish Government's Planning Portal. Excludes extensions to / modifications of existing infrastructure, buildings or sites, as existing buildings would be avoided. Minor developments (e.g. construction of outbuildings within the grounds of an existing property) are also excluded, as it is anticipated such developments could be avoided through micro siting during the alignment stage and/or detailed design phase.