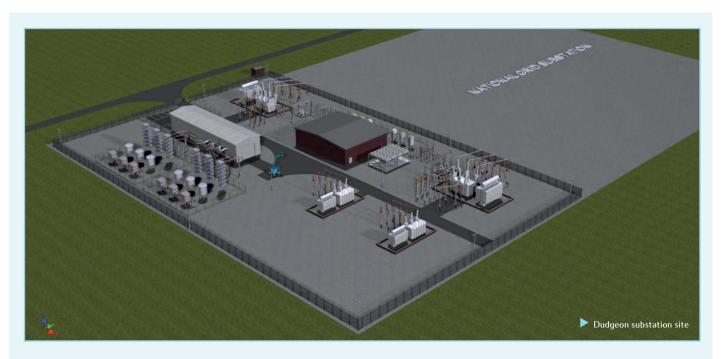
DUDGEON Offshore Wind Farm

Onshore electricity substation Fact Sheet



Constructing the Dudgeon electricity substation at Necton in Norfolk

The Dudgeon Offshore Wind Farm will be built 20 miles off the coast of Cromer in North Norfolk, and it will be fully installed by late 2017. In order for the electricity generated by this offshore wind farm to be transmitted to National Grid electricity distribution network, a new substation will be built adjacent to the A47 highway outside the village of Necton in Norfolk.

The planning consent for the construction of the substation and its associated infrastructure was granted by Breckland District Council in October 2012. In order to allow for an optimised design with a 21% reduced footprint, the consent was varied in May 2014. The site preparation works took place during the Summer and Autumn months of 2014, and work will start to construct the substation during March 2015.

The 67 offshore wind turbine generators have a total capacity of 402 MW and will produce sufficient electricity to power over 410,000 UK homes. The electricity will be transmitted to shore at Weybourne Hope in North Norfolk by cables laid on the seabed, and then by onshore underground cables to the Necton site.

Two separate substations will be constructed on the site; the Dudgeon Offshore Wind Farm substation will be built and equipped



National Grid substation site



Substation site preparation works in 2014

by Siemens Transmission and Distribution (Siemens), while National Grid will construct and commission the adjacent substation.

The construction works and testing and commissioning will be completed by November 2016, and the first electricity from the first operational wind turbine is expected to be delivered from the wind farm to the National Grid during the first quarter of 2017







Questions and Answers

What is the timetable for the construction works?.

Both Siemens and National Grid will start work in March 2015, and work on the site is not scheduled to be completed until November 2016. However, the majority of the construction activity will be finished by April 2016, after which National Grid will have some tower works to undertake during May and July 2016 and Siemens will be undertaking equipment testing and commissioning.

What will be the site working hours?

The planning consent associated with the site restricts construction working hours to 07:00-18:00 hours from Monday to Friday and from 07:00-13:00 hours on Saturday. No work can take place on Sunday. Any changes from these working hours will need prior written consent from Breckland District Council.

What will be done to minimise noise and dust pollution during construction?

The construction noise will be kept below 85db using modern machinery. A noise reduction strategy will be implemented which will include turning off machinery when it is not in use. Dust will be suppressed on site using a mobile water bowser.

How will the site be managed, secured and lit?

The site will be permanently fenced off, and the main access will be from the A47 highway. The site entrance will be secured through the use of a security cabin with a drop-down barrier. The security cabin will be manned 24 hours/7 days per week. There will be no site lighting after 18:00 hours, although low level pedestrian lighting will be set up around the compound during daylight saving hours from October 2015 - March 2016.

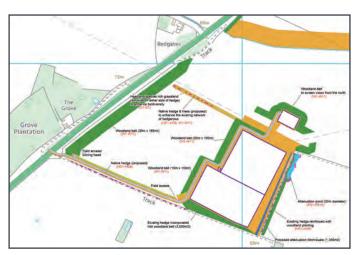
Will site construction traffic be coming through Necton village?

Diversion routes should ensure that there is no construction traffic coming through Necton village. A Traffic Management Plan has been developed by a specialised traffic management contractor to manage the flow of traffic entering and leaving the site from the A47 highway. All suppliers will be issued with the Traffic Management Plan informing them of local restrictions and diversions. It is hoped that a request for a temporary speed reduction on the A47 approach to the site will be granted.

What is the benefit of the substation?

The substation is a part of the Dudgeon Offshore Wind Farm, whose 67 6MW turbines will produce sufficient clean electricity to supply 410,000 British homes. Without this substation, it will not be possible to transmit this energy to customers through the National Grid transport system

Landscaping the substation site



Ecology and bio-diversity outline for the substation site

Landscaping is part of the Ecological Mitigation Management Plan and Bio-Diversity Management Plan which has been agreed with Breckland District Council for the electricity substation site.

The landscaping programme will be implemented by a specialist contractor, and the details of that plan and its associated timetable will be finalised by the end of February 2015.

Dudgeon Offshore Wind will be seeking to establish a Focus Group with representation from residents in Necton with the objective of giving input regarding the landscaping plan and the appearance of the main substation building.

The computer generated images below show how planting could help screen the substation site over the coming years











