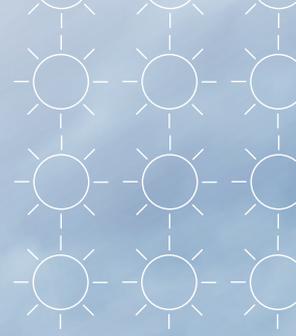




Scottish & Southern
Electricity Networks

TRANSMISSION

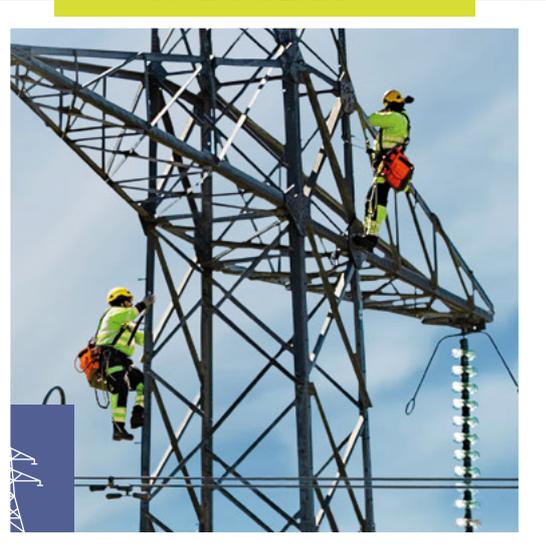


Kintore to Tealing 400kV Overhead Line

Including Emmock and Tealing Section 37 Tie-Ins

Alignment Public
Consultation Events

September/October 2024



Contents

Powering change together	3	Additional works	14
The Pathway to 2030	4	Our access strategy	16
About the Kintore - Tealing 400kV projects	6	3D visualisations	18
Emmock and Tealing section 37 tie-ins	7	Project timeline	20
Project location	8	Project alignment overview	22
The story so far	10	Have your say	24
Selecting an alignment	12	Your feedback	25
About the overhead line	14	Notes	27

The consultation events will be taking place on:

Monday 23 September, 1.30-6.30pm
Tealing Village Hall, Hall Road,
Inverdake, Tealing, DD4 0QW

Tuesday 24 September, 2-7pm
Royal Hotel, Wallace Suite,
33 Castle Street, Forfar, DD8 3AE

Wednesday 25 September, 2-7pm
Memus Community Hall,
Memus, Forfar, DD8 3TY

Thursday 26 September, 2-7pm
Brechin City Hall, 9 Swan Street,
Brechin, DD9 6EE

Monday 30 September, 2-7pm
Menmuir Hall, Brechin,
DD9 7RN

Tuesday 1 October, 1.30-6.30pm
Kintore Public Hall, 12 School Road,
Kintore, AB51 0UX

Wednesday 2 October, 2-7pm
Echt Hall, Echt, Westhill, AB32 6UL

Thursday 3 October, 2-7pm
Drumoak, Durris & Crathes
Bowling Club, Sunnyside Avenue,
Drumoak, AB31 5EF

Monday 7 October, 2-7pm
Drumlithie Village Hall,
Station Road, Drumlithie, AB39 3YT

Tuesday 8 October, 2-7pm
Stonehaven Town Hall, Allardice Street,
Stonehaven, AB39 2BU

Wednesday 9 October, 2-7pm
Dickson Memorial Hall, Station Road,
Laurencekirk, AB30 1BE

Thursday 10 October, 2-7pm
Durris Kirkton Hall, Kirkton
of Durris, Banchory, AB31 6BP



Powering change together



The time has come to further enhance Scotland's energy infrastructure, providing power for future generations as we move towards net zero.

The shift to a cleaner, more sustainable future is about more than climate change. It's about ensuring future generations have the same opportunities to thrive as we have all had.

Countries around the world are investing in their energy infrastructure to support the demands of modern economies and meet net zero targets. The UK is leading the way in building a modern, sustainable energy system for the future.

We all have a part to play

When it comes to net zero, we have to be in it together. The UK and Scottish Governments have ambitious net zero targets, and we're playing our part in meeting them.

We work closely with National Grid Electricity System Operator to connect vast renewable energy resources – harnessed by solar, wind, hydro and marine generation – to areas of demand across the country. Scotland is playing a big role in meeting this demand, exporting two-thirds of power generated in our network.

But there's more to be done. By 2050, the north of Scotland is predicted to contribute over 50GW of low carbon energy to help deliver net zero. Today, our region has around 9GW of renewable generation connected to the network.

At SSEN Transmission, it is our role to build the energy system of the future.

We're investing £20 billion into our region's energy infrastructure this decade, powering more than ten million UK homes and 20,000 jobs, 9,000 of which will be here in Scotland.



Find out more

Scan the QR code with your smartphone to find out more about how these policies have been assessed and determined.

Who we are

We're responsible for maintaining and investing in the electricity transmission network in the north of Scotland. We're part of SSE plc, one of the world's leading energy companies with a rich heritage in Scotland that dates back more than 80 years. We are also closely regulated by the GB energy regulator Ofgem, who determines how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network

What we do

We manage the electricity transmission network across our region which covers a quarter of the UK's landmass, crossing some of the country's most challenging terrain. We connect renewable energy sources to our network in the north of Scotland and then transport it to where it needs to be. From underground and subsea cables, overhead lines (OHLs) to electricity substations, our network keeps your lights on all year round.

Working with you

We understand that the work we do can have an impact on communities. So we're committed to minimising our impacts and maximising all the benefits that our local developments can bring to your area. We're regularly assessed by global sustainability consultancy AccountAbility for how we engage with communities. That means we provide all the information you need to know about our plans and how they will impact communities like yours. We want to hear people's views, concerns, or ideas and harness local knowledge so that our work benefits their communities: today and long into the future. You can share your views with us at: ssen-transmission.co.uk/talk-to-us/contact-us

The Pathway to 2030

Building the energy system of the future will require a delivery of significant infrastructure over the next few years. In partnership with the UK and Scottish Governments, we're committed to meeting our obligation of connecting new, renewable energy to where it's needed by 2030.

Achieving net zero

By 2030, both the UK and Scottish governments are targeting a big expansion in offshore wind generation of 50GW and 11GW respectively. The Scottish Government has also set ambitious targets for an additional 12GW of onshore wind by 2030.

Across Great Britain, including the north of Scotland, there needs to be a significant increase in the capacity of the onshore electricity transmission infrastructure to deliver these 2030 targets and a pathway to net zero.

Securing our energy future

And it's not just about net zero. It's also about building a homegrown energy system, so that geopolitical turmoil around the world doesn't severely impact the UK and push up energy prices.

The UK Government's British Energy Security Strategy further underlines the need for this infrastructure, setting out plans to accelerate homegrown power for greater energy independence. The strategy aims to reduce the UK's dependence on and price exposure to global gas wholesale markets through the deployment of homegrown low carbon electricity generation supported by robust electricity network infrastructure.

Meeting our 2030 targets

In July 2022, National Grid, the Electricity System Operator (ESO), published the Pathway to 2030 Holistic Network Design (HND). This set out the blueprint for the onshore and offshore transmission infrastructure that's required to support the forecasted growth in the UK's renewable electricity. It's an ambitious plan that will help the UK achieve net zero.

What does this mean for you?

The East of Scotland will play a key role in meeting these goals. The extensive studies that informed the ESO's Pathway to 2030 HND confirmed the requirement to increase the power transfer capacity of the onshore corridor from Kintore to Tealing.

This requires a 400kV connection between these sites to enable the significant capability needed to take power from onshore and large scale offshore renewable generation, connecting on the East Coast of Scotland before transporting power to areas of demand.

As part of these plans, we're proposing to build a new 400kV OHL between Kintore and Tealing. This also requires two new 400kV substations to be constructed in Fetteresso Forest (Hurlie) and Tealing (Emmock) to enable future connections and export routes to areas of demand.

In addition, two of the existing 275kV OHLs out of the existing Tealing substation to Alyth and Westfield require upgrades to 400kV operation and to be connected to the proposed new Emmock 400kV site.

These five projects, collectively are called the Kintore to Tealing 400kV projects, and are seen as critical to enable the delivery of the UK and Scottish Government's targets.

Future network investment requirements

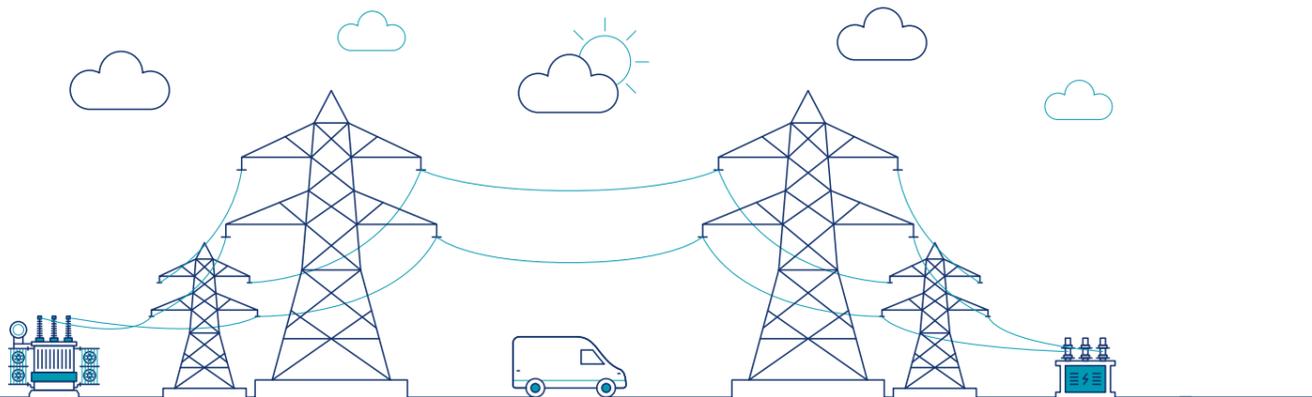
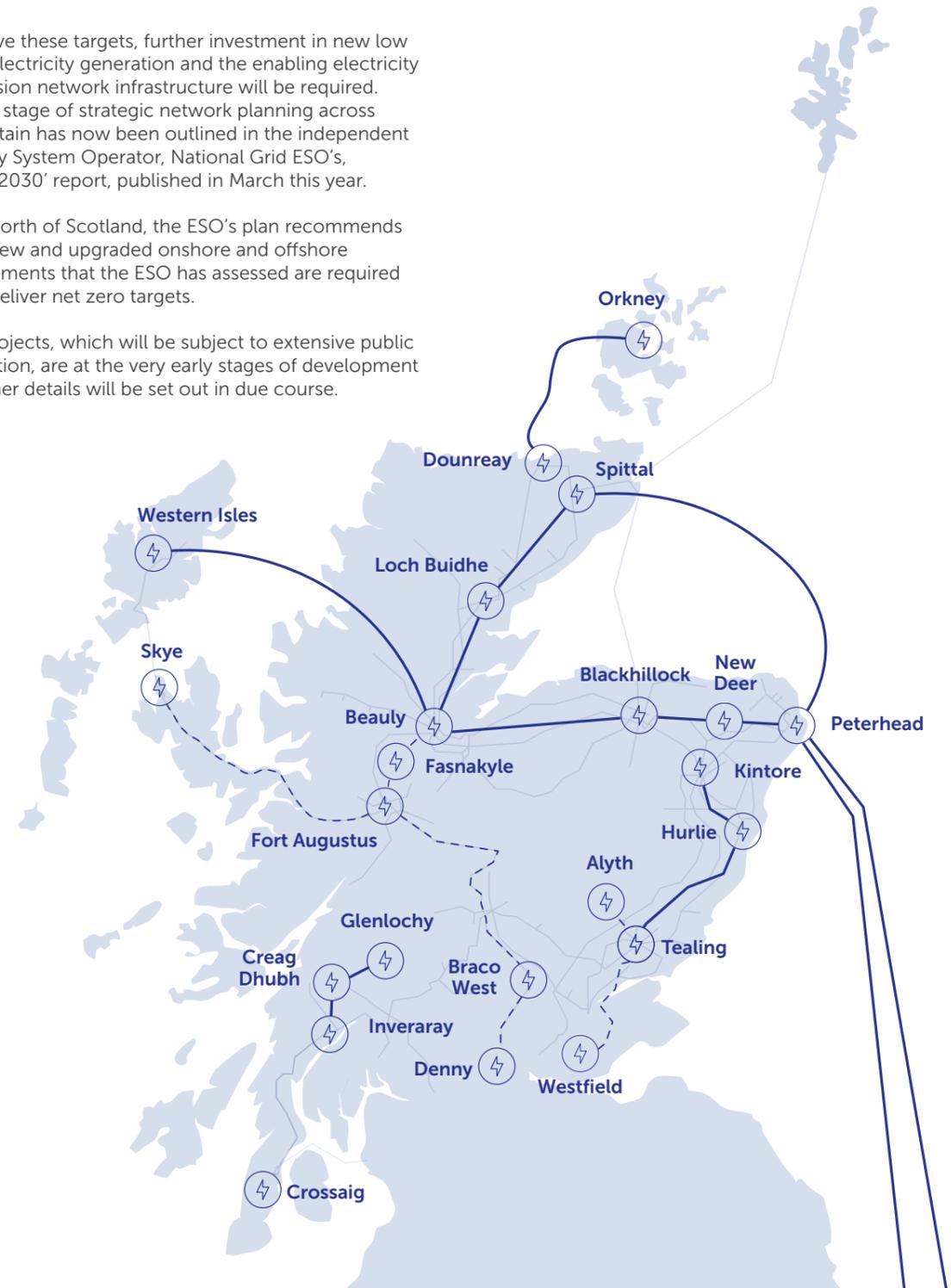
Our 2030 targets are the first step on the transition to net zero. The UK Government has a target to decarbonise our electricity system by 2035 and fully decarbonise our economy by becoming net zero by 2050, with the Scottish Government committing to net zero five years earlier, by 2045.

To achieve these targets, further investment in new low carbon electricity generation and the enabling electricity transmission network infrastructure will be required. The next stage of strategic network planning across Great Britain has now been outlined in the independent Electricity System Operator, National Grid ESO's, 'Beyond 2030' report, published in March this year.

For the north of Scotland, the ESO's plan recommends several new and upgraded onshore and offshore reinforcements that the ESO has assessed are required to help deliver net zero targets.

These projects, which will be subject to extensive public consultation, are at the very early stages of development and further details will be set out in due course.

-  New infrastructure
-  Upgrade/replacement of existing infrastructure
-  Existing network



About the Kintore - Tealing 400kV projects

The Kintore - Tealing 400kV project consists of five key onshore projects comprising of works to develop new infrastructure and upgrade existing infrastructure in both SSEN Transmission and Scottish Power Transmission's areas.

Due to the criticality of these works, there is a requirement for accelerated development and delivery to meet the 2030 connection dates.

Kintore - Tealing 400kV OHL connection

This requires the construction of a new 400kV OHL approximately 107km in length. This is split into two sections:

- Approximately 35km between the 400kV substation currently under construction at Kintore and the proposed new 400kV Hurlie substation.
- Approximately 72km between Hurlie and the proposed new 400kV Emmock substation.

Emmock 400kV substation

A new 400kV substation is essential to enable the connection of the proposed Kintore - Tealing 400kV OHL as well as allowing the upgraded Alyth - Tealing and Tealing - Westfield OHLs to connect at 400kV.

Tealing has been selected as the preferred area as it reuses existing infrastructure via Westfield and Alyth down to Kincardine that can be upgraded to 400kV operation.

A new substation site near Tealing, close to the existing Tealing substation, minimises the requirement for new infrastructure.

Hurlie 400kV substation

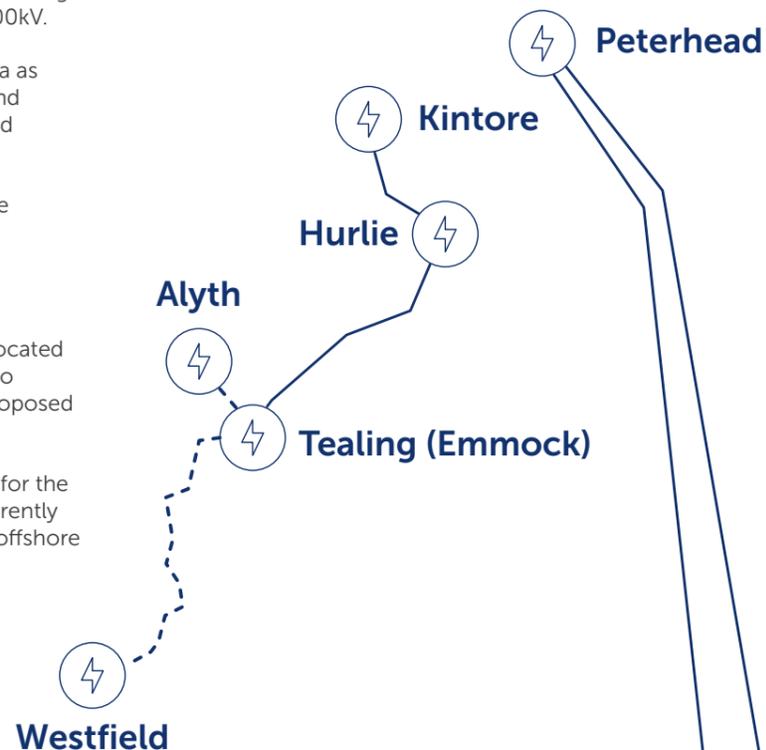
A new 400kV substation, known as Hurlie, is located near the existing 132kV substation in Fetteresso Forest to provide a connection for the new proposed Kintore - Tealing 400kV OHL.

Hurlie also provides an onshore landing point for the proposed co-ordinated Offshore Network currently being developed which is intended to deliver offshore connections more efficiently.

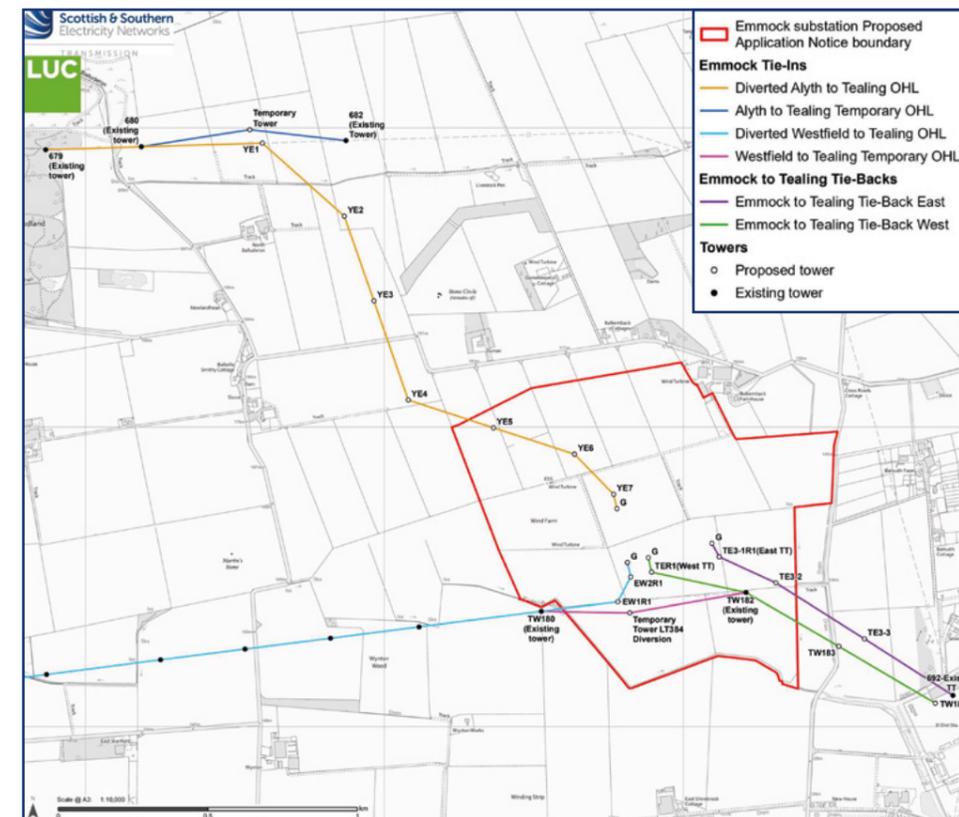
Upgrade to 400kV for Alyth - Tealing and Tealing - Westfield OHL

To support the increased capacity from the proposed Kintore - Tealing 400kV OHL, the export routes to areas of demand must be upgraded to 400kV. This means the existing Alyth - Tealing and Tealing - Westfield OHLs, which currently operate at 275kV need to be upgraded to operate at 400kV.

This is known as 'reconductoring' and is achieved by replacing the existing conductors with larger capacity conductors. Once upgraded these lines will connect into the proposed new 400kV substation at Tealing (Emmock).



Emmock and Tealing section 37 tie-ins



Consult our maps

We've split our maps into sections so that you can refer to the areas of most interest to you in clearer detail.

Copies will be available at the consultation to take away with you, or alternatively you can download the copies you need from our project webpage.

The Emmock and Tealing tie-ins comprises the diversion of short sections of the Alyth to Tealing (A-T OHL) and Westfield to Tealing (W-T OHL) 275kV OHLs, which currently connect at their eastern extent with the existing Tealing 275kV substation, to connect with the proposed Emmock 400kV substation.

Consent for this work will be applied for via a standalone section 37 application under the Electricity Act 1989 to Scottish Ministers. Consent is also sought under the same application for the installation of two short sections of parallel 275kV OHL 'tiebacks' between Emmock substation (assuming it is consented) and Tealing substation.

The project is being planned in parallel with separate SSEN Transmission projects to reconductor both of the above-mentioned 275kV OHLs to 400kV for tie-in to Emmock substation.

The key issues arising from this project are likely to be landscape and visual and cumulative impacts arising from the other proposed electrical infrastructure in the area.

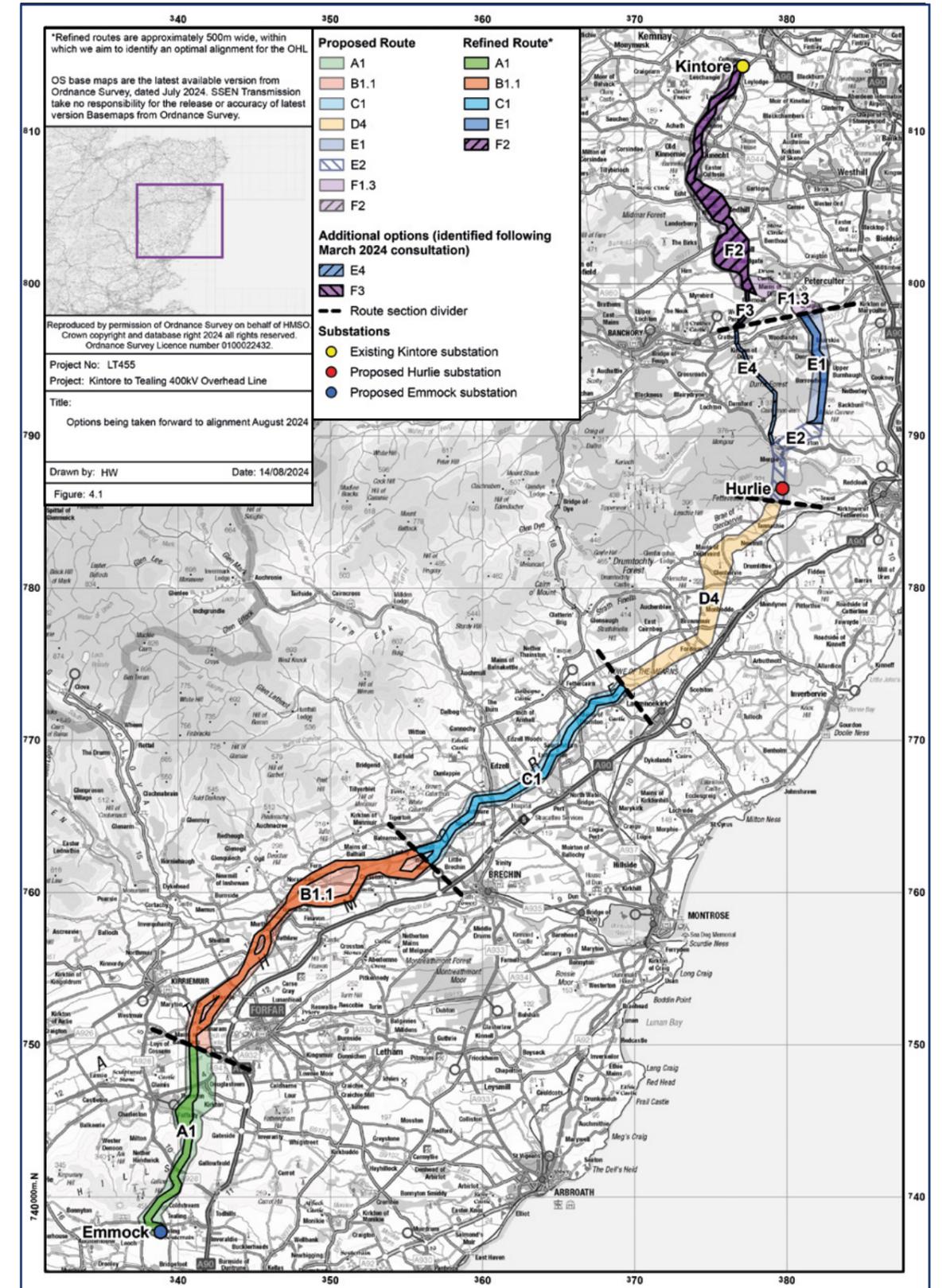
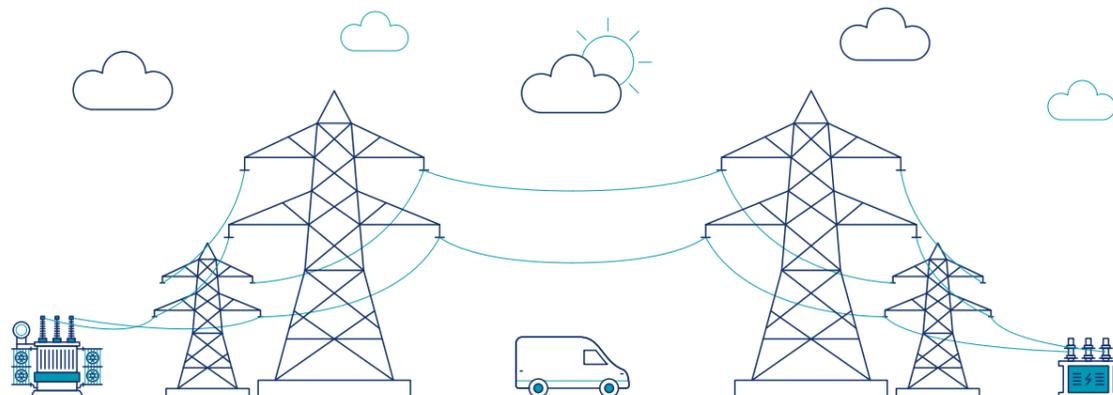
The project is essential to the completion of the Kintore to Tealing projects, as it would provide the tie-ins for the reconducted A-T OHL and W-T OHL to the proposed Emmock substation as part of the upgraded 400kV transmission infrastructure. This would allow power to keep flowing whilst the wider upgrade works are undertaken.

An Environmental Impact Assessment (EIA) Screening Request was submitted in August 2024, and an Environmental Appraisal of the project is due to be undertaken in the coming months to support a section 37 application to Scottish Ministers, this is expected to be submitted in early 2025. It is anticipated a decision will be made later that year and we expect to commence construction in 2026.

Project location

Our overhead line project spans around 107km and we split the project into six sections at the routing stage. As we've worked towards a Potential Alignment, we've identified locations where there are alignment options which have different constraints. More detail on the options is available in the handouts and in the Consultation Document, please see ssen-transmission.co.uk/TKUP

Location	Routing stage section (see figure from Report on Consultation August 2024 opposite for options being taken forward to alignment)	Alignment stage options (see figure showing location of alternative alignments options on pages 22 & 23)
Tealing (Emmock) to Forfar	Section A (Route A1)	Potential Alignment Location 1: Hayston Hill - 2 Alternative Alignments (1a and 2a)
Forfar to Brechin	Section B (Route B1.1)	Potential Alignment Location 2: Padanaram - 2 Alternative Alignments (2a and 2b) Location 3: Justinhaugh - 2 Alternative Alignments (3a and 3b) Location 4: Careston - 5 Alternative Alignments (4a, 4b, 4c, 4d and 4e)
Brechin to Laurecekirk	Section C (Route C1)	Potential Alignment No Alternative Alignments
Laurecekirk to Hurlie	Section D (Route D4)	Potential Alignment No Alternative Alignments
Hurlie to River Dee	Section E (Route E1, E2 and E4)	Potential Alignment Location 5: Durris (including part of Section F) - 2 Alternative Alignments (5a and 5b)
River Dee to Kintore	Section F (Route F1.3, F2 and F3)	Potential Alignment Location 6: North of Drumoak - 3 Alternative Alignments (6a, 6b and 6c) Location 7: Schoolhill - 3 Alternative Alignments (7a, 7b and 7c) Location 8: Echt - 3 Alternative Alignments (8a, 8b and 8c)



The story so far

May 2023



We first introduced this project in May 2023, consulting on route corridors and route options.

March 2024



We held further public consultations where we presented new route options in Sections D, E and F following the change in location of Hurlie 400kV substation. We requested feedback on these potential route options and further updates to the refined routes.

April 2024



The consultation closed on 30 April 2024, with 1,610 written responses received.

August 2024



We published a Report on Consultation confirming the proposed route options being taken forward to alignment and detailing how consultation has informed this process.

September/October 2024



Alignment consultation events.

Why we're here today

We are currently at the alignment stage of project development. This is when we have lines on the map showing our alignment options and clear proposals for where the line is likely to go rather than the routes previously presented which are typically around 1km wide.

Over the past months, we have developed these alignments by carrying out further studies and assessments following consultation feedback and through engagement with landowners and wider stakeholders.

This consultation will focus on our alignment options, one of which is being presented as the Potential Alignment option and will include further information on how this option has been chosen as the potential one.

We welcome your feedback on these alignment options and will review all feedback received to inform the final design of the project.

We are here



Stage 1: Corridor selection

Stage 2: Route selection

Stage 3: Alignment selection

Help shape our plans

The work we have planned is significant and has the potential to deliver massive benefits in your community, Scotland, and beyond. Yet we know that achieving our goals will require a lot of work that will impact your lives. That's why we want to work with you every step of the way throughout the planning and delivery stages of these essential and ambitious works.

We're committed to delivering a meaningful consultation process that actively seeks the views of everyone affected by our plans. That means making our plans clear and easily accessible, so that you can give us input throughout each stage of the development process.

Throughout the consultation, we'll present our approach to developing the project, including changes made since we last engaged with you. We will be sharing our Potential Alignment for the overhead line, with alternative alignment options in some locations, alongside indicative tower positions presented through maps and visualisations.

These will all also be available to view and download from our project website.

What we are seeking views on

We want you to share your thoughts and opinions on our plans, where you think we can make improvements, concerns about the impact of our work and what you think of the refinements or changes we've made.

If you live adjacent to the Potential Alignment, in particular we want to work with you to discuss potential impacts and mitigation.

By telling us what you think, you will help shape our proposals. We want to harness your local knowledge so that we spot any unforeseen challenges early and maximise the potential benefits and opportunities for your communities.

Ultimately, we want to work with you to ensure that the energy infrastructure we build will be the best it can possibly be.

What we are seeking views on

As well as communities, we are keen to hear feedback from a broad range of other stakeholders including but not limited to landowners, businesses, non-statutory consultees and statutory consultees such as local authorities, NatureScot, Scottish Environment Protection Agency (SEPA), Historic Environment Scotland (HES) and Scottish Forestry.



Scan the QR code to visit the project webpage and feedback form.



Selecting an alignment

The consideration of alignment options and design solutions brings together work by four main disciplines:

Engineering Team

Who identify engineering constraints and where overhead lines and cables can be installed from a construction and operational perspective.

Key considerations include:

- Infrastructure crossings
- Environmental design
- Ground conditions
- Accessibility
- Proximity to existing infrastructure and properties

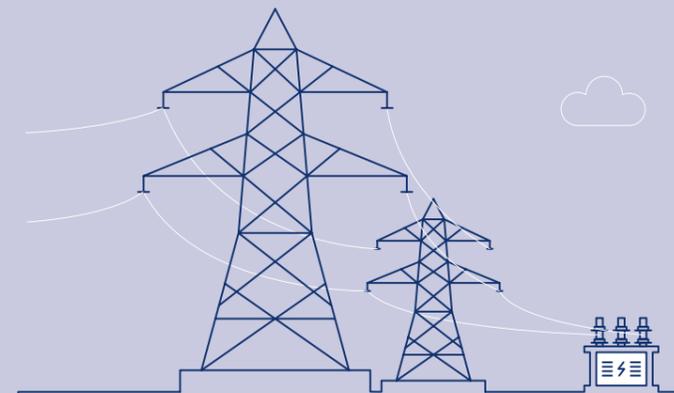


Communities Team

Who work with communities and make sure that their feedback during the consultation process is closely considered during project refinement.

Key considerations include:

- Community engagement
- Consultation responses review
- Recreational areas and areas of local interest



Land Team

Who engage with landowners to identify key land use constraints.

Key considerations include:

- Landowner engagement
- Mitigating effects of infrastructure on land and properties
- Reaching land agreements

Environmental Team

Who identify key environmental constraints along the routes which the new infrastructure could impact upon.

Key considerations include:

- Engagement with statutory consultees and planning authorities
- Results of specialist environmental archaeology, ornithology, ecology, geology and hydrology surveys
- Local environmental aspects like visual amenity and landscape character, Scheduled Monuments, Special Protected Areas, Specials Areas of Conservation and Sites of Special Scientific Interest
- Peat, ground conditions and the water environment
- Land use, including agriculture, forestry and recreation
- Proximity to residential properties and other sensitive receptors



Striking a balance

When selecting an alignment, we need to carefully balance key considerations relating to engineering, environment and cost, in each section of the overhead line route.

We then consider the likely effect and level of impact of each consideration, which will vary from section to section.

This can be based on how populated the area is, the outcomes of environmental and engineering surveys, stakeholder and community feedback, the presence of peat, the local water environment, if there is existing infrastructure we need to avoid, if the effects on land and property can be mitigated and if a constructable alignment can be identified.

Ultimately, we need to balance a range of factors and present the solution we consider most viable, to then put forward for consultation. We have now identified a Potential Alignment alongside indicative tower locations which we are seeking your views on.

Our Alignment Selection Consultation Document describes the alignment options and comparative appraisal of each option in detail, and this can be downloaded from the project webpage or viewed during the consultation events.

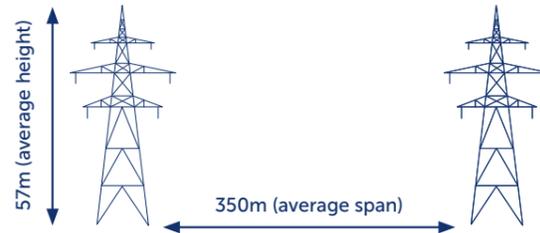
You can download our Alignment Maps, Alignment Consultation Document and Routeing Process from our website: ssen-transmission.co.uk/TKUP

About the overhead line

400kV double circuit overhead line

The required technology for the new 400kV link between Kintore - Hurlie - Emmock has been determined to be a new double circuit 400kV HVAC (High Voltage Alternating Current) overhead line.

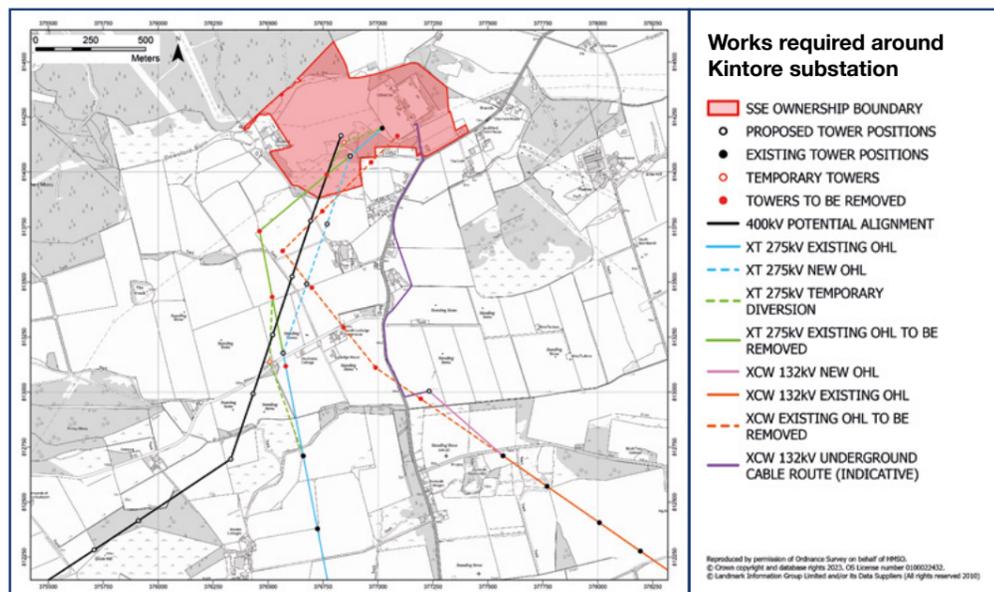
The overhead line would consist of steel lattice towers with an average height of approximately 57m which would support six conductor bundles on six cross arms and an earth wire between the peaks for lightning protection. The average distance between towers is expected to be 350m. Tower height and the distance between them will vary dependent on several factors such as altitude, climatic conditions and topography. This is similar to our Beauly–Denny line, where 80% of its 600-plus towers are below 57m, ranging from 42m to 65m in height.



Additional works

In addition to the new double circuit overhead line and towers, the project will require a number of additional works. These are currently expected to include:

- Temporary overhead line diversions at a number of locations including near Emmock substation, south of Echt, south and west of Kirkton of Durris (should the Potential Alignment be taken forward) and near Kintore.
- Sections of 132kV underground cabling near Kintore substation and potentially south of Echt (depending on arrangement of existing 132kV overhead crossing).
- New overhead line arrangements at Emmock substation to tie in the new Kintore to Tealing overhead line, the overhead lines to Alyth and Westfield and the connection between the new Emmock and existing Tealing substations. Modification of existing lines will be undertaken where possible but new structures will also be required. Any redundant structures will be removed. Please see more information on the tie-ins required at Emmock and Tealing on page 7.
- Modification of existing circuits at Kintore to allow space for the new OHL connection and removal of redundant towers. This will involve realignment of one circuit and undergrounding of another. See figure below.
- A crossing of the existing 132kV overhead line south of Echt and removal of redundant towers near Tealing substation. For more information on OHL crossings please see **Tower Crossings**.
- Permanent realignment of the existing OHL between Kintore and Fetteresso, near Kirkton of Durris, to allow provision for the new proposed 400kV OHL (should the Potential Alignment be taken forward).



The challenges with undergrounding at 400kV

The environmental, technical, and operational constraints associated with undergrounding at 400kV make it extremely challenging to deliver in many areas of Scotland. For underground cables at this capacity, longer than 1-2km, additional substation infrastructure would also be needed, enlarging the project's footprint.

Underground cables at 400kV are estimated to be between 5 and 10 times more expensive than overhead lines, and since these costs are reflected in consumer bills, it's a factor that needs to be considered. To deliver the necessary capacity, up to 30 parallel cables would be required. To achieve the required spacing, a trench of over 40m wide would need to be excavated, typically between 1m and 7m deep. During construction, a working corridor of over 70m wide is required for cable installation. This can result in significant land use constraints, typically more so than overhead line construction activities, particularly for farming operations.

Underground cables at 400kV are estimated to be between 5 and 10 times more expensive than overhead lines, and since these costs are reflected in consumer

<p>Between 5-10x More expensive than overhead lines</p>	<p>Up to 30 Parallel cables required</p>	<p>Trench of over 40m wide and 1-7m deep would need to be excavated</p>	<p>Over 70m wide working corridor, which can result in significant land use constraints</p>
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Why can't the development be placed offshore?

In its assessment of what is required to meet 2030 targets, National Grid ESO concluded there is a need for both onshore and offshore projects.

Moreover, onshore energy infrastructure helps support local electricity needs and improves the network's reliability across northern Scotland.

Overhead lines can carry roughly three times more power than subsea cables, making them more efficient and cost effective for energy bill payers, whilst technical challenges and constraints limit the use of only offshore solutions.

Visit our Frequently Asked Questions page to find out more about our engineering and technology considerations including more details regarding underground and offshore cables: ssen-transmission.co.uk/2030faqs

Managing construction impacts

We are committed to minimising the impact of construction through avoiding potential issues by designing them out, undertaking thorough environmental assessments and working closely with the local community. Our focus includes mitigating effects, for example to people, biodiversity, water, soil, and traffic disturbances. A Construction Environment Management Plan will be set up, to ensure mitigation is put in place and its effectiveness is monitored throughout the construction phase.

During construction, expected short-term impacts may include noise and traffic disruptions. Before starting, we'll have a plan to manage these, including organising deliveries and travel to avoid busy times and sensitive areas.

We'll work closely with community groups and contractors to ensure adherence to mitigation measures. Typically, most project components will take around four years to complete, however these works will be phased across the length of the overhead line with bursts of activity and quiet periods.



Our access strategy

Constructing and maintaining our overhead line

We are currently developing our access strategy, which considers access requirements for construction and maintenance of the overhead line. Access requirements have informed the alignment appraisal process, as a key engineering consideration. Preliminary access routes to indicative tower locations have been appraised but these may change following feedback and design refinement, and we will present final proposed access routes at our pre-application events early next year.

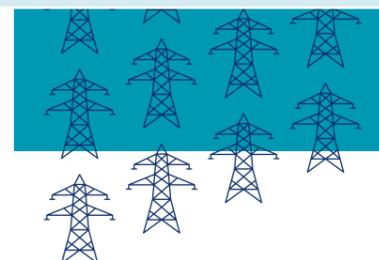
A detailed traffic and transport assessment will form part of the Environmental Impact Assessment (EIA), which assesses potential impacts of construction traffic and the capacity of local roads to accommodate this traffic.

A Construction Traffic Management Plan (CTMP) will be agreed with the relevant authorities prior to works commencing.



The table below explains the different types of tracks that are typically considered and what they are required for.

Type of access	What does it mean?
Construction access	<p>During construction, stone tracks would typically be used to gain access to each of the tower locations. This would normally be temporary except in locations where it is considered that it needs to be retained to maintain safe access for future requirements.</p> <p>There are different types of construction access tracks, these include cut tracks, surface tracks and floated roads. Each provide different benefits depending on the ground conditions in the area.</p> <p>A typical access track would be of a minimum 4m in width however this could be wider in areas where heavy plant require access.</p>
Statutory inspection and general maintenance access	<p>When designing the overhead lines, we need to consider how our operational teams will get back to the locations in the future to carry out routine inspections and maintenance.</p> <p>Operational access would normally consist of an off-road 4x4 vehicle with a trailer being able to reach each tower. If we consider it not possible for a 4x4 to be capable of doing this, we would need to consider alternative access either by identifying a route where temporary panelling can be installed as and when required or through construction of a permanent track.</p> <p>In open fields with no poor ground conditions and generally accessible terrain no additional permanent access would normally be required.</p>
Heavy maintenance access	<p>This covers if any future refurbishment or modifications would be required for the line. For this we have to consider what locations heavy plant would need to be able to access and have plans on how they would get to these locations.</p> <p>Typically, the main focus here is access to the angle towers. At angle towers this is where the overhead line conductors get pulled onto the towers so additional access and space is needed in these locations during construction to carry this out.</p> <p>Where these locations cannot be easily accessed, we would look to retain permanent access so that if a conductor needed replaced in the future this could be carried out safely whilst minimising the timeframes required to perform the maintenance.</p>
Demolition access	<p>This is required from a health and safety perspective so that we can understand that if at some point the overhead line is to be removed how access can be gained safely to do so.</p> <p>This doesn't mean having access to every location to be able to dismantle the towers, but it should consider how we may take the access and what additional roads or panelling would be required if we were to do so.</p>



3D visualisations

We understand that local stakeholders need to be able to visualise what the development may look like in their local area. We've provided 3D visualisations which model the alignment options into the local landscape to help understanding of the proposals in terms of the visual impact, distance and height.

The following are some images taken from the 3D model created for the overhead line from a range of different angles.



To find the portal with 3D visualisations, scan the QR code or visit the following URL: ssen-transmission.co.uk/TKUP



Overhead line in distance crossing a river

To get a better sense of the proposals in full, a portal containing visualisations is also available to view from the project webpage and our consultants, 3D Webtech, will be assisting us at our consultation events with copies of the model that attendees can interact with during the events.

The 3D model has been developed using indicative tower locations, identified by our contractor following walkover surveys of the alignment options. The exact location, design and height of each individual tower may change based on feedback and further refinement of the design. If that happens, we'll update our model and visualisations and share these on our webpage and with you at the next series of consultation events.

Photomontages

Photomontage visualisations will also be produced as part of the Environmental Impact Assessment (EIA). Once the EIA is completed, we'll ensure these photomontages are available to view.

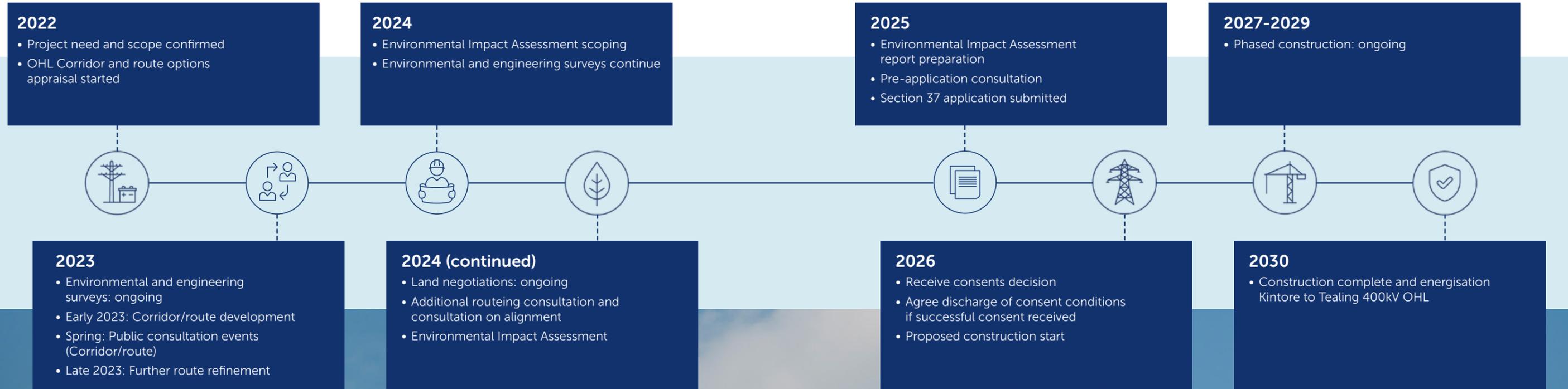


Overhead line crossing agricultural land

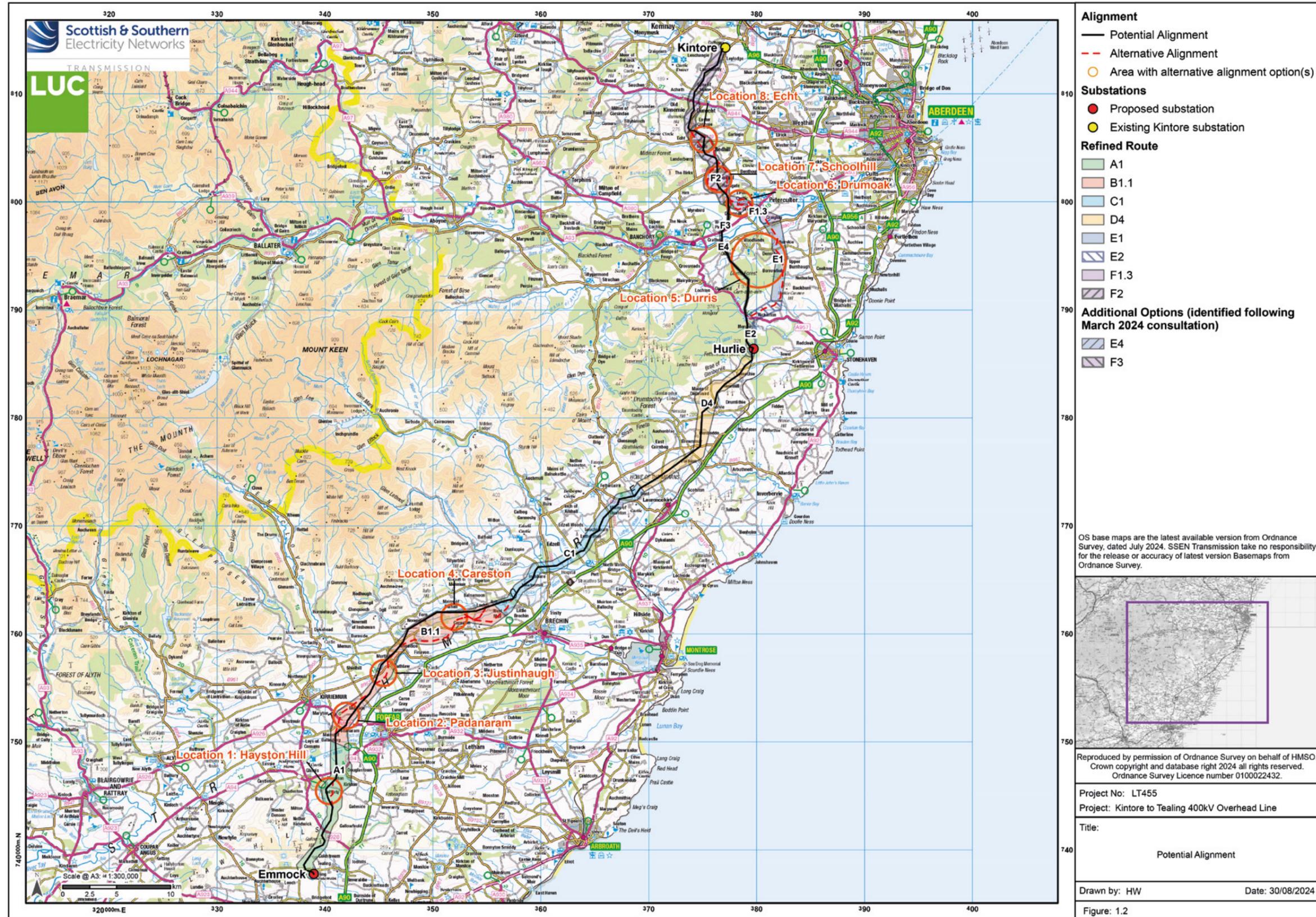


Example of overhead line tower

Project timeline



Potential Alignment overview



Please see project website ssen-transmission.co.uk/TKUP for detailed maps of each section and alternative alignment options.

Have your say

We value community and stakeholder feedback. Without this, we would be unable to progress projects and reach a balanced proposal.

The feedback period

We will accept feedback from now until **21 November 2024**.

How to provide feedback

Submit your feedback online by:

- Scanning the QR code on this page or via the form on our project webpage at: ssen-transmission.co.uk/TKUP
- Emailing the feedback form to the Community Liaison Manager, or;
- Write to us enclosing the feedback form in this booklet.

Our Community Liaison Team

Each project has a dedicated Community Liaison Manager who works closely with community members to make sure they are well informed of our proposals and that their views, concerns, questions, or suggestions are put to our project teams.

Throughout the life of our projects, you will hear from us regularly. We aim to establish strong working relationships by being accessible to key local stakeholders such as community councils, residents' associations, and development trusts, and regularly engage with interested individuals.



To support everyone online, we provide accessibility and language options on our website through 'Recite Me'. The accessibility and language support options provided by 'Recite Me' include text-to-speech functionality, fully customisable styling features, reading aids, and a translation tool with over 100 languages, including 35 text-to-speech.

Please select "Accessibility" on our website to try out our inclusive toolbar."

What we're seeking views on

Now that we have presented a Potential Alignment, we want you to share your thoughts and opinions on our plans, where you think we can make improvements, concerns about the impact of our work and what you think of any changes and refinements we've made. We particularly want to hear from you if you live close to the Potential Alignment.

We are actively looking to avoid and mitigate the impacts of the overhead line as much as possible over the coming months. It would be helpful to understand what you believe we should be doing to help minimise these impacts and if there are any opportunities to deliver local community benefits you would like us to consider.

During previous consultations we have received feedback on the need for the project and the alternative technology options. Whilst we acknowledge this feedback, we are keen to receive comments on the Potential Alignment and alternative alignment options.

We encourage all interested community members to fill in a feedback form when submitting feedback, however if you prefer, you can email us to provide your feedback or ask any questions. Comments made to the applicant during this consultation are not representations to the Scottish Ministers and if the applicant submits a section 37 application there will be an opportunity to make representations on that application to the Scottish Ministers.

Community Liaison Manager

The best way to contact us regarding this project is through our Community Liaison Team.

Rob Whytock

SSEN Transmission
200 Dunkeld Road,
Perth, PH1 3GH tkup@sse.com

Additional information



The best way to keep up to date is to sign up to project updates via the project webpage:
ssen-transmission.co.uk/TKUP

You can also follow us on social media

@ssentransmission @SSETransmission

Your feedback

Thank you for taking the time to read this consultation booklet. In order to record your views and improve the effectiveness of our consultation, please complete this short feedback form. We welcome your feedback on the following new OHL routes:

Please complete in BLOCK CAPITALS. (Please tick one box per question only)

Q1. Which consultation event did you attend? (Select all that apply)

- | | | | | |
|---------------------------------------|----------------------------------|--|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> Tealing | <input type="checkbox"/> Forfar | <input type="checkbox"/> Memus | <input type="checkbox"/> Brechin | <input type="checkbox"/> Menmuir |
| <input type="checkbox"/> Kintore | <input type="checkbox"/> Echt | <input type="checkbox"/> Drumoak | <input type="checkbox"/> Drumlithie | <input type="checkbox"/> Stonehaven |
| <input type="checkbox"/> Laurencekirk | <input type="checkbox"/> Durriss | <input type="checkbox"/> Accessed information online | <input type="checkbox"/> | <input type="checkbox"/> None |

Q2. Is there a specific section of the overhead line alignment that you are interested in?

Please detail name of section(s), alternative alignment option(s) or closest settlement

Comments:

Q3. Has the approach taken to select the Potential Alignment in your section of interest been clearly explained?

- Yes No Unsure

Comments:

Q4. Do you have any specific concerns relating to the alignment options within your section of interest? If so, is there anything we could do to mitigate the impact of this?

Comments:

Q5. Is there anything you'd like to bring to our attention regarding the Potential Alignment or alternative alignment that you believe we may not have already considered?

Comments:



Scottish & Southern
Electricity Networks

TRANSMISSION

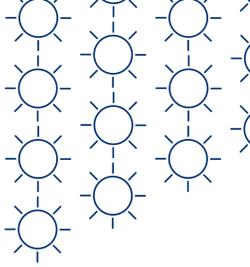
Appendix E – Consultation Document PAC 1

<https://www.ssen-transmission.co.uk/globalassets/projects/kintore---tealing-400kv-ohl-downloads/september-2024-consultation-docs/september-october-2024-alignment-consultation-document.pdf>

Appendix F – Report on Consultation PAC 1

<https://www.ssen-transmission.co.uk/globalassets/projects/kintore---tealing-400kv-ohl-downloads/alignment-report-on-consultation/kintore-tealing-report-on-consultation-january-2025.pdf>

Appendix G – Consultation Banners PAC 2



Purpose of today's event

Welcome to this public feedback event for the Kintore to Tealing 400kV OHL Project. This event is the last public event for the project before a Section 37 application is submitted to the Energy Consents Unit.

We are hosting this event to present the Proposed Alignment for the project and our responses to feedback received at the last round of consultation events.

Consultation on our proposals has taken place at the corridor/routeing, refined routeing, and alignment stages, with the feedback received informing refinement as the project developed.

Providing feedback

At this final stage of development, we are not seeking comment or feedback on further refinement to the proposed alignment but welcome comments on how we engage with you during the next phase of the project.

All the materials presented today are available in hard copies and large print by request. Please speak to a member of the team who will arrange this for you.

You can submit feedback online via the feedback form on the project web page, by completing the feedback form at the back of the booklet or using the paper copies available at the sign in desk. Freepost envelopes are also available.

Our team will also capture verbal feedback from the events and log this with all other feedback.

The feedback period closes on
28 March 2025

If you have any questions relating to any aspects of the project, please speak with a member of the team who will assist you.

Community Liaison Manager

Rob Whytock

 SSEN Transmission,
200 Dunkeld Road, Perth, PH1 3GH

 TKUP@sse.com



ssen-transmission.co.uk/TKUP



The Pathway to 2030

Building the energy system of the future will require a significant acceleration of work over the next few years. In partnership with the UK and Scottish governments, we're committed to meeting our obligation of connecting new, renewable energy to where it's needed by 2030.

Achieving Net Zero

By 2030, both the UK and Scottish governments are targeting an expansion in offshore wind generation of 50GW and 11GW respectively. The Scottish Government has also set ambitious targets for an additional 12GW of onshore wind by 2030.

Across Great Britain, including the north of Scotland, there needs to be a significant increase in the capacity of the onshore electricity transmission infrastructure to deliver these 2030 targets and a pathway to net zero.

Securing our energy future

And it's not just about net zero. It's also about building a homegrown energy system, so that geopolitical turmoil around the world doesn't severely impact the UK and push up energy prices.

The UK Government's British Energy Security Strategy further underlines the need for this infrastructure, setting out plans to accelerate homegrown power for greater energy independence. The strategy aims to reduce the UK's dependence on and price exposure to global gas wholesale markets through the deployment of homegrown low carbon electricity generation supported by robust electricity network infrastructure.

Meeting our 2030 targets

In July 2022, the National Energy System Operator (NESO) published the Pathway to 2030 Holistic Network Design (HND). This set out the blueprint for the onshore and offshore transmission infrastructure that's required to support the forecasted growth in the UK's renewable electricity.

It's an ambitious plan that will help the UK achieve net zero.

What does this mean for the East of Scotland?

The East of Scotland will play a key role in meeting these goals. The extensive studies that informed the NESO's Pathway to 2030 HND confirmed the requirement to increase the power transfer capacity of the onshore corridor from Kintore to Tealing.

This requires a 400kV connection between these sites to enable the significant capability needed to take power from onshore and large scale offshore renewable generation, connecting on the East Coast of Scotland before transporting power to areas of demand.

As part of these plans, we are proposing to build a new 400kV overhead line (OHL) between Kintore and Tealing. This also requires two new 400kV substations to be constructed in Fetteresso Forest (Hurlie) and Tealing (Emmock) which the new OHL will connect into and enable future connections and export routes to areas of demand.

In addition, two of the existing 275kV OHLs out of the existing Tealing substation to Alyth and Westfield require upgrades to 400kV operation and to be connected to the proposed new Emmock 400kV site.

These five projects, collectively are called the Kintore to Tealing 400kV projects, and are critical to enable the delivery of the UK and Scottish Government's targets.

