Nautilus onshore

nationalgrid

We began our site selection process with an initial desk-based appraisal and have since been undertaking assessments on siting and routeing options.

Our shortlisted converter station search areas, landfall and cable route options, are detailed on the map. For our Nautilus DCO application, we intend to narrow this down to:

- One converter station site of five hectares
- One landfall site
- One HVDC cable corridor from the landfall location to the converter station
- One HVAC cable corridor from the converter station to the NGET substation

Our connection location

This work has been based on the reasonable assumption of a connection location at the Friston NGET substation as proposed by ScottishPower Renewables (SPR). Our feasibility and assessment work based on a Friston substation connection continues and we are seeking your feedback on these options[1].

Converter station search areas, landfall site options and cable corridor options

We began with a search area for potential converter station sites within five kilometres (km) of the proposed NGET substation in Friston. We looked at all of the known environmental features in this five km search area to identify areas which featured constraints that we would want to avoid if possible, such as environmentally designated sites, heritage assets, hydrology features, recreational areas, landscape designations, villages, towns, and existing and known infrastructure. For potential landfall locations our search area consisted of coastline adjacent to this five km search area in order to keep the cable route as direct as possible and to limit the potential impact. This process included desk-based research and a series of ecological surveys.

We undertook a further assessment of these locations to evaluate and identify a shortlist of the most suitable converter station search areas, landfall site options and cable corridor options. Key criteria used for selecting the most suitable options included:

- The potential to affect the Suffolk Coast and Heath AONB and Heritage Coast
- Visual impacts
- Proximity to Public Rights of Way and cycle routes
- Proximity to residential properties, existing infrastructure and future developments
- Impacts to local heritage and archaeological assets

For our landfall site options, nearshore constraints were also considered including:

- Shipping and vessel activity
- Commercial fishing and recreational usage
- Marine archaeology

Converter station search areas

We have identified five shortlisted converter station search areas.

A typical footprint for a converter station site covers an area of five hectares (12 acres). This includes space for construction lay down areas as well as the converter station building. The converter station will have a height of up to 24 metres. The exact size and height will depend upon the specific proposals, and location taken forward.

Cable route corridors

We have undertaken an initial screening of constraints to identify possible cable corridors between the emerging landfall options and converter station search areas, and between the converter station search areas to the proposed National Grid substation in Friston.

Landfall options

We have identified five landfall location options within the search area.

The landfall location is the point where our cables come ashore and typically requires a working area of two hectares during construction. The cables will be buried underground at the landfall site.

We will be using feedback to undertake further detailed assessments to identify preferred converter station and landfall sites.

*While Landfall E has not been discounted, it is heavily constrained from an onshore perspective. Landfall E is located within an Important Bird Area (IBA), RSPB reserve and Site of Special Scientific Interest (SSSI). It is also located close to a Special Protection Area (SPA) and County Wildlife Site. These ecological features present substantial siting and routeing challenges. As such, Landfall E is not preferred from an onshore perspective. However, due to environmental features and technical constraints in the marine environment we need to consider this Landfall options from an offshore perspective in order to confirm that one or more of the landfall options that have been identified are achievable. We will also consider any engineering measures which could reduce potential effects if it emerges that there is a need for Landfall E to be progressed.

[1] Our connection agreement for Nautilus relates to a new National Grid Electricity Transmission (NGET) substation on the Sizewell 400 kilovolts (kV) network in the 'Leiston area'. The connection agreement therefore relates to an area rather than a specific location.