Onshore cable route

Evolution of Design

At our first round of consultation in November 2023, we presented our preferred option to connect Buchan Offshore Wind to Peterhead substation, showing our landfall area near Rattray Head, our onshore cable route options and our shortlist of onshore substation search areas.

After consideration of feedback received from local people, Aberdeenshire Council and statutory bodies, we refined our proposals to take account of, in particular, where the onshore cable route should pass Keyhead and St Fergus, and we also reduced our onshore substation search areas from three to two.

In November 2024 we presented the latest proposed onshore development which was refined to include our landfall area near Rattray Head and an onshore cable route from the landfall area heading south towards two onshore substation search areas in the Peterhead Area. We were also able to confirm Peterhead substation as the grid connection point for the project.

Feedback received from the November 2024 consultation, as well as additional technical and environmental survey work and landowner interactions, has informed further refinement of the proposed onshore development. Our objective remains to balance environmental and technical factors and identify a proposed onshore development which causes the least disturbance to the environment and those who live, work and recreate within it.

Proposed Onshore Development

The landfall area near Rattray Head remains the same, as does the majority of the onshore cable route which heads south from the landfall area towards Peterhead. In the Peterhead area, we have removed one of our substation search areas and have updated the red line boundary as a result of this change, as shown on the adjacent map.

The landfall area will host up to three transition joint bays where the offshore export cables will be joined on to the onshore underground cables.

The onshore underground cables will transmit the power at a voltage of up to 275,000 volts (275kV) to the onshore substation. They will be installed within a 100m corridor within the red line boundary for the onshore cable route. The precise corridor will be confirmed following detailed design.

The onshore substation will occupy a maximum footprint of 300m x 250m within the substation search area. Here, the power will be stepped-up to a voltage of 400kV for onward transmission, via 400kV underground cables, to Peterhead substation, the project's grid connection point.