

ARKLOW BANK WIND PARK PHASE 2 **ONSHORE GRID INFRASTRUCTURE**

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

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1 Preface

1.1 Arklow Bank Wind Park

A Foreshore Lease was awarded to Sure Partners Limited (SPL), a wholly owned subsidiary of SSE plc (SSE), for the development of the Arklow Bank Wind Park (ABWP) on the Arklow Bank in 2002. The Foreshore Lease permits the development of an offshore wind farm which comprises wind turbines, offshore substations and associated cables. The Lease allows for the construction of up to 200 wind turbines with an export capacity of 520MW.

ABWP Phase 1 was constructed in 2003/2004. It is owned and operated by Arklow Energy Limited. It consists of seven wind turbines and operates under a sub-lease of the main Foreshore Lease.

SPL now proposes to develop the remainder of ABWP, Arklow Bank Wind Park Phase 2 (the Project) under the existing Foreshore Lease.

1.2 SSE plc and SSE Renewables

SSE plc is the leading generator of renewable electricity in the UK and Ireland, providing energy needed today while building a better world of energy for tomorrow. It develops and operates low-carbon infrastructure supporting the net zero transition, including onshore and offshore wind, hydro power, electricity transmission and distribution grids and efficient gas-fired generation, alongside providing energy products and services for businesses. UK-listed, SSE is a major contributor to the UK and Ireland economies, employs 12,000 people and is real Living Wage and Fair Tax Mark accredited.

SSE Renewables is part of the SSE plc Group and is a leading developer, operator and owner of renewable energy across the UK and Ireland, with a portfolio of around 4GW of onshore wind, offshore wind and hydro. Its strategy is to drive the transition to a net zero future through the world-class development, construction and operation of renewable energy assets.

SSE Renewables owns nearly 2GW of operational onshore wind capacity with over 1 GW under development. Its 1,459MW hydro portfolio includes 300MW of pumped storage and 750 MW of flexible hydro. Its operational offshore wind portfolio consists of 487MW across two offshore joint venture sites, Beatrice and Greater Gabbard, both of which it operates on behalf of its asset partners.

SSE Renewables has the largest offshore wind development pipeline in the UK and Ireland at over 6 GW, of which around 3GW is in construction or consented. It is currently constructing the world's largest offshore wind farm, the 3.6GW Dogger Bank Wind Farm in the North Sea, a joint venture with Equinor.

It is also building Scotland's largest offshore wind farm, the 1.1GW Seagreen Offshore Wind Farm in the Firth of Forth, which is a joint venture with Total.

SSE Renewables is a Principal Partner to the UK Government in the run up to and during the COP26 UN climate summit in November 2021.

1.3 Arklow Bank Wind Park Phase 2

With advances in wind turbine technology since the Foreshore Lease was granted, it is now possible to achieve the 520 MW export capacity of the wind park through the installation of significantly fewer wind turbines within the same Foreshore Lease area.

ABWP Phase 2 will be made up of the following key components;

- **ABWP Phase 2 – Offshore Infrastructure**

The offshore infrastructure will comprise up to 62 wind turbines and up to two offshore substation platform(s), to which the turbines will be connected by a network of inter-array cabling. The offshore substation platform(s) will transform the electricity generated by the wind turbines to a higher voltage. The power will be transmitted to shore from the offshore substation platform(s) using two high voltage alternating current (HVAC) offshore export cables.

- **ABWP Phase 2 – Onshore Grid Infrastructure**

The onshore grid infrastructure will be made up of underground HVAC onshore export cables, which will transmit electrical power from the offshore export cables at landfall to a new onshore 220 kV substation at Shelton Abbey. The new onshore 220 kV substation will receive the electricity and transfer it onto the existing National Electricity Transmission Network (NETN).

- **ABWP Phase 2 – Operations and Maintenance Facility**

The operation and maintenance facility will support the operation of ABWP Phase 2, located at Arklow South Dock. The operation and maintenance facility will comprise onshore infrastructure including an onshore administration and stores building and quayside infrastructure. The facility will include nearshore infrastructure including a pontoon to provide vessel berthing facilities, located on the foreshore.

1.4 Consents

ABWP Phase 2 – Offshore Infrastructure

SPL has made an application to extend the long stop dates under the Foreshore Lease to allow for the construction of the offshore infrastructure for ABWP Phase 2. As part of this application, an Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) has been submitted to the Department of Housing, Local Government and Heritage.

ABWP Phase 2 – Onshore Grid Infrastructure

SPL has made an application to An Bord Pleanála for permission to construct the Onshore Grid Infrastructure. The application is accompanied by an EIAR and NIS.

ABWP Phase 2 – Operations and Maintenance Facility

SPL is making an application to Wicklow County Council for permission to construct and operate the proposed development. SPL is also making an application to the Department of Housing, Local Government and Heritage for a Foreshore Lease for the nearshore infrastructure, located on the foreshore. These applications will be accompanied by an EIAR and NIS.

1.5 EIAR for ABWP Phase 2 Onshore Grid Infrastructure

This EIAR for ABWP Phase 2 Onshore Grid Infrastructure is in three volumes, as follows:

- Volume 1 Non Technical Summary
- Volume 2 Main Text
- Volume 3 Appendices

A NIS is submitted with the EIAR.

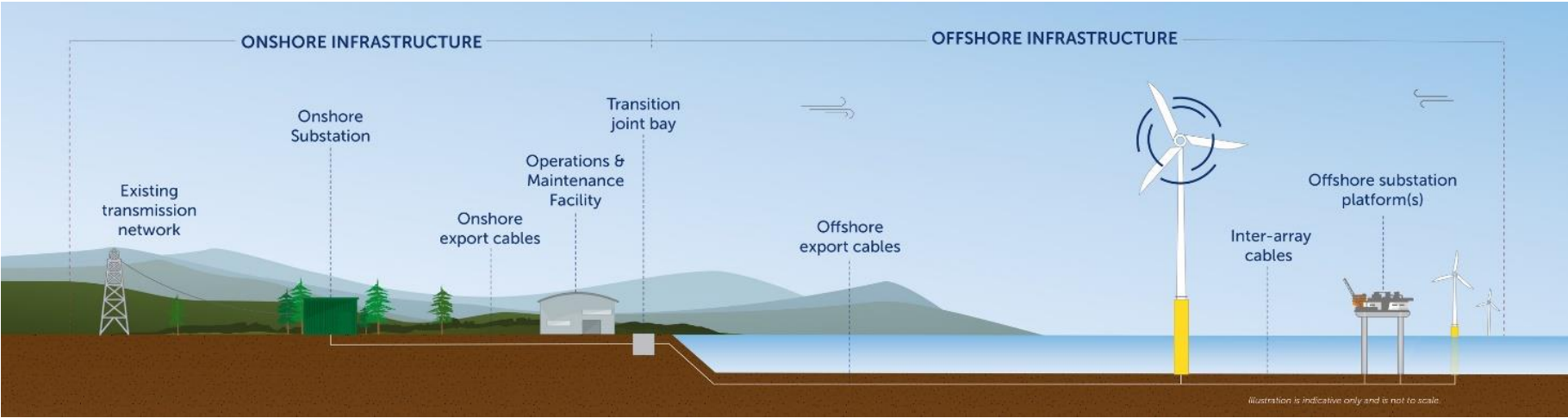


Figure 1 Overview of ABWP Phase 2

Contractor Document Information			
Contractor Name	Arup		
Contractor Doc No	271715-00_Environmental Impact Assessment Report	Contractor Doc Rev	Final
Document Title	Arklow Bank Wind Park Phase 2 Onshore Grid Infrastructure Environmental Impact Assessment Report		

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Document Number	CDL Code	Sequence	Sheet
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2	Accepted with Comments		
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