### Nautilus Interconnector

National Grid Interconnector Holdings is proposing to develop Nautilus, a second Interconnector between Belgium and Great Britain, to provide a 1.4 GW HVDC electricity link between the two countries.

Electricity provided by Nautilus will be transported under the North Sea via underground subsea cables which will be buried onshore at a point known as 'landfall' before connecting into an onshore converter station and the national grid.

Potential high level cable route options and various landfalls along the East Suffolk Coast are currently being assessed for Nautilus.

In order to connect Nautilus to the national grid, discussions have been ongoing with National Grid Electricity Transmission (NGET) and the System Electricity Transmission (NGET) and the System Operator, From this, NGET have provided a Connection Agreement to use a new 400 kilovotts (kV) substation provisionally referred to as "Leiston 400X\* substation". This is the same substation that Sottisin Power Renewables (SPPI) offshore windfarms East Angla 11 Na of 2 are proposed to be linked to, NGH, SPR and NGET are currently working on the premise that all projects will be connecting to the same substation "Leiston 400xV substation".

Nautilus is currently at a very early stage of its development. Should consent be granted, a Final Investment Decision is planned for 2024. Following this, construction will commence, and the project could be operational by 2028.





#### Design

The design for the converter station has not yet been developed. A typical operational footprint for a converter station covers an area of five hectares (12 acres) with a maximum height of 24 metres. The exact size and height will depend upon the specific proposals for mitigation and construction.

The business is constantly challenging its supply chain to bring down the size of converters. The final design of the converter station will be developed through a thorough consultation process with stakeholders and the local community, as well as through collaboration with the supply chain.

# Key benefits



1.4 gigawatts (GW) of secure, sustainable energy for British consumers



East Anglia TWO Offshore Windfarm and East Anglia ONE North Offshore Windfarm





## Welcome

Welcome to our Phase Four Consultation Public Information Day about our proposed East Anglia TWO and East Anglia ONE North offshore windfarm projects. Members of our project team are on hand today to answer your questions and we welcome any feedback you have.

As part of our pre-application consultation, ScottishPower Renewables (SPR) has published separate Preliminary Environmental Information Reports (PEIRs) for East Anglia TWO and East Anglia ONE North.

Each PEIR provides information on site selection; a detailed project description; preliminary impact assessments; potential cumulative impacts and mitigation measures to reduce or prevent environmental impacts. The content presented today and in each PEIR is shaped by the feedback we received from previous consultation rounds.

This is Phase Four of our pre-application consultation and we will use your feedback to help finalise our project proposals and impact

assessments, prior to submitting separate consent applications towards the end of 2019.

Freepost envelopes are available to return feedback on each project or you can email us at: eastangliaonenorth@scottishpower.com eastangliatwo@scottishpower.com

All material shared today, including each PEIR, is available to download from our website. Each PEIR (excluding appendices) is also available to view in hard copy format at the following locations: Aldeburgh Library; Aldeburgh Town Council; Woodbridge Library; Leiston Town Council; Friston Village Hall; Suffolk County Council and OrbisEnergy Centre (please check our website for times when these documents are available to view).

Application -Following the initial scoping phase of consultation, the project progressed to the Environmental Impact Assessment Updates to design - In response to the feedback we receive during Phase Four Consultation, we will consider further refinements to the design of the project.

Consent Application - Each project submits an application for consent, together with a range of supporting documents including the Environmental Statement to The Planning Inspectorate for examination.

**Examination** - The Planning Inspectorate will consider the application and will consult with statutory and key stakeholders, including local authorities. Members of the public will also have the opportunity to make representations during examination.

www.scottishpowerrenewables.com

East Anglia TWO Offshore Windfarm and East Anglia ONE North Offshore Windfarm



# East Anglia TWO and ONE North Onshore Development

The offshore export cables will make landfall north of Thorpeness, at a location which has been selected following consultation with statutory stakeholders and technical experts.

Horizontal Directional Drilling (HDD) will be undertaken to facilitate the offshore export cables coming onshore and to avoid interaction with the cliffs, beach and intertidal area.

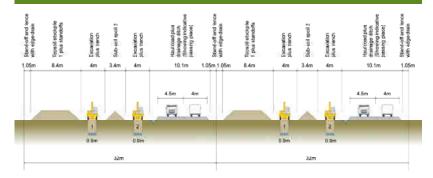
From landfall, underground cables would be installed to the substations at Grove Wood, a distance of approximately 9km.

The width of the onshore cable route would typically be 32m per project during construction, reducing to 16.1m at important hedgerows and the woodland at Aldeburgh Road.

Where trenchless techniques are used (i.e. at the landfall), the width would be wider.

An onshore substation would be required for each project, both connecting to a single National Grid substation at Grove Wood. All substations will be located adjacent to each other to maximise the use of existing screening and improve the effectiveness of new landscaping, which will reduce the visual impact of the substations.

The existing overhead lines will require modification to facilitate the grid connection, which could include up to one additional pylon and require strengthening works to the existing pylons in the immediate area. New cable sealing end compounds will also be required to connect the overhead lines to the National Grid substation.



East Anglia TWO and East Anglia ONE North Indicative cable trenching arrangement and working area

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