Scottish & Southern Electricity Networks

Routeing Consultation Document

Salamander

November 2025

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GLOSSARY

Term	Definition
Alignment	A centre line of an underground cable (UGC) or Overhead line (OHL).
Amenity	The natural environment, cultural heritage, landscape and visual quality. Also includes the impact of SHE Transmission's works on communities, such as the effects of noise and disturbance from construction activities.
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.
Habitat	Term most accurately meaning the place in which a species lives but also used to describe plant communities or agglomerations of plant communities.
High Voltage Direct Current (HVDC)	High Voltage Direct Current (HVDC) systems utilise power electronics technology to convert AC and DC. HVDC systems enable utilities to move more power further, efficiently integrate renewables and interconnect grids.
Kilovolt (kV)	One thousand volts.
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 to C.
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel towers or poles.
Route Option	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.
Routeing	The work undertaken which leads to the selection of a proposed alignment, capable of being taken forward into the consenting process under the Planning Act 2008 as the development is considered to be "Strategic Renewable Electricity Generation and Transmission Infrastructure". "Strategic Renewable Electricity Generation and Transmission Infrastructure" is identified in the National Planning Framework (NPF4) as 'National Development'.
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'.
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.
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 Protection Area (SPA)	An area designated under the Wild Birds Directive (Directive74/409/EEC) to protect important bird habitats. Implemented under the Wildlife and Countryside Act 1981.
Stakeholders	Organisations and individuals who can affect or are affected by SHE Transmission works.
Volts	The international unit of electric potential and electromotive force.

PREFACE

This Consultation Document has been prepared by AECOM Ltd. on behalf of Scottish and Southern Electricity Networks Transmission (SSEN Transmission). SSEN Transmission, operating under licence held by Scottish Hydro Electric Transmission plc, owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands. This document invites comments from all interested parties on the route options for a new 132 kV Overhead Line (OHL) to connect the consented onshore substation serving Salamander Offshore Wind Farm, located east of Lunderton, to the existing Peterhead-St Fergus overhead line.

This Consultation Document is available online at the project website –

www.ssen-transmission.co.uk/salamander

Over the coming months, SSEN Transmission will be actively engaging with Statutory Consultees and stakeholders to further understand constraints and identify potential opportunities for the project. A public consultation event detailing the proposals described in this document will be held at the following time and location:

- Thursday 27 November - Peterhead – Peterhead Football Club, Balmoor Stadium, 2pm-7pm

Comments on this Consultation Document should be sent to:

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All comments are requested by **Friday 9 January 2026**.

1. INTRODUCTION

1.1 Purpose of Document

This document has been prepared by Scottish and Southern Electricity Networks Transmission (SSEN Transmission). SSEN Transmission, operating under licence held by Scottish Hydro Electric Transmission plc, owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands. This document invites comments from all interested parties on the proposed routes for a new 132kV overhead line connection from the developer's substation east of Lunderton (NK 11188 49723) to the existing Peterhead to St Fergus OHL as shown on Figure 1. This connection will also require construction of an associated tee-in compound close to the point of connection to the existing OHL.

This document outlines the proposed route options and describes the appraisal undertaken. Comments are now sought from statutory authorities, key stakeholders, elected representatives and the public. All comments received will inform further consideration of the preferred route.

This document supports the information made available to the public and statutory authorities as part of ongoing consultation.

1.2 Document Structure

This report is comprised of eight sections as follows:

Introduction – sets out the purpose of the Consultation Document and document structure.

Project Background and Need – describes the need for the proposals.

Project Overview – sets out a description of the overall project as well as a description of the OHL Design.

Route Selection Process - sets out the route selection process and methodology that has been applied to date.

Description of Overhead Line Route Options – provides a description of the proposed OHL routes.

Comparative Appraisal – comparative analysis of the route options from an environmental, technical and economic perspective.

Selection of Preferred Route – identification of the preferred route option.

Next Steps – invites comments on the assessment process and route options.

The main body of this document is supported by a series of figures which are included in **Appendix 1: Figures**.

1.3 Next Steps

As part of the consultation exercise, comments are sought from members of the public, statutory consultees and other key stakeholders on the preferred route option put forward in this report.

A Report on Consultation will be produced which will document the consultations received, and the decisions made in light of these responses.

Following the identification of a proposed route, further technical and environmental surveys will be undertaken to identify a preferred alignment within the proposed route. Consultation on a preferred alignment will be undertaken in a similar manner to the identification of a proposed route in February 2026 (TBC).

2. PROJECT BACKGROUND AND NEED

2.1 The Need for the Project

Scottish and Southern Electricity Networks (SSEN) Transmission holds a license under the Electricity Act 1989 for the transmission of electricity in the north of Scotland and has a statutory duty under Schedule 9 of the Electricity Act to develop and maintain an efficient, co-ordinated and economical electrical transmission system in its licence area. Where there is a requirement to extend, upgrade or reinforce its transmission network, SSEN's aim is to provide an environmentally aware, technically feasible and economically viable solution which would cause the least disturbance to the environment and to people who use it.

This proposed Salamander project involves the construction of a new 132kV overhead line connection from the developer's consented substation, located east of Lunderton, to the existing Peterhead to St Fergus OHL. This tee-in connection will also require construction of an associated tee-in compound close to the point of connection to the existing OHL. This proposal provides the grid connection from the developer's substation facilitating a connection to the Salamander Offshore Wind Farm project with an overall aim to reduce carbon emissions utilising innovative floating offshore wind technologies to produce zero-carbon electricity to help Scotland and the UK to progress towards a net-zero future.

The Salamander Offshore Wind Farm development comprises a floating wind farm approximately 35km off the coast of Peterhead combined with 100MW onshore battery, totalling 200MW.

An environmental appraisal has been undertaken which evaluates the 132kV OHL required to be constructed between the substation and the Peterhead hub in line with SSEN Transmission's commitment and licence obligation, to facilitate the connection of renewables generation to the grid through an economical, efficient, and coordinated approach to transmission reinforcement.

2.2 National Planning Policy

Scotland's fourth National Planning Framework (NPF4) was published by the Scottish Government on 13th February 2023. NPF4 is a long-term strategy for Scotland (to 2045) that guides spatial development, sets out national planning policies, designates national developments and highlights regional spatial priorities. Alongside adopted local development plans, NPF4 now forms part of the statutory development plan for decision making in Scotland. In NPF4, transmission infrastructure is identified as a National Development under National Development 3 'Strategic Renewable Electricity Generation and Transmission Infrastructure' and supported by Policy 11 Energy, however proposals are required to be assessed against all relevant development plan policies.

The Proposed Development would form a vital element to deliver network and grid infrastructure required to deliver the UK and Scottish Government's legally binding targets for net zero emissions and renewable energy electricity generation objectives.

3. PROJECT OVERVIEW

3.1 Introduction

This proposed Salamander project involves the construction of a new 132kV overhead line connection from the developer's substation east of Lunderton to a new tee-in compound substation in the vicinity of the existing OHL. The four OHL route options being assessed would tie into the proposed location of the Salamander Substation east of Lunderton from a tee-in compound located alongside the existing OHL.

3.2 Overhead Line (OHL)

A new overhead line (OHL) connection is proposed consisting of a 132 kV double circuit OHL between a proposed substation, east of Lunderton and the existing OHL.

Construction activities are anticipated to consist of the following:

- Pre-Construction works
  - Forestry clearance and establishment of temporary construction compound(s) and welfare units;
  - Establishment of suitable laydown areas for material and installation of temporary track solutions and drainage as necessary;
  - Delivery of structures and materials to site; and,
  - Clearance of vegetation.
- Construction works
  - Alterations to the existing transmission and distribution networks;
  - Demolition of part of the existing OHL infrastructure;
  - Construction of foundations and installation of new towers and lines;
  - Erection of support structures; and,
  - Conductor stringing (including construction of temporary scaffolding).
- Commissioning and reinstatement works
  - Inspections and OHL commissioning;
  - Removal of temporary works and site reinstatement; and,
  - Remedial works to reinstate the immediate vicinity of the works and any ground disturbed, to pre-existing use.

All construction activities will be undertaken in accordance with a Construction Environmental Management Plan (CEMP) which will define specific methods for environmental survey, monitoring and management throughout construction. A CEMP will be produced by the Principal Contractor and agreed with statutory stakeholders prior to the commencement of construction.

3.3 Forestry Removal

Construction of the project would likely require the removal of sections of commercial forest, which would be undertaken in consultation with Forestry and Land Scotland (FLS) and affected landowners.

After felling, any timber removed that is commercially viable would likely be sold and the remaining forest material would be dealt with in a way that delivers the best practicable environmental outcome and is compliant with waste regulations.

An operational corridor would be required to enable the safe operation and maintenance of the OHL. This will vary depending on the type of woodland (based on species present) in proximity to the OHL. In areas of native woodland it is usually possible to provide a narrower corridor due to a reduced risk of trees falling on the OHL.

3.4 Access

The access strategy has not yet been determined, however where possible existing access tracks will be used and upgraded as required. New access tracks may be required and where there is a justified long-term requirement, they will be left in place. Where ground conditions permit, it is preferable to construct the infrastructure without an access track

(e.g., on dry and level pasture). Temporary matting may be used in sensitive areas subject to an assessment of gradient and ground conditions.

New access (permanent or temporary) would generally be constructed using geotextile, with approximately 200 mm of crushed and compact stone laid on top. Tracks may be floated over areas of peat, or may use cut and fill approaches, subject to ground conditions and gradients.

3.5 Programme

It is anticipated that construction of the project would take place over an approximately 26-month period following the granting of consents, although detailed programming of the works would be the responsibility of the Contractor in agreement with SSEN Transmission.

4. ROUTE SELECTION PROCESS

4.1 Overview

The route selection process has followed formal SSEN Transmission internal guidance to enable a consistent and rigorous selection of alignments and sites for new substations, switching stations and converter stations. The route selection process has three key stages, each increasing in detail and definition. Technical, environmental, and cost considerations are brought together in a way which seeks the best balance in accordance with SSEN Transmission's Network Operator's Licence and the Electricity Act 1989.

SSEN Transmission internal guidance for OHL routeing has been followed to provide a consistent approach to routeing. The principal objective of the routeing process is to balance technical and cost considerations with environmental considerations, to select a proposed alignment which is economically viable, technically feasible, minimises impacts on important resources or features of the environment and reduces disturbance to those living in it, working in it, visiting it or using it for recreational purposes.

4.2 OHL Route Selection Process

The route selection process splits a project into the following principal routeing stages:

- Stage 0: Routeing Strategy Development.
- Stage 1: Corridor Selection.
- Stage 2: Route Selection.
- Stage 3: Alignment Selection.

The stages that are carried out can vary depending on the type, nature of and size of a project and consultation is carried out at each stage of the process.

Stage 0: Routeing Strategy Development: The routeing strategy development stage seeks to set out the overall approach to the routeing study, the methods which will be adopted to identify, appraise and select options at each stage, and the overall consultation strategy. It will also highlight any departures from the Routeing Guidelines that are required.

Stage 1: Corridor Selection: The corridor selection stage seeks to identify a series of linear areas (corridors) capable of providing a continuous connection between the defined connection points and delivering the required transmission connection. Due to the close proximity of the two connection locations, this project did not undertake Stage 1 – Corridor Selection, rather went straight to Stage 2 – Route Selection.

Stage 2: Route Selection: The route selection stage seeks to identify a preferred route within the wider corridor area.

Stage 3: Alignment Selection: The alignment selection will seek to identify an alignment within the chosen preferred route and to define the access arrangements adapted in terms of, for example, the nature and extent of temporary and/or permanent tracks and road improvements. This stage will be subject to further study and consultation.

4.3 Baseline Conditions

The following information sources have informed the desk-based baseline study to identify potential environmental constraints within, and adjacent to the routes.

- Identification of environmental designated sites and other constraints, utilising GIS datasets available via NatureScot's Site Link and other sources. These include:
    - Special Areas of Conservation (SAC);
    - Special Protection Areas (SPA);
    - Proposed Special Protection Areas (pSPA);
    - Site of Special Scientific Interest (SSSI);
    - National Scenic Area (NSA);
    - Wild Land Areas (WLA);
    - Royal Society for the Protection of Birds (RSPB) reserves;

- Land capability for agriculture;
- Geological Conservation Review Sites;
- Carbon-rich soil, deep peat and priority peatland habitats; and
- Areas at risk of flooding (SEPA flood map)

- Identification of archaeological designations and other recorded sites, utilising GIS datasets available via Historic Environment Scotland Data Services and Local Historic Environment Teams. These include:
  - World Heritage Sites (WHS) and buffers;
  - Scheduled Monuments;
  - Category A, B and C listed buildings; and
  - Gardens and Designed Landscapes.
- Review of the Aberdeenshire Local Development Plan to identify local policies and further environmental constraints and opportunities, such as Local Nature Conservation Sites (LNCS), Conservation Areas, core paths or other locations important to the public;
- Review of landscape character assessments of relevance to the route options;
- Review of Ordnance Survey (OS) mapping (1:50,000 and 1:25,000 and online GIS data sources from OS OpenData) and aerial photography (where available) to identify other potential constraints such as settlement, properties, walking routes, cycling routes etc.;
- Extrapolation of OS Vectormap GIS data to identify further environmental constraints including locations of watercourses and waterbodies, roads classifications and degree of slope; and
- Review of other local information through online and published media such as tourism sites and walking routes.

4.4 Route Options Identification

Four route options have been identified by the engineering team, all of which were found to be viable following a high-level engineering route evaluation. All route options comprise the tee-in compound to connect the new OHL into the existing OHL. All four routes provide a link between the existing OHL and the developers proposed substation east of Lunderton.

These route options are described in Figure 1.

Route options were identified following site appraisals, taking into account the most notable constraints identified during the baseline studies. Considerations have included a review of the steps outlined in the Holford Rules and SSEN Transmission's approach to routeing. In summary, the following has been taken into account as far as is practicable at this routeing stage 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;
- Technical issues related to clearances, connectivity, outages, maintenance, faults; and
- Any other project specific requirements.

Indicative route options have been identified at 1 km widths to allow for subsequent identification of alignments during the next stage of the process (Stage 3).

4.5 Appraisal Methodology

Appraisal of Route Options has involved systematic consideration against the following environmental, technical and economic topic areas, as specified in the SSEN Transmission guidance:

<u>Environmental</u>

- Natural Heritage (Designations, Protected Species, Habitats, Ornithology and Geology, Hydrogeology and Hydrology);
- Cultural Heritage (Designations and Cultural Heritage Assets);
- People (Proximity to Settlements, Visual and Physical Effects);
- Landscape and Visual (Designations, Character and Visual Impact); and
- Land Use (Agriculture, Forestry and Recreation); and
- Planning Policy and Proposals

Technical

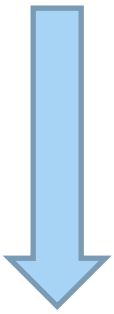
- Infrastructure Crossings (e.g. overhead lines, rail, rivers, pipelines, roads)
- Environmental Design (e.g. altitude, contaminated land, flooding);
- Ground Conditions (e.g. peat, rock, terrain);
- Construction / Condition (e.g. access arrangements, angles of deviation)
- Proximity (e.g. windfarms, communications masts, urban environments, metallic pipelines).

Cost

- Construction;
- Diversions;
- Public Road Improvements;
- Felling;
- Land Assembly;
- Consent Mitigations;
- Inspections; and
- Maintenance.

A Red, Amber, Green 'RAG' rating has been applied to each subject area indicating potential effects. This rating is based on a four-point scale shown in Image 5 below:

Image 1 RAG Ratings

Performance	Appraisal
Most Preferred  Least Preferred	No potential for the infrastructure design development to be constrained
	Low potential for the infrastructure design development to be constrained
	Moderate potential for the infrastructure design development to be constrained
	High potential for the infrastructure design development to be constrained

The overall objective throughout the appraisal has been to take full consideration of all environmental, engineering and economic factors to minimise any potential adverse impacts on the environment whilst taking into account technical and cost considerations.

5. DESCRIPTION OF OVERHEAD LINE ROUTE OPTIONS

5.1 Introduction

This section provides a high-level description of each route option. Please also refer to the figures in Appendix A for additional information.

Four route options have been identified providing different options for connecting the proposed developer's substation to the existing transmission network.

5.2 Route Option 1

Route Option 1 provides the most direct connection to the existing transmission network from the developer's proposed substation while avoiding residential properties. Route Option 1 is approximately 1.5 km in length and is located primarily within agricultural land. The route crosses the A90 directly to the west of the proposed substation site. Several 11kV distribution lines and minor roads fall within the route. The Cuttie Burn is located within the route option but does not cross the full width of the route, so there may be potential to avoid it at the alignment stage.

5.3 Route Option 2

Route Option 2 connects directly to the existing transmission network to the south of Kirktown. Route Option 2 is approximately 3 km in length and is located primarily within agricultural land. The route crosses the A90 directly to the west of the proposed substation site. The route crosses over the Kinloch waterbody and there are several watercourses within the route option, including the Cuttie Burn. The route also crosses two surface medium pressure gas pipelines, several 11kV overhead lines (OHL) and minor roads.

5.4 Route Option 3

Route Option 3 connects directly to the existing transmission network to the north of Inverugie. Route Option 3 is approximately 1.6 km in length and is located primarily within agricultural land. The route crosses the A90 to the south towards Peterhead. There are numerous named and unnamed watercourses throughout the Option 3 Route, with notable larger watercourses including the River Ugie. However, none of these watercourses cross the full width of the Route Option. The route also includes a 11 kV overhead line and some minor roads.

5.5 Route Option 4

Route Option 4 connects to the existing transmission network to the south of Kirktown, avoiding the properties and waterbody at Kinloch Farm. Route Option 4 is approximately 3.4 km in length and is located primarily within agricultural land. The route crosses the A90 to the north, two medium pressure surface gas pipelines, several 11kV overhead lines, and minor roads. There are numerous named and unnamed watercourses throughout the Option 4 Route, with notable larger watercourses including the Kinloch waterbody and the Cuttie Burn. The Cuttie Burn crosses the full width of Route Option 4.

6. COMPARATIVE APPRAISAL

6.1 Stage 0: Routeing Strategy Development

The following key requirements were identified for the identification of the OHL Routes:

- Connectivity between the developer's consented substation and OHL connection points.
- Avoiding key settlements.
- Avoiding designated ecological and ornithological sites.

Four route options were identified which provided connections between the developer's proposed substation and the existing transmission network.

6.2 Stage 2: Route Selection

6.2.1 Environmental assessment

A summary outlining the key findings of the environmental assessment of each of option is set out below. A detailed review of potential environmental effects is presented in Appendix B 'Environmental Appraisal of Options'.

Route Option 1

- Route Option 1 is relatively small and self-contained within mainly agricultural habitats and is therefore unlikely to have significant effects on natural heritage features.
- No impact on statutory designated site is anticipated, nor are impacts on the Rattray Head to Peterhead Local Nature Conservation Site (LNCS) which is located within all route options.
- The Cuttie Burn is located within Route Option 1 but it is not crossed by the route option.
- There are two scheduled monuments within Route Option 1 and two further schedule monuments within 1km of the route, which may have their setting compromised. There is also the potential for previously unrecorded archaeological remains to survive within the route option.
- There is one category c listed building within Route Option 1 and five category b/c listed buildings within 1km of the route, which are unlikely have their setting compromised.
- A small part of this route option nearest the coast, is within the North East Aberdeenshire Special Landscape Area (SLA) and therefore may result in direct and indirect change to this designation. Forestry and woodland to the north and east and rising topography to the south provide opportunities to partially screen the proposed OHLs and therefore limit the extent of potential impacts on the SLA.
- This route option is in close proximity to a number of residential properties, including Linksfield Cottage and Drumlinnie, Portofino, Bearhill and Hillcrest and those at Lunderton and Hallmoss. There may be potential to achieve an alignment which avoids direct impacts on the main views to the south and east from Linksfield Cottage and Drumlinnie, and the Lunderton properties
- Option 1 avoids any impacts on prime agricultural land. However, it is located within an area of commercial forestry with an active permission for felling therefore any potential conflicts with ongoing forestry operations should be considered.
- There are no core paths or other designated recreation areas within the route options.

Table 1: Route Option 1 - Environmental RAG Rating Table

Natural Heritage					Cultural Heritage		Landscape & Visual			Land Use			Planning	
Designations	Protected Species	Habitats	Hydrology / Geology	Ornithology	Designations	Cultural Heritage Assets	Designations	Character	Visual Amenity	Agriculture	Forestry	Recreation	Policy	Proposals
L	M	L	L	L	M	L	M	L	M	L	M	L	L	L

Route Option 2

- Option 2 is approximately 1.6 km in length and, although mainly located within agricultural habitats, also crosses some potentially notable features including plantation woodland and the Kinloch waterbody.
- No impact on statutory ecological designated sites is anticipated. Rattray Head to Peterhead LNCS is within the route but will not be impacted.
- Option 2 could impact bird species which are designated features of Loch of Strathbeg Special Protection Area (SPA) and Ramsar site and Ythan Estuary, Sands of Forvie and Meikle Loch SPA as some parts crossed by the route may be functionally linked to these Sites. In particular, designated features of these sites were observed on the Kinloch waterbody.
- The Cuttie Burn is located within Route Option 2 but it is not crossed by the route option.
- There are two scheduled monuments within 1km of Route Option 2 which may have their setting compromised. There is also the potential for previously unrecorded archaeological remains to survive within the route option.
- There is one category c listed building within Route Option 2 and two category b/c listed buildings within 1km of the route, which are unlikely have their setting compromised.
- A small part of this route option nearest the coast, is within the North East Aberdeenshire SLA and therefore may result in direct and indirect change to this designation.
- Route Option 2 is likely to result in impacts on a number of nearby residential properties.
- Route Option 2 avoids any impacts on prime agricultural land. However, it is located within an area of commercial forestry with an active permission for felling therefore any potential conflicts with ongoing forestry operations should be considered.
- There are no core paths or other designated recreation areas within the route options.

Table 2: Route Option 2 - Environmental RAG Rating Table

Natural Heritage					Cultural Heritage		Landscape & Visual			Land Use			Planning	
Designations	Protected Species	Habitats	Hydrology / Geology	Ornithology	Designations	Cultural Heritage Assets	Designations	Character	Visual Amenity	Agriculture	Forestry	Recreation	Policy	Proposals
L	H	M	M	H	M	L	M	L	M	L	M	L	L	L

Route Option 3

- Route Option 3 is approximately 1.6 km in length and, although mainly located within agricultural habitats, also crosses some potentially notable features including woodland.
- No impact on non-ornithological statutory designated sites is anticipated. Rattray Head to Peterhead LNCS is within the route but will not be impacted.
- Some notable habitats are crossed by the line and therefore may be impacted. This includes potentially notable woodland along the River Ugie that could include GWDTE, though further survey is required to confirm the presence of such habitats.
- Route Option 3 could potentially impact bird species which are designated features of Loch of Strathbeg SPA and Ramsar site and Ythan Estuary, Sands of Forvie and Meikle Loch SPA as some parts crossed by the route may be functionally linked to these Sites.
- There are numerous named and unnamed watercourses throughout Route Option 3, with notable larger watercourses including the River Ugie. However, none of these watercourses cross the route.
- There are three scheduled monuments within Route Option 3 and two further schedule monuments within 1km of the route, which may have their setting compromised. There is also the potential for previously unrecorded archaeological remains to survive within the route option.
- There are two category c listed building within Route Option 3 and three category b/c listed buildings within 1km of the route, which are unlikely have their setting compromised.
- A small part of this route option nearest the coast, is within the North East Aberdeenshire SLA and therefore may result in direct and indirect change to this designation.
- Route Option 3 is likely to result in impacts on a number of nearby residential properties.
- There is an area of prime agricultural land within Route Option 3 to the north of Peterhead, as well as commercial forestry with an active permission for felling.
- There are no core paths or other designated recreation areas within the route options.

Table 3: Route Option 3 - Environmental RAG Rating Table

Natural Heritage					Cultural Heritage		Landscape & Visual			Land Use			Planning	
Designations	Protected Species	Habitats	Hydrology / Geology	Ornithology	Designations	Cultural Heritage Assets	Designations	Character	Visual Amenity	Agriculture	Forestry	Recreation	Policy	Proposals
L	H	M	M	H	M	L	M	L	M	M	M	L	L	L

Route Option 4

- Route Option 4 is approximately 3.4 km in length and although mainly located within agricultural habitats, also crosses some potentially notable features.
- No impact on non-ornithological statutory designated sites is anticipated. Rattray Head to Peterhead LNCS is within the route but will not be impacted.
- Route Option 4 could potentially impact bird species which are designated features of Loch of Strathbeg SPA and Ramsar site and Ythan Estuary, Sands of Forvie and Meikle Loch SPA as some parts crossed by the route may be functionally linked to these sites.
- There are numerous named and unnamed watercourses throughout the route, with notable larger watercourses, including the Kinloch waterbody and the Cuttie Burn. Route Option 4 also crosses the Cuttie Burn.
- There are no scheduled monuments within Route Option 4 or within 1km of the route.
- There are two category c listed building within Route Option 4 and three category b/c listed buildings within 1km of the route, which are unlikely have their setting compromised.
- A small part of this route option nearest the coast, is within the North East Aberdeenshire SLA and therefore may result in direct and indirect change to this designation.
- Route Option 4 is likely to result in impacts on a slightly greater number of nearby residential properties than the other options.
- Route Option 2 avoids any impacts on prime agricultural land. However, it is located within an area of commercial forestry with an active permission for felling therefore any potential conflicts with ongoing forestry operations should be considered.
- There are no core paths or other designated recreation areas within the route options.

Table 4: Route Option 4 – Environmental RAG Rating Table

Natural Heritage					Cultural Heritage		Landscape & Visual			Land Use			Planning	
Designations	Protected Species	Habitats	Hydrology / Geology	Ornithology	Designations	Cultural Heritage Assets	Designations	Character	Visual Amenity	Agriculture	Forestry	Recreation	Policy	Proposals
L	H	M	M	H	L	L	M	M	M	L	M	L	L	L

6.2.2 Technical Assessment

A summary outlining the key findings of the technical assessment of each of option is set out below.

Route Option 1

- Approx. length from the centreline: 1.5 km (both, Northern and Southern branch). This is the shortest and most compact option among those considered.
- **Infrastructure Crossings**: One 11 kV line runs south to north through the centre of the corridor, parallel to the A90. Another 11 kV line crosses west to east, with small branches supplying rural properties such as Portofino and Peachtree; this line intersects the main north–south line.
- **Water Infrastructure**:

  No major water features of high environmental importance within the corridor. The Cattie Burn minor river lies in the north-east and is easy to avoid; there are a few small streams of no significance. At the south-west edge, the River Ugie forms the boundary and poses no crossing risk.
- Based on the number of crossings listed above, ie. two 11kV crossings, this option scores High Risk as these are considered major crossings.
- **Road Crossings:**
  The A90 major road runs south to north through the centre of the corridor. Small deviations from the A90 provide access to settlements such as Lunderton Cottage and Linksfield Cottage, which appear avoidable as they are located at the southern edge. A minor road slightly to the west also crosses the corridor, splitting into two branches near the centre. Tractor tracks are present within some fields and are considered low importance. This option scores **Low Risk**, as it has the least number of road crossings.
- Elevation: 100% of the corridor lies below 200 metres above Ordnance Datum (AOD).
- Atmospheric Pollution: No high pollution areas anticipated.
- Contaminated Land: No clear areas of contaminated land (other than potential for contamination at road crossings or disused canals).
- Flooding: Significantly less than 80% width is within a 1 in 200-year flood zone. Minor surface flood risk throughout.
- Terrain: Open, relatively flat terrain with typical slope gradients of 0-3 degrees. Approx. 25% of route falls within an area of up to 10% slope gradient. No pinch points. No apparent indicators of slope instability.
- No mapped peat near line.
- Proposed access is via an existing A90 road or smaller roads, Kinloch Road and unnamed road, within less than 1km from existing road network.
- Based on the potential change in direction within the corridor, it is estimated that 3 to 5 number of angle towers might be required (same for each branch, Northern and Southern).
- Within the 1000 m corridor, no relevant structures or installations have been identified that would impact clearance distance.
- Windfarm Proximity: The closest windfarm is located at a distance greater than 1 km from the proposed corridor, ensuring adequate separation and minimising potential impacts on the development.
- Communication mast Proximity: The closest Communication mast is located at a distance greater than 1 km from the proposed corridor, ensuring adequate separation and minimising potential impacts on the development.
- Metallic Pipelines: None Present

Table 5: Route Option 1 – Engineering RAG Rating Table

Length	Infrastructure Crossings	Environmental Design	Ground Condition	Construction / Condition	Proximity

Approximate corridor length	Major crossing	Road crossing	Elevation	Atmospheric pollution	Contaminated land	Flooding	Terrain	Peat	Access	Angle towers	Clearance distance	Windfarms	Communication mast	Urban environments	Metallic pipelines
L	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L

Route Option 2

- Approx. length from the centreline: 2.8 km, which is considerably longer than Option 1 and Option 3.
- **Infrastructure Crossings:**
  Two 11 kV overhead lines run through the corridor: one north–south along the A90 with branches to Kiloch Farm, South Kirkton, and nearby houses; the other enters from the south-central section, intersects the first, and branches to Portofino Farm and other properties. Two subsurface medium-pressure gas pipelines enter from the south-west: one crosses the corridor centre to the north-east (unavoidable), and the other heads north-west near VS1/VS2 38. Three wind turbines are located in the north-west near the existing 132 kV double circuit line.
- **Water Crossings:**
  Kiloch Waterbody of high environmental importance lies near the corridor centre (crossing width considered at 200 m+), with Cuttie Burn minor river along the east and several small streams between these features. Two water utilities cross in the north-west section.
- This corridor is considered high risk primarily due to the numerous infrastructure and utility crossings involved, which significantly complicate construction and planning. Most notably, Kiloch waterbody presents the greatest environmental importance within the entire study area, further elevating the overall risk associated with this option.
- **Road Crossings:**
  The A90 major road crosses the eastern section of the corridor from south to north. A minor road runs centrally, branching into two near the northern end, while another minor road in the north-west provides access to Bruxiehill WindFarm (avoidable). Small deviations from the A90 give access to settlements such as Linksfield Cottage, located at the southern edge and easily avoided. Tractor tracks are present within some fields and are considered low importance.
- Elevation: 100% of the corridor lies below 200 metres above Ordnance Datum (AOD).
- Atmospheric Pollution: No high pollution areas anticipated.
- Contaminated Land: No clear areas of contaminated land (other than potential for contamination at road crossings or disused canals).
- Flooding: Significantly less than 80% width is within a 1 in 200-year flood zone. Minor surface flood risk throughout.
- Terrain: Open, relatively flat terrain with typical slope gradients of 0-5 degrees. Approx. 10% of route falls within areas of up to 10% slope gradient. No pinch points. No apparent indicators of slope instability.
- Peat: End of line (at existing VS1/VS2 connection) has mapped peat approx. 200m away.
- Proposed access is via an existing A90 road or smaller roads, Kinloch Road and unnamed road, within less than 1km from existing road network.
- Angle towers: Based on the potential change in direction within the corridor, it is estimated that 3 to 5 number of angle towers might be required.
- Within the 1000 m corridor, no relevant structures or installations have been identified that would impact clearance distance.
- There are three wind turbines northwest of the corridor within 750m.
- Communication mast Proximity: The closest Communication mast is located at a distance greater than 1 km from the proposed corridor, ensuring adequate separation and minimising potential impacts on the development
- Less than 10% of the corridor passes through urban environment

- Two subsurface medium pressure gas mains run through across the western extent of the option 1000m corridor.

Table 6: Route Option 2 - Engineering RAG Rating Table

Length	Infrastructure Crossings		Environmental Design				Ground Condition		Construction / Condition		Proximity				
Approximate corridor length	Major crossing	Road crossing	Elevation	Atmospheric pollution	Contaminated land	Flooding	Terrain	Peat	Access	Angle towers	Clearance distance	Windfarms	Communication mast	Urban environments	Metallic pipelines
M	H	M	L	L	L	L	L	L	L	L	L	H	L	L	M

Corridor Option 3

- Approx. length from the centreline: 1.6 km
- **Infrastructure Crossings:**
  One 11 kV line is located in the southern part of the corridor, with multiple branches serving nearby settlements. Most branches extend to the left of the existing VS1/VS2 line without crossing, while others run to the right to supply Mains of Inverugie, Hallmoss Farm, and Hallmoss Cottages.
- **Water Features and Risk Assessment:**
  River Ugie, of high environmental importance, lies in the south-west section; a short segment runs to the right of the existing VS1/VS2 line but can be avoided. Cuttie Burn minor river is in the northern part beyond the developer's substation, so it does not affect the proposed alignment. A few minor streams of low importance run parallel to Cuttie Burn and discharge into the coast
- Major crossings include River Ugie and one 11 kV line, totalling two major infrastructures—this option is categorised as **High Risk**.
- **Road Crossings:**
  The A90 major road crosses the central part of the corridor. A minor road branches near Hallmoss Farm and splits into two smaller roads, while another minor road leads to Mains of Inverugie (avoidable if the T-off is made from the central area towards the west at the start of the corridor). There is also a minor road at the south-easternmost starting point of the corridor. Tractor tracks are present within some fields and are considered low importance. This option scores **Medium Risk**, as it does not have less than 200 % of the least number of crossings among the options.
- **Elevation:** 100% of option below 200m AOD.
- Atmospheric Pollution: No high pollution areas anticipated.
- Contaminated land: No clear areas of contaminated land (other than potential for contamination at road crossings or disused canals).
- Flooding: Significantly less than 80% width is within a 1 in 200-year flood zone. Western end of Option 3 includes a limited extent of 1in200 year (0.5% likelihood) riverine flooding risk. Minor surface flood risk throughout.
- Terrain: Open, relatively flat terrain with typical slope gradients of 0-5 degrees. Approx. 10% of route falls within areas of up to 10% slope gradient. No pinch points. No apparent indicators of slope instability, although river/stream banks are steeper and may be unstable.
- No mapped peat near line.
- Proposed access is via an existing A90 road or smaller roads, Kinloch Road and unnamed road, within less than 1km from existing road network.

- Based on the potential change in direction within the corridor, it is estimated that 3 to 5 number of angle towers might be required.
- Within the 1000 m corridor, no relevant structures or installations have been identified that would impact clearance distance.
- Windfarm Proximity: The closest windfarm is located at a distance greater than 1 km from the proposed corridor, ensuring adequate separation and minimising potential impacts on the development.
- Communication mast Proximity: The closest Communication mast is located at a distance greater than 1 km from the proposed corridor, ensuring adequate separation and minimising potential impacts on the development.
- Metallic Pipelines: None Present

Table 7: Route Option 3 OHL - Engineering RAG Rating Table

Length	Infrastructure Crossings		Environmental Design				Ground Condition		Construction / Condition		Proximity				
Approximate corridor length	Major crossing	Road crossing	Elevation	Atmospheric pollution	Contaminated land	Flooding	Terrain	Peat	Access	Angle towers	Clearance distance	Windfarms	Communication mast	Urban environments	Metallic pipelines
L	H	M	L	L	L	L	L	L	L	L	L	L	L	L	L

Corridor Option 4

- Approx. length from the centreline: 3.4 km This is the longest and most extensive corridor among all those evaluated.
- **Infrastructure Crossings:**
  Four 11 kV overhead lines are present: one runs through the centre branching to Kiloch Farm and unnamed houses; a longer branch crosses the A90 to South Kirkton; another line in the north-west connects three wind turbines; and one from the A90 supplies North Kirkton and Kiloch Manor. Two subsurface medium-pressure gas pipelines cross the corridor—one in the north-west and another from the central area to the north-east (unavoidable). Three wind turbines are located in the north-west near the existing 132 kV double circuit VS1/VS2 line.
- **Water crossing:**
  Kiloch Waterbody lies near the centre and can be avoided. Cuttie Burn minor river crosses the corridor. Several small streams and water bodies of low importance occur mainly in the central section, and two water utilities cross in the west.
- Major crossings include four 11 kV lines and two gas pipelines, totalling six major infrastructures—this option is categorised as **High Risk**.
- **Road Crossings and Risk Assessment:**
  The A90 major road crosses the central part of the corridor from south to north. Several minor roads branch from the A90 through the central section, providing access to farms, fields, and small settlements such as Kinloch Farm, Kiloch Manor, and North Kirkton. A minor road leading to South Kirkton farm in the central-eastern area is easily avoidable, as is another minor road in the north-west that provides access to Bruxiehill WindFarm. Tractor tracks are present within some fields and are considered low importance. This option scores **Medium Risk**, as it does not have less than 200 % of the least number of crossings among the options.
- **Elevation:** 100% of option below 200m AOD.

- **Atmospheric Pollution:** No high pollution areas anticipated.
- **Contaminated Land:** No clear areas of contaminated land (other than potential for contamination at road crossings or disused canals).
- **Flooding:** Significantly less than 80% width is within a 1 in 200-year flood zone. Minor surface flood risk throughout.
- **Terrain:** Open, relatively flat terrain with typical slope gradients of 0-5 degrees. Approx. 40% of route falls within areas of up to 10% slope gradient. No pinch points. No apparent indicators of slope instability, although river/stream banks are steeper and may be unstable.
- **Peat:** Approx. 4% of line has mapped peat ~100m away. End of line (at existing VS1/VS2 connection) has mapped peat approx. 200m away.
- Proposed access is via an existing A90 road or smaller roads, Kinloch Road and unnamed road, within less than 1km from existing road network.
- Based on the potential change in direction within the corridor, it is estimated that 4 to 6 number of angle towers might be required.
- Within the 1000 m corridor, no relevant structures or installations have been identified that would impact clearance distance.
- Windfarms: There are three wind turbines northwest of the corridor within 750m.
- Communication mast Proximity: The closest Communication mast is located at a distance greater than 1 km from the proposed corridor, ensuring adequate separation and minimising potential impacts on the development.
- Less than 10% of the corridor passes through urban environment
- Metallic Pipeline: Two subsurface medium pressure gas mains run through across the western extent of the option 1000m corridor.

Table 8: Route Option 4 OHL - Engineering RAG Rating Table

Length	Infrastructure Crossings		Environmental Design				Ground Condition		Construction / Condition		Proximity				
Approximate corridor length	Major crossing	Road crossing	Elevation	Atmospheric pollution	Contaminated land	Flooding	Terrain	Peat	Access	Angle towers	Clearance distance	Windfarms	Communication mast	Urban environments	Metallic pipelines
H	H	M	L	L	L	L	L	L	L	M	L	H	L	L	M

6.2.3 Cost Assessment

The relative economic impact of each route was assessed against a set of economic criteria as set out below.

Construction

- Route options 1 and 3 are the shortest routes ranging from 1.5km to 1.6km respectively when compared to route options 2 and 4 which are 3km and 3.4km respectively. All route options require to cross the A90 at some location and would interface with various watercourses including the cuttie burn and river ugie in some capacity. However, route option 1 provides the greatest opportunnity to avoid the cuttie burn at the alignment stage.
- Option 2 also has three windfarms in close proximity to the north western part of the corridor close to the VS1/2 OHL.

- Option 3 highlights local stability issues near river and stream banks which have the potential to oncrease the construction timeline.

Diversions

- All options require to cross or be in close proximity to other infrastructure or equipment assets. This includes 11kV distribution lines, road crossings, water courses, gas pipelines and windfarms,
- Option 1 is the least constrained from a diversionary and proximity perspective.
- For all options a temporary diversion of the existing VS1/2 OHL is required during construction to ensure the 132kV network remains intact which reduces outage pressure on the wider network whilst construction is underway.

Public Road Improvements

- At this stage, there may be requirements for public road improvements. We require to undertake more detailed studies on this and will consult in more detail at future events once this requirement has been determined.

Tree Felling

- There may be areas of commercial forestry which require to be removed which will be undertaken in consultation with Forestry and Land Scotland (FLS).
- An operational corridor would be required to enable the safe operation and maintenance of the OHL. This will vary depending on the type of woodland (based on species present) in proximity to the OHL. In areas of native woodland it is usually possible to provide a narrower corridor due to a reduced risk of trees falling on the OHL
- The economic assessment of this will be completed in more detail at the next stages of the project.

Land Assembly

- All route options are situated on 3rd party land and will require wayleaves or servitudes. We will require to purchase an area of land for the tee compound which will include the operational compound, servitudes for access where required and a potential buffer zone around the tee compound for maintenance.
- Route options 1 and 3 cover the least amount of land whcih will require land agreements. In comparison, route options 2 and 4 require the most amount of land ownership.

Consent Mitigations

- Through our initial desktop and on-site assessments, consent mitigations seem similar from a cost perspective across all four presented routes. As part of our ongoing process for the overhead line works we will submit an EIA screening request to the Scottish Government Energy Consents Unit (ECU), which will establish further process and considerations for progressing necessary consents. Additionally, we will submit a pre-application enquiry to Aberdeenshire council in relation to the tee compound and the feedback received from the Local Authority will inform design development and anticipated mitigation measures.
- All of this will feed into the economic impact of consent mitigations of the project overall.
- In broad terms, mitigations for consents are seen as low to medium risk, noting low levels of peat, and limited impact on designated areas, monuments and other environmental receptors. The highest risk areas relate to the proximity of crossings of water courses however it is hoped that this risk can be reduced through careful consideration at the alignment stage of the project.

Inspections & Maintenance

- All considered corridor options should not introduce significant risks or costs with regards to Inspection and Maintenance. Access for all corridor options is proposed via existing road network, A90 road and other existing minor roads, with less than 0.5km of new or upgraded access where required.

Table 9: Cost RAG Rating Table

	Capital						Operational	
	Construction	Diversions	Public Road Improvements	Tree Felling	Land Assembly	Consent Mitigations	Inspections	Maintenance
Route Option 1	L	H	M	H	L	M	L	L
Route Option 2	M	H	M	H	M	M	L	L
Route Option 3	L	H	M	H	L	M	L	L
Route Option 4	M	H	M	H	M	M	L	L

6.3 Stage 3: Alignment Selection

The alignment selection stage will seek to identify an alignment within the chosen preferred route and to define the access arrangements adapted in terms of, for example, the nature and extent of temporary and/or permanent tracks and road improvements. This stage will be subject to further study and consultation

7. SELECTION OF PREFERRED ROUTE

Route Option 1 is considered to have fewer high impacts compared to Route Options 2, 3 and 4 and is therefore the preferred route option from an environmental perspective.

Route Option 1 is primarily located within agricultural land and avoids important habitats such as Ancient Woodland, Class 1 peatland and the Kinloch Waterbody which would be impacted by the other route options. Route Option 1 does not run parallel coast unlike the other route options; avoiding interaction with coastal habitats and Rattray Head to Peterhead LNCS.

All options would have similar impacts on cultural heritage.

While all options have potential to impact landscape and visual receptors, Route Option 1 is likely to result in least impact, despite the potential for a locally intense wirescape towards the southern connection point. The short length of this route would help limit the extent of landscape impacts, concentrating them in a small area already influenced by an OHL, although visual impacts from a number of nearby residential properties are likely. The rolling nature of this landscape coupled with localised blocks of woodland is likely to limit more distant landscape and visual impacts.

Route Option 1 avoids impact on areas of Prime Agricultural Land; however, all route options have the potential to have impacts on an area of commercial forestry at Lunderton which has an active permission for felling.

Route Option 1 would have overall reduced impacts on land use compared to Options 2, 3 and 4 due its smaller scale and land-take.

8. NEXT STEPS

8.1 Public Consultation

A public consultation event is to take place to help inform the final selection of the proposed OHL route. The responses received from the consultation event, and those sought from statutory consultees and other key stakeholders will inform further consideration of the route options put forward, and the identification of a proposed route to take forward to the next stage in the routeing process (Alignment selection). Further consultation event(s) will be held as part of the alignment section process.

A Report on Consultation will be produced which will document the consultations received, and the decisions made in light of these responses.

8.2 Questions for Consideration by Consultees

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

- Have you any comments regarding the location of the route options and associated tee compound locations?
- Are there any additional factors or environmental features that you would like to bring to the attention of the project team?
- Is there anything specific you would like to raise in relation to the project which will impact on the development process to deliver this essential connection project to support Government net-zero targets?

8.3 Environmental Assessment and Submission

The outcome of the alignment process will be a development for a proposed OHL which would be consented under Section 37 of the Electricity Act 1989.

The application may be subject to an Environmental Impact Assessment (EIA) under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 This may result in further alterations to the Proposed Development to reflect outcomes of the EIA process. Should the Proposed Development be deemed non-EIA (due to its scale or number and significance of potential environmental effects), a voluntary Environmental Appraisal would be carried out to support the application.

Further public and stakeholder consultation will be undertaken to present our proposals ahead of submitting any planning applications.

APPENDIX A FIGURES

APPENDIX B ENVIRONMENTAL APPRAISAL OF ROUTE OPTIONS

Route Option 1 Appraisal		
Description:		
132kV double circuit steel lattice route extending from the developer's substation and tee-in to existing OHL. This route is 1.5 km.		
Review of Environmental Impacts		
Natural Heritage		
Topic	**Potential Impacts**	**RAG Impact Rating**
Designations	No impacts on statutory designations which are not designated for ornithology are anticipated. Rattray Head to Peterhead LNCS is within the Route Option 1 but will not be impacted unless this route moves towards the coast. See below for ornithological designations.	L
Protected Species	This route crosses a ditch which may have suitability for water vole and possibly otter, and the woodland to the east may support bats, red squirrel, pine marten and/or badger. Additional trees on field boundaries may also support bats and field boundaries may be used by badger. However, the risk of the route significantly impacting protected species is significantly reduced by the habitats being suboptimal for these species. There is also the remote possibility of great crested newt being present.	M
Habitats	No notable or protected habitats will be impacted by Route Option 1 as none appear to be present from aerial imagery or were otherwise identified by the desk study. A notable watercourse (Ugie Water) and likely notable coastal grassland (Rattray Head to Peterhead LNCS) are present within Route Option 1 but are unlikely to be impacted.	L
Geology, Hydrology and Hydrogeology	Route Option 1 would not impact any designated geological sites. The Cuttie Burn is located within Route Option 1 but it is not crossed by the route option. Route Option 1 is located within the Fraserburgh DWPA.	L
Ornithology	Route Option 1 is unlikely to have impacts on any statutory sites designated for birds (Buchan Ness to Collieston Coast SPA, Loch of Strathbeg SPA and Ramsar site Ythan Estuary, Sands of Forvie and Meikle Loch SPA) as it is relatively short and there is little evidence to suggest that the area around this option is of particular importance to designated features of the SPAs. However, further surveys are required to confirm this, particularly as geese may be at risk of colliding with overhead lines. Route Option 1 may impact some trees which, if mature, may provide habitat for species such as barn owl.	L

Route Option 1 Appraisal		
	Route Option 1 may also result in the loss of some habitat which supports common breeding bird species (e.g. woodland, hedges), though these impacts will be relatively insignificant in the context of the wider landscape.	
Cultural Heritage		
Topic	**Potential Impacts**	**RAG Impact Rating**
Designations	There are fifteen non-designated heritage assets within Route Option 1 which may be directly impacted by the route option. There is potential for previously unrecorded archaeological remains to survive within Route Option 1. These remains could potentially be impacted during ground works, including the addition of the new OHL towers, access tracks and decommissioning of towers associated with the existing OHL.	L
Cultural Heritage Assets	There are three designated heritage assets within Route Option 1. These assets are primarily located on the south of Hallmoss where the route would tie into the existing transmission network; therefore, there is not expected to be any physical or setting impacts to designated heritage assets.	L
Landscape		
Topic	**Potential Impacts**	**RAG Impact Rating**
Designations	Route Option 1 is not within or adjacent to any national landscape designations. A short section of Route Option 1 does pass through a local landscape designation (North East Aberdeenshire Special Landscape Area (SLA)). Potential for localised impacts on the SLA.	M
Character	Route Option 1 is predominantly within the Coastal Agricultural Plain - Aberdeenshire Landscape Character Type (LCT). This option would result in an increased concentration of OHLs, converging towards the southern tie-in point, leading to localised impacts on the character of this LCT. A small part of Route Option 1 is also within the Beaches, Dunes and Links LCT, with the potential for localised but relatively limited impacts on the characteristics of this LCT.	L
Visual	Whilst there are relatively few receptors within this route, the introduction of two OHLs around Lunderton is likely to result in visual impacts on a number of nearby residential properties.	M
Land Use		
Topic	**Potential Impacts**	**RAG Impact Rating**
Agriculture	Agricultural land has a land capability for agriculture of 3.2 within Route Option 1.	**L**
Forestry	There are areas of Forestry within the corridor for Route Option 1 where the OHL connects to the substation.	**M**
Recreation	There are no core paths or national cycle paths within or close to the OHL routes.	**L**
Planning		

Route Option 1 Appraisal		
Policy	Adherence to National, Regional and Local planning policy will depend on avoiding or minimising potential constraints noted, particularly in relation to potential impacts on the natural environment given the presence of designated sites.	L
Proposals	There are no proposals identified which would be impacted by Route Option 1 this should be further considered during the next stage.	L

Route Option 2 Appraisal		
Description:		
132kV double circuit steel lattice route extending from the developer's substation and tee-in to existing OHL. This route is 3 km.		
Review of Environmental Impacts		
Natural Heritage		
Topic	**Potential Impacts**	**RAG Impact Rating**
Designations	No impacts on statutory designations which are not designated for ornithology are anticipated. Rattray Head to Peterhead LNCS is within the Route Option 2 but will not be impacted unless this route moves towards the coast. See below for ornithological designations.	L
Protected Species	Habitats the Route Option 2 are locally suitable for and have the potential to support all protected species discussed above (bats, otter, water vole, red squirrel, pine marten, badger). There is also the remote possibility of great crested newt being present.	H
Habitats	Some notable habitats are crossed by Route Option 2 and therefore may be impacted. This includes potentially notable woodland around the Kinloch waterbody, which could include GWDTE, though further survey is required to confirm the presence of such habitats and coastal grassland.	M
Geology, Hydrology and Hydrogeology	Route Option 2 would not impact any designated geological sites. There is an area of Class 1 peat within the northwest of Route Option 2. There are numerous named and unnamed watercourses throughout the Route Option 2, with notable larger watercourses, including the Kinloch waterbody and the Cuttie Burn. Route Options 2 is located within the Fraserburgh and Mintlaw DWPAs.	M
Ornithology	Route Option 2 could potentially impact bird species which are designated features of Loch of Strathbeg SPA and Ramsar site and Ythan Estuary, Sands of Forvie and Meikle Loch SPA as some parts crossed by the route may be functionally linked to these Sites. In particular, designated features of these sites were observed on the Kinloch waterbody, and others may occur. This includes geese, which may be at risk of colliding with overhead lines if they are located within a flight path. There is little evidence to suggest that the area around Route Option 2 is of particular importance to geese, however, further surveys are required to confirm this. Route Option 2 may impact some trees which, if mature, may provide habitat for species such as barn owl. Route Option 2 will also likely result in the loss of habitat which supports common breeding bird species (e.g. woodland, scrub, hedges).	H
Cultural Heritage		
Topic	**Potential Impacts**	**RAG Impact Rating**

Route Option 2 Appraisal		
Designations	There are nine non-designated heritage assets within Route Option 2 which may be directly impacted by the route option. There is potential for previously unrecorded archaeological remains to survive within the route option. These remains could potentially be impacted during ground works, including the addition of the new OHL towers, access tracks and decommissioning of towers associated with the existing OHL.	L
Cultural Heritage Assets	There is one designated heritage assets within Route Option 2. This asset is avoidable within the route option; however, the setting of the asset may be impacted.	M
Landscape		
Topic	**Potential Impacts**	**RAG Impact Rating**
Designations	Route Option 2 is not within or adjacent to any national landscape designations. Route Option 2 does pass through a local landscape designation (North East Aberdeenshire SLA). Potential for localised impacts on the SLA.	M
Character	The eastern part of Route Option 2 is within the Beaches, Dunes and Links LCT, with potential for localised impacts on the character and impression of this landscape. The western part of Route Option 2 is within the Coastal Agricultural Plain LCT, introducing a new section of OHL north of Lunderton. Overall, this route option is likely to result in a local increase in the influence of electrical infrastructure within this and the adjacent LCT. There are opportunities to make use of woodland blocks to help partially screen the northern section of this option, reducing potential impacts.	L
Visual	Route Option 2 is likely to result in impacts on a number of nearby residential properties. There is also potential for localised impacts on recreational receptors along the coastal path.	M
Land Use		
Topic	**Potential Impacts**	**RAG Impact Rating**
Agriculture	Agricultural land has a land capability for agriculture of 3.2 within Route Option 2.	L
Forestry	Route Option 2 is located within an area of commercial forestry with an active permission for felling therefore any potential conflicts with ongoing forestry operations should be considered.	M
Recreation	There are no core paths or national cycle paths within or close to the OHL routes.	L
Planning		

Route Option 2 Appraisal		
Policy	Adherence to National, Regional and Local planning policy will depend on avoiding or minimising potential constraints noted, particularly in relation to potential impacts on the natural environment given the presence of designated sites.	L
Proposals	There are no proposals identified which would be impacted by Route Option 2 this should be further considered during the next stage.	L

Route Option 3 Appraisal		
Description:		
132kV double circuit steel lattice route extending from the developer's substation and tee-in to existing OHL. This route is 1.6 km.		
Review of Environmental Impacts		
Natural Heritage		
Topic	**Potential Impacts**	**RAG Impact Rating**
Designations	No impacts on statutory designations which are not designated for ornithology are anticipated. Rattray Head to Peterhead LNCS is within the Route Option 3 but will not be impacted unless this route moves towards the coast. See below for ornithological designations.	L
Protected Species	Habitats within the Route Option 3 are locally suitable for and have the potential to support all protected species discussed above (bats, otter, water vole, red squirrel, pine marten, badger). There is also the remote possibility of great crested newt being present.	H
Habitats	Some notable habitats are crossed by the Route Option 3 and therefore may be impacted. This includes potentially notable woodland along the River Ugie that could include GWDTE, though further survey is required to confirm the presence of such habitats and adjacent ancient woodland, coastal grassland.	M
Geology, Hydrology and Hydrogeology	Route Option 3 would not impact any designated geological sites. There are numerous named and unnamed watercourses throughout Route Option 3, with notable larger watercourses including the River Ugie. However, none of these watercourses cross the Route Option. Route Options 3 is located within the Fraserburgh and Mintlaw DWPAs.	M
Ornithology	Route Option 3 could potentially impact bird species which are designated features of Loch of Strathbeg SPA and Ramsar site and Ythan Estuary, Sands of Forvie and Meikle Loch SPA as some parts crossed by the route may be functionally linked to these Sites. In particular, designated features of these sites were observed on the Kinloch waterbody, and others may occur. This includes geese, which may be at risk of colliding with overhead lines if they are located within a flight path. There is little evidence to suggest that the area around Route Option 2 is of particular importance to geese, however, further surveys are required to confirm this. Route Option 3 may impact some trees which, if mature, may provide habitat for species such as barn owl. Route Option 3 will also likely result in the loss of habitat which supports common breeding bird species (e.g. woodland, scrub, hedges).	H
Cultural Heritage		

Route Option 3 Appraisal		
Topic	**Potential Impacts**	**RAG Impact Rating**
Designations	There are eleven non-designated heritage assets within Route Option 3 which may be directly impacted by the route. There is potential for previously unrecorded archaeological remains to survive within the route option. These remains could potentially be impacted during ground works, including the addition of the new OHL towers, access tracks and decommissioning of towers associated with the existing OHL.	L
Cultural Heritage Assets	There are four designated heritage assets within Route Option 3. These assets are avoidable within the route option; however, the setting of the assets may be impacted.	M
Landscape		
Topic	**Potential Impacts**	**RAG Impact Rating**
Designations	Route Option 3 is not within or adjacent to any national landscape designations. Route Option 3 does pass through a local landscape designation (North East Aberdeenshire SLA). Potential for localised impacts on the SLA.	M
Character	The eastern part of Route Option 3 is within the Beaches, Dunes and Links LCT, with potential for localised impacts on the character and impression of this landscape. There may be potential to reduce impacts at the next stage by avoiding the higher ground to the east of Hallmoss Farm. The western part of Route Option 3 is within the Coastal Agricultural Plain LCT, introducing a new section of OHL north of Lunderton. Overall, this route option is likely to result in a local increase in the influence of electrical infrastructure within this and the adjacent LCT. There are opportunities to make use of woodland blocks to help partially screen the northern section of this option, reducing potential impacts.	L
Visual	Route Option 3 is likely to result in impacts on a number of nearby residential properties. There is also potential for localised impacts on recreational receptors along the coastal path and at Craigewan Links golf course.	M
Land Use		
Topic	**Potential Impacts**	**RAG Impact Rating**
Agriculture	Route Option 3 extends through Grade 3.1 agricultural land designated as Prime Agricultural Land.	**M**
Forestry	Route Option 3 is located within an area of commercial forestry with an active permission for felling therefore any potential conflicts with ongoing forestry operations should be considered.	**M**
Recreation	There are no core paths or national cycle paths within or close to the OHL routes.	**L**

Route Option 3 Appraisal		
Planning		
Policy	Adherence to National, Regional and Local planning policy will depend on avoiding or minimising potential constraints noted, particularly in relation to potential impacts on the natural environment given the presence of designated sites.	L
Proposals	There are no proposals identified which would be impacted by Route Option 3 this should be further considered during the next stage.	L

Route Option 4 Appraisal		
Description:		
132kV double circuit steel lattice route extending from the developer's substation and tee-in to existing OHL. This route is 3.4 km.		
Review of Environmental Impacts		
Natural Heritage		
Topic	**Potential Impacts**	**RAG Impact Rating**
Designations	No impacts on statutory designations which are not designated for ornithology are anticipated. Rattray Head to Peterhead LNCS is within the Route Option 4 but will not be impacted unless Route Option 4 moves towards the coast. See below for ornithological designations.	L
Protected Species	Habitats within the Route Option 4 are locally suitable for and have the potential to support all protected species discussed above (bats, otter, water vole, red squirrel, pine marten, badger). There is also the remote possibility of great crested newt being present.	H
Habitats	Some notable habitats are crossed by Route Option 4 and therefore may be impacted, though further survey is required to confirm including coastal grassland.	M
Geology, Hydrology and Hydrogeology	Route Option 4 would not impact any designated geological sites. There is an area of Class 1 peat within the northwest of Route Option 4. There are numerous named and unnamed watercourses throughout the Route Option 4, with notable larger watercourses, including the Kinloch waterbody and the Cuttie Burn. Route Option 4 also crosses the Cuttie Burn. Route Options 4 is located within the Fraserburgh and Mintlaw DWPAs.	M
Ornithology	Route Option 4 could potentially impact bird species which are designated features of Loch of Strathbeg SPA and Ramsar site and Ythan Estuary, Sands of Forvie and Meikle Loch SPA as some parts crossed by the route may be functionally linked to these sites. This includes geese, which may be at risk of colliding with overhead lines if they are located within a flight path. There is little evidence to suggest that the area around Route Option 4 is of particular importance to geese, however, further surveys are required to confirm this. Route Option 4 may impact some trees which, if mature, may provide habitat for species such as barn owl. Route Option 4 will also likely result in the loss of habitat which supports common breeding bird species (e.g. woodland, scrub, hedges).	H
Cultural Heritage		
Topic	**Potential Impacts**	**RAG Impact Rating**

Route Option 4 Appraisal		
Designations	There are nine non-designated heritage assets within Route Option 4 which may be directly impacted by the route option. There is potential for previously unrecorded archaeological remains to survive within the route option. These remains could potentially be impacted during ground works, including the addition of the new OHL towers, access tracks and decommissioning of towers associated with the existing OHL.	L
Cultural Heritage Assets	There are two designated heritage assets within Route Option 4. These assets are avoidable within the route option; however, the setting of the assets may be impacted.	M
Landscape		
Topic	**Potential Impacts**	**RAG Impact Rating**
Designations	Route Option 4 is not within or adjacent to any national landscape designations. Route Option 4 does pass through a local landscape designation (North East Aberdeenshire SLA). Potential for localised impacts on the SLA to a greater extent than other options.	M
Character	The eastern part of Route Option 4 is within the Beaches, Dunes and Links LCT, with potential for impacts on the character and impression of this landscape. The western part of Route Option 4 is within the Coastal Agricultural Plain LCT, introducing a new section of OHL south of Inverquinzie. Overall, this route option is likely to result in a local increase in the influence of electrical infrastructure within this and the adjacent LCT. There are opportunities to make use of woodland blocks and landform to help partially screen the northern section of this option, reducing potential impacts.	M
Visual	Route Option 4 is likely to result in impacts on a slightly greater number of nearby residential properties than the other Route Options. There is also potential for impacts on recreational receptors along the coastal path.	M
Land Use		
Topic	**Potential Impacts**	**RAG Impact Rating**
Agriculture	Agricultural land has a land capability for agriculture of 3.2 within Route Option 4.	L
Forestry	Route Option 4 is located within an area of commercial forestry with an active permission for felling therefore any potential conflicts with ongoing forestry operations should be considered.	M
Recreation	There are no core paths or national cycle paths within or close to the OHL routes.	L
Planning		

Route Option 4 Appraisal		
Policy	Adherence to National, Regional and Local planning policy will depend on avoiding or minimising potential constraints noted, particularly in relation to potential impacts on the natural environment given the presence of designated sites.	L
Proposals	There are no proposals identified which would be impacted by Route Option 4 this should be further considered during the next stage.	L