Tealing 400kV Substation

Report on Consultation

November 2023

Scottish & Southern Electricity Networks

TRANSMISSION

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1. Introduction

1.1. Purpose of this document

The purpose of this Report on Consultation (RoC) is to document the site selection process, consultation and feedback for the new proposed Tealing 400kV Substation in the Tealing area in Angus, and to show how the option taken forward to the next stage has been informed by this process.

This RoC details the consultation undertaken, including details of consultation methods and advertising, those consulted and/or contributing to the process and it also summarises the feedback received, including objections, concerns and areas of support. The document confirms which Site option for the proposed new 400kV substation is being progressed to the next stage of development and provides information on the next steps we are implementing, leading to the next public consultation events.

1.2. Project Overview

Based on the requirements outlined in National Grid ESO's Pathway to 2030 Holistic Network Design we have developed proposals to reinforce the transmission system, as part of this we are proposing to establish a new 400kV overhead line (OHL) between Kintore and Tealing. This requires two new 400kV substations to be constructed to connect to this new OHL, one near Fiddes in Aberdeenshire and one near Tealing to enable required future connections and export routes to areas of demand. Together, these three projects form the East Coast 400kV Phase 2 Upgrade. While each is being progressed as a separate project, they are intrinsically linked and were presented as such in the combined consultation process launched in May of this year.

This RoC covers the proposed 400kV Substation in the Tealing area (referred to in the earlier consultation process as the Tealing 400kV Substation).

Please refer to the following project specific Reports on Consultation for details on the proposed Kintore to Tealing 400kV OHL and proposed Fiddes 400kV Substation via the relevant project webpages:

- Kintore to Tealing 400kV OHL
- Fiddes 400kV Substation

The new substation addressed in this Report is proposed to be built near the existing Tealing 275kV Substation, near Kirkton of Tealing, north of Dundee, in Angus.

New SSEN Transmission projects between Kintore and Tealing

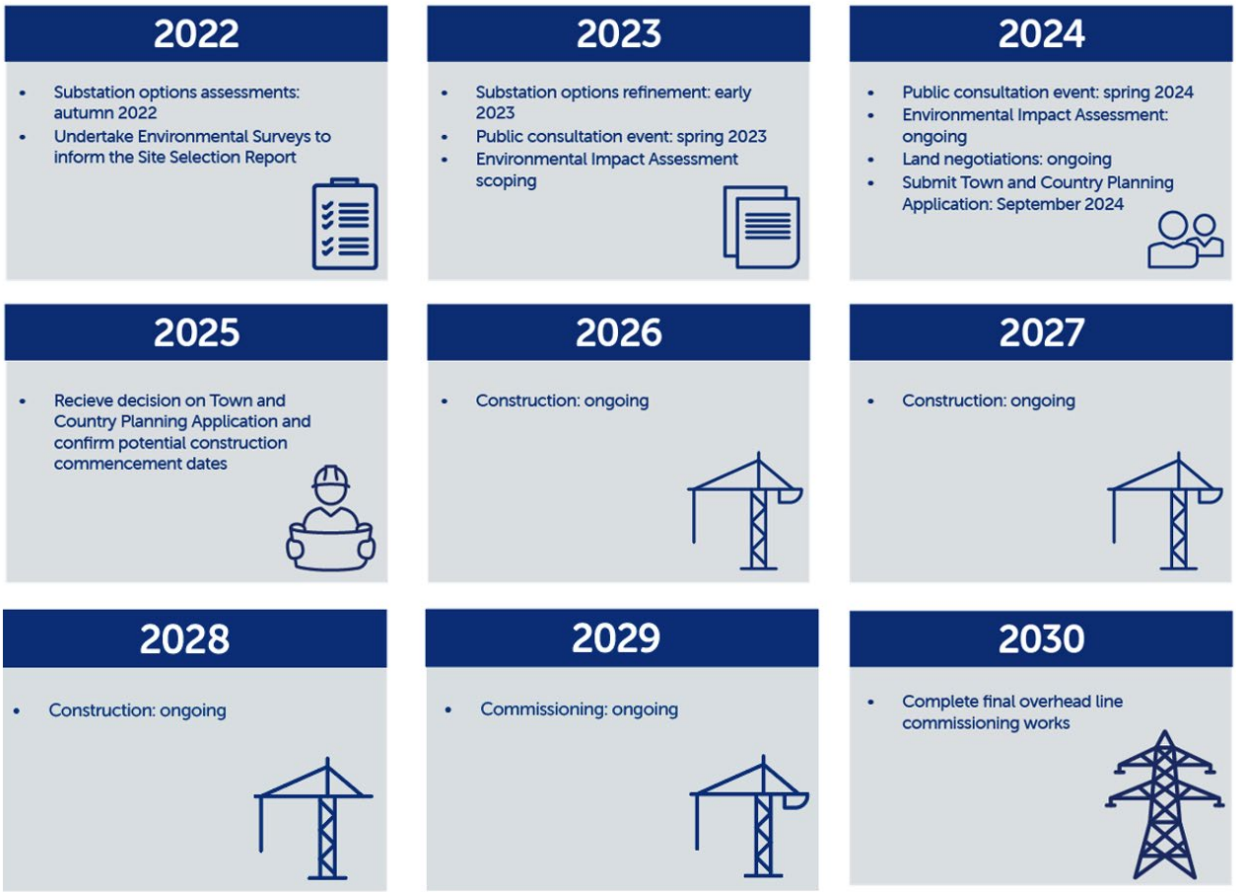
The proposed Tealing 400kV Substation project requires:

- The construction of a new outdoor AIS 400kV substation, which would require an area of land approximately 650m x 300m.
- Space to accommodate connections from future renewable energy generation projects.
- Land for drainage, landscaping, habitat enhancement and access.
- Land would also be required on a temporary basis during construction for use as temporary laydown, equipment storage, site offices and welfare facilities.

The following existing and proposed new infrastructure will require connection to the proposed Tealing 400kV Substation:

- The proposed Kintore to Tealing 400kV OHL connection.
- The existing 275kV OHL from Tealing to Alyth and Tealing to Westfield (into Scottish Power Transmission's licence area) will be upgraded to 400kV operation under a separate project in the East Coast 400kV Phase 2 upgrade. When upgraded to 400kV operation both circuits will be connected into the proposed Tealing 400kV Substation.
- The proposals require a new 275kV connection between the proposed Tealing 400kV Substation and the existing Tealing 275kV Substation. When the existing OHL is upgraded to 400kV operation, it will result in some towers which are no longer required. It is proposed that some of these towers will be dismantled and reused in making the connection between the proposed 400kV substation and the existing 275kV substation.

1.3. Project Timeline



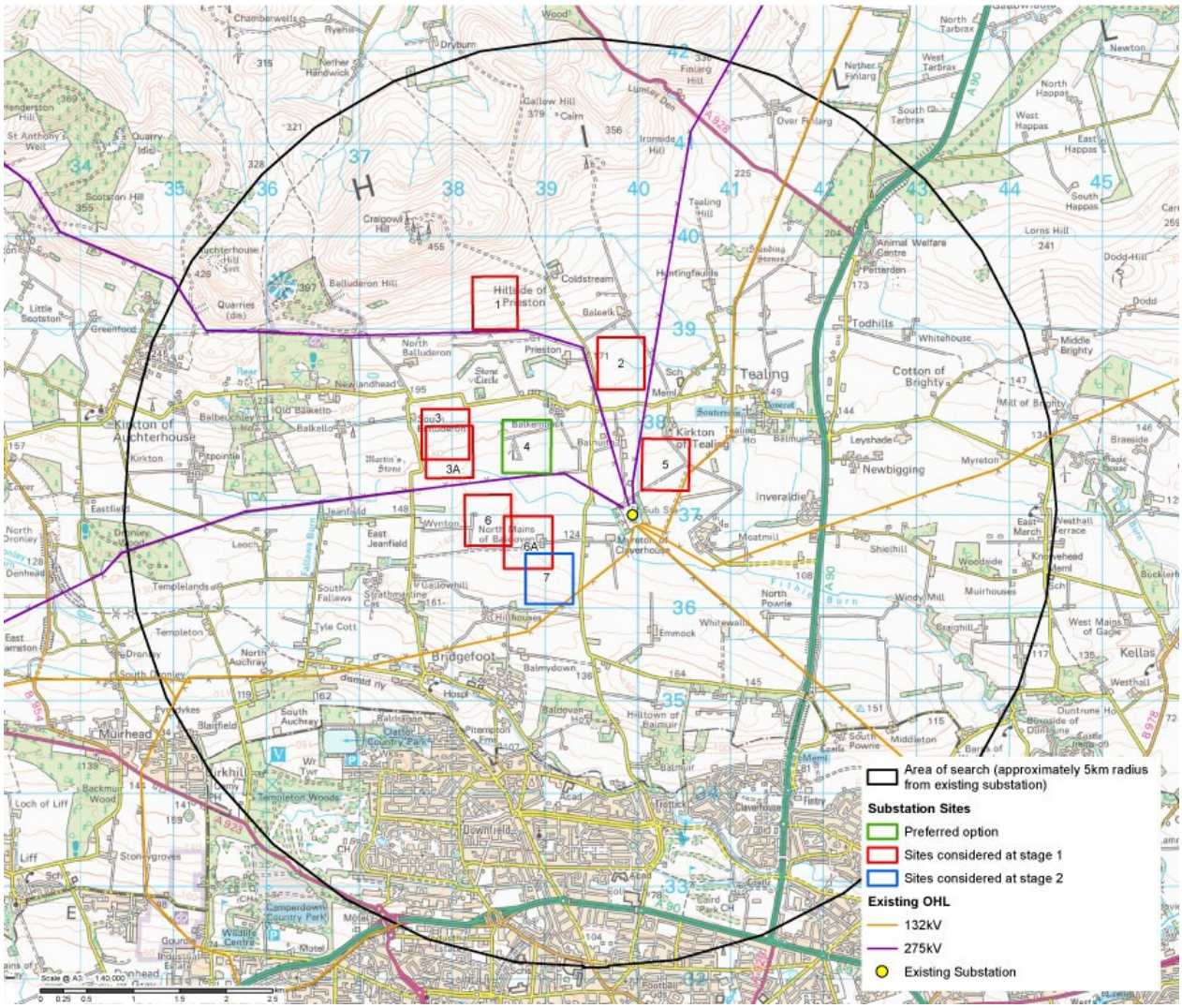
Find out more about our 2030 projects: www.ssen-transmission.co.uk/projects/2030-projects/

1.4. What we were consulting on

We understand the importance of involving communities and key stakeholders throughout each stage of our development process. Stakeholder feedback collected during consultations is critical to ensuring that our decision making is informed, and stakeholder concerns are taken into consideration at each stage of the project's development.

During this consultation, we presented options regarding our site selection for the proposed Tealing 400kV Substation. The consultation included information regarding site options, environmental and technical considerations, and the project development process and explained the factors which were taken into consideration in the selection process. The consultation explained how Site Options 4 and 7 were assessed in greater detail, and that the outcome of the process identified Site 4 as the preferred site option to be taken forward into the consultation process.

Figure 1 –Substation Site Selection Options



2. The Consultation Process

2.1. Who we consulted with

Our consultation process sought to capture the views of anyone who had an interest in our proposals, and we invited comments from all interested parties. During our engagements we aimed to ensure that we captured the views of:

- statutory consultees
- non-statutory consultees
- community members and local organisations; including local elected members
- landowners and occupiers

2.2. Consultation feedback period

The public consultation period was open from 2 May 2023 and was initially expected to end on the 9 June, however it was extended to 23 June 2023 and further to 28 July 2023 due to requests from Stakeholders to allow more time to respond to the consultation.

Statutory consultees and non-statutory consultees were invited to provide feedback on our Consultation Documents[1]. Where possible, affected landowners were contacted ahead of the consultation period opening to discuss land related considerations or concerns.

2.3. The advertising process

The consultation events for the East Coast 400kV Phase 2 scheme were advertised using the following methods:

- The Angus County Press, The Courier and The Press and Journal.
- Our social media channels and the dedicated project webpage.
- Community Councillors and Local Elected Members were emailed in advance with information they could share within their local area.
- A postcard was sent to 11,276 homes and businesses within communities potentially impacted by our proposals. A copy of the postcard invite can be found in Appendix C.

2.4. Stakeholder participation

A series of in-person consultation events for the East Coast 400kV Phase 2 scheme were held between 2 May and 13 July 2023 where local stakeholders had the opportunity to meet with the project team to discuss the proposals in more detail.

The event held in Tealing Village Hall focused on enabling communities in closest proximity to view the site options for the Tealing 400kV Substation.

Date	Event	Recorded attendance
11 May 2023	Tealing – Tealing Village Hall	75
17 May 2023	Virtual Event	75

Attendance figures reflect the number of people who had registered attendance at a consultation event. For busier events, the number of attendees can often be considerably higher than recorded.

For members of the public who were unable to attend the face-to-face consultation events, a virtual consultation event was held on 17 May 2023.

The virtual consultation event was held via a virtual consultation room which provided information boards giving an overview of the project and the type of infrastructure proposed. During the virtual consultation event, a live chat function was available for members of the public to ask questions about the project.

The event was attended by 75 people and the exhibition within the virtual room has remained open and is available via the project website: https://3dwebtech.co.uk/dashboard/ssen/tealing-to-fiddes/exhibition-en/

Stakeholder meetings

In the weeks before, during and after the consultation events, various meetings were held with other key stakeholders such as landowners, statutory and non-statutory consultees, councillors and community councils to discuss the project proposals.

Date	Meeting Type	Stakeholder group in attendance
19 April 2023	Pre-Consultation Microsoft Teams Meeting for Local Ward Councillors	Local Ward Councillors, 39 invited and 7 attended
25 April 2023	Pre-consultation Teams meeting for Community Councils	2 of the 39 invited Community Councils attended
19 June 2023	Community Council requested in person public meeting.	Glamis and Area Community Council and community members

2.5. Feedback volume

Feedback from our stakeholders was welcomed via a range of methods. For the public consultation, only responses in the form of letters, emails, phone calls or the feedback form submitted by post or email, or online, before the feedback period end date, have been included in the analysis undertaken for this Report. Feedback received after the end date has been responded to and considered by the project team but has not formed part of the analysis presented in this Report.

Responses to public consultation

Respondents generally provided feedback on the project scheme; proposed Tealing to Kintore OHL, Tealing Substation and Fiddes Substation therefore the decision was made to present the feedback as one scheme.

Responses from statutory and non-statutory consultees:

The Consultation Documents regarding the three projects within the East Coast 400kV Upgrade Project was issued to a total of 43 statutory consultees and 34 non-statutory consultees, inviting feedback on the preferences presented. A total of 8[2] and 5[2] responses were received, respectively, specifically in connection with the proposed Tealing 400kV Substation proposals. A summary of the responses and our responses are presented in Tables 3.3 to 3.6 below and in more detail in Appendix A and B.

Stakeholder representations

A number of other non-statutory organisations that were not directly approached by us, have responded to the consultation through the public consultation channels. All their comments have been taken on board and were analysed for this Report along with the public consultation responses.

[2] Some responses were to the consultation overall which included the proposed Tealing and Fiddes 400kV Substations and the Kintore to Tealing 400kV OHL projects. The responses specifically responding to Tealing Substation are counted here.

3. Consultation Feedback and Our Response

3.1. Common Themes

Across all of our Pathway to 2030 project consultations, we received feedback covering a number of common themes. Although some of this feedback related to topics which fell outside of the scope of our consultations, we recognise that it is important to address the points that our stakeholders took the time to raise, which we have summarised in this section. In addition, we have also developed a set of Frequently Asked Questions (FAQ) that can be viewed here.

Project Need

The need for these projects has been independently assessed by both the GB Electricity System Operator, National Grid ESO (ESO); and the GB energy regulator, Ofgem.

Some responses questioned whether these projects are needed at all. In many cases, those questioning the need have done so as the electricity these projects will connect, and transport is not all needed in the north of Scotland.

Under our licence, we have a legal obligation to provide connections to electricity generators looking to connect to our network and we do not determine the location of new electricity generation. This is led by generators themselves, often underpinned by Government targets and policies.

These projects - which are part of a major upgrade of the electricity transmission network across Great Britain - are needed to unlock the north of Scotland's vast renewable electricity resources and transport that power to demand centres across the UK.

The renewable electricity these projects will transport will play a key role in meeting UK and Scottish Government renewable energy and climate change targets. They will also help secure the country's future energy independence by reducing dependence on imported power from volatile wholesale energy markets.

For more details on why these projects are needed and how this need has been assessed, we have published a short briefing paper.

Technology Choice

Several respondents have questioned the technology choice, particularly why the infrastructure cannot all be installed subsea or underground, instead of overhead line steel lattice towers.

Due to the significant volume of power we need to connect and transport from generation source to areas of demand the ESO concluded that there is a need for both onshore and offshore network reinforcements.

The ESO's and Ofgem's independent assessment of need for this project and our wider Pathway to 2030 programme was also based on the technology choices we are progressing.

Underground cabling is highly sensitive to ground conditions and terrain. There can be significant and lasting environmental impacts and future land use constraints associated with undergrounding; together with the technical challenges of operating, maintaining and in the event of a fault, restoring power.

Cost is also an important consideration, with subsea and undergrounding significantly more expensive than overhead. As the cost of investing in the electricity transmission network is ultimately recovered by electricity bill payers across GB, cost is one of the key factors in the ESO's and Ofgem's assessment of need, and in Ofgem's future assessment of the costs we are allowed to recover for these projects.

Environmental impacts

We have received feedback highlighting concerns about potential environmental impacts, particularly on local biodiversity.

As one of the greatest risks to our natural environment and biodiversity is climate change, these projects are part of the solution if we are to tackle the climate emergency and deliver net zero emissions in Scotland and across the United Kingdom.

However, we do recognise that in delivering these critical projects, there will be unavoidable impacts and we would like to reassure stakeholders that we take our environmental responsibilities extremely seriously.

To deliver our projects in the most sensitive way possible we ensure environmental factors are considered at every stage in the development of each project, along with technical requirements and economic considerations. A key way we do this for the environment is to follow the mitigation hierarchy. Firstly, we seek to avoid sensitive areas wherever possible and where impacts are likely to occur, we seek to minimise these, provide mitigation, and identify opportunities to restore.

In addition, all of our consent applications will be accompanied by detailed environmental assessments which are prepared by external specialists. These assessments will consider impacts on a wide range of environmental topics (many of which have been highlighted in the stakeholder responses to this consultation) and identify measures that may be required to mitigate any impacts.

We also acknowledge that minimising impacts is not enough on its own, and we have therefore committed to delivering a Biodiversity Net Gain (BNG) on all our projects; as well as compensatory planting for any trees felled during the construction phase, where possible with native species. Where our projects are unable to completely avoid irreplaceable habitats (for example peatland or ancient woodland), we have also introduced a commitment to restore more habitat than we affect.

You can find out more about how we are delivering a positive environmental legacy by clicking here.

In the following section of this Report on Consultation, we will address any specific environmental feedback relevant to the options we consulted on.

Socio-Economic impact

Several community responses highlighted concerns about the impact on the local community, including visual and tourism impacts. We have also been asked what local benefits these projects will provide.

We acknowledge that there will inevitably be a visual impact on some local communities and are committed to do all that we can to minimise and mitigate this as part of the ongoing development of this project. The environmental assessment that will accompany our consent applications will also consider landscape and visual impacts.

From a tourism perspective, as part of our consent application, we intend to consider socio-economic and tourism impacts as part of the suite of documentation to be submitted to relevant consenting authorities. This will ensure that appropriate consideration is given to these issues in the consenting process.

These projects will also provide significant benefits to local and national economies. Independent socio-economic analysis undertaken on our Pathway to 2030 projects has estimated that they will collectively support around 20,000 jobs across the UK, around 9,000 of which are expected in Scotland, adding billions of economic value to the economy.

We also expect these projects to deliver significant local benefits, including direct and indirect job opportunities, alongside supply chain opportunities for local businesses. We will set out more details of these opportunities in due course, including 'Meet the Buyer' events to introduce local businesses to the opportunities presented through our main supply chain partners.

We are also committed to introducing community benefit funding, recognising the important role host communities will play in delivering the infrastructure required to meet our national endeavours to build a cleaner, more secure, and affordable energy system for homes and businesses across Scotland and Great Britain in the long-term.

In the following section of this Report on Consultation, we will address any specific community feedback relevant to the options we consulted on.

Consultation process

We have received some feedback that our consultation process was not well promoted to affected communities or wider stakeholders and concerns around the timescale provided for feedback to be given.

As we set out in the 'Consultation Process' section of this Report on Consultation, we held a number of public consultation events, public meetings and bilateral and group engagements, using a range of methods to promote our consultations to our stakeholders.

Even at this early stage of development, where our consultation activities are voluntary, we fully recognise the importance of gathering stakeholder input to help inform our development plans. In response to stakeholder feedback, we introduced extensions to our consultation period to encourage anyone interested in these projects to provide their feedback. In addition, we would like to highlight that there will be further opportunity to comment on our proposals through the consenting process and would encourage all stakeholders to fully engage in that formal consultation exercise.

We fully recognise there is always room for improvement and as we look forward to the next round of public consultations, we are committed to apply learning from our first round of consultations to increase awareness, accessibility, and coverage of consultation events. We will continue to welcome feedback on how we can further improve our engagement and stakeholder consultations.

3.2. Specific Project Related Feedback

Introduction

This section summarises the feedback specific to the proposed Tealing 400kV Substation project that has been identified through the consultation process and sets out our responses to the key points raised.

The feedback included in this section also refers to the Common Themes and our Pathway to 2030 Frequently Asked Questions (FAQs), which can be found here: www.ssen-transmission.co.uk/2030faqs

The project specific feedback is set out in the tables that follow under the four themes:

- Community Impact – see Table 3.3.
- Environmental Impact – see Table 3.4.
- Economic Impact – see Table 3.5.
- Technology Impact - see Table 3.6

The stakeholders have been grouped into the categories outlined in the table below:

Stakeholder Group	Examples
Statutory Consultees	Historic Environment Scotland (HES), SEPA, NatureScot, Local Authorities
Non-Statutory Consultees	RSPB, Scottish Water, Forestry and Land Scotland
Community members and local organisations	Homeowners, local businesses, Residents Associations, elected members
Landowners & occupiers	Landowners, crofters, tenant farmers, occupiers of properties in closest proximity to substations

Table 3.3 - Community Impact

Summary of feedback	Contributing Stakeholder Group	Our Response
Cost/benefit analysis of alternatives and the consultation process A number of responses raised concerns regarding the cost benefit analysis and options analysis undertaken. Others expressed the view that the consultation was not held early enough and was not genuine with the conclusion pre-determined. Stakeholders felt they didn't really have the ability to influence the solution.	Community members and local organisations	Our responses under 'Cost and engineering considerations' in the FAQ referred to above address the question of cost, cost benefit analysis and how alternatives to the project have been considered. Our responses under 'Our approach to routeing and public consultation' in the FAQ explain our approach to public consultation and how stakeholder views are considered.
Landscape and Visual Concerns were expressed by Glamis and Area Community Council regarding the impact the project would have on the landscape and scenery notably on the Howe of the Mearns and Vale of Strathmore, pointing out the importance of the latter as the context for Glamis Castle and village. Angus Council noted that impacts on residential receptors is likely to be one of the main planning considerations including amenity issues associated with landscape and visual impacts.	Statutory Consultees Non-statutory consultees Community members and local organisations Landowners and occupiers	It is acknowledged that with new transmission infrastructure there will be a change to the landscape setting in the areas where the proposed Tealing 400kV Substation would be sited. As such, consideration of the landscape is undertaken at the outset of the substation site process. The design of the substation will carefully consider key landscape setting elements in order to integrate the project into the overall landscape in such a way that its prominence will be minimised. The following ongoing work will be undertaken as the project develops: • Landscape and Visual specialists will be involved in the substation design and will undertake appraisals, which aim to avoid and mitigate landscape and visual concerns.

The majority of responses from members of the public raised concerns relating to landscape and visual effects, there was a feeling that the area was becoming industrialised and would lose its rural character which would have an effect on the local communities and businesses.		• Viewpoints for detailed photography will be agreed with the relevant Local Authorities, NatureScot and Historic Environment Scotland. • An Environmental Impact Assessment (EIA) Scoping Report will be issued to Angus Council as the Local Planning Authority that will provide details on how we propose to complete the Landscape and Visual Impact Assessment (LVIA) as part of the EIA. • Once the design is finalised an Environmental Impact Assessment Report (EIAR) will be written, this will include a specific chapter reporting on the LVIA which will also consider the potential for wider cumulative impacts when viewed against the backdrop of other existing and planned infrastructure in the area. The EIAR will be submitted with the Planning Application to Angus Council.
Construction Impacts Points were made by the public relating to construction and access concerns including seeking reassurance that roads would not be closed off, access to properties restricted or roads and footpaths damaged during construction. Numerous comments raised related to sound, noise and vibration particularly around construction work and noise levels relating to an increase in traffic, particularly HGVs, as well as the level of noise emitting from the substation itself during operation. Additionally, points were raised concerning the levels of dust and pollution which will need careful management and monitoring during construction.	Statutory Consultees Non-statutory consultees Community members and local organisations Landowners and occupiers	As the project develops we will work with local communities to identify any road closures we may require and look to mitigate the impact of these as far as possible, keeping these to a minimum and maintaining access for residents. Measures would be taken to avoid damage to footpaths and verges, however any damage would be repaired if it were to occur. Should the project receive Planning Consent, we would prepare a Construction Environmental Management Plan (CEMP) prior to construction commencing. Implementation of the CEMP will ensure that best practice measures are employed during construction to control noise, dust and prevent pollution and contamination. The plan will include strict requirements to safeguard and monitor relevant private water supplies and protect the water environment and wildlife. Strict biosecurity measures will be required of all site staff and plant including those undertaking pre-construction surveys, enabling and construction work

Concerns were made by a number of members of the public relating to the appointment and management of contractors on site during construction. Of specific note were concerns about biosecurity measures that need to be in place when construction staff, vehicles and plant move between farmlands which may cause the spread of eelworms and Potato Cyst Nematode (PCN). A number of points were also raised relating to the potential for safety issues due to an increase in the presence and movement of 'vehicles. Angus Council raised points relating to amenity issues associated with noise impact on residential properties. Transport Scotland pointed to the need to ensure the subsequent assessment of the Project addresses the potential impact on construction traffic on the main road network; and of impacts from the transport of abnormal indivisible loads and the impacts on and suitability of trunk road junctions.		and post-construction testing and assurance checks. We fully appreciate the concerns raised and the impact poor biosecurity can have on agricultural activities. We note the suggestion relating to pre-construction surveys. Within the EIAR, working hours for construction will be proposed. Whilst these have not been discussed in full at this early stage of the project, working hours on our other projects typically involve the periods 07:00 to 19:00 Monday to Friday and 07:00 to 16:00 on Saturdays, with no construction work taking place on a Sunday or on public holidays. Working hours are usually set out in a condition within the Planning Consent. Noise mitigation is a primary consideration within the substation development process and noise surveys will be carried out with a noise impact assessment completed and reported in the EIAR. This will consider the existing noise levels, potential noise impacts from the proposed new infrastructure (for its construction and operation); cumulative noise impacts and consideration of any mitigation required. The concern of community safety and construction vehicles is noted. All staff employed on the project will carry identification, wear branded clothing and staff will park in designated areas. Safety is a priority, and our Community Liaison Team will work with local communities and our contractors to monitor and act on safety concerns. There is potential for travel disruption during construction, when we take delivery of key plant items or because of increased volumes of traffic on the local road network. Disruption will be minimised and typically controlled through a Construction Traffic Management Plan. We aim to ensure that construction traffic uses the roads safely and that any inconvenience to the

		public is kept to a minimum whilst maintaining a safe environment for the workforce and others.
Noise A number of members of the public raised the issue of noise, and the fact that the operation of substations can generate an audible 'whining' noise which can be irritating to locals living, working and visiting the area as well as have an impact on wildlife.	Community members and local organisations Landowners and occupiers	As noted above, noise mitigation is a primary consideration within the substation design and noise surveys will be carried out with an impact assessment completed and reported in the EIAR. This will consider the existing noise levels, potential noise impacts from the proposed new infrastructure (for its construction and operation); cumulative noise impacts and consideration of any mitigation required.
Lighting Concerns from members of the public extended to the intrusion of lighting / light spill at night from substations which detracts from the character of the area at night, again making the area feel more industrialised. Effective year round screening appropriate to the area would be needed which would need properly maintained during operation of the substation.	Community members and local organisations Landowners and occupiers	Construction and operational lighting will be fully assessed in the EIAR, which will be produced as part of a planning application for the substation. The EIAR will include site specific recommendations to mitigate against the effects of lighting where necessary. We will be required to adhere to any security lighting requirements relating to the security classification of the site, once that is known. Generally, we seek to reduce the use of lighting where practicable: Our substations are not floodlit but instead have motion sensor controlled security lighting, plus work lighting in case of urgent repairs during hours of darkness. Floodlighting will be in use during winter months for construction during the agreed working hours.
Health A number of members of the public raised health concerns with the development of the substation, including levels of stress and anxiety caused by the construction process. Additionally, there were		For our response to health concerns, please refer to 'Communities and landowner considerations' in the FAQ. Understanding the impacts of changing climate conditions for the design of the substation, in terms of increasing frequency and intensity of storms,

concerns over the lack of research on the dangers of electromagnetic fields (EMI/EMF) on physical health including cancer risk, autism, general wellness and the toll on mental health. Other comments related to the need for more information on how the project would assess the potential health risks of the project including on mental health. Some of these concerns also extended to animal health. A number of comments were also raised about the consideration of the safety and reliability of the substation given climate change, extreme weather conditions and the expected greater frequency of storms and flooding. Issues related to the risk of damage being caused to substation in storms and then the risk to residents, businesses and livestock from extended power outages.		flooding and high winds is a core part of the site selection and design approach and will be a key element of the EIA process presented in the EIA Report. For example, the drainage strategy will include a flood risk assessment, the parameters of which will be agreed with SEPA to ensure climate adjusted assumptions are taken into account.
Cumulative Impacts Some points from consultees related to cumulative impacts, particularly around the presence of current overhead lines, substation and transmission towers, other projects and other components of this project particularly in relation to landscape and visual impacts. Angus Council highlighted the potential for cumulative impacts on residential receptors, particularly in relation to landscape and visual impacts as well as		Cumulative impacts are assessed in the EIA and reported within the impact assessment chapters in the EIAR taking account of other relevant existing and planned infrastructure in the area. Landscape and visual, noise, historic and natural heritage issues are primary considerations of the project and detailed impact assessments will be completed through the EIA process. These will consider the existing environment (including other existing projects on the ground), potential impacts from the project and cumulative impacts when considered along with other potential future projects including the proposed new 400kV OHL which will connect with the new substation.

noise levels, as a result of the project when combined with other similar developments within the area.		The EIA will also assess the potential for the interaction or combination of different impacts from the project on people and communities, for example landscape and visual and noise impacts considered together.
Mitigation It has been noted that mitigation to screen the project through the use of planting of hedgerows, trees and woodlands would enhance the landscape character and biodiversity of the area. Further meetings have been requested with SSEN Transmission by the statutory consultees to discuss matters such as road safety, landscape and visual impacts and sensory amenity matters	Statutory Consultees Non-statutory consultees Community members and local organisations Landowners and occupiers	In the first instance we will seek to avoid impacts through the design of the project and the way it will be constructed. Where this is not possible, mitigation will then be applied to the project through the EIA. Specific mitigation measures will be discussed and agreed with statutory consultees along with further general mitigation measures and will be provided in a Schedule of Mitigation in the EIAR. In addition to mitigation, we will also deliver our commitments to Compensatory Planting and Biodiversity Enhancement and suggestions made by consultees will be considered by the project team and incorporated into the design where practical. The section above in Common Themes, Environmental Impact, discusses this and includes a reference to a paper for further information.
Electromagnetic Interference (EMI/EMF) Concerns were raised by the Radio Protection Network related to the potential for the project to specifically interfere with BT's current and future radio network. Similar concerns were expressed by the community more generally on mobile and internet signals in the area, and future connections if the substation was expanded. Concerns were also raised about interference with the communication equipment used by farmers and emergency response	Community members and local organisations Landowners and occupiers	As our design develops we will consider the impact this has for interference. Where impacts on radio, mobile and internet signals are highlighted as having the potential to occur we will work with the relevant providers to identify solutions to mitigate any impacts to service. Impact on wildlife from the construction and operation of the project will be considered as part of the EIA process.

vehicles (including potential impacts Global Positioning Systems (GPS)). Some comments related to the impact of EMI/EMF on wildlife and in particular, birds, bats and bees.		
Community Viability Some members of the public were concerned about the amenity and the character of the area, considering that the area would be less rural and less attractive to future families, businesses and visitors which may ultimately affect the viability of the area as residents move away and demand for services and facilities reduces.		We have recently announced a Community Benefit Fund. This fund is the first of its kind for transmission operators in Scotland and will provide a direct opportunity for us to work with local communities that will be affected by the project on a variety of local initiatives. These will be community led and will directly support communities across the North of Scotland. In addition, our response in the 'Communities and landowner considerations' in our FAQ provides further detail.

Table 3.4 - Environmental Impacts

Summary of feedback	Contributing Stakeholder Group	Our Response
Biodiversity, Habitats, Protected Species and Designated Sites NatureScot raised comments about natural heritage, specifically identifying the potential for the substation to impact upon qualifying features of nearby Special Protection Areas (SPA) and Ramsar sites. The response identifies that there will be no direct impact upon any designated area for nature conservation although there is potential for connectivity with a number of SPAs which are designated for their bird interests. These are the Firth of Tay and Eden Estuary SPA and Ramsar site which is located approximately 8km from the proposed Tealing Substation site, designated for the non-breeding populations of greylag goose and pink-footed goose. Additionally, the Outer Firth of Forth and St Andrews Bay Complex SPA site could be impacted, this site is designated for breeding and non-breeding seabird species including herring gull which can be found further inland when foraging. A Habitats Regulations Appraisal (HRA) was suggested to be presented at the application stage.	Statutory Consultees Non-statutory consultees Community members and local organisations Landowners and occupiers	Wildlife and natural heritage aspects have been a key component of the site options study process undertaken to date, and the large number and variety of natural heritage designations, from international sites to local wildlife sites, is noted. The substation will be designed to avoid and/or reduce impacts on habitats and species as far as possible and mitigation measures will be identified including through the provision of compensatory habitat and, later, through proposals for biodiversity enhancement. The consultation process has provided a wealth of detailed national, regional and local information which will be considered by the project team in the detailed design and EIA processes. This will be used to help focus survey work and to provide a context for the ecological assessment of the proposals. We will continue to liaise with statutory consultees through the next stage of the project which will involve ecologists considering the scope of the EIA in terms of ecological and ornithological (bird) surveys and assessments, and also in terms of any Habitats Regulations Appraisal (HRA) which may required where the proposals could affect the interests of the most important sites designated as SACs or SPA sites.

Numerous comments from members of the public related to habitats, wildlife, ornithology and protected species, with disruption and disturbance to birds being noted as a concern.		We note the legislative requirements with regard to protected ecological sites, and Government planning and natural heritage and environmental protection policies relating to avoiding and minimising impacts on protected sites and species and the expectations to demonstrating that the impacts can be reduced to a level which would allow the proposals to be consented. The following work, which has already commenced, will be continued as the project develops: • Fieldwork will be undertaken by ecologists and ornithologists to survey key habitats and species to provide a baseline understanding of the area's ecological importance. • Ecological specialists will be involved in the substation design and will undertake appraisals, which aim to avoid and mitigate ecological impacts on protected sites and species. • An EIA Scoping Report and an HRA Screening and Scoping Reports will be issued to Angus Council that will provide details on how we propose to complete the ecological assessments. • Once the design is finalised an Environmental Impact Assessment Report (EIAR) will be written, this will include specific chapters reporting on the predicted ecological and ornithological impacts of the proposals including the potential for wider cumulative impact when viewed against the backdrop of other existing and planned infrastructure in the area. • A HRA report will also be produced setting out how the project performs against the requirements of The Conservation (Natural Habitats) Regulations 1994. • The EIAR and HRA report will be submitted with the Planning Application to Angus Council.

		In addition to avoiding and minimising ecological impacts, we will mitigate further any adverse ecological and ornithological effects with Compensatory Planting and Biodiversity Enhancement measures which will be agreed with the statutory consultees at that stage. Species Protection Plans (SPPs) will be agreed with NatureScot for all key protected species which have the potential to be adversely affected by the proposals.
Cultural Heritage HES highlighted specific cultural heritage assets in proximity to the substation site options (eg Scheduled Ancient Monuments and Listed Buildings) which should be considered in the assessment. It is considered by HES that the setting of Balkemback Cottages and stone circle (SM2868) would have the most sensitivity to potential impact upon their setting from the proposed substation. However, it was noted that due to the height of the substation, the level of impact would not be of national interest. HES also noted that as site Option 7 is located slightly further away from the heritage assets identified above, there may be a lesser impact upon the setting of the monuments. They considered the proposed Options 4 and 7 to be preferable in terms of cultural heritage and that the discounted sites, particularly Options 3, 3A and 5, would have the potential for significant adverse impacts upon the setting of some nationally important assets.	Statutory Consultees Non-statutory consultees Community members and local organisations Landowners and occupiers	From extensive work completed already we are aware of the cultural heritage designations and assets within the area of the substation site options. The site option assessment undertaken to date has considered these key constraints and avoided major sites where possible. We will continue to liaise with Historic Environment Scotland and Angus Council through the next stage of the project which will involve cultural heritage specialists considering the scope of the EIA in terms of further cultural heritage surveys and assessments of the potential impacts of the substation proposal on cultural heritage. We note the legislative requirements with regard to protected cultural heritage sites, and Government and Planning Policy relating to avoiding and minimising impacts on protected sites and the expectations to demonstrate that the impacts will be avoided or reduced to an acceptable level. The assessment of cultural heritage will be closely aligned with the landscape and visual assessment (which is discussed in Table 3.3 Community Impact) in terms of character and setting. The teams involved in these assessments will work together to understand the overall effect on the various environmental aspects including in-combination effects, and mitigation measures will be developed by the project's specialists together

		to avoid and reduce impacts wherever possible. For example, the potential for areas of new woodland planting as part of woodland compensation will be considered in locations where it could also contribute to screening views of the substations from sensitive cultural heritage sites.
Flooding and Water Resources In terms of flooding SEPA stated that although there do not appear to be any flood risk issues within the sites considered for a substation, further investigation should be undertaken. A number of points were made by SEPA in relation to water resources. It was indicated that substation site Option 4 contains no watercourses or any apparent flood risk issues, and no private water supplies (PWS) or carbon rich soils. SEPA also suggested that a watercourse diversion would likely be required for sites Options 2 and 6A. SEPA requested further investigations are undertaken to support the potential for creating a positive impact on the hydrology of the area through the realignment of a straightened watercourse, the Fithie Burn, and noted they would contribute to layout design discussions once habitat surveys were carried out. The Fithie Burn watercourse is located to the south of the preferred substation site and was artificially straightened in the past.	Statutory Consultees Non-statutory consultees Community members and local organisations Landowners and occupiers	In discussion with SEPA any requirement for flood risk assessments will be progressed taking into account future climate change predictions and design development will ensure that the risk of flooding is not increased on project land or elsewhere. The consultation process has provided detailed information on flooding, water resources, Private Water Supplies, and the absence of water supply assets such as Water Protection Areas. We note the legislative requirements with regard to flood risk and water resources, and relevant policy relating to avoiding and minimising impacts. We will ensure that we continue to liaise with Angus Council, SEPA and Scottish Water at the EIA Scoping stage to set out the scope of and approach to the EIA. The hydrology consultants appointed to support the project will work with the engineers and other environmental specialists, notably the ecological and landscape and visual teams to assess the impacts of the project and to develop suitable mitigation. The hydrological regime in any area is influenced by the ground conditions, topography and climatic factors which will be factored into the assessment of hydrology and hydrogeology.

Scottish Water stated that there are no records of Scottish Water drinking catchments or water abstraction sources designated as Drinking Water Protected Areas which may be impacted by the project. Additionally, there are no records which indicate there are any Scottish Water assets.		The EIA will consider the construction and operation stages. Throughout the design and construction planning stages, we will aim to avoid and minimise impacts on the Fithie Burn groundwater. As noted in Table 3.3 we will submit a Construction Environmental Management Plan (CEMP) for approval by Angus Council prior to construction commencing. The CEMP will ensure that best practice measures are employed during construction to prevent pollution, to safeguard and monitor private water supplies and protect the water environment and wildlife.
Contaminated Land In terms of contamination SEPA confirmed that site Option 4 lies outwith the 1km buffer for potential radioactive substance sources. However, as Site Option 5 is located close to a former airfield near Tealing, further contaminated land investigations would be required. Some members of the public questioned what would happen to the existing substation and what SSEN Transmission planned to do with old and obsolete plant and how would they clean up the site. One member of the public recommended further survey work for contaminated land and unexploded ordnance in the area of the substation.	Statutory Consultees Non-statutory consultees Community members and local organisations Landowners and occupiers	The project is being developed in a rural location on agricultural land. An initial assessment has identified no sources of contamination based on past uses of the site. Ground investigations have been commenced, the results of which will confirm the presence/absence of soil and groundwater contamination. Should this identify the possible presence of contaminants at the site, the EIA will assess the implications for development and for soil and groundwater and define the measures that will be adopted to prevent contamination mobilisation and impacts to vulnerable receptors. There are no proposals for closure of the existing 275kV substation at Tealing. The upgrades to the electricity transmission network require the development of a new 400kV substation and retention of the existing facilities at Tealing. As standard we undertake initial surveys for contaminated land and UXO for our projects.
Cumulative Impacts A number of members of the public indicated that the development of the substation would need to consider	Statutory Consultees	These aspects are discussed above in Table 3.3 Community Impact. The principles for cumulative assessment in the EIA apply also to the

wind farms, pipelines and other transmission infrastructure in the area. Other points raised by HES related to the potential for cumulative impacts to occur when combined with the associated OHL and other infrastructure.	Non-statutory consultees Community members and local organisations Landowners and occupiers	environmental topics raised by consultees here and which have been discussed in the previous sections of this table.
Mitigation With regards to mitigation, Angus Council raised the importance of biodiversity net gain (BNG) and associated landscaping / screening for biodiversity enhancement to mitigate any potential impacts from the project. Another mitigation suggestion from HES related to the screening of cultural heritage assets from the project and suggested a photomontage should be produced which would demonstrate the potential for the project to impact upon the setting of the identified heritage assets. Further meetings have been requested with SSEN Transmission by the statutory consultees to discuss matters such as drainage and flooding, as well as historic and natural heritage assessments including the HRA.	Statutory Consultees Non-statutory consultees Community members and local organisations Landowners and occupiers	These aspects are discussed above in Table 3.3 Community Impact. The principles for mitigation in the EIA apply also to the environmental topics raised by consultees here and which have been discussed in the previous sections of this table. Proposals for mitigation put forward by consultees will be discussed further through ongoing dialogue as substation design and mitigation is progressed. As noted above, in addition to the EIA mitigation we will set out our commitments to Compensatory Planting and Biodiversity Enhancement and suggestions made by consultees will be fully considered by the project and incorporated into the design where practical.

Table 3.5 - Economic Impact

Summary of feedback	Contributing Stakeholder Group	Our Response
Agriculture and Farming Glamis and Area Community Council noted that the Project lies in an area of importance locally for agricultural production. The National Farmers Union Scotland (NFUS) raised a number of points relating to the loss of agricultural land. The NFUS consider that farmers in the local communities impacted should receive some benefit, e.g. guaranteed grid capacity for renewables. It is vital that the community should benefit from the investment. Glamis and Area Community Council and NFUS also raised concerns about biosecurity risks related to seed potatoes and the potential spread of Potato Cyst Nematode (PCN), (which also threatens daffodil crops). NFUS point to experience of members that contractors breach their own set down protocols and that members are concerned about the impacts on their farming	Statutory Consultees Non-statutory consultees Community members and local organisations Landowners and occupiers	It is acknowledged that the proposed Tealing 400kV Substation will unavoidably affect an area actively used for agriculture. However, the need to avoid prime agricultural land has been a key consideration in the site selection process and the proposed site, Site 4, avoids Grades 1, 2 and 3.1 land, and is entirely located on non prime Grade 3.2 land. We will minimise the impacts of the project on agricultural land by careful design and positioning of our temporary construction sites and set down / layout areas, as well as our permanent site and access points. Farming access routes will be fully considered as part of this process and we will work closely with the landowner to ensure that construction access plans are developed to take account of field and farm access requirements. Strict biosecurity measures will be required of all site staff including those undertaking pre-construction surveys, enabling and construction work and post-construction testing and assurance checks. We fully appreciate the concerns raised and the impact poor biosecurity can have on agricultural activities. We note the suggestion relating to pre-construction surveys.

businesses from inadequate biosecurity. Pre-entry Record of Condition should include PCN / soil sampling. This applies to land surveys and preconstruction activities including those undertaken using drones.		
Tourism and Other Local Businesses Glamis and Area Community Council raised the importance of the Howe of the Mearns and Vale of Strathmore as a scenic area and important tourist destination was emphasised. Specific reference was made to holiday let businesses in Kirkton of Kinnettles. NFUS highlighted the possibility that the project would have negative economic implications for the rural economy and on the local tourism industry. Tourism is an important part of the local economy as many small farms, small holdings and rural properties have diversified into the tourist trade to supplement their income. These businesses rely on the unspoilt rural countryside to encourage people to visit the area. Some respondents considered that the impact on tourism would be significant as	Statutory Consultees Non-statutory consultees Community members and local organisations Landowners and occupiers	We note the concerns raised about impacts on local businesses notably tourism. The Planning Application submission will include consideration of socio-economic impacts of the project on sectors such as tourism which form part of the local economy. This is also covered in Common Themes above. A number of the concerns raised related to the likely impact on local businesses as a result of landscape, visual and amenity issues. The EIA will consider these issues and aim to include measures which avoid and minimise and mitigate impacts on the tourism sector. We are actively committed to maximising opportunities to support local businesses and the economy throughout the construction phase and to work with our main contractors to use local supply chains where possible. As the project progresses, we will hold business engagement events and encourage local trades and contractors to work with us. We have recently announced a Community Benefit Fund. This fund is the first of its kind for a transmission operator in Scotland and will provide a direct opportunity for us to work with local communities that will be affected by the project on a variety of local initiatives. These will be community led and will directly support communities across the North of Scotland in a number of

people would be deterred from visiting the area. Concerns also extended to the detrimental impacts on other businesses that serve and support the farming and tourism industries in the area. It was felt by many that the economic impacts would be felt deeply in the area and jobs would be lost. Some members of the public considered that the socio-economic impact of the project has been underestimated, with impacts occurring in the present but also in the future when construction has been completed. It was considered that the project would have significant economic implications for the rural economy beyond farming and the four year construction window was of concern.		ways, for example improvements to tourist facilities may be delivered through the fund.
Property and Land Value Members of the public raised concerns about the impact of the new substation at Tealing on local property prices and land values.		Our FAQ referred to above acknowledges our projects may impact land and property and explains how we assess compensation.

It is also noted by the NFUS that property values in communities will be devalued and negatively impacted.		
Compensation NFUS consider that farmers in the local communities impacted should receive some benefit, eg guaranteed grid capacity for renewables. It is vital that the community should benefit from the investment. Concerns raised by members of the public related to the lack of compensation that was being provided for those that live / work in the area, with particular concerns relating to the impact on farming business and property devaluation. Queries were raised from some members of the public regarding what the benefits of a substation would bring to those within the community. Public respondents suggested that we could provide funding to local community groups to help increase biodiversity through planting.	Statutory Consultee	See responses above regarding compensation and how communities may benefit, in the latter, through our recently announced Community Benefit Fund. Our FAQ referred to above acknowledges our projects may impact land and property and explains how we assess compensation.

Table 3.6 - Technology Impact

Summary of feedback	Contributing Stakeholder Group	Our Response
Technology choices, drivers, and alternatives A number of community responses raised technology related questions, for example, why the existing substation could not be upgraded or extended. Some members of the public asked why substations could not be clustered together with other large energy infrastructure sites such as near existing power stations, near existing or other substations, or near other energy generation facilities such as wind or solar farms, or why they couldn't be located closer to the area of demand eg in towns and cities. Others questioned the size of the substation and why more efficient and therefore smaller, or if different designs were not used. Somes responses asked why substations were being located on green field land and why brownfield sites could not be used. A common suggestion from respondents was to recess the substation into the ground, or behind landscape bunds. A similar point raised related to the question of why the substation could not be located underground or enclosed in a building or hanger / warehouse structure.	Statutory Consultees Non-statutory consultees Community members and local organisations Landowners and occupiers	As indicated in our Common Themes section above, and our FAQ, the overall need for the project is defined in the context of the Pathway to 2030 which establishes the need for new transmission infrastructure to contribute towards meeting climate goals, ensuring energy security and supporting Scottish and UK Government targets for a just transition to a net zero future. These needs cannot be achieved by upgrading or extending the existing substation. Clustering major infrastructure and locating substations close to areas of demand poses many challenges. The locations of substations on the transmission grid are influenced by many factors, not least the locations of generation, electrical design, grid management and operability requirements. Other factors include environmental impact and security considerations. The size requirements of the substation are defined by the voltage of the network, which in turn is defined by the amount of power required to be transported, and by the number of connections that are required. The layout is determined largely by the need to meet stringent safety standards for the safe operation and maintenance of the substation equipment. The opportunity to locate substations on brownfield land is a principal consideration for selecting new substation sites, and a search of brownfield land was undertaken as part of the site

Summary of feedback	Contributing Stakeholder Group	Our Response
		selection process. No sites, which are large enough and which also met other environmental and technical criteria, such as avoiding risks of pollution or contamination or avoiding challenges in establishing the overhead transmission connections, were identified. In terms of enclosing the substation in an existing structure, similar constraints exist– identifying a large enough site in the optimum location necessary to accommodate the electrical infrastructure. In terms of recessing or burying the substation, while burial would not be cost effective because of the volume of material to be excavated, consideration of ground levels in detailed substation design, and using excavated material to create landscape bunds will be a key consideration.

4. Summary of Key Decisions

This Report has described the consultation events and the key responses received and provides detail on our responses to the points raised.

Based on the responses received during the consultation process there have been no substantial issues raised regarding the selection of our preferred site.

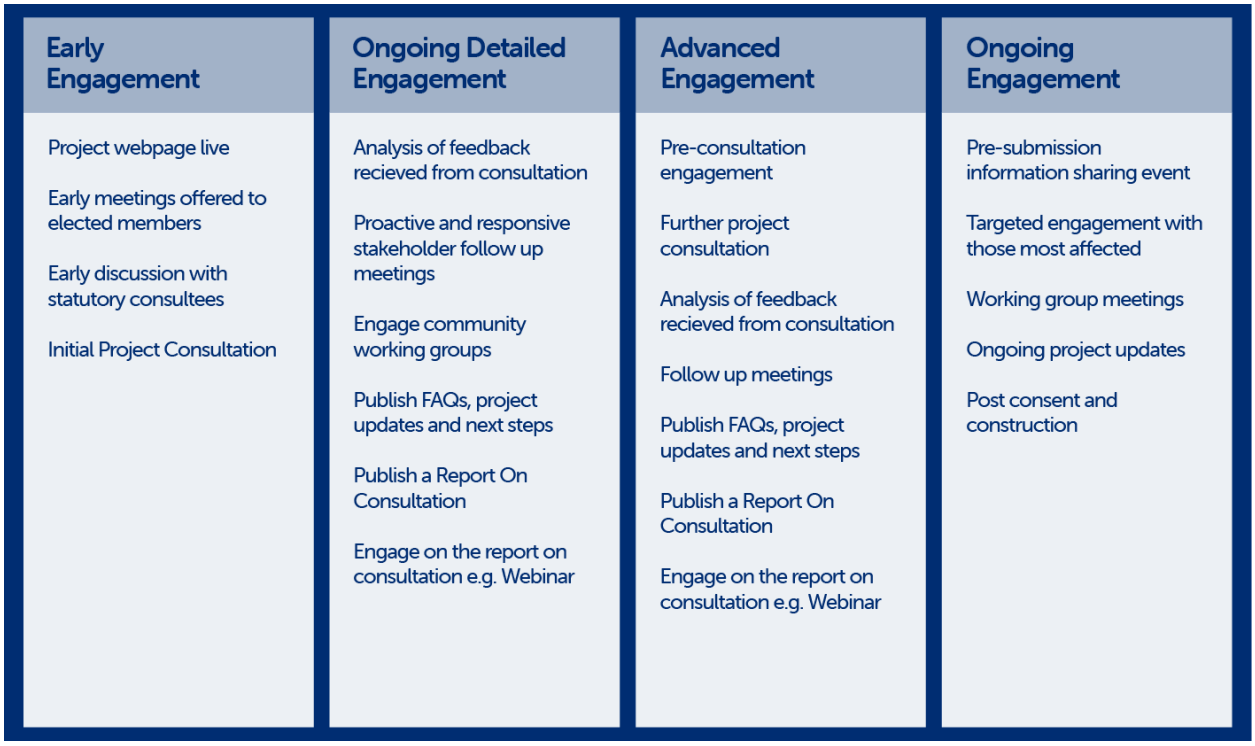
There are fewer residential properties in close proximity to Site 4, compared to Site 7. While Site 4 is slightly closer to some of the principal cultural heritage assets identified, none are so close that their integrity and essential setting are likely to be adversely impacted by development. The Site offers efficiency with regards to connections to the existing Tealing substation site. The location minimises the requirement of new infrastructure to enable the connections of existing circuits when they are upgraded to 400kV operation. In addition, the location enables the removal of over 3km of existing 275kV OHL and reuses redundant sections to enable connections between the existing Tealing and the proposed Tealing 400kV substation.

The consultation process has confirmed that substation site Site 4, shown on Figure 1 is the proposed site option and that this option will be progressed through the EIA and subsequent consenting stages.

5. Next Steps

5.1. Ongoing Engagement

The period of consultation described in this Report is part of an ongoing engagement process that spans the full development cycle for the project, where feedback is sought at different stages and engagement with stakeholders is continuous as we refine our proposals.



Following publication of this Report, we, alongside specialist consultants and contractors, will further develop the design of the site.

In Spring 2024, we will hold our first formal Pre-Application Consultation (PAC) event, following the statutory requirements of the planning process3. As part of this PAC process, we will present the rationale for the selection of the Tealing site, and present indicative information on the likely extent, layout and appearance of the proposed substation, and give stakeholders and the community the opportunity to comment on our proposals. This event will be followed by a second PAC event, where we will present our analysis of the consultation feedback and explain how that has informed our final design and proposals that will be the focus of our subsequent planning application.

A request for an EIA Scoping Opinion will be made to Angus Council and an EIA Scoping Report will be prepared and submitted to support the request. The request for a Scoping Opinion is made to identify the scope of impacts to be addressed and the method of assessment to be applied in the Environmental Impact Assessment (EIA) Report which is prepared and submitted with the Planning Application for consent. The request for an EIA Scoping Opinion, on which consultees, including community councils will have an opportunity to comment, will likely be made in Spring 2024.

[3] The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 (As Amended).

5.2. Feedback

Feedback on this Report or about the project is welcome via our Community Liaison Team who can be contacted using the details below:

Community Liaison Manager

TKUP@sse.com

+44 (0) 7721 407 513

Scottish and Southern Electricity Networks Transmission

10 Henderson Road

Inverness

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Further information about the project is available on the project website:

www.ssen-transmission.co.uk/projects/project-map/tealing-400kv-substation/

6. Glossary

Term	Definition
Air Insulated Switchgear (AIS) Substation	An AIS substation is constructed with switchgear which relies on open air components, which can require large clearance areas for operation and safety, which takes up a larger area of land than Gas Insulated Switchgear (GIS).
Alignment	A centre line of an overhead line OHL, along with location of key angle structures.
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.
Ancient Woodland	Defined in National Planning Framework (NPF) 4 as "*land that has maintained continuous woodland habitat since at least 1750*".
Ancient Woodland Inventory (AWI)	AWI is a provisional guide to the location of Ancient Woodland. It contains three main categories of woodland, all of which are likely to be of value for their biodiversity and cultural value. These include Ancient Woodland, Long-established woodlands of plantation origin (LEPO), and other woodlands.
Area of Search (Study Area)	A broad geographical area within which possible sites might be capable of identification within approximately 5km of the required connectivity point; usually determined by geographical features such as coastlines or hill/mountain ranges, or designation boundaries, such as National Park boundaries.
Biodiversity Net Gain (BNG)	Biodiversity Net Gain (BNG) is an approach to development that aims to leave the natural environment in a measurably better state than it was pre-development. It focuses on the change in the biodiversity value of a site, comparing the pre and post construction biodiversity values to ensure a positive impact overall.
Conductor	A metallic wire strung from support structure to support structure, to carry electric current.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views and, normally, with the objective of influencing decisions, policies or programmes of action.
Corridor	A linear area which allows a continuous connection between the defined connection points. The corridor may vary in width along its length; in unconstrained areas it may be many kilometres wide.
Double circuit	A double circuit transmission line comprises of two independent circuits each made up of three sets of conductors (cables).
Environmental Impact Assessment (EIA)	A formal process set down in The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 used to systematically identify, predict and assess the likely significant environmental impacts of a proposed project or development.

Engagement	The establishment of effective relationships with individuals or groups.
Electricity System Operator (ESO)	National Grid is the Electricity System Operator (ESO) for Great Britain. The ESO balances electricity supply and demand to ensure the electricity supply.
Gardens and Designed Landscapes (GDLs)	The Inventory of Gardens and Designed Landscapes lists those gardens or designed landscapes which are considered by a panel of experts to be of national importance.
Gas Insulated Switchgear (GIS) Substation	A GIS substation is constructed with switchgear with gaseous reliant components which allows operation and safety clearances to be reduced compared to an AIS substation.
Habitat	Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities.
Holford Rules (as modified)	Principles developed by the late Lord Holford in 1959 which continue to be employed as the basis for routeing high voltage overhead lines and include additional notes on the siting of substations.
Kilovolt (kV)	One thousand volts.
Landscape Character Type (LCT)	A distinct, recognisable and consistent pattern of elements in a landscape that differentiate the area from another.
Listed Building	Building included on the list of buildings of special architectural or historic interest and afforded statutory protection under the 'Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997' and other planning legislation. Classified categories A – C(s).
Micrositing	The process of positioning individual structures to avoid localised environmental or technical constraints.
Mitigation	Term used to indicate avoidance, remediation or alleviation of adverse impacts.
National Scenic Area (NSA)	A national level designation applied to those landscapes considered to be of exceptional scenic value.
Offshore Integrated Link	Offshore cable connection between the onshore network and offshore network being developed as part of the Coordinated Offshore Network. This is being developed as a result of the Holistic Network Design (HND) publication in summer of 2022 produced by National Grid Electricity System Operator (NGESO) to facilitate greater co- ordination and efficiency for offshore windfarms. In the autumn of 2022 Ofgem published their Asset Classification findings which in turn meant SSENT were tasked with delivering large parts of the Coordinated Offshore Network.
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel towers or wooden poles.

Planning Application	Used in this context to describe an application for consent under the Town and Country Planning (Scotland) Act 1997.
Plantation Woodland	Woodland of any age that obviously originated from intentional planting.
Preferred Option	The option which SSEN Transmission believes offers the best balance of technical and environmental impact considerations identified through initial assessment. This is then subject to consultation with stakeholders, where local and previously unknown considerations may confirm or alter the initial preference. Once confirmed, this becomes the Proposed Option to take forward to the next stage of project development.
RAG Rating	A Red, Amber, Green rating provided to allow for a comparison between different options being appraised.
Red Line Boundary (RLB)	This area should include all land necessary to carry out the Proposed Development.
Riparian Woodland	Natural home for plants and animals occurring in a thin strip of land bordering a stream or river.
Route	A linear area of approximately 1 km width (although this may be narrower/wider in specific locations in response to identified pinch points / constraints), which provides a continuous connection between defined connection points.
Routeing	The work undertaken which leads to the selection of a proposed alignment, capable of being taken forward into the consenting process under Section 37 of the Electricity Act 1989.
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'.
Section 37 Application	An application for consent under Section 37 of the Electricity Act 1989 to develop an overhead electricity line.
Semi-natural Woodland	Woodland that does not obviously originate from planting. The distribution of species will generally reflect the variations in the site and the soil. Planted trees must account for less than 30% of the canopy composition
Site of Special Scientific Interest (SSSI)	Designated area of national importance for natural heritage. The aim of the SSSI network is to maintain an adequate representation of all natural and semi-natural habitats and native species across Britain.
Span	The section of overhead line between two structures.
Special Area of Conservation (SAC)	An area designated under the EC Habitats Directive to ensure that rare, endangered or vulnerable habitats or species of community interest are either maintained at or restored to a favourable conservation status.
Special Landscape Area (SLA)	Landscapes designated by The Highland Council which are considered to be of regional/local importance for their scenic qualities.

Special 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.
Study Area	The area within which the corridor, route and alignment study takes place.
Substation	A node on the network to allow safe control of the electricity network. This could include convergence of multiple circuits, transformation of voltage or other functions to maintain and operate the electricity network.
Substation Site Area	Site area identified as necessary to deliver all the substation infrastructure requirements e.g. platform, access tracks, temporary construction area, drainage including SUDS, landscaping.
Sustainable Urban Drainage Systems (SUDS)	Drainage solutions that provide an alternative to the direct channelling of surface water through networks of pipes and sewers to nearby watercourses.
Terminal Structure	A structure (tower or pole) required where the line terminates either at a substation or at the beginning and end of an underground cable section.
The National Grid	The electricity transmission network in the Great Britain.
UK Biodiversity Action Plan (UK BAP)	The UK BAP was published in 1994 after the Convention on Biological Diversity. It summarised the most threatened species and habitats in the UK and gave detailed plans for their recovery.
Volts	The international unit of electric potential and electromotive force.
Wayleave	A voluntary agreement entered into between a landowner, upon whose land an overhead line is to be constructed, and SHE Transmission
Wild Land Area (WLA)	Those areas comprising the greatest and most extensive areas of wild characteristics within Scotland.
Works	Constructing new transmission infrastructure such as substations, overhead lines, underground cables; major refurbishment of these; the dismantling and removal of any parts of the system; and associated works, which may include formation of access tracks, bridge and road improvements, tree cutting, drainage etc.

7. Appendices - Statutory and Non-statutory Consultee Responses and SSEN Transmission's Replies

Appendix A - Statutory Consultee Feedback

Organisation	Statutory Consultee Feedback	Our Response
Statutory Consultees – excluding Community Councils		
Angus Council	The approach employed to consider alternative sites for a new substation at Tealing taking account of and weighting the different environmental constraints is welcomed. The substation design requirements are noted, and landscaping/screening and associated biodiversity net gain will be important mitigation for a development of this scale and nature. Comments provided by consultees in relation to the proposed site raise a number of useful considerations including the potential for the development to deliver biodiversity enhancement. 1. Impacts (including cumulative impacts with other similar development in this area) of the project on residential receptors is likely to be one of the main planning considerations, including (but not limited to) amenity issues associated with potential noise sources and landscape and visual impacts from the proposed development. Matters relevant to the consideration of alternative	1. These points are noted. We do not intend to seeking an EIA Screening Opinion from Angus Council, rather a full EIAR will be prepared to accompany the planning application. A Scoping Report will be prepared to accompany our request for a Scoping Opinion, which will propose the scope of and approach to the EIA. The Scoping Report will seek agreement on projects in the vicinity of the proposed development, that are considered relevant as part of the cumulative impact assessment. 2. As indicated in Section 4 Next Steps in this Report, We will seek further feedback from the community, and demonstrate how feedback has been addressed, as part of the PAC process.

Organisation	Statutory Consultee Feedback	Our Response
	sites at Tealing and the importance of thorough a thorough public consultation exercise have been raised in recent meetings with SSEN. In relation to the specific questions in the substation site selection consultation document: a. Has the need for the Project been explained adequately? Yes. b. Has the approach to select the substation site been explained adequately? Yes. c. Are there any factors, or environmental features, that you consider should be reconsidered as part of the site selection process? No. d. Do you agree that, on balance, Site 4 is the most appropriate for further consideration for a new substation at Tealing? 2. 2. At this time, no opinion is offered on a preferred site; but the process which has been followed to arrive at that site selection preference is noted. Public consultation with those who live in the local area may also raise additional matters that should be considered. I also confirm that Angus Council planning service would be happy to arrange a future preapplication meeting in relation to the preferred site if SSEN would find that helpful. That could involve colleagues within Angus Council who deal with matters including road safety, drainage and flooding, landscape and visual impacts, public access matters and sensory amenity matters.	

Dundee Council	I can advise that Dundee City Council has no comment on the proposals for the OHL or Tealing substation.	Noted.
Historic Environment Scotland (HES)	In relation to the specific questions posed in the Consultation Document, the need for the project and the approach to the site selection are adequately described. It appears likely that a new substation could potentially be located at this site without raising issues of national interest for our remit. However, this should be confirmed by full assessment once the details of the proposed substation including potential mitigation options, through landscaping, for example are known. In addition, cumulative impacts of the proposed option along with the required overhead line infrastructure should be considered when more detailed assessment is undertaken. Two Category A Listed Buildings are in the vicinity of the Site: Kirkton of Tealing, Former Parish Church (LB17450) is around 1.25km west of Site 4, and South Balluderon Farm, Steading (LB17458) which is around 1.6 km east of Site. An initial appraisal suggests that views to and from the church may be limited to its close surroundings because of other buildings and vegetation around the Tealing burn. Long views to and from the asset may not be important to its significance. At South Balluderon Farm, the farm's setting appears to be limited to its immediate surroundings, which are screened by dense vegetation. Long views to and from the asset may not be important to its significance.	We acknowledge the response and notes the specific characteristics of the cultural heritage assets listed in the response. A full assessment of the potential for significant effects on these assets and their essential settings will be undertaken as part of the EIA process. The specific approach to assessment, including the location of viewpoints for photomontage, will be agreed with HES through the EIA scoping process. We will continue to engage closely with HES as the design and EIA processes evolve.

	In addition, it appears the Site might be visible from a number of Scheduled Monuments. The most significant potential impact appears to be on the setting of Balkemback Cottages, stone circle (SM2868) located 600m to the south-east of the Site. However, in light of the relatively small height of the development, the level of impact would not likely be of national interest. However, in both respects, Listed Buildings and Scheduled Monument, the potential for significant impacts should be assessed in detail once all specifications of the proposals are understood. Should this option be taken forward, mitigation measures that would lessen the potential impact, such as screening around the substation would be welcomed. It would also be helpful for a photomontage to be produced that demonstrates the potential impact on the setting of the monument.	
NatureScot	• <u>Protected sites</u> We recognise that the preferred sites selected will not impact directly on any protected areas for nature conservation but, as identified in your consultation documents, there is potential connectivity with a number of Special Protection Areas (SPAs) designated for their bird interests. • The site at Tealing is approximately 8 km from the Firth of Tay and Eden Estuary SPA and Ramsar site which has non-breeding greylag and pink-footed geese as an interest with potential for the proposal to affect foraging. The Outer Firth of Forth and St Andrews Bay Complex SPA is predominantly designated for its breeding and non-breeding seabird species but this includes herring gull which could venture further inland to forage. • These species can forage from their roost site up to 15 – 20 km. Fowlsheugh SPA is just over 5 km from the site and whilst it's designated	We acknowledges the response provided in points 1. to 4. and notes that no responses disfavour the identification of Site 4 as the Site to be taken forward. Specifically, the following are noted. 1. The Tay and Eden Estuary SPA and Ramsar site and Outer Firth of Forth and St Andrews Bay Complex SPA have been identified in the substation site selection process. Bird surveys are ongoing implementing the scope agreed with NatureScot. 2. We will provide the required detail within the EIA to assist NatureScot in undertaking HRA. 3. The standing advice is acknowledged and will be adopted, where relevant, in the EIA.

	for its breeding seabird species one species, herring gull, can travel inland to feed. • Habitats Regulations Appraisal (HRA) To help inform the Habitats Regulations Appraisal an assessment of potential effects should be presented at the application stage informed by an appropriate level of survey work. We are commenting separately on the ornithological and ecology scope of works. Information should be gathered about the European sites that could potentially be impacted, including their qualifying interests and conservation objectives. Information about European sites is available. We are happy to continue engagement with SSE on the gathering and production of information to inform the HRA. 1. Ecological and ornithological interests not associated with protected areas We have standing advice and guidance on minimising impacts on nature and securing the benefits that nature can provide. 2. Landscape and visual interests The sites selected will avoid impacts on National Scenic Areas and Wild Land Areas. We do not intend to offer comments on landscape and visual impacts for the substations as Aberdeenshire and Angus Council are best placed comment on these.	4. We will discuss the scope of and approach to the landscape and visual impact of the substation and any cumulative effects, with Angus Council, through the EIA scoping process. We will continue to engage closely with NatureScot as the design and EIA processes evolve.
Scottish Environment Protection Agency (SEPA)	1. Explanation of the Project In relation to our interests the need for this project has been adequately explained in the booklet and previous meetings.	We acknowledge the responses provided in points 1. to 3. And note that no responses disfavour the identification of Site 4 as the Site to be taken forward.

	2. Has the approach to select the substation site been explained adequately? In relation to our interests the approach to site selection has been sufficiently explained. 3. Are there any factors, or environmental features, that you consider should be reconsidered as part of the site selection process? In relation to our interests, we have not identified any further factors or environmental features that should be reconsidered as part of the site selection process. However, should Site 4 be taken forward as the preferred site we would welcome further investigation into whether there were any opportunities to realign the straightened watercourse, the Fithie Burn, immediately to the south of the site that appears to have been artificially straightened as part of the NPF4 Policy 3 requirement to contribute to the enhancement of biodiversity. Do you agree that, on balance, Site 4 is the most appropriate for further consideration for a new substation at Tealing? As there do not appear to be any private water supplies or carbon rich soils in close proximity to Site 4 and no watercourses or apparent flood risk issues within the site area identified, we agree that this site would be appropriate for further investigation. We can confirm Site 4 also lies outwith any 1km buffer for potential Radioactive substances sources. We confirm also that Sites 1, 3, 3A, 6 and 7, in relation to our interests, would also appear to have no constraints that would stop further investigation. Sites 2 and 6A are likely to create the need for a watercourse diversion and consequently these would be our least favoured options.	We acknowledge the general Scoping Guidance for Large Infrastructure Projects and this be reviewed as part of the EIA process. We will engage closely with SEPA as the design and EIA processes evolve.

	For you information, due to the presence of a former airfield near Tealing, further contaminated land investigations are likely to be required should Site 5 be progressed further. We welcome pre-application engagement, but please be aware that our advice at this stage is based on emerging proposals and we cannot rule out potential further information requests as the project develops. Similarly, our advice is given without prejudice to our formal planning response, or any decision made on elements of the proposal regulated by SEPA, which may take into account factors not considered at the pre-application or planning stage going forward In addition to the above, general Scoping Guidance for Large Infrastructure Projects is provided. This general guidance provides advice and further information in relation to the following: flood risk; wastewater drainage; surface water drainage; pollution prevention and environmental management; engineering activities in the water environment; disruption to wetlands including peatlands; disturbance and re-use of excavated peat; existing groundwater abstractions; water abstractions; space for waste management provision within site layout; and borrow pits.	
Scottish Water	<u>Drinking Water Protected Area (DWPA)</u> A review of our records indicates that there are no Scottish Water drinking water catchments or water abstraction sources, which are designated as Drinking Water Protected Areas under the Water Framework Directive, in the areas that may be affected by the proposed activity. <u>Scottish Water Assets</u> A review of our records indicates that there are no Scottish Water assets (including water supply and sewer pipes, water and waste water treatment works, reservoirs, etc.) in the areas concerned. This should be confirmed however through obtaining plans from our Asset Plan Providers.	The response is noted.

	It should be noted that the proposals will be required to comply with Sewers for Scotland and Water for Scotland 4th Editions 2018, including provision of appropriate clearance distances from Scottish Water assets.	
Transport Scotland	1. We would state that Transport Scotland has no specific preference on the location of the proposed Substation. 2. However, it should be noted that regardless of the location chosen, Transport Scotland will require to be satisfied that the potential impact of construction related traffic on the trunk road network is assessed appropriately and in accordance with the Institute of Environmental Management and Assessment (IEMA) Guidelines for the Environmental Assessment of Road Traffic. 3. We would ask that any assessment of the proposed delivery route(s) not be confined to just the local roads but also include the suitability of using the trunk road junction(s). 4. In addition, the use of Abnormal Indivisible Loads to deliver substation components will require to be assessed, with a full Abnormal Loads Assessment report provided that identifies key pinch points on the trunk road network. Swept path analysis should be undertaken and details provided with regard to any required changes to street furniture or structures along the route. Transport Scotland would state that any proposed changes to the trunk road network must be discussed and approved (via a technical approval process) by the appropriate Area Manager.	We acknowledge the responses provided by Transport Scotland. A full assessment of construction related traffic impacts on both the trunk and local roads networks will be undertaken as part of the EIA process and presented in the Environmental Impact Assessment Report. and Transport Scotland will be engaged through the process.

Statutory Consultees – Community Councils		
Glamis and Area Community Council	There is a general appreciation of the need to reconfigure the UK's power grid. The Net Zero timetable is one that has been artificially created, and so should extra resource be required further into the project in order to be completed on time then this would seem appropriate, instead of the iniquitous situation where shortcuts in consultation provision are taken with those who are going to be most affected. Whilst there is little inherently wrong in speeding up a process, that does come with risks – the obvious one being of points being missed leading to poor decisions and outcomes. Therefore for a process to be consciously accelerated and yet maintain the integrity of the decisions and outcomes it must be beholden on SSE and its sub contractors to increase the diligence of its internal procedures to ensure that while the process may be sped up that it does not mean corners are cut. The inconsistent way in which it seems communications have thus far been undertaken to potentially affected residents does suggest that things are being missed. Up to 31st May a Community Council representative personally visited 16 Douglastown houses NOT ONE of which had heard of the project. Similar results were experienced in Kirkton of Kinnettles. It also seems appropriate to report that confusion and distress was caused by it being a CC representative providing this notification and not SSE itself. There is always a trade off, but a decision to degrade a resource which in total occupies somewhere less than 8% of the total land mass of Scotland	Feedback from communities, is carefully considered at every stage of the project development process and, where possible, acted upon. The concerns raised and information provided have been passed to our relevant project teams and will be used to inform ongoing project development. Please refer to the following parts of this report for our responses to the concerns and issues you have raised: Landscape and Visual – Table 3.3 Community Impact. Wildlife and biodiversity – Table 3.4 Environmental Impact, under heading, Biodiversity, Habitats, Protected Species and Designated Sites. Tourism and Local Business – Table 3.5 Economic Impact. Agricultural Land and Biosecurity – Table 3.5 Economic Impact. We address the concerns regarding consultation in Section 3.2 Common Themes, Consultation Process, 3.2. Socio-Economic Issues, where we discuss community benefit, and 3.2 Project Need. Further information is provided in our FAQ.

	should not be taken lightly. A saving in one budget today can end up being a net loss to the Country in the future. The areas of Prime Agricultural land covered by the selected Corridor and proposed Route options are largely underpinned by potato production. Potato Cyst Nematode (PCN), more commonly known as 'Eelworm', is transmitted by persons and vehicles/machinery crossing contaminated ground and poses a serious threat to this industry. Devastating is a strong word, but in a sector for whom cereals are in most cases simply a break crop between potatoes which are the only crop providing a meaningful return, this is an appropriate term for the likely effects should poor biosecurity cause this pathogen to spread down the Howe Sub-contractors tend to be awarded work because they submit the cheapest quote and unfortunately experience has shown that in order for margins to be made that corners are often cut. The actions of sub contractors around communications and bird surveys suggest this is already taking place in this project. This can be remedied but will require action by SSEN. There is a strong case to suggest that public goods should be at public and not private expense. The planning framework and how burdens are apportioned for infrastructure implementation has moved on from the immediate post war methodology. To expand on the concept of burdens being equitably shared, it is extremely important that impacts on residents are minimised, and not just to the levels of statutory minimums. To take a figure out of the air, if the project costs an extra £100 million for extra routing away from houses or undergrounding where this cannot be done, then it seems reasonable as a national infrastructure project that this cost is shared nationally as opposed to being disproportionately carried by affected individuals in an attempt to minimise cost.	In addition to the information contained above, we note the community council point on the combined corridor and routeing consultation approach. We confirmed in the Consultation Documents that is was undertaking a combined Corridor and Route Consultation for the Kintore to Tealing 400kV OHL Connection project, due to the accelerated delivery programme that is required to achieve the UK and Scottish Government 2030 targets. It was also confirmed that the feedback on the preferred corridor consultation exercise will be assessed independently of the fact that the project has progressed to the routeing stage. If the corridor is changed because of the corridor consultation exercise, the route selection process may have to be revisited. In this instance, there was no feedback or further information obtained from the consultation process that would necessitate a change from the preferred corridor

Appendix B - Non-statutory Consultee Feedback

Organisation	Non-statutory Consultee Feedback	Our Response
Joint Radio Company	Thank you for your advisory regarding the East Coast 400kV Phase 2 project. Unfortunately, the JRC have been unable to assess the impact of the project on local link infrastructure. On these grounds, JRC OBJECTS TO THE PROPOSED DEVELOPMENT	Noted. Feedback will be sought during consultation on the OHL alignment, which will include possible tower locations and dimensions that should help to inform your consideration, and as part of the formal Pre-Application Consultation for the substation application, as referred to above.
National Farmers Union (NFU) Scotland	A few of our key lines are as follows; • Where possible, prime agricultural land to be avoided. Using lower value land would reduce the impact of taking prime, high value agricultural land out of production. • Consider using field margins or boundaries for any infrastructure. This would minimise the agricultural impact. • Avoid, where possible, separating farms into small parcels of land, ultimately making them unviable. We appreciate you have consulted on the routes etc. We are keen to continue this consultation process, and NFUS is happy to help and support with contacting landowners and ensuring that appropriate agreements are reached.	Thank you for providing this information, it has been passed to our relevant project teams and will be used to inform ongoing project development. Please refer to Table 3.5 Economic Impact. The responses provided in Table 3.5 provide information in response to NFU's concerns in this consultation feedback. The Consultation Documents contain information on the landscape and visual impacts of the route options and further information on the response to landscape concerns can be found in Table 3.3 Community Impact. At future consultation events additional visual material will be provided to assist stakeholders in understanding the proposed development.

Organisation	Non-statutory Consultee Feedback	Our Response
National Farmers Union (NFU) North East Regional Manager	Biosecurity risks appear to threaten several areas, especially where there is a huge risk to particular agricultural crops- eg seed potatoes and the potential spread of Potato Cyst Nematode (PCN). Daffodil crops are also threatened too. Historically, SSEN contractors' breach their own set down protocols, as evidenced by many growers. Members are questioning the assurance from SSEN that they will ensure full and effective behaviours with regard to adequate biosecurity? Food security is an issue for our growing population. Why should SSEN destroy some of Scotland's most productive farmland to deliver this project?	Thank you for providing this information, it has been passed to our relevant project teams and will be used to inform ongoing project development. Please refer to Tables 3.3 Community Impacts and 3.5 Economic Impact which include responses specific to NFU's concerns in this consultation feedback on biosecurity and the management of construction activities and the avoidance wherever possible of prime agricultural land. Strict biosecurity measures will be required of all site staff including those undertaking pre-construction surveys, enabling and construction work and post-construction testing and assurance checks. We fully appreciate the concerns raised and the impact poor biosecurity can have on agricultural activities.
NATS Safeguarding	The proposed development has been examined from a technical safeguarding aspect and does not conflict with our safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") has no safeguarding objection to the proposal. However, please be aware that this response applies specifically to the above consultation and only reflects the position of NATS (that is responsible for the management of en route air traffic) based on the information supplied at the time of this application. This letter does not provide any indication of the position of any other party, whether they be an airport, airspace user or	Noted. Further engagement will continue at the OHL alignment consultation and the substations Pre-Application Consultation stages.

Organisation	Non-statutory Consultee Feedback	Our Response
	otherwise. It remains your responsibility to ensure that all the appropriate consultees are properly consulted. If any changes are proposed to the information supplied to NATS in regard to this application which become the basis of a revised, amended or further application for approval, then as a statutory consultee NERL requires that it be further consulted on any such changes prior to any planning permission, or any consent being granted.	
Radio Network Protection (BT)	The conclusion is that this could possibly interfere with BT's current and presently planned radio network. Please see below BT links that are potentially on the route path and their end-to-end co-ordinates. When the co-ordinates of the structures at height are available, please send these over and then we can carry out an assessment accurately.	Noted. We will seek further feedback during consultation on the OHL alignment, which will include possible tower locations and dimensions, and as part of the formal Pre-Application Consultation that will be a part of the planning application process for the substation. Both consultations are expected to take place at the end of Q1 2024.

Appendix C – Consultation Flyer

Scottish & Southern Electricity Networks
TRANSMISSION

Scan me

East Coast 400kV Phase 2
Public consultation events

SSEN Transmission are developing proposals between Kintore and Tealing via Fiddes to build a new 400kV connection between these sites enabling the significant power transfer capability needed to take power from onshore and large scale offshore renewable generation connecting on the east coast of Scotland.

The East Coast 400kV Phase 2 project will seek to establish a new 400kV network and reinforce sections of the existing electricity transmission infrastructure.

We are inviting members of the public and all interested parties to attend our drop-in consultation events and give their views on the following proposed projects:

- Kintore – Tealing 400kV OHL (overhead line)
- Tealing 400kV substation
- Fiddes 400kV substation
- Alyth – Tealing OHL Re-conductor
- Tealing – Westfield OHL Re-conductor

Come along to one of the following sessions and meet with our project team who will be there to talk through the details of the projects and answer any of your questions:

2 May (2-7pm)	Kirkton of Skene – Milne Hall
3 May (2-7pm)	Ardoe - Ardoe House Hotel
4 May (2-7pm)	Laurencekirk – Dickson Hall
9 May (2-7pm)	Brechin – Brechin City Hall
10 May (2-7pm)	Kirriemuir – Westmuir Hall
11 May (2-7pm)	Tealing – Tealing Village Hall
17 May (4-6pm)	Virtual event*

*Joining details available on website

If you have any questions, please contact the Community Liaison Manager:

Martha Smart
SSEN Transmission
200 Dunkeld Road,
Perth, PH1 3GH
TKUP@sse.com
+44 (0) 7721 407 513

Find out more and register for project updates by visiting the project website using the below URL or by scanning the QR code.

bit.ly/3TLCo2A

All venues have disabled access; for any other accessibility requirements please get in touch.

SSEN Community @SSETransmission

ssen-transmission.co.uk