

Environmental and Social Data Sheet

Overview

Project Name: *BEATRICE OFFSHORE*
 Project Number: *2015-0314*
 Country: *United Kingdom*
 Project Description: *The project consists of an offshore windfarm of around 600 MW, located about 14 km from the Caithness coast near Wick, Scotland*

EIA required: yes

Project included in Carbon Footprint Exercise¹: yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project's main objective is to generate electricity from renewable energy sources per year. It is located next to an existing demonstration offshore wind farm.

The UK Government has set a target of generating 15% of energy from renewable sources by 2015, with a desired aim of 20% of energy from renewables by 2020. In a similar move the Scottish Government has set a more ambitious target for a 30% renewable energy share by 2020. The Scottish government has conducted a Strategic Environmental Assessment (SEA) in 2002/03 for its plan to develop offshore wind off its coast. For this purpose, the SEA broke down the coastline in six regions and identified six short term sites suitable for development, as well as 25 medium term search area. The project is located in the only short term site identified in the North East Region area and is compliant with the development recommendations of this SEA.

By virtue of its technical characteristics the project is classified as an Annex II-project according to the EIA-Directive 2011/92/EU. National legislation requires a full EIA including public consultation for offshore wind farms. The promoter's Environmental Impact Study (EIS) analyses the project's environmental and social impacts alone and cumulated with other activities in the same onshore and offshore area. The EIS concludes that the project's most relevant impacts derive from pile driving during construction (noise impacts on marine mammals; noise and barrier effects on sand eel, herring, Atlantic salmon and cod), from the offshore cable installation (landfall within the Spey Bay Site of Special Scientific Interest), and from operating the wind turbines (potential collisions of great black-backed gulls from the neighbouring East Caithness Cliffs SPA, ca. 11 km from the site). These impacts are adequately mitigated through the following means: a piling strategy to mitigate noise impacts in relation to marine mammals and fish, horizontal drilling of the cable of the offshore cable to minimise impacts on the SSSI, and pre-construction ornithological monitoring to inform any additional mitigation efforts in relation to SPA bird populations to be included in the Environmental Management Plan.

There are three designated Natura 2000 sites in the vicinity of the project, the two closest being at ca. 3 km (Moray & Nairn Coast SAC and Lower River Spey & Spey Bay SPA). A comprehensive Appropriate Assessment (AA) has been pursued by the competent authority, concluding that the project has no adverse effects on the integrity of any protected site provided that proposed mitigation measures are put in place. In June 2015, the promoter was informed by UK authorities of a proposal to designate a new offshore Special Area of

¹ Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO₂e/year absolute (gross) or 20,000 tons CO₂e/year relative (net) – both increases and savings.

Conservation covering the entire sea area where the wind farm is located, for the primary purpose of supporting harbour porpoise, a marine mammal. It is understood that there is concern about the level of protection for this species. If this proposal is approved, the environmental consent for the project will have to be reviewed, and an additional AA will have to be prepared by the competent authority. Such a procedure – if realised - is expected to take place towards the second half of 2016. The Bank's services will ensure that this procedure is again in accordance with the applicable EU directives.

All key consents were or will be granted during the period 2014-2015 by the competent authorities after appropriate consultation of relevant stakeholders. The consents comprise a comprehensive set of mitigation measures and monitoring obligations, in-line with the EIS and AA in relation to the existing Natura 2000 sites.

During the same period, the promoter has decided to down-scale the project from an initially analysed 1000 MW to 588 MW. This decision also addresses mitigation measures included in the permit.

It is proposed that the promoter undertakes to forward to the Bank an electronic copy of the basis for the additional AA (if the new offshore SAC is approved) and the environmental monitoring reports that the promoter submits to the competent authorities. In addition, the Bank will include contractual conditions whereby the promoter will implement any additional mitigation that may be required in relation with the new offshore SAC.

With the above conditions in place, the overall environmental and social impact of the project is considered to be acceptable to the Bank.

Environmental and Social Assessment

Environmental Assessment

The promoter has permitted the project under two separate EIA processes: one for the wind farm and offshore transmission works (offshore substations and two subsea export cables of ca. 65 km length), and another for the onshore transmission works, i.e. the cable landfall point, a new high-voltage onshore substation and a ca. 19 km underground cable connecting the landfall and substation sites.

Following rounds of public consultation and expert panel advice, the wind farm and offshore transmission works EIA was approved in 2014 and the onshore transmission works EIA is expected to be approved by end 2015. Meanwhile, an update is being finalised to take into account later changes in project design as well as the cable landing and onshore section. This update includes a significant downsizing of the wind farm (from 1000 MW initially permitted to 588 MW) and a reduction of the number of wind turbines (from 277 to 84 turbines) due to the above decrease in total capacity and to the increase of each individual turbine rated capacity. The EIA includes the assessment of impacts on ship traffic and safety, flora and fauna, noise, humans, as well as cumulative impacts from a neighbouring offshore wind farm.

With adequate precautionary measures and subject to the outcomes of the ongoing pre-construction studies required in the existing permit, the impacts on fauna and flora, including on local and migrating birds, marine mammals, benthos and invertebrates are considered to be minor and acceptable. Precautionary measures include inter alia appropriate working procedures, horizontal drilling of the export cable landfall, safety zones from shipping routes, appropriate piling methods, acoustic deterrence of marine mammals and noise monitoring, and fitting of the turbines with visual signs and lighting to prevent ship safety hazards. The existing EIA studies and the permit approval identified some gaps in knowledge related to the behaviour of local and migrating bird species and sea mammals as well as underwater noise, which will be subject of a monitoring programme during construction and operations.

As part of the original EIA, an Appropriate Assessment and an addendum to the AA were carried out to analyse the impact on neighbouring Natura 2000 sites, also considering

cumulative impacts with the Moray Offshore wind farm. The AA concludes that there are no significant negative effects on Natura2000 sites.

In June 2015, the promoter was informed by the competent authorities that by the end of 2015 they may officially propose an offshore Special Area of Conservation (pSAC) to the European Commission which covers the entire sea area where the project is located. The timeline has now shifted to the second half of 2016, and public consultation on the pSAC conservation objectives may be held around Q4 2015. If this proposal is issued the key consent (section 36, Electricity Act) for the project will have to be reviewed as it is likely to affect the site. This is expected to take place towards the end of 2015, and an additional Appropriate Assessment in relation to impacts to the pSAC may be required. Possible consequences could be a revised piling strategy or micro-siting of wind turbines and export cables in order to better address the conservation objectives of the pSAC.

EIB Carbon Footprint Exercise

The direct CO₂ emissions of offshore wind farms are deemed negligible.

In accordance with the current Bank's Carbon Footprint methodology it is calculated that the estimated emissions savings of the project are 1294 kilo-tonnes of CO₂ equivalent per year. This calculation assumes that 75% of generated electricity substitute power generation in existing fossil fuel based power plants whilst 25% substitute power generation in new gas-fired combined cycle power plants.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

Other Environmental and Social Aspects

The promoter is a large European energy company. It has a good environmental and social management capacity.