



# Tealing to Kincardine Upgrade Project

Proposed extensions to the existing substations at Westfield and Mossmorran, upgrades to transmission lines and associated works.

Summary of First Round of Pre-Application Consultation (PAC)

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## Executive summary

This report summarises the first round of pre-application consultation (PAC) carried out by SP Energy Networks (SPEN) on the proposals for the Tealing to Kincardine Upgrade Project (TKUP). TKUP proposes to extend the existing substations at Westfield, near Ballingry, and Mossmorran, near Cowdenbeath in order to increase the voltage of existing overhead lines between Tealing and Kincardine from 275,000 volts (275kV) to 400,000 volts (400kV). The proposals also included connecting two existing overhead lines to each other north of Kincardine. However, further technical studies following the first round of consultation concluded that this connection was not required and it no longer forms part of our plans.

SPEN carried out pre-application consultation with local residents and stakeholders from Thursday 18 July until Friday 30 August 2024 which included two drop-in events, one in Ballingry (for Westfield) and one in Crossgates (for Mossmorran).

The TKUP project also includes a proposed new substation at Conland, near Glenrothes. This was not included in the consultation and will be subject to separate pre-application consultation at a later date.

Whilst substation development does not fall under the schedules of development set out within the Town & Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017, SPEN elected to carry out a full Environmental Impact Assessment (EIA) of the proposals to ensure that potential effects of the substation on the local area are considered in detail.

This report will provide:

- An overview of the project proposals
- Details of the consultation process
- Next steps in the process

## 1. Introduction

### 1.1. The Need for the Tealing to Kincardine Upgrade Project

The Network Options Assessment (NOA) is carried out every year by the National Energy Systems Operator (NESO), previously National Grid, to determine what, if any, additional capacity will be required and economically justified to ensure current and future energy generation can flow from where it is produced to where it is needed.

Much of the electricity transmission network in Scotland is between 50 and 100 years old. It has grown and evolved to meet industrial needs and serve the expanding population, but the network in central Scotland will soon be at full capacity and unable to accommodate all the clean, green renewable energy we will all need in future.

In order to increase network capacity, the voltage of the existing overhead line between Tealing, near Dundee, and Kincardine, in Fife, needs to be increased from 275,000 volts (275kV) to 400,000 volts (400kV). To facilitate this, SPEN needs to replace the two existing 275kV transformers at Westfield substation, which are now 55 years old, with four new 400kV transformers. The same is needed at the Mossmorran substation where the two existing 275kV transformers are 62 and 41 years old, respectively.

The extended substations will have a key role in enabling Scotland and the UK to meet Net Zero emissions targets while ensuring that power flows efficiently through the system in central Scotland.

### 1.2. The role of SP Energy Networks (SPEN)

SP Energy Networks is part of the ScottishPower Group. It is responsible for the transmission and distribution of electricity in central and southern Scotland, and, through SP Manweb, the distribution network in North Wales and part of North West England. SPEN's role is to maintain, operate and invest in our network to secure a safe, reliable, and economic service for current and future consumers.

Its transmission networks are the backbone of the electricity system in its area, carrying large amounts of electricity at high voltages across long distances. The distribution networks are local networks, which take electricity from the transmission grid and bring it into the heart of communities. SPEN's transmission network in Scotland consists of over 150 substations, more than 4,500km of overhead lines and more than 600km of underground cables.

As transmission licence holder for southern Scotland, SPEN (through SP Transmission) is required under Section 9(2) of the Electricity Act 1989 to:

- Develop and maintain an efficient, co-ordinated and economical system of electricity transmission; and
- Facilitate competition in the supply and generation of electricity.

SPEN is required to provide for new electricity generators wishing to connect to the transmission system in its licence area, to make its transmission system available for these purposes and to ensure that the system is fit for purpose through appropriate reinforcements to accommodate the contracted capacity.

Schedule 9 of the Electricity Act 1989 imposes a further statutory duty on SPEN to take account of the following factors in formulating proposals for the installation of overhead transmission lines:

- “(a) to have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features or special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and
- (b) to do what it reasonably can to mitigate any effects which the proposals would have on the natural beauty of the countryside or any such flora, fauna, features, sites, buildings or objects.”

SPEN’s ‘Schedule 9 Statement’ sets out how it will meet the duty placed upon it under Schedule 9. The Statement also refers to the application of best practice methods to assess the environmental impacts of proposals and to identify appropriate mitigation measures.

As a result of the above, SPEN is required to identify electrical connections that meet the technical requirements of the electricity system, which are economically viable, and cause on balance, the least disturbance to both the environment and the people who live, work and enjoy recreation within it.

### **1.3. The project proposals**

The TKUP proposals include increasing the voltage of the existing overhead line between Tealing, near Dundee, and Kincardine, in Fife, from 275kV to 400kV.

The TKUP proposals at Westfield, near Ballingry, seek to replace the two existing 275kV transformers at Westfield substation with six new 400kV transformers.

Minor alterations to the existing overhead lines are also required at Westfield to connect them to the new substation. The overhead lines currently cross the site for the proposed new substation. SPEN will install a temporary mast to divert the overhead lines away from the site, removing six existing towers (pylons) to enable the build of the new substation. Two new towers will then be erected and underground cables installed to connect the new substation to the network before removing the temporary mast and line diversion.

The project will also involve the following associated construction and connectivity works:

- A new 400kV SF6-free Gas Insulated Switchgear (GIS) substation building, which will house electrical switchgear, plant and ancillary equipment,
- Five 400/132kV transformers and one 400/275kV transformer
- SF6-free GIS double busbar to connect the switchgear to each circuit,
- Internal access roads and vehicle parking, and
- Drainage and mitigation (for example, A new steel palisade fence and internal fencing around the live compound to ensure safety and security).

The TKUP proposals at Mossmorran, near Cowdenbeath, seek to replace the two existing 275kV transformers at Mossmorran substation with four new 400kV transformers.

The project will also involve the following associated construction and connectivity works:

- A new 400kV SF6-free Gas Insulated Switchgear (GIS) substation building, which will house electrical switchgear, plant and ancillary equipment,
- Four 400/132kV transformers,
- SF6-free GIS double busbar to connect the switchgear to each circuit,

- Space for three additional transformers to be installed in future,
- Internal access roads and vehicle parking,
- Drainage and mitigation (for example, landscaping), and
- A new steel palisade fence and internal fencing around the live compound to ensure safety and security.

Similar to Westfield, minor alterations to the existing overhead lines are required at Mossmorran to connect them to the new substation. The overhead lines currently cross the site for the proposed new substation. SPEN will install two temporary masts in order to divert the overhead lines away from the site, removing three existing towers (pylons) to enable the build of the new substation. One new tower will then be erected to connect the new substation to the network before removing the temporary masts and line diversion.

## **2. Approach to Pre-Application Consultation**

### **2.1 Legislation and guidance**

SPEN will be applying to Fife Council for planning permission for TKUP under Section 57(2) of the Town and Country Planning (Scotland) Act 1997, as amended.

SPEN will also need to submit applications to the Scottish Government Energy Consents Unit, under Section 37 of the Electricity Act 1989, for the proposed changes to the overhead lines and the uprating in voltage.

Because the substation will operate at 400kV/132kV, it is classified as a national development in terms of the Scottish Government's National Planning Framework 4. This means that an applicant must carry out pre-application consultation and submit report on the consultation and an Access and Design statement with the application.

### **2.2 SPEN's statutory and licence responsibilities**

As a transmission licence holder for central and southern Scotland, SPEN is required under Section 9(2) of the Electricity Act 1989 to develop and maintain an efficient, co-ordinated and economical transmission system.

SPEN also has a duty under section 38 of Schedule 9 of the Electricity Act 1989, to have regard to the desirability of the preservation of amenity, the natural environment, cultural heritage, landscape and visual quality. SPEN also considers the effect of work on communities when putting forward proposals for new electricity lines and other transmission development.

As a result of the above, SPEN is required to identify electrical connections that meet the technical requirements of the electricity system, which are economically viable, and cause, on balance, the least disturbance to the environment and the people who live, work and enjoy recreation within it.

### **2.3 SPEN's commitment to engagement**

Stakeholder engagement, including public involvement, is an important component of the Scottish planning and consenting system. Legislation and government guidance aim to ensure that the public, local communities, statutory and other consultees and interested parties have an opportunity to have their views taken into account throughout the planning process.

Striking the right balance can be challenging, and in seeking to achieve this, SPEN recognises the importance of consulting effectively on proposals and being transparent about the decisions reached. SPEN is keen to engage with key stakeholders including local communities and others who may have an interest in the project. This engagement process begins at the early stages of development of a project and continues into construction once consent has been granted.

## 2.4 Consultation Strategy and approach

Whilst there are no formal pre-application requirements for consultation in seeking Section 37 consent/deemed planning permission, SPEN is embracing best practice as outlined in the Scottish Government Energy Consents Unit (ECU) Best Practice Guidance (July 2022). This guidance encourages applicants to engage with stakeholders and the public in order to develop their proposals in advance of such applications being made. Therefore, prior to the submission, SPEN is carrying out consultation with stakeholders and the public.

Following the submission of application for Section 37 consent and deemed planning permission, the Scottish Government ECU will, on behalf of Scottish Ministers, carry out further consultation with the public and stakeholders.

The strategy for consultation was designed to ensure that stakeholders:

- Were made aware of the proposals in a timely manner,
- Had access to project information and understood its development, and
- Could put forward their own views and be confident that issues raised would be considered.

The formal Proposal of Application Notice (PAN) was submitted to Fife Council which sets out a description of the development in general terms, including maps to identify the site, and SPEN's proposals for undertaking pre-application consultation for the substation extensions and associated works.

SPEN used a range of communication channels to publicise and promote the consultations, which are detailed in the following sections of this document. Respondents also had the opportunity to speak with the project team and provide feedback in different formats, depending on their preference:

- Email: [tkup@communityrelations.co.uk](mailto:tkup@communityrelations.co.uk)
- Freepost: FREEPOST SPEN TKUP
- Freephone: 0800 470 2376
- Online via the dedicated project website: [www.spenergynetworks.co.uk/pages/tkup\\_project.aspx](http://www.spenergynetworks.co.uk/pages/tkup_project.aspx)
- Face-to-face or in writing at public consultation exhibitions

## 3. Pre-Application Consultation

### 3.1 Consultation Strategy

SPEN attaches great significance to the effects its works may have on the environment and local communities and is very keen to hear the views of local people to help it develop the project in the most appropriate way.

The overall objective of the consultation process is to ensure that all parties with an interest in TKUP have access to up-to-date information and are provided with clear and easy ways in which to shape and inform SPEN's proposals at the pre-application stage.

As part of the consultation strategy, SPEN will be holding two rounds of public consultation for the public, stakeholders and consultees to provide comments on the proposals.

For the first round of consultation, SPEN consulted on, and welcomed feedback from consultees on the following:

- Views on our proposed substation extensions;
- Views on our proposed changes to the overhead lines, including pylon locations and increasing the voltage;
- Any other factors for consideration, such as areas used for recreation and local environmental features;
- Any comments on the consultation process itself;
- Any wider comments consultees have.

### 3.2 How we consulted

The consultation period ran from Thursday 18 July until Friday 30 August 2024.

SPEN wished to consult with relevant stakeholders and seek their views on the proposals. The stakeholder groups that were identified for engagement include:

- Statutory and non-statutory consultees, including community councils,
- Known local interest and community groups operating in the project area (specifically Ballingry and Cowdenbeath areas),
- Elected members of Fife Council areas, Members of Parliament (MP) and Members of the Scottish Parliament (MSPs) whose constituencies are within the Fife council area,
- Local residents, businesses and the general public.

A notification was sent via email to the project stakeholders advising them of the consultation and inviting them to the public events.

A separate project leaflet was produced for each site explaining the proposals, the purpose of the consultation and the process for submitting feedback. The leaflets were distributed to properties (residential and business) within a defined radius of the two project sites, including the communities around Westfield (Ballingry, Lochore, Crosshill, Auclerterran and Cardenden) and Mossmorran (Crossgates and Auchtertool). This was the principal form of direct communication with the local community. A copy of both leaflets can be found in Appendix A1 and A2.

To promote the consultation, SPEN placed formal newspaper advertisements in the *Glenrothes Gazette*, *Central Fife Times* and *Fife Free Press* newspapers for two consecutive

weeks (w/c 15 July and w/c 22 July 2024). The advert introduced the consultation with some high level information about the project including the proposals, details of the drop-in event and the ways in which feedback can be submitted. A QR code linking to the project website was also included on the adverts. A copy of the advert can be found in Appendix B.

The project leaflet, newspaper notice, project plans, FAQs, general information about the project and the consultation and a feedback form were made available on a dedicated project website: [www.spenergynetworks.co.uk/pages/tkup\\_project.aspx](http://www.spenergynetworks.co.uk/pages/tkup_project.aspx). To make the website as accessible as possible, most communications created for the consultation included a QR code that linked through to the home page of the website. The website remained live following the consultation to ensure stakeholders can find out more and stay up to date on project developments.

A feedback form was made available in hard copy and online. Stakeholders could submit feedback in various methods as outlined in Section 2.4. Respondents were made aware via a data protection statement that any comments they made could be made available to certain bodies for the purposes of the consultation and for creating reports. This included the Scottish Government and relevant planning authorities.

The feedback form included seven questions in relation to the project proposals and an additional section that asked demographic data including title, name, address, telephone number, email address, asking if the respondent is responding on behalf of an organisation and if they attended the public exhibition.

The seven project related questions were:

- 1) Do you have any comments on our proposals for Westfield substation?
- 2) Please let us have any comments you may have about our proposed changes to overhead lines and underground cables at Westfield.
- 3) Do you have any comments on our proposals for Mossmorran substation?
- 4) Please let us have any comments you may have about our proposed changes to overhead lines and underground cables at Mossmorran.
- 5) Please let us have any comments about our proposed reconductoring and increase in voltage from 275kV to 400kV of the existing overhead lines in the wider area, as identified in our consultation materials.
- 6) How did you find out about the project and the consultation? *Multiple choice options provided were: advert, leaflet, website, media coverage, social media, word of mouth, other.*
- 7) Do you have any comments about our public consultation, or any other comments you would like to make?

The closing date for submitting responses to SPEN was midnight on Friday 30 August 2024. Following this date, the consultation information will remain accessible on the project website and available to download.

No feedback forms were submitted during the consultation period, however the TKUP email and phonenumber will remain open and any enquiries or feedback received will be responded to accordingly.

SPEN held two public events for the consultation:

- **Westfield:** Tuesday 30 July, 2pm-7pm. Benarty Centre, Flockgouse Avenue, Ballingry, KY5 8JH
- **Mossmorran:** Wednesday 31 July, 2pm-7pm. Crossgates Royal British Legion, 60 Main Street, Crossgates

The venues, dates and times were detailed in all project communications that had been issued.

At the events, stakeholders had the opportunity to drop in to view the project proposals and talk to members of the project team to discuss any questions or concerns that they had. The materials made available at the events included seven pull up banners which provided detail on each aspect of the proposals, hard copies of maps at large scale, and relevant project documents. A copy of the banners can be found in Appendix C.

The events were attended by a total of 20 people, including representatives from four community councils: Crossgates and Mossgreen Community Council, Portmoak Community Council, Cardenden Community Council and Lochgelly Community Council. No feedback was received during the consultation.

### **Next Steps**

Following the first round of the pre application consultation for Westfield and Mossmorran, SPEN will develop a detailed design for the respective substation layouts. These designs will be presented at a second round of consultation in autumn 2024.

Once the second round of consultation is complete, SPEN will carry out an EIA. Following completion of the EIA, SPEN will prepare a detailed development and design proposal and submit a planning application to Fife Council. The Councils will then invite representations from local people and stakeholders before deciding whether to grant planning permission, and to inform any conditions that may be required under permission.

## 4. Appendices

### Appendix A1: Project Leaflet for Westfield



## Powering Scotland Towards Net Zero

### Tealing to Kincardine Upgrade Project: Westfield Substation Extension

Scotland is producing more clean, green energy than ever before, and we need to strengthen the transmission network so we can get it to the homes, schools and businesses that need it.

Renewable energy is replacing older fossil-fuelled power stations. At the same time, demand for electricity is growing through increased electrification of heating, industry and transport networks, and electric vehicles are replacing petrol and diesel.

The UK and Scottish Governments are committed to increasing the use of renewable energy and have targets to achieve net-zero greenhouse gas emission by 2045 in Scotland and 2050 in the UK.

This huge change means we need to upgrade Scotland's electricity transmission network, so we can get this increasing amount of energy from where it's produced to where it's needed.

To help make this happen we need to increase the voltage of overhead lines in Fife from 275,000 volts (275kV) to 400,000 volts (400kV), and extend Westfield substation, near Ballingry, to strengthen the electricity transmission network and guarantee secure energy supplies for the future.

This leaflet tells you about our plans, where to find more information, and how you can give us your views.



## Why do we need to extend Westfield substation?

Much of the electricity transmission network in Scotland is between 50 and 100 years old. It has grown and evolved to meet industrial needs and serve the expanding population, but the network in central Scotland will soon be at full capacity – unable to accommodate all the clean, green renewable energy we will all need in future.

More onshore and offshore wind farms, solar energy and battery storage are connecting to the power network and we need to increase the voltage of the overhead lines in this area from 275kV to 400kV, in keeping with the wider electricity transmission network, so we can get the energy from where it's produced to where it's needed.

In order to increase the voltage and network capacity we need to replace the two existing 275kV transformers at Westfield substation – which are now 55 years old – with four new 400kV transformers.

The new Westfield substation will have a key role in enabling Scotland and the UK to meet Net Zero emissions targets while ensuring that power flows efficiently through the system in central Scotland.

## What will happen at Westfield?

Before we can switch off the old transformers, we need to extend the substation site so we can install the new 400kV transformers and equipment and connect them to the network.

This is because the old transformers are essential to keep the lights on and the power flowing while we put the new substation in place.

The proposed new Westfield substation will have similar equipment to SPEN's Kilmamock South substation, pictured on the front of this leaflet.

**We are still developing detailed plans, but the project will include:**

- A new 400kV SF6-free Gas Insulated Switchgear (GIS) substation building, which will house electrical switchgear, plant and ancillary equipment
- Four 400/132kV transformers
- SF6-free GIS double busbar to connect the switchgear to each circuit
- Internal access roads and vehicle parking
- Drainage and mitigation (for example, landscaping)
- A new steel palisade fence and internal fencing around the live compound to ensure safety and security.

## Overhead line changes

We will need to make minor alterations to the existing overhead lines at Westfield to connect them to the new substation, as shown on the plan in this leaflet.

At the moment, the overhead lines cross the site for the proposed new substation. We plan to put up two temporary masts so we can divert the overhead lines away from the site, removing six existing towers (pylons) and allowing us to build the new substation.

We will then need to put up two new towers and install some underground cables to connect the new substation to the network before removing the temporary masts and line diversion.

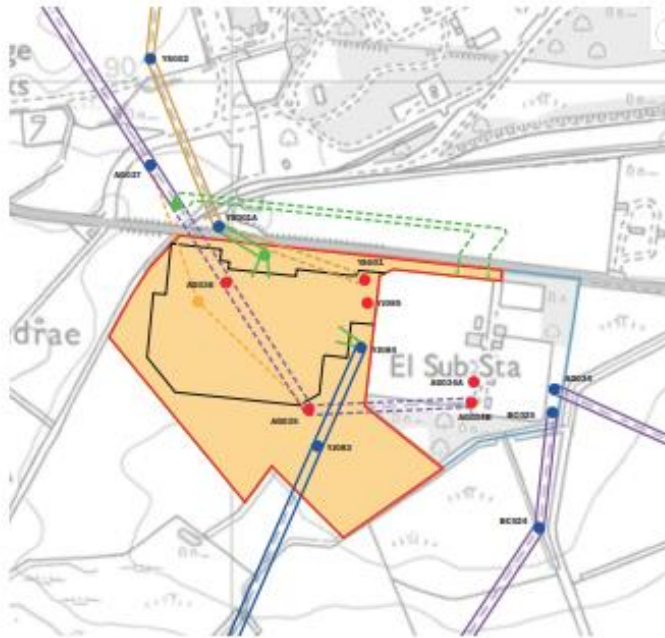
## What else is involved in the Tealing to Kincardine Upgrade Project?

The purpose of the project is to increase the voltage of overhead lines from 275kV to 400kV between Tealing, near Dundee (in the Scottish and Southern Energy Networks area) and Kincardine (in the SP Energy Networks area), to allow more clean, green energy to flow through the network.

To make this happen, SP Energy Networks needs to extend the substations at Mossmorran, near Cowdenbeath, and Westfield, near Ballingry. We will also need to connect two existing overhead lines to each other north of Kincardine, to improve the efficiency of the network.

You can find full details on our project website.





### Proposed overhead line changes

- Site boundary
- Westfield Substation Extension
- Indicative Substation Fenceline

### SPT OHL Transmission Infrastructure

- AG OHL Route to be Retained
- AG OHL Route to be Removed
- YS OHL Route to be Retained
- YS OHL Route to be Removed
- YS OHL Route to be Retained
- SP OHL Route to be Retained
- New Spans from Existing OHLs to Westfield Substation
- New Underground Route Connections to Westfield Substation
- Existing OHL Towers to be Retained
- Proposed OHL Towers
- Existing OHL Towers to be Removed
- Temporary AG Mast Locations
- Temporary AG OHL Route



### Potential substation layout

- Site boundary
- Existing Westfield Substation
- Proposed Westfield Substation Extension Area
- Transformers
- Control Building
- Proposed Access
- Internal Roads
- Area Reserved for Mitigation and Drainage Requirements
- New/Altered OHL Lattice Towers
- Indicative Substation Fenceline



## We want to hear your views

**Our public consultation runs until Friday 30 August 2024.**

SPEN attaches great importance to the effect our work may have on the environment and local communities.

We want to hear what local people think about our plans, to help us develop the project in the best way.

**Please come along to our public exhibitions** where you can see our plans in more detail and ask questions of the project team:

**Tuesday 30 July, 2pm to 7pm:**  
Benarty Centre, Flockhouse Avenue, Ballingry, KY5 8JH

**Wednesday 31 July, 2pm to 7pm:**  
Crossgates Royal British Legion, 60 Main Street,  
Crossgates, KY4 8DY

You can find more information and project documents on our project website, where you can also fill in an online feedback form. If you don't have internet access, you can call our Freephone number to ask any questions you may have, or request a personal call back from a member of the project team. We can also send you a paper feedback form and a Freepost envelope so you can complete it and return it to us free of charge.

## What happens next?

Following the first round of consultation we will develop detailed designs for the substations, including locations for buildings, access routes and working areas. We will publish a report summarising the feedback received and how this has influenced our proposals.

We will carry out a detailed Environmental Impact Assessment, and hold further consultation, before we finalise our proposals and submit planning applications under the Town and Country Planning (Scotland) Act 1997 (as amended) to Fife Council.

We will also need to submit applications to the Scottish Government Energy Consents Unit, under Section 37 of the Electricity Act 1989, for the proposed changes to the overhead lines and uprating in voltage.

At this stage, your comments are not representations to the planning authority. When we submit applications for development consent in the future, you will be able to make formal representations at that stage.



## How to contact us

**Email: [tkup@communityrelations.co.uk](mailto:tkup@communityrelations.co.uk)**

**You can call us free of charge on: 0800 470 2376**

**You can write to us free of charge at: FREEPOST SPEN TKUP**

**You can find more information about the project on our website:**

**[www.spenergynetworks.co.uk/pages/tkup\\_project.aspx](http://www.spenergynetworks.co.uk/pages/tkup_project.aspx)**



## Appendix A2: Project Leaflet for Mossmorran



# Powering Scotland Towards Net Zero

## Tealing to Kincardine Upgrade Project: Mossmorran Substation Extension

**Scotland is producing more clean, green energy than ever before, and we need to strengthen the transmission network so we can get it to the homes, schools and businesses that need it.**

Renewable energy is replacing older fossil-fuelled power stations. At the same time, demand for electricity is growing through increased electrification of heating, industry and transport networks, and electric vehicles are replacing petrol and diesel.

The UK and Scottish Governments are committed to increasing the use of renewable energy and have targets to achieve net-zero greenhouse gas emission by 2045 in Scotland and 2050 in the UK.

This huge change means we need to upgrade Scotland's electricity transmission network, so we can get this increasing amount of energy from where it's produced to where it's needed.

To help make this happen we need to increase the voltage of overhead lines in Fife from 275,000 volts (275kV) to 400,000 volts (400kV), and extend Mossmorran substation, near Cowdenbeath, to strengthen the electricity transmission network and guarantee secure energy supplies for the future.

This leaflet tells you about our plans, where to find more information, and how you can give us your views.



## Why do we need to extend Mossmorran substation?

Much of the electricity transmission network in Scotland is between 50 and 100 years old. It has grown and evolved to meet industrial needs and serve the expanding population, but the network in central Scotland will soon be at full capacity – unable to accommodate all the clean, green renewable energy we will all need in future.

More onshore and offshore wind farms, solar energy and battery storage are connecting to the power network and we need to increase the voltage of the overhead lines in this area from 275kV to 400kV, in keeping with the wider electricity transmission network, so we can get the energy from where it's produced to where it's needed.

In order to increase the voltage and network capacity we need to replace the two existing 275kV transformers at Mossmorran substation – which are 62 and 41 years old – with four new 400kV transformers.

The new Mossmorran substation will have a key role in enabling Scotland and the UK to meet Net Zero emissions targets while ensuring that power flows efficiently through the system in central Scotland.

## What will happen at Mossmorran?

Before we can switch off the old transformers, we need to extend the substation site so we can install the new 400kV transformers and equipment and connect them to the network.

This is because the old transformers are essential to keep the lights on and the power flowing while we put the new substation in place.

The proposed new Mossmorran substation will have similar equipment to SPEN's Kilmarnock South substation, pictured on the front of this leaflet.

**We are still developing detailed plans, but the project will include:**

- A new 400kV SF6-free Gas Insulated Switchgear (GIS) substation building, which will house electrical switchgear, plant and ancillary equipment
- Four 400/132kV transformers
- SF6-free GIS double busbar to connect the switchgear to each circuit
- Space for additional transformers to be installed in future
- Internal access roads and vehicle parking
- Drainage and mitigation (for example, landscaping)
- A new steel palisade fence and internal fencing around the live compound to ensure safety and security.

## Overhead line changes

We will need to make minor alterations to the existing overhead lines at Mossmorran to connect them to the new substation, as shown on the plan in this leaflet.

At the moment, the overhead lines cross the site for the proposed new substation. We plan to put up two temporary masts so we can divert the overhead lines away from the site, removing three existing towers (pylons) and allowing us to build the new substation.

We will then need to put up two new towers to connect the new substation to the network before removing the temporary masts and line diversion.

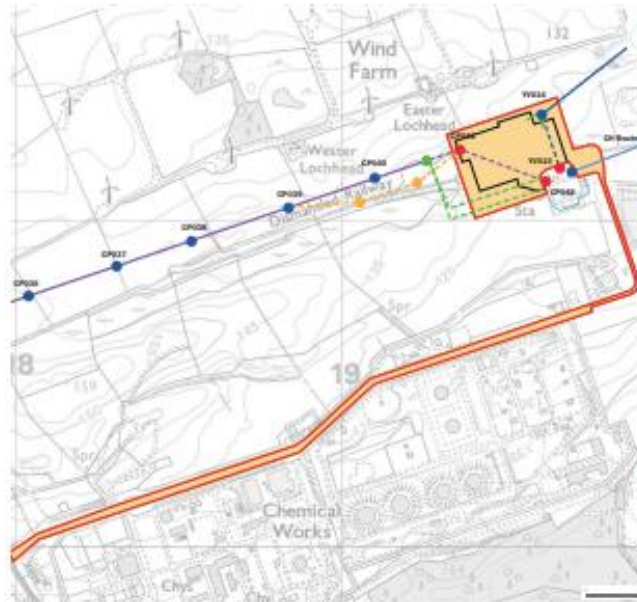
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To make this happen, SP Energy Networks needs to extend the substations at Mossmorran, near Cowdenbeath, and Westfield, near Ballingry. We will also need to connect two existing overhead lines to each other north of Kincardine, to improve the efficiency of the network.

You can find full details on our project website.





### Proposed overhead line changes

- Site boundary
  - Mossmorran Substation Extension
  - Indicative Substation Fenceline
- SPT OHL Transmission Infrastructure**
- CP OHL Route to be Retained
  - CP OHL Route to be Removed
  - YV OHL Route to be Removed
  - YV OHL Route to be Removed
  - New Spans from YV OHL to Mossmorran Substation Extension
  - New Underground CP Route Connection
  - CH OHL Route to be Retained
- Existing CP/CH/YV/OHL Towers to be Retained
  - Proposed CP OHL Towers
  - Existing CP/YV OHL Towers to be Removed
  - Temporary CP Mast Locations
  - Temporary CP OHL Route



### Potential substation layout

- Site boundary
- Existing Mossmorran Substation
- Proposed Mossmorran Substation Extension Area
- Transformers
- Contracted Transformers
- Future Transformers
- Control Building
- Proposed Access Points
- Internal Records
- Area Reserved for Mitigation and Drainage Requirements
- New/Altered OHL Lattice Towers
- Indicative Substation Fenceline



## We want to hear your views

**Our public consultation runs until Friday 30 August 2024.**

SPEN attaches great importance to the effect our work may have on the environment and local communities.

We want to hear what local people think about our plans, to help us develop the project in the best way.

**Please come along to our public exhibitions** where you can see our plans in more detail and ask questions of the project team:

**Tuesday 30 July, 2pm to 7pm:**  
Benarty Centre, Flockhouse Avenue, Ballingry, KY5 8JH

**Wednesday 31 July, 2pm to 7pm:**  
Crossgates Royal British Legion, 60 Main Street,  
Crossgates, KY4 8DY

You can find more information and project documents on our project website, where you can also fill in an online feedback form. If you don't have internet access, you can call our Freephone number to ask any questions you may have, or request a personal call back from a member of the project team. We can also send you a paper feedback form and a Freepost envelope so you can complete it and return it to us free of charge.

## What happens next?

Following the first round of consultation we will develop detailed designs for the substations, including locations for buildings, access routes and working areas. We will publish a report summarising the feedback received and how this has influenced our proposals.

We will carry out a detailed Environmental Impact Assessment, and hold further consultation, before we finalise our proposals and submit planning applications under the Town and Country Planning (Scotland) Act 1997 (as amended) to Fife Council.

We will also need to submit applications to the Scottish Government Energy Consents Unit, under Section 37 of the Electricity Act 1989, for the proposed changes to the overhead lines and uprating in voltage.

At this stage, your comments are not representations to the planning authority. When we submit applications for development consent in the future, you will be able to make formal representations at that stage.



## How to contact us

**Email: [tkup@communityrelations.co.uk](mailto:tkup@communityrelations.co.uk)**

**You can call us **free of charge** on: 0800 470 2376**

**You can write to us **free of charge** at: FREEPOST SPEN TKUP**

**You can find more information about the project on our website:**

**[www.spenergynetworks.co.uk/pages/tkup\\_project.aspx](http://www.spenergynetworks.co.uk/pages/tkup_project.aspx)**



## Appendix B: Newspaper Advert

### Tealing to Kincardine Upgrade Project Westfield and Mossmorran Substation Extensions



#### We'd like your views!

Scotland is producing more clean, green energy than ever before, and we need to strengthen the transmission network so we can get it to the homes, schools and businesses that need it.

To help make this happen we need to extend our substations at Westfield, near Balingry, and Mossmorran, near Cowdenbeath, so we can increase the voltage of the overhead lines between Tealing (north of Dundee) and Kincardine from 275kV (275,000 volts) to 400kV.

We will also need to alter the overhead lines slightly to connect them to the new extended substations.

The project will play a key role in the fight against climate change, and the UK's transition to Net Zero, as renewable energy replaces old fossil-fuelled power generation.

We are now asking local people and stakeholders what they think about our plans, to help us develop the project in the best way.

We are holding two public exhibitions where you can view our plans and talk to the project team. You can also find more information on our website [https://www.spenergynetworks.co.uk/pages/tkup\\_project.aspx](https://www.spenergynetworks.co.uk/pages/tkup_project.aspx)



You can leave comments on the website, and you can also contact us in the following ways:

**Phone: 0800 470 2376**

**Email: [tkup@communityrelations.co.uk](mailto:tkup@communityrelations.co.uk)**

**Post: FREEPOST SPEN TKUP**

At this stage, your comments are not representations to the planning authority. When we make an application for development consent in the future, you will be able to make formal representations at that stage.

#### Public exhibitions

Date	Location
Tuesday 30 July 2.00pm – 7.00pm	Westfield: Benarty Centre, Flockhouse Avenue, <b>Balingry, KY5 8JH</b>
Wednesday 31 July 2.00pm – 7.00pm	Mossmorran: Crossgates Royal British Legion, 60 Main Street, <b>Crossgates, KY4 8DY</b>

**Our public consultation runs until Friday 30 August 2024.**

## Appendix C: Exhibition Boards

### Why do we need to extend Westfield and Mossmorran substations?



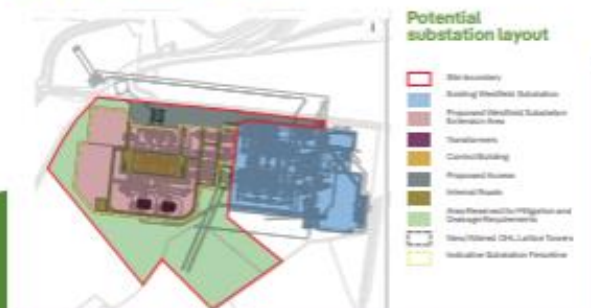
Much of the electricity transmission network in Scotland is between 50 and 100 years old. It has grown and evolved to meet industrial needs and serve the expanding population, but the network in central Scotland will soon be at full capacity – unable to accommodate all the clean, green renewable energy we will all need in future.

More onshore and offshore wind farms, solar energy and battery storage are connecting to the power network and we need to increase the voltage of the overhead lines between Tealing (near Dundee) and Kincardine (Fife) from 275kV to 400kV, in keeping with the wider electricity transmission network, so we can get the energy from where it's produced to where it's needed.

In order to increase the voltage and network capacity we need to replace the two existing 275kV transformers at Westfield substation – which are now 55 years old – with four new 400kV transformers. We need to do the same at Mossmorran, where the two existing 275kV transformers are 62 and 41 years old.

The extended substations will have a key role in enabling Scotland and the UK to meet Net Zero emissions targets while ensuring that power flows efficiently through the system in central Scotland.

## What will happen at Westfield substation?



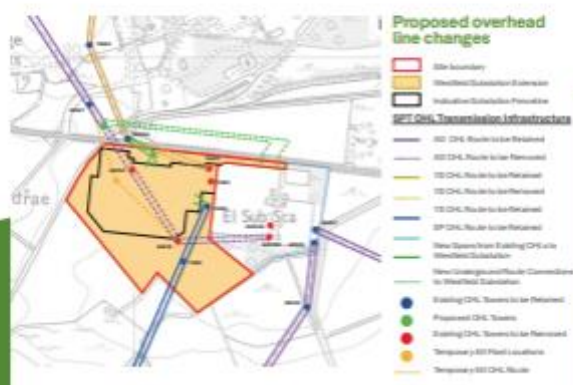
Before we can switch off the old transformers, we need to extend the substation site so we can install the new 400kV transformers and equipment and connect them to the network.

This is because the old transformers are essential to keep the lights on and the power flowing while we put the new substation in place.

We are still developing detailed plans, but the project will include:

- A new 400kV SF<sub>6</sub>-free Gas Insulated Switchgear (GIS) substation building, which will house electrical switchgear, plant and ancillary equipment
- Four 400/132kV transformers
- SF<sub>6</sub>-free GIS double busbar to connect the switchgear to each circuit
- Internal access roads and vehicle parking
- Drainage and mitigation (for example, A new steel palisade fence and internal fencing around the live compound to ensure safety and security).

## Overhead line changes at Westfield



We will need to make minor alterations to the existing overhead lines at Westfield to connect them to the new substation, as shown here.

At the moment, the overhead lines cross the site for the proposed new substation. We plan to put up a temporary mast so we can divert the overhead lines away from the site, removing six existing towers (pylons) and allowing us to build the new substation.

We will then need to put up two new towers and install some underground cables to connect the new substation to the network before removing the temporary mast and line diversion.

## What will happen at Mossmorran substation?



Before we can switch off the old transformers, we need to extend the substation site so we can install the new 400kV transformers and equipment and connect them to the network. This is because the old transformers are essential to keep the lights on and the power flowing while we put the new substation in place.

We are still developing detailed plans, but the project will include:

- A new 400kV SF<sub>6</sub>-free Gas Insulated Switchgear (GIS) substation building, which will house electrical switchgear, plant and ancillary equipment
- Four 400/132kV transformers
- SF<sub>6</sub>-free GIS double busbar to connect the switchgear to each circuit
- Space for additional transformers to be installed in future
- Internal access roads and vehicle parking
- Drainage and mitigation (for example, landscaping)
- A new steel palisade fence and internal fencing around the live compound to ensure safety and security.

## Overhead line changes at Mossmorran



We will need to make minor alterations to the existing overhead lines at Mossmorran to connect them to the new substation, as shown here.

At the moment, the overhead lines cross the site for the proposed new substation. We plan to put up two temporary masts so we can divert the overhead lines away from the site, removing three existing towers (pylons) and allowing us to build the new substation.

We will then need to put up one new tower to connect the new substation to the network before removing the temporary masts and line diversion.

## We want to hear your views!



### Our public consultation runs until Friday 30 August 2024.

SPEN attaches great importance to the effect our work may have on the environment and local communities.

We want to hear what local people think about our plans, to help us develop the project in the best way.

Please give us your views on our plans to extend the substations and the proposed changes to overhead lines. Please also let us know if there is anything else you would like us to consider, such as site access.



You can find more information, project documents and an online feedback form at our project website: [https://www.spenergynetworks.co.uk/pages/tkup\\_project.aspx](https://www.spenergynetworks.co.uk/pages/tkup_project.aspx)

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At this stage, your comments are not representations to the planning authority. When we submit applications for development consent in the future, you will be able to make formal representations at that stage.