

Alignment Consultation Document

Salamander

March 2026

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CONTENTS

GLOSSARY	3
PREFACE	4
1. INTRODUCTION	5
1.1 Purpose of Document	5
1.2 Document Structure	5
1.3 Next Steps	5
2. PROJECT BACKGROUND AND NEED	6
2.1 The Need for the Project	6
2.2 National Planning Policy	6
3. PROJECT OVERVIEW	7
3.1 Introduction	7
3.2 Overhead Line (OHL)	7
3.3 Tee-in Compound	7
3.4 Forestry Removal	8
3.5 Access	8
3.6 Programme	8
4. ALIGNMENT SELECTION PROCESS	9
4.1 Overview	9
4.2 OHL Route Selection Process	9
4.3 Baseline Conditions	10
4.4 Route Options Identification	10
4.5 Alignment Options Identification	11
4.6 Appraisal Methodology	11
5. DESCRIPTION OF OVERHEAD LINE ALIGNMENT OPTIONS	13
5.1 Introduction	13
5.2 Alignment Option 1	13
5.3 Alignment Option 2	13
5.4 Alignment Option 3	13
6. DESCRIPTION OF TEE-IN COMPOUND SITES	13
6.1 Introduction	13
6.2 Site Selection Process	14
6.3 Site Option 1 North A	14
7. COMPARATIVE APPRAISAL	14
7.1 Stage 0: Routeing Strategy Development	14
7.2 Stage 1: Corridor Selection	15
7.3 Stage 2: Route Selection	15
7.4 Stage 3: Alignment Selection	15
8. SELECTION OF PREFERRED ALIGNMENT	22
9. NEXT STEPS	23
9.1 Public Consultation	23
9.2 Questions for Consideration by Consultees	23
9.3 Environmental Assessment and Submission	23
APPENDIX A FIGURES	24
APPENDIX B ENVIRONMENTAL APPRAISAL OF ALIGNMENT OPTIONS	25

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 24 March - 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 5 May 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 overhead line (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 alignment 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.
- **Alignment Selection Process** - sets out the alignment selection process and methodology that has been applied to date.
- **Description of Overhead Line Alignment Options** – provides a description of the proposed OHL alignments.
- **Comparative Appraisal** – comparative analysis of the alignment options from an environmental, technical and economic perspective.
- **Selection of Preferred Alignment** – identification of the preferred alignment option.
- **Next Steps** – invites comments on the assessment process and alignment options.

The main body of this document is supported by a series of figures which are included in **Appendix A: 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 alignment, further technical and environmental surveys will be undertaken to inform the detailed design of the development.

2. PROJECT BACKGROUND AND NEED

2.1 The Need for the Project

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 OHL 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 100MW floating wind farm approximately 35km off the coast of Peterhead combined with 100MW onshore battery.

An 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 three OHL alignment 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 OHL connection is proposed consisting of a 132 kV double circuit OHL between a proposed developer's substation, east of Lunderton and the existing OHL.

There is the potential that the cable would be undergrounded for approximately 600m from the proposed developer's substation under the A90.

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 Tee-in Compound

To minimize disturbance to the existing double-circuit 132 kV OHL from both an operational and construction standpoint, a tee-in compound is proposed to be established, according to the following considerations:

- Location within the existing OHL corridor at a suitably identified point to reduce the need for major realignments or shutdown durations.
- Adoption of a double tee-in configuration, rather than two separate single tee-ins, enabling a single 132 kV compound to reconfigure both circuits with reduced footprint and construction interfaces.
- Use of an indoor air insulated switchgear (AIS) 132 kV substation, providing controlled installation conditions and improved operational reliability.

The temporary 132 kV bypass arrangement required to maintain continuity of both circuits during construction will, due to spatial and construction constraints, be limited to the shortest practicable line length.

Applying a conservative planning approach, the estimated substation plot size required to accommodate this arrangement is approximately 130 m in length and 160 m in width.

3.4 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.

3.5 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.

3.6 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. ALIGNMENT 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: This stage resulted in the single preferred route option following consideration principles outlined in the guidance, and the environmental, technical and economic analysis of route options. Four initial route options were identified during the route identification process. Following environmental, technical and economic analysis of route options the preferred option was identified as Route Option 1.

Stage 3: Alignment Selection: The project is currently at the alignment selection stage and work is ongoing to identify an alignment within the chosen preferred route. The key objectives at this stage are the:

- Identification of alignment options
- Environmental analysis of alignment options
- Identification of a preferred alignment option indicating locations of support structures
- Identifying Limits of Deviation (LOD) either side of the alignment to allow for micro-siting of individual support structures
- Setting out an access strategy, i.e. how access to the alignment will be provided to facilitate construction e.g. the nature, indicative location and extent of temporary access tracks, construction tracks and road improvements
- The consultation exercise set out in this report.

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 were identified, all of which were found to be viable following a high-level engineering route evaluation. All route options include provision for a tee-in compound to connect the new OHL into the existing OHL. All four routes provide a link between the existing OHL and the developer's 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. The following was taken into account as far as practicable during routeing stage and has been 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 were identified at 1 km widths to allow for subsequent identification of alignments at this stage.

4.5 Alignment Options Identification

Three alignment options have been identified within the preferred Route Option 1 which are viable. All alignment options comprise a tee-in compound to connect the new OHL into the existing OHL. All three alignments provide a link between the existing OHL and the developers proposed substation east of Lunderton.

4.6 Appraisal Methodology

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

Environmental

- 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

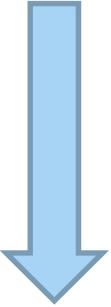
- Infrastructure Crossings (e.g. overhead lines, rail, rivers, pipelines, roads)
- Environmental Design (e.g. altitude, contaminated land, flooding);
- Ground Conditions (e.g. peat, rock, terrain);
- Construction / Condition (e.g. access arrangements, angles of deviation)
- Proximity (e.g. windfarms, 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 1 below:

Image 1 RAG Ratings

Performance	Appraisal
<p>Most Preferred</p>  <p>Least Preferred</p>	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 ALIGNMENT OPTIONS

5.1 Introduction

This section provides a description of each alignment option. Please also refer to the figure in **Appendix A** for additional information.

Three 100 m wide alignment options have been identified providing different options for connecting the proposed developer's substation (NK 11188 49723) to the existing transmission network.

All the alignments, together with the tee-in compounds, can be viewed in the drawings in Appendix A for a clearer understanding of the descriptions of the following route.

5.2 Alignment Option 1

Alignment Option 1 provides the most direct connection to the existing transmission network 1km north of Inverugie (NK 09775 49470). Alignment Option 1 is approximately 1.5 km in length and 100m wide and is located within non-prime agricultural land. The alignment crosses the A90 directly to the west of the proposed substation site and passes 15 m north of properties at Linksfeld Cottage. Additionally, it includes two crossings with 11 kV lines.

5.3 Alignment Option 2

Alignment Option 2 connects directly to the existing transmission network 1 km north of Inverugie (NK 09775 49470). Alignment Option 2 is approximately 1.5 km in length and is located within non-prime agricultural land. The alignment crosses the A90 directly to the west of the proposed substation site, and its edge passes about 30 metres north of Linksfeld Cottage. Additionally, it includes two crossings with 11 kV lines.

5.4 Alignment Option 3

Alignment Option 3 connects directly to the existing transmission network 1 km north of Inverugie (NK 09775 49470). Alignment Option 3 is approximately 1.6 km in length and is located within non-prime agricultural land. The route crosses the A90 directly west of the proposed substation site and its edge runs 100 metres north of Linksfeld properties, while also passing 50 meters south of a Portofino property. In addition, it includes two crossings with 11 kV lines.

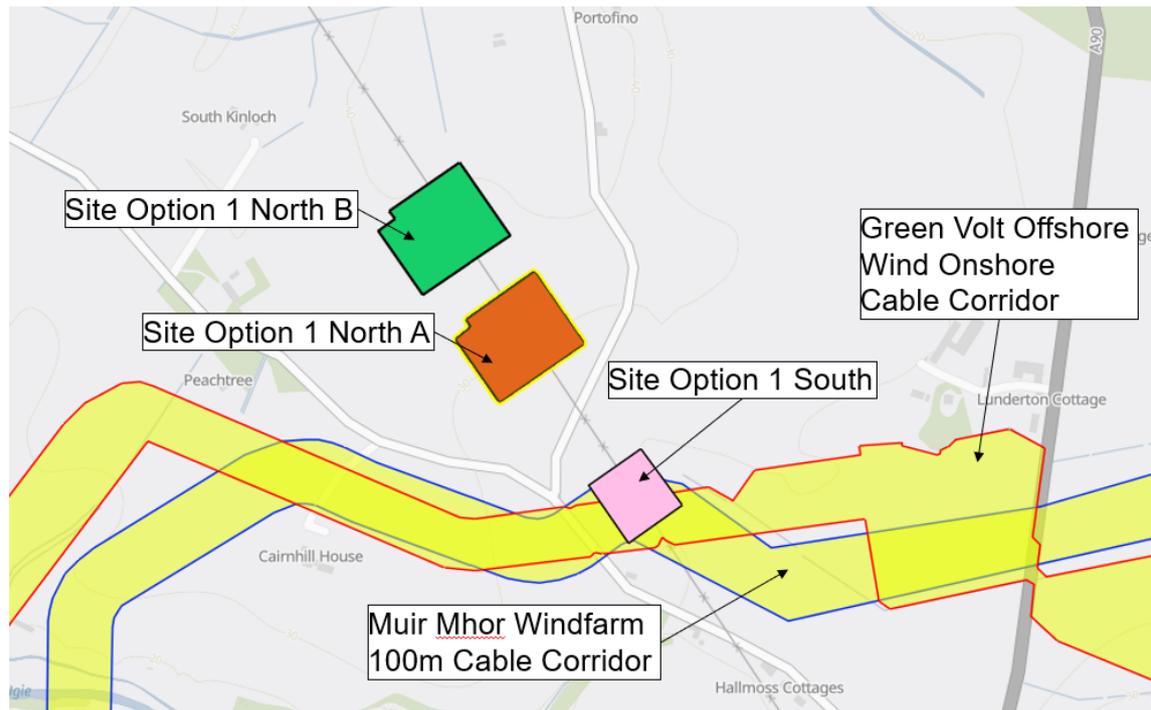
6. DESCRIPTION OF TEE-IN COMPOUND SITES

6.1 Introduction

This section outlines tee-in compound site selection. Three initial tee-in compound options were considered as part of the selection process. These are listed below:

- Site Option 1 North A
- Site Option 1 North B
- Site Option 1 South

Figure 6-1 Tee-in Compound Site Options



6.2 Site Selection Process

Site Option 1 North B was initially discounted from site selection due to the increased length of the OHL required to tie into this option and the increased environmental and engineering constraints along the proposed route.

Subsequently, Site Option 1 North A and Site Option 1 South were evaluated through the site selection process. Site Option 1 North A was identified as the preferred option from both an environmental and engineering perspective. Site Option 1 North A would have a reduce visual impact due to the increased distance from residential properties.

The site is also preferential over Site Option 1 South due to the southern south being located within an area of flooding and adjacent to existing utility hazards.

The alignment options have therefore been proposed between the Developer's Proposed Substation and Site Option 1 North A.

6.3 Site Option 1 North A

The proposed site is located within an open field approximately 100m northwest of the minor road. Three residential properties, Berehill Croft, South Kinloch, and Kincairn, are situated nearby. Utility search data from 2023 indicates the presence of BT services running parallel to the minor road. The site slopes gently downhill from north to south.

7. COMPARATIVE APPRAISAL

7.1 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.

7.2 Stage 1: Corridor Selection

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.

7.3 Stage 2: Route Selection

At Routeing stage, Route Option 1 has been assessed as having fewer high impacts compared to Route Options 2, 3 and 4 and was therefore identified as 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 along the coast unlike the other route options; avoiding interaction with coastal habitats and Rattray Head to Peterhead LNCS.

While all options have potential to impact landscape and visual receptors, Route Option 1 was identified as being likely to result in least impact. The short length of Route Option 1 would help limit the extent of landscape impacts. 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.

7.4 Stage 3: Alignment Selection

The alignment selection stage seeks to identify an alignment within the chosen preferred route. 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'.

7.4.1 Alignment Option 1

Environmental Appraisal

Natural Heritage

Designations - Alignment Option 1 is located 100 m to the east of Rattray Head to Peterhead Local Nature Conservation Site (LNCS) and there is some potential for constraint on the site or its designated features which include the coastal habitat and plant species. There are no other designated sites which may be impacted by the alignment.

Protected Species - Habitats have been identified as being sub-optimal for protected species; however, there is the potential for the presence of Otter and Bats.

Habitats - No Annex 1 Habitats or groundwater dependant terrestrial ecosystems (GWDTE) were identified during ecological walkover surveys.

Ornithology - There is a low potential for impacts on Schedule 1 birds or Birds of Conservation Concern (BoCC).

Hydrology/ Hydrogeology - Alignment Option 1 does not cross any named or unnamed watercourses.

Cultural Heritage

Designations – Alignment Option 1 is located within 2 km of five designated Scheduled Monuments, including Castle Hill (SM3259) which would have direct line of sight due to its elevated position. In addition, there is one non-designated heritage asset, Lunderton Bridge (canmore id: 216366), within the alignment.

Cultural Heritage Assets – Six listed buildings are within 2 km of Alignment Option 1 including Lunderton House (LB19799) (Category C) which is 220 m to the south. The building is partially screened by trees but surrounded by relatively flat topography resulting in the potential for an impact on its setting.

People

Proximity to Dwellings - There are two properties located at Linksfield Cottage within two times the height of the proposed structure (assumed to be 26 m).

Landscape and Visual

Designations – Alignment Option 1 is located within the Northeast Aberdeenshire Coast Special Landscape Area (SLA).

Landscape Character – Alignment Option 1 would sit across Landscape Character Type (LCT)12 (Beaches, Dunes and Links Aberdeenshire) and LCT17 (Coastal Agricultural Plain – Aberdeenshire) leading to a moderate potential for constraint based on cross boundary effects.

Visual – Alignment Option 1 would exist on relatively flat surrounding agricultural land with multiple residential properties/farmsteads in visual proximity. The alignment would also cross the A90, which is the main road north of Peterhead.

Land Use

Agriculture – Alignment Option 1 is located within non-prime agricultural land.

Forestry – The easternmost section of Alignment Option 1 where it connects with the developer's substation is within an area of commercial forestry, with active felling licenses

Recreation – There are no Core Paths, National Cycle Routes (NCR) or evidence of highland sports within 2km of Alignment Option 1. There are some non-designated public paths along the coast but natural screening largely blocks line of sight, and none of the public paths would be directly impacted by the development.

Planning

Policy – Alignment Option 1 is considered part of a national development and supported within the NPF4 for the purposes of transmission infrastructure at or above 132kV

Proposals – There are six relevant planning proposals within the surrounding area of Alignment Option 1. All proposals relate to other energy developments that would not be inconsistent with the proposed development.

Engineering Appraisal

Length

Estimated length of the corridor measured from its centreline – Alignment Option 1 centreline measurement: 1.44 km

Infrastructure Crossings

Major Crossings (132kV, 275kV, Rail, rivers over 200 m wide, navigable canals, gas or hydro pipelines) – Alignment Option 1 includes the following crossings within the 100 m wide route:

- Two 11 kV transmission lines

Road crossings – Alignment Option 1 includes the following roads crossings within the 100 m wide route:

- One crossing at the A90 major road
- One crossing at a minor road

Environmental Design

Elevation – The entire width of Alignment Option 1 is situated at an elevation below 200m above ordnance datum (AOD).

Atmospheric Pollution – There are no clearly identified areas of high pollution, except for possible contamination near road crossings or disused canals.

Contaminated Land – No clear areas of contaminated land (other than potential for contamination at road crossings or disused canals).

Flooding – 2-3% of length (30-40 m) with ~40% of width in a 1–200-year flood risk zone (surface water and small watercourses)

Ground Conditions

Terrain – The terrain along the alignment corridor is predominantly rolling hills, slopes typically 1-5 degrees, approximately 10% of length has a slope of ~13 degrees (100% of width).

Peat – No mapped peat within the alignment corridor.

Construction/Condition

Access – Proposed access is via an existing A90 road or smaller roads within less than 1km from existing road network.

Angle Towers – Alignment Option 1 may require approximately one to three angle towers.

Proximity

Clearance distance – Within the alignment, no relevant structures or installations have been identified that would impact clearance distance.

Windfarms – No windfarms are located within the corridor of Alignment Option 1. The nearest windfarm is situated over 1 km away and does not have any impact on the design.

Communication mast – No communication masts are located within the corridor of Alignment Option 1.

Urban Environments – Less than 10% of the alignment width passes through urban environment

Metallic Pipelines – No metallic pipelines have been identified within the Alignment Option 1 width.

7.4.2 Alignment Option 2

Environmental Appraisal

Natural Heritage

Designations - Alignment Option 2 is located 100 m to the east of Rattray Head to Peterhead LNCS and there is some potential for constraint on the site or its designated features which include the coastal habitat and plant species. There are no other designated sites which may be impacted by the alignment.

Protected Species - Habitats have been identified as being sub-optimal for protected species; however, there is the potential for the presence of Otter and Bats.

Habitats - No Annex 1 Habitats or GWDTE were identified during ecological walkover surveys.

Ornithology - There is a low potential for impacts on Schedule 1 birds or BoCC.

Hydrology/ Hydrogeology - Alignment Option 2 does not cross any named or unnamed watercourses.

Cultural Heritage

Designations – Alignment Option 2 is located within 2 km of five designated Scheduled Monuments, including Castle Hill (SM3259) which would have direct line of sight due to its elevated position.

Cultural Heritage Assets – Six listed buildings are within 2 km of Alignment Option 2 including Lunderton House (LB19799) (Category C) which is 280 m to the south. The building is partially screened by trees but surrounded by relatively flat topography resulting in the potential for an impact on its setting.

People

Proximity to Dwellings - There are two properties located at Linksfield Cottage within two times the height of the proposed structure (assumed to be 26 m).

Landscape and Visual

Designations – Alignment Option 2 is located within the Northeast Aberdeenshire Coast SLA.

Landscape Character – Alignment Option 2 would sit across LCT12 (Beaches, Dunes and Links Aberdeenshire) and LCT17 (Coastal Agricultural Plain – Aberdeenshire) leading to a moderate potential for constraint based on cross boundary effects.

Visual – Alignment Option 2 would exist on relatively flat surrounding agricultural land with multiple residential properties/farmsteads in visual proximity. The alignment would also cross the A90, which is the main road north of Peterhead.

Land Use

Agriculture – Alignment Option 2 is located within non-prime agricultural land.

Forestry – The eastern most section of Alignment Option 2 where it connects with the developer's substation is within an area of commercial forestry, with active felling licenses

Recreation – There are no Core Paths, NCR or evidence of highland sports within 2 km of Alignment Option 2. There are some non-designated public paths along the coast but natural screening largely blocks line of sight, and none of the public paths would be directly impacted by the development.

Planning

Policy – Alignment Option 2 is considered part of a national development and supported within the NPF4 for the purposes of transmission infrastructure at or above 132kV

Proposals – There are six relevant planning proposals within the surrounding area of Alignment Option 2. All proposals relate to other energy developments that would not be inconsistent with the proposed development.

Engineering Appraisal

Length

Estimated length of the corridor measured from its centreline – Alignment Option 2 centreline measurement: 1.47 km

Infrastructure Crossings

Major Crossings (132kV, 275kV, Rail, rivers over 200 m wide, navigable canals, gas or hydro pipelines) – Alignment Option 2 includes the following crossings within the 100 m wide route:

- Two 11 kV transmission lines

Road crossings - Alignment Option 2 includes the following roads crossings within the 100 m wide route:

- One crossing at the A90 major road
- One crossing at a minor road

Environmental Design

Elevation – The entire width of Alignment Option 2 is situated at an elevation below 200 m AOD.

Atmospheric Pollution – There are no clearly identified areas of high pollution, except for possible contamination near road crossings or disused canals.

Contaminated Land – No clear areas of contaminated land (other than potential for contamination at road crossings or disused canals).

Flooding – 2-3% of length (30-40 m) with ~40% of width in a 1–200-year flood risk zone (surface water and small watercourses)

Ground Conditions

Terrain – The terrain along the alignment corridor is predominantly rolling hills, slopes typically 1-5 degrees, approximately 10% of length has a slope of ~13 degrees (100% of width).

Peat – No mapped peat within the alignment corridor.

Construction/Condition

Access – Proposed access is via an existing A90 road or smaller roads within less than 1 km from existing road network.

Angle Towers – Alignment Option 2 may require approximately one to three angle towers.

Proximity

Clearance distance – Within the alignment, no relevant structures or installations have been identified that would impact clearance distance.

Windfarms – No windfarms are located within the corridor of Alignment Option 2. The nearest windfarm is situated over 1 km away and does not have any impact on the design.

Communication mast – No communication masts are located within the corridor of Alignment Option 2.

Urban Environments – Less than 10% of the alignment width passes through urban environment.

Metallic Pipelines – No metallic pipelines have been identified within the Alignment Option 2 width.

7.4.3 Alignment Option 3

Environmental Appraisal

Natural Heritage

Designations - Alignment Option 3 is located 100 m to the east of Rattray Head to Peterhead LNCS there is some potential for constraint on the site or its designated features which include the coastal habitat and plant species. There are no other designated sites which may be impacted by the alignment.

Protected Species - Habitats have been identified as being sub-optimal for protected species; however, there is the potential for the presence of Otter and Bats.

Habitats - No Annex 1 Habitats or GWDTE were identified during ecological walkover surveys.

Ornithology - There is a low potential for impacts on Schedule 1 birds or BoCC.

Hydrology/ Hydrogeology - Alignment Option 3 does not cross any named or unnamed watercourses.

Cultural Heritage

Designations – Alignment Option 3 is located within 2 km of five designated Scheduled Monuments, including Castle Hill (SM3259) which would have direct line of sight due to its elevated position.

Cultural Heritage Assets – Six listed buildings are within 2 km of Alignment Option 3 including Lunderton House (LB19799) (Category C) which is 380 m to the south. The building is partially screened by trees but surrounded by relatively flat topography resulting in the potential for an impact on its setting.

People

Proximity to Dwellings - There is one property, Hillcrest, located within two times the height of the proposed structure (assumed to be 26 m).

Landscape and Visual

Designations – Alignment Option 3 is located within the Northeast Aberdeenshire Coast SLA.

Landscape Character – Alignment Option 3 would sit across LCT12 (Beaches, Dunes and Links Aberdeenshire) and LCT17 (Coastal Agricultural Plain – Aberdeenshire) leading to a moderate potential for constraint based on cross boundary effects.

Visual – Alignment Option 3 would exist on relatively flat surrounding agricultural land with multiple residential properties/farmsteads in visual proximity. The alignment would also cross the A90, which is the main road north of Peterhead.

Land Use

Agriculture – Alignment Option 3 is located within non-prime agricultural land.

Forestry – The eastern most section of Alignment Option 3 where it connects with the developer's substation is within an area of commercial forestry, with active felling licenses

Recreation – There are no NCR or evidence of highland sports within 2 km of Alignment Option 3. There are some non-designated public paths along the coast but natural screening largely blocks line of sight, and none of the public paths would be directly impacted by the development.

Planning

Policy – Alignment Option 3 is considered part of a national development and supported within the NPF4 for the purposes of transmission infrastructure at or above 132kV

Proposals – There are six relevant planning proposals within the surrounding area of Alignment Option 3. All proposals relate to other energy developments that would not be inconsistent with the proposed development.

Engineering Appraisal

Length

Estimated length of the corridor measured from its centreline – Alignment Option 3 centreline measurement: 1.54 km

Infrastructure Crossings

Major Crossings (132kV, 275kV, Rail, rivers over 200 m wide, navigable canals, gas or hydro pipelines) - Alignment Option 3 includes the following crossings within the 100 m wide route:

- Two 11 kV transmission lines

Road crossings - Alignment Option 3 includes the following roads crossings within the 100 m wide route:

- One crossing at the A90 major road
- One crossing at a minor road

Environmental Design

Elevation – The entire width of Alignment Option 3 is situated at an elevation below 200 m AOD.

Atmospheric Pollution – There are no clearly identified areas of high pollution, except for possible contamination near road crossings or disused canals.

Contaminated Land – No clear areas of contaminated land (other than potential for contamination at road crossings or disused canals).

Flooding – ~2% of length (~30 m) with >80% of width within a 1-200 year flood zone (surface water and small watercourses).

Ground Conditions

Terrain – The terrain along the alignment corridor is predominantly rolling hills, slopes typically 1-5 degrees, approximately 10% of length has a slope of ~13 degrees (100% of width).

Peat – No mapped peat within the alignment corridor.

Construction/Condition

Access – Proposed access is via an existing A90 road or smaller roads within less than 1km from existing road network

Angle Towers – Since this alignment involves more angular changes, it is projected that constructing the line along this path would require about two to five additional angle towers.

Proximity

Clearance distance – Within the alignment, no relevant structures or installations have been identified that would impact clearance distance.

Windfarms – No windfarms are located within the corridor of Alignment Option 3. The nearest windfarm is situated over 1 km away and does not have any impact on the design.

Communication mast – No communication masts are located within the corridor of Alignment Option 3.

Urban Environments – Less than 10% of the alignment width passes through urban environment

Metallic Pipelines – No metallic pipelines have been identified within the Alignment Option 3 width.

7.4.4 Environmental Assessment Summary

Due to the short length of the proposed alignment options; the environmental assessment conclusions are similar comparatively where compared using SSEN Transmission internal guidance.

The undergrounding of the cable from the proposed developer’s substation under the A90; would have the potential to reduce visual impacts of Alignment Options 1 and 2.

A summary of the environmental assessment is provided in a RAG Summary Table below.

Image 2 Environmental RAG Summary Table

		Option 1	Option 2	Option 3
Natural Heritage	Designations	Yellow	Yellow	Yellow
	Protected Species	Yellow	Yellow	Yellow
	Habitats	Green	Green	Green
	Ornithology	Green	Green	Green
	Hydrology/ Hydrogeology	Green	Green	Green
Cultural Heritage	Designations	Yellow	Yellow	Yellow
	Cultural Heritage Assets	Yellow	Yellow	Yellow
People	Proximity to Dwellings	Red	Red	Red
Landscape and Visual	Designations	Yellow	Yellow	Yellow
	Landscape Character	Yellow	Yellow	Yellow
	Visual	Yellow	Yellow	Yellow
Land Use	Agriculture	Green	Green	Green
	Forestry	Yellow	Yellow	Yellow
	Recreation	Green	Green	Green
Planning	Policy	Green	Green	Green
	Proposals	Green	Green	Green

7.4.5 Engineering Assessment Summary

Alignment Option 1 passes 15 m from the edge of the 100 m-wide corridor north of Linksfield Cottage.

Alignment Option 2 passes 30 m from the same point. Alignment Option 3 runs 80 m north of Linksfield Cottage, giving greater separation from properties. However, it passes within 50 m of a second property, Portofino, to the west.

Alignment Option 3 requires more angle towers due to its winding path and has a higher flood risk, making it less favourable than Alignment Options 1 and 2.

The only distinction between Alignment Options 1 and 2 is that option 2 runs slightly further north. Within Alignment Option 2, there is a crossing between two 11kV overhead lines at the upper edge of the alignment. This crossing can be easily avoided by micro-siting during detailed design. It occurs at a wood pole with increased height, and the new line would be raised as needed to ensure required clearance.

A summary of the engineering assessment is presented in the RAG Summary Table below.

Image 3 – Engineering RAG Summary Table

		Option 1	Option 2	Option 3
Length	Approximate Corridor Length			
Infrastructure Crossings	Major Corssings			
	Road Crossings			
Footprint Requirements	Technology			
	Adjacent Land Use			
	Space Availability			
Hazards	Unique Hazards			
	Existing Utilities			
Environmental Conditions	Elevation			
	Atmospheric Pollution			
	Contaminated Land			
	Flooding			
Ground Conditions	Terrain			
	Peat			
Construction/ Maintenance	Access			
	Angle Towers			
Proximity	Clearance Distance			
	Wind Farms			
	Communication Masts			
	Urban Environments			
	Metallic Pipelines			

8. SELECTION OF PREFERRED ALIGNMENT

Overall, the alignment options are all a similar relatively short length so there is no significant difference between the options.

From an environmental perspective, all options are similarly rated due to their relative short length and similar siting.

The potential undergrounding of the cable from the developer's substation beneath the A90 has the potential to reduce visual impacts associated with Alignment Options 1 and 2.

From an engineering perspective, Alignment Options 1 and 2 are preferred. They present reduced flood risk and follow a more direct route, requiring fewer angle towers compared with Alignment Option 3.

Overall, Alignment Option 1 has been taken forward as the preferred option due to the shorter length of the route.

9. NEXT STEPS

9.1 Public Consultation

A public consultation event is to take place to help inform the final selection of the proposed OHL alignment. 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 alignment to take forward to detailed design.

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

9.2 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?

9.3 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 necessary applications.

APPENDIX A FIGURE

APPENDIX B ENVIRONMENTAL APPRAISAL OF ALIGNMENT 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 International or national statutory designations are anticipated. Alignment Option 1 is located 100m to the east of Rattray Head to Peterhead LNCS and there is some potential for constraint on the site or its designated features which include the coastal habitat and plant species.	M
Protected Species	This alignment 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 alignment 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 Alignment Option 1 as none appear to be present from aerial imagery or were otherwise identified by the desk study.	L
Geology, Hydrology and Hydrogeology	Alignment Option 1 would not impact any designated geological sites. Alignment Option 1 is located within the Fraserburgh DWPA. There are no surface watercourses within the alignment.	L
Ornithology	Alignment Option 1 is unlikely to have impacts on any statutory sites designated for birds within 10km of the alignment (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. Alignment 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.	L
Cultural Heritage		

Route Option 1 Appraisal		
Topic	Potential Impacts	RAG Impact Rating
Designations	<p>There are five Scheduled Monuments within the 2km study areas of Alignment Option 1. Castle Hill (SM3259) would have direct line of sight due to its elevated position. The remaining Scheduled monuments would be largely screened by natural tree cover and land topography.</p> <p>There is one non-designated heritage assets within Alignment Option 1, Saint Fergus and North Ugie Water Canal, Lunderton Bridge (canmore id: 216366), which may be directly impacted by the alignment option.</p> <p>There is potential for previously unrecorded archaeological remains to survive within Alignment 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.</p>	M
Cultural Heritage Assets	There are six listed buildings are within 2 km of Alignment Option 1 including Lunderton House (LB19799) (Category C) which is 220 m to the south. The building is partially screened by trees but surrounded by relatively flat topography resulting in the potential for an impact on its setting.	M
Topic	Potential Impacts	RAG Impact Rating
Proximity to Dwellings	Based on an assumed pylon height of 26 m, there are two properties within 2 times the nominal height of the proposed structure from the alignment ($\leq 52\text{m}$).	R
Landscape		
Topic	Potential Impacts	RAG Impact Rating
Designations	Alignment Option 1 is not within or adjacent to any national landscape designations. A short section of Alignment Option 1 does pass through a local landscape designation (North East Aberdeenshire Special Landscape Area (SLA)). There is the potential for localised impacts on the SLA.	M
Character	<p>Alignment 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.</p> <p>A small part of Alignment 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.</p>	M

Route Option 1 Appraisal		
Visual	Alignment Option 1 would be sited on relatively flat agricultural land with multiple residential properties/farmsteads in visual proximity. The alignment would also be required to cross (and subsequently be in close proximity to) the A90, which is the main road north of Peterhead. The undergrounding of the alignment under the A90 would have the potential to reduce visual impacts on this the A90 and Linksfield Cottage.	M
Land Use		
Topic	Potential Impacts	RAG Impact Rating
Agriculture	Agricultural land within Alignment Option 1 is non-prime (class 3.2).	L
Forestry	There are areas of commercial forestry identified within the Alignment Option 1 where the OHL connects to the proposed developer's substation.	M
Recreation	There are no core paths or national cycle paths within or close to Alignment Option 1. There are some non-designated public paths along the coast but natural screening largely blocks line of sight and none of the public paths would be directly impacted by the development.	L
Planning		
Policy	All Alignment Options are considered to be part of a national development and supported within the NPF4 for the purposes of Transmission infrastructure at or above 132kV. It is considered unlikely that the Alignment Option 1 would be contrary to planning policy.	L
Proposals	There are six relevant planning proposals within the surrounding area of Alignment Option 1. All proposals relate to other energy developments that would not be inconsistent with the proposed development.	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 1.6 km.		
Review of Environmental Impacts		
Natural Heritage		
Topic	Potential Impacts	RAG Impact Rating
Designations	No impacts on International or national statutory designations are anticipated. Alignment Option 2 is located 100m to the east of Rattray Head to Peterhead LNCS and there is some potential for constraint on the site or its designated features which include the coastal habitat and plant species.	M
Protected Species	This alignment 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 alignment 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 Alignment Option 2 as none appear to be present from aerial imagery or were otherwise identified by the desk study.	L
Geology, Hydrology and Hydrogeology	Alignment Option 2 would not impact any designated geological sites. Alignment Option 2 is located within the Fraserburgh DWPA. There are no surface watercourses within the alignment.	L
Ornithology	Alignment Option 2 is unlikely to have impacts on any statutory sites designated for birds within 10km of the alignment (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. Alignment Option 2 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.	L
Cultural Heritage		

Route Option 2 Appraisal		
Topic	Potential Impacts	RAG Impact Rating
Designations	<p>There are five Scheduled Monuments within the 2km study areas of Alignment Option 2. Castle Hill (SM3259) would have direct line of sight due to its elevated position. The remaining Scheduled monuments would be largely screened by natural tree cover and land topography.</p> <p>There is potential for previously unrecorded archaeological remains to survive within Alignment Option 2. 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.</p>	M
Cultural Heritage Assets	There are six listed buildings are within 2 km of Alignment Option 2 including Lunderton House (LB19799) (Category C) which is 280 m to the south. The building is partially screened by trees but surrounded by relatively flat topography resulting in the potential for an impact on its setting.	M
Topic	Potential Impacts	RAG Impact Rating
Proximity to Dwellings	Based on an assumed pylon height of 26 m, there are two properties within 2 times the nominal height of the proposed structure from the alignment ($\leq 52\text{m}$).	R
Landscape		
Topic	Potential Impacts	RAG Impact Rating
Designations	Alignment Option 2 is not within or adjacent to any national landscape designations. A short section of Alignment Option 2 does pass through a local landscape designation (North East Aberdeenshire Special Landscape Area (SLA)). There is the potential for localised impacts on the SLA.	M
Character	<p>Alignment Option 2 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.</p> <p>A small part of Alignment Option 2 is also within the Beaches, Dunes and Links LCT, with the potential for localised but relatively limited impacts on the characteristics of this LCT.</p>	M
Visual	Alignment Option 2 would be sited on relatively flat agricultural land with multiple residential properties/farmsteads in visual proximity. The alignment would also be required to cross (and subsequently be in close proximity to) the A90, which is the main road north of	M

Route Option 2 Appraisal		
	Peterhead. The undergrounding of the alignment under the A90 would have the potential to reduce visual impacts on the A90 and Linksfield Cottage.	
Land Use		
Topic	Potential Impacts	RAG Impact Rating
Agriculture	Agricultural land within Alignment Option 2 is non-prime (class 3.2).	L
Forestry	There are areas of commercial forestry identified within the Alignment Option 2 where the OHL connects to the proposed developer's substation.	M
Recreation	There are no core paths or national cycle paths within or close to Alignment Option 2. There are some non-designated public paths along the coast but natural screening largely blocks line of sight, and none of the public paths would be directly impacted by the development.	L
Planning		
Policy	All Alignment Options are considered to be part of a national development and supported within the NPF4 for the purposes of Transmission infrastructure at or above 132kV. It is considered unlikely that the Alignment Option 2 would be contrary to planning policy.	L
Proposals	There are six relevant planning proposals within the surrounding area of Alignment Option 2. All proposals relate to other energy developments that would not be inconsistent with the proposed development.	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 International or national statutory designations are anticipated. Alignment Option 3 is located 100m to the east of Rattray Head to Peterhead LNCS and there is some potential for constraint on the site or its designated features which include the coastal habitat and plant species.	M
Protected Species	This alignment 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 alignment 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 Alignment Option 3 as none appear to be present from aerial imagery or were otherwise identified by the desk study.	L
Geology, Hydrology and Hydrogeology	Alignment Option 3 would not impact any designated geological sites. Alignment Option 3 is located within the Fraserburgh DWPA. There are no surface watercourses within the alignment.	L
Ornithology	Alignment Option 3 is unlikely to have impacts on any statutory sites designated for birds within 10km of the alignment (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. Alignment Option 3 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.	L
Cultural Heritage		

Route Option 3 Appraisal		
Topic	Potential Impacts	RAG Impact Rating
Designations	<p>There are five Scheduled Monuments within the 2km study areas of Alignment Option 3. Castle Hill (SM3259) would have direct line of sight due to its elevated position. The remaining Scheduled monuments would be largely screened by natural tree cover and land topography.</p> <p>There is potential for previously unrecorded archaeological remains to survive within Alignment Option 3. 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.</p>	M
Cultural Heritage Assets	There are six listed buildings are within 2 km of Alignment Option 3 including Lunderton House (LB19799) (Category C) which is 380 m to the south. The building is partially screened by trees but surrounded by relatively flat topography resulting in the potential for an impact on its setting.	M
Topic	Potential Impacts	RAG Impact Rating
Proximity to Dwellings	Based on an assumed pylon height of 26 m, there are three properties within 2 to 4 times the nominal height of the proposed structure from the alignment (52m to 104m).	M
Landscape		
Topic	Potential Impacts	RAG Impact Rating
Designations	Alignment Option 3 is not within or adjacent to any national landscape designations. A short section of Alignment Option 3 does pass through a local landscape designation (North East Aberdeenshire Special Landscape Area (SLA)). There is the potential for localised impacts on the SLA.	M
Character	<p>Alignment Option 3 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.</p> <p>A small part of Alignment Option 3 is also within the Beaches, Dunes and Links LCT, with the potential for localised but relatively limited impacts on the characteristics of this LCT.</p>	M
Visual	Alignment Option 3 would be sited on relatively flat agricultural land with multiple residential properties/farmsteads in visual proximity. The alignment would also be required to cross (and subsequently be in close proximity to) the A90, which is the main road north of	M

Route Option 3 Appraisal		
	Peterhead. The undergrounding of the alignment under the A90 would have the potential to reduce visual impacts on this the A90 and Linksfield Cottage.	
Land Use		
Topic	Potential Impacts	RAG Impact Rating
Agriculture	Agricultural land within Alignment Option 3 is non-prime (class 3.2).	L
Forestry	There are areas of commercial forestry identified within the Alignment Option 3 where the OHL connects to the proposed developer's substation.	M
Recreation	There are no core paths or national cycle paths within or close to Alignment Option 3. There are some non-designated public paths along the coast but natural screening largely blocks line of sight, and none of the public paths would be directly impacted by the development.	L
Planning		
Policy	All Alignment Options are considered to be part of a national development and supported within the NPF4 for the purposes of Transmission infrastructure at or above 132kV. It is considered unlikely that the Alignment Option 3 would be contrary to planning policy.	L
Proposals	There are six relevant planning proposals within the surrounding area of Alignment Option 3. All proposals relate to other energy developments that would not be inconsistent with the proposed development.	L