

Introducing The Eastern Link Project



Have your say on the 'Torness – Eastern Link' statutory consultation

SP Energy Networks is consulting on a vital new energy link between Scotland and England, known as the Eastern Link Project. The Eastern Link project will support the growth of renewables as we aim to reach Net Zero carbon emissions by 2045 in Scotland, and 2050 in the rest of the UK.

To enable us to deliver this crucial project, we need to build a new substation and converter station and lay underground cables and marine cables at our preferred locations in East Lothian.

Torness is already an energy generating site and the landing site for major offshore wind farm connections, which are of

national importance. Construction is expected to begin in 2023 to enable the project to be fully up and running by 2027.

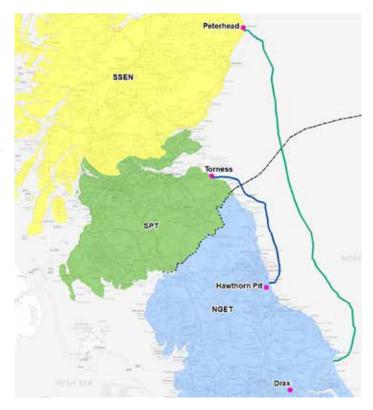
Your views are important to us, so please take the time to read this leaflet, visit the website to find out more, and respond to the consultation.

Site selection

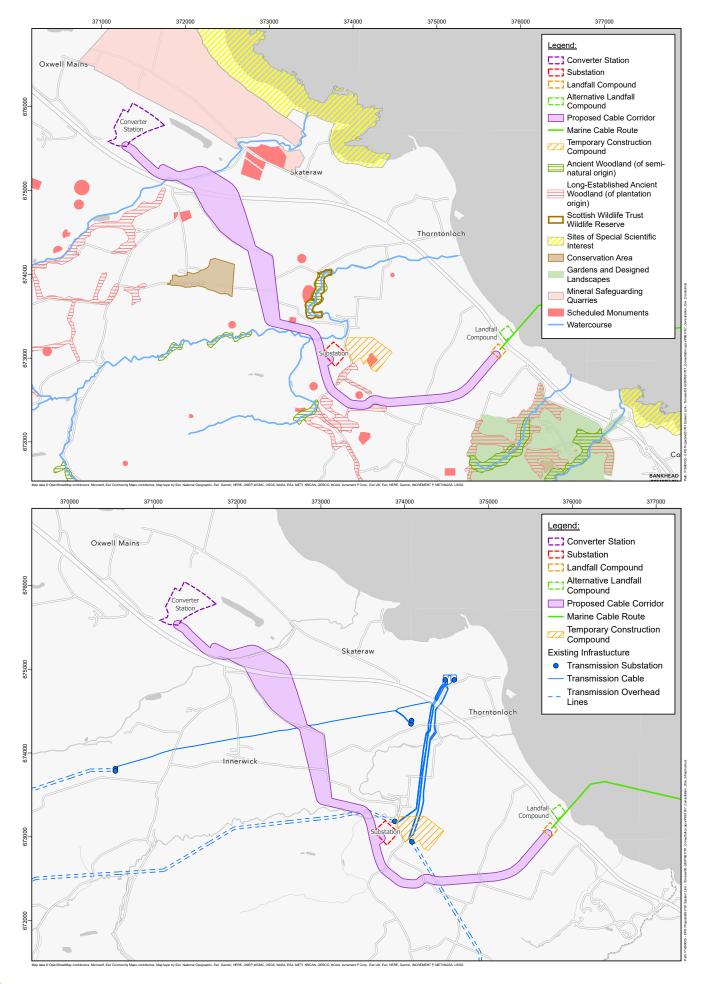
There is a significant level of offshore wind generation connected, contracted and scoping to connect in and around Scotland, particularly in the east, due to the great resource availability in the area. The existing network is close to the coast and therefore provides good opportunities to develop such a link. SP Energy Networks has carried out a full assessment of potential impacts (constraints), along with a seabed survey and detailed analyses of the area around Torness. This has enabled us to find the most suitable locations for the required infrastructure. This has included looking at access and residential areas, existing and planned energy developments, environmentally protected areas, sites of important historic and archaeological interest and fishing and wider marine requirements.

From our initial analysis, we have then further refined our assessment, taking account of technical constraints and engineering considerations. Our preferred options seek to balance our technical requirements, cost of the works for the UK consumer, alongside impact on the environment and the people who live, work and enjoy spending their spare time in the area.

Protected woodland in the area will not be affected by the development and any habitats will be fully restored after construction.











Cables will be installed underground

Marine cables will need to be installed in addition to underground cables

Site in detail

There are three components to SP Energy Networks plans that we are consulting on:

- a new substation
- a new converter station
- underground cables and marine cables

The proposed convertor station and the substation have been located away from residential locations and communities, but close enough to the coast and existing electrical infrastructure as to reduce the length of underground cabling required.

SP Energy Networks is proposing to locate the new substation at Branxton, East Lothian, 1.8 kms south of Torness Power Station. The new converter station is planned to be located east of the Dunbar Energy Recovery Facility, East Lothian. Located in an existing industrial setting, this site has been chosen because it is far from residential buildings. The converter station and substation will be fenced off to ensure the safety of staff and members of the public. Once constructed, the cable corridors will not be fenced.

Approximately 6 kms of underground cabling is proposed, all of which will be placed underground, therefore minimising the visual impact. However, the construction of these underground cables will require excavation, installation of temporary access roads, equipment and material laydown areas and some underground drilling.

Depending on the final design we would expect main construction activities to take 2 to 3 years to enable the project to be fully up and running by 2027.

About the project

SP Energy Networks is consulting on its proposals for a new substation, converter station, underground cables and marine cables at our preferred locations near Torness, East Lothian.

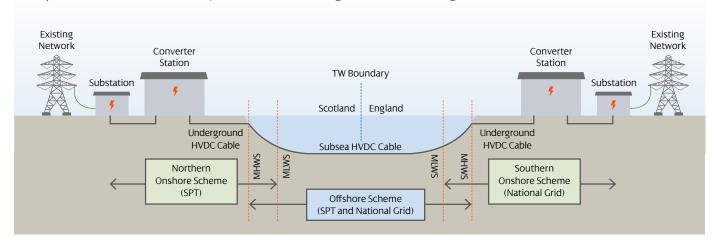
The proposed development is necessary to help meet Net Zero carbon emissions, which refers to the balance between greenhouse gas production and the amount being removed from the atmosphere.

Renewable energy generated in Scotland sometimes surpasses levels of local demand, and so this needs to be exported to the rest of the UK. This guarantees Scotland's energy security of supply as well as creating job opportunities in the process.

The Eastern Link project is being jointly managed by SP Energy Networks and National Grid.

SP Energy Networks is a Distribution and Transmission Network Operator. We keep electricity flowing to homes and businesses throughout Central and Southern Scotland, North Wales, Merseyside, Cheshire and North Shropshire. We do this through the network of overhead lines and underground cables which we own and maintain. SP Energy Networks transmits and distributes energy to over 3.5m homes and businesses in the south of Scotland, north Wales and the north-west of England and is responsible for the operation and maintenance of over 105,000km of overhead lines and underground cables.

In this public consultation we are asking for people's views on the location of the substation, converter station and routes of the underground cables as well as the potential access routes and construction compounds (where materials, equipment and staff welfare facilities will be stored). The consultation is focused on our preferred coastal landfall site just south of Thortonloch Beach to the preferred converter station site east of the Dunbar Energy Recovery Facility. This includes a potential location for a new substation at Branxton and our preferred route for underground and marine cables.



What is a Converter Station and why is it necessary?

The transition of electricity generation away from large fossil fuel power stations to clean renewable sources is a key element of tackling climate change. As conventional forms of fossil fuel generation are phased out, we need to ensure that renewable generation can be brought onto the Grid.

Work has begun to develop two bi-directional high voltage direct current (HVDC) subsea links between Scotland and the north of England. One between Torness in East Lothian and Hawthorn Pit in County Durham is needed in 2027. The other, which will run between Peterhead in Aberdeenshire and Drax in North Yorkshire, is required in 2029. The UK electricity system is mainly AC (alternating current), which

is ideally suited to local transmission and distribution of electricity as it is easily transformed in stages from high voltages required for longer routes to the voltages used in businesses and homes. However, where large electricity capacity is needed to be transmitted over long lengths of cable or overhead lines, the use of direct current (DC) significantly increases both the efficiency and the stability of the wider network.

On these projects it has been decided to use DC marine cables. This will require the associated converter stations, land cables and a new network switching station (substation) onshore to connect into the existing networks at each end.

Project timeline







Spring 2021 Environmental surveys



Summer 2021
Public
consultation



Winter 2021 and Spring 2022 Planning Submissions



2023 Construction to begin, if planning consent secured



2027 Project complete

What disruption can I expect?

Some disruption will be inevitable in a project of this size, but it is too early to be precise until we have developed our final proposals. We always take every opportunity to minimise the impacts of construction and we will talk to all local communities who will be affected. Detailed information will be available in the next round of consultation.

SP Energy Networks will work in partnership with the local community to minimise local access and transport issues. We will aim to minimise any potential impact on environmentally sensitive areas and have carried out a detailed siting and routing assessment to identify and avoid these areas wherever possible. Following consultation, we will be carrying out detailed surveys and assessments of the proposed options.

Once construction is completed, disruption to the local community is expected to be minimal. The converter station will have no permanent staff presence however there will be a requirement to carry out routine maintenance.

Why is it important to take part in the consultation?

It is important that we hear the views of local people and we'll be speaking to local communities, landowners and elected representatives to explain our plans and ask for feedback.

We are in the planning stages of the project, and we will need consent from East Lothian Council before our plans are finalised. As part of the process, we'll be presenting our plans to the local community and getting your feedback on our proposed project. To do this, we will be holding online virtual public consultations via our dedicated website.

We will be holding virtual public consultation events for the project, from 2nd to 27th August 2021 for you to explore the material and share feedback.

Due to the ongoing restrictions surrounding Covid-19, our public consultation will be online and can be accessed at **www.spenergynetworks.co.uk/eastern_link**. As well as providing information about the proposal, the website and consultation provides an opportunity to see an online 3-D model of the proposals.

How are we consulting?

We will be holding online virtual public consultations via our dedicated website: **www.spenergynetworks.co.uk/eastern_link**We are holding live Q&As and meet the team video sessions on our website so that you can engage with the team directly.

Our consultation dates and times are below: LIVE Q&AS DATES AND TIMES

TUESDAY 10th August 2021 (8am – 12 noon) THURSDAY 12th August 2021 (4pm – 8pm) THURSDAY 19th August 2021 (4pm – 8pm) FRIDAY 20th August 2021 (8am – 12 noon)

MEET THE TEAM VIDEO SESSIONS DATES AND TIMES

TUESDAY 24th August 2021 (6pm – 8pm) THURSDAY 26th August 2021 (8am – 10am)