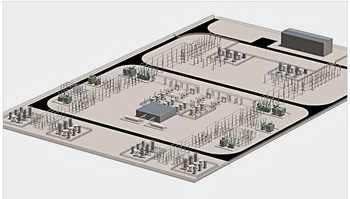
CALEDONIA
Offshore Wind Farm

PROPOSED DEVELOPMENT DESCRIPTION

The 2GW Caledonia OWF will consist of the following onshore transmission infrastructure:

- Up to six offshore export cables, with a nominal voltage of up to 275kV
- Landfall site, with up to six transition joint bays
- Up to six onshore cable circuits with a nominal voltage of up to 275kV between the landfall site and onshore substation
- Onshore substation
- Up to six onshore cable circuits with a nominal voltage of up to 400kV, from the onshore substation to the grid connection point.

All onshore transmission infrastructure (except the substation) will be underground. During construction, a number of temporary construction compounds, storage facilities, laydown areas and access and haulage tracks will be required. These areas will be reinstated once construction is complete and infrastructure will not be visible.



PROPOSED DEVELOPMENT DESCRIPTION

The onshore transmission infrastructure includes all works required to transport energy to the grid connection point at the existing New Deer substation. This includes:

CABLE LANDFALL POINT:

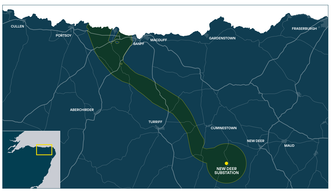
The landfall point is where the offshore export cables from the offshore substation platforms arrive on land. These will be buried below the seabed and will remain underground as they come onshore. The potential landfall location is situated between Boyne Bay, east of Portsoy and Boyndie Bay.

The preferred landfall site will be identified by considering environmental and engineering/ technical risks and cost constraints.

SUBSTATION

Caledonia OWF will connect to the National Electricity Transmission System at the existing SSEN Transmission Substation at New Deer.

The project is currently identifying suitable locations for one AC substation with a footprint of approximately 250m x 500m, up to 15m high, and within a 10km diameter of the existing New Deer substation.



CABLE ROUTE

Up to six onshore cable circuits, each consisting of three single core cables and operated at up to 275kV, will be routed underground from the landfall site to the onshore substation.

The cable route will have a maximum distance of approximately 40km and land will be fully reinstated after the works, with no overhead pylons required.

The map above visualises a preferred route corridor within the scoping area, derived by considering technical and environmental factors.

The project is currently undertaking baseline environmental surveys within this area to identify a ca. 100m working corridor to house the onshore infrastructure. The refined corridor will form the basis of the planning application to Aberdeenshire Council.

OW
OCEAN WINDS