

Toni-Marie McGinn
Marine Licensing and Consenting Casework Manager
Licensing Operations Team, Marine Directorate
Scottish Government
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

10/07/2022

Dear Toni-Marie

We would like to request a variation to the Beatrice Marine Licence (licence number 04462/18/1), to allow for temporary installation of scaffolding to enable repair of an inter-array cable at the J-tube of BEF6.

The cable repair is required urgently to restore full electricity export capability to BEF6 and the other five wind turbines in Beatrice cyan string. An initial fault (evidenced by a 'bubble', i.e. localised heat damage to cable insulation material) was found at the cable, within the BEF6 jacket structure, in 2021. During repair of this fault (conducted from within the jacket structure) in October 2021, a further fault was found which could not be directly accessed from the jacket structure.

Options were investigated for repair of this second fault, with a preference for avoiding a subsea cable repair. Following an options feasibility study it was confirmed in May 2023 that an out-of-sea repair would be possible where the cable passes through the J-tube on the underside of the BEF6 jacket transition piece, and this was selected as the repair option. The works will comprise:

1. De-energisation of cyan string.
2. Erecting scaffolding on the underside of the BEF6 jacket transition piece, to enable access to the works locations.
3. Cutting out a section of the J-tube (painted steel) to enable access to the cable. The section removed will be a maximum of 7 metres long, and will be removed in sections of less than 25kg. A maximum of 700kg of steel will be removed, with no deposits to sea.
4. Completing the cable repair with a new section of cable and cable joint.
5. Installing a new manufactured section of J-tube (a clamp/cover), estimated to be approximately 700kg, likely to be primarily galvanized steel.
6. Re-energisation of cyan string and ongoing monitoring of the repair location.

The scaffolding will be installed beneath the jacket transition piece; the scaffolding location is therefore represented by the geographical centre point of the BEF6 jacket, at the coordinates below:

Location	Latitude (ddm)	Longitude (ddm)
BEF6 jacket geographical centre point	58° 14.169' N	2° 54.170' W

The maximum volume of the scaffolding is calculated as 6,144m³.

I trust this information is suitable to support our licence variation request.

Kind regards

Redacted

Joe Deimel

Environmental Advisor

On behalf of Beatrice Offshore Windfarm Limited