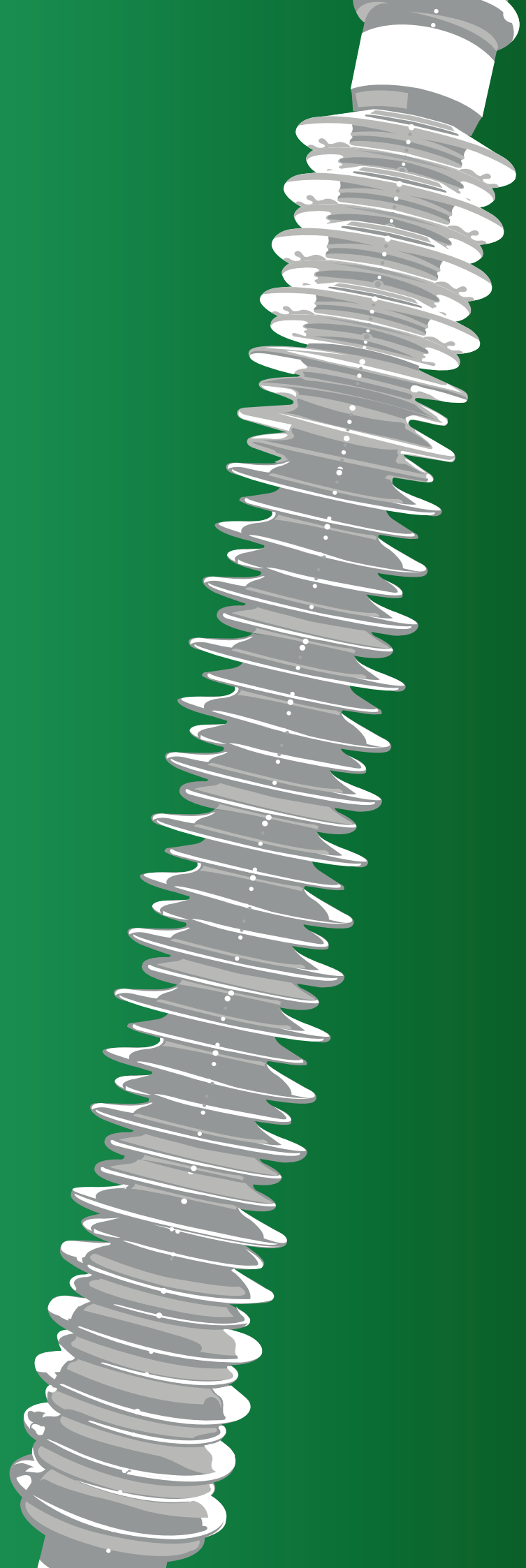


Inch Cape Onshore Transmission Works

New Energy for Scotland

Non Technical Summary

2018

SDIC

Red Rock Power Limited

CONTENTS

Foreword

The application under the Town and Country Planning (Scotland) Act 1997 for the Onshore Transmission Works (OnTW) represents a key milestone in the development of Inch Cape Offshore Limited's (ICOL's) Offshore Wind Farm. The OnTW will allow connection of ICOL's Offshore Wind Farm to the national grid system and the export of up to 784 MW of renewable energy generation.

ICOL's Offshore Wind Farm could provide sufficient low-carbon generation to meet the electricity demands of approximately 500,000 UK households and power approximately 22 per cent of Scottish homes.

ICOL's Offshore Wind Farm will also provide economic benefits through its construction and ongoing operation and is key to energy supply and security in Scotland and the UK and will make a significant contribution to carbon reduction targets.

Since the award of exclusive development rights for ICOL's Offshore Wind Farm in 2009, ICOL has been progressing an extensive programme of engineering and environmental works to support consent applications to the Scottish Government and East Lothian Council (ELC) for all aspects of ICOL's Offshore Wind Farm, including the Offshore Transmission Works (OfTW) and the OnTW. Our team has considered the engineering design of ICOL's Offshore Wind Farm along with the OfTW and OnTW and the interaction with the existing environment from a wide range of technical, environmental, commercial and social considerations.

The OnTW Environmental Impact Assessment (EIA) Report provides the public and stakeholders access to the extensive assessments that have been undertaken to aid ELC and their advisors in their decision making process. It also ensures that any interested organisations or individuals are informed of the OnTW plans and predicted effects. This Non Technical Summary (NTS) has been produced to distil the key points of the information included in the EIA Report into an accessible format.

Ian Johnson
Inch Cape Project Manager

Introduction

Inch Cape Offshore Wind Farm will be located across a 15 to 22 kilometres (km) range to the east of the Angus coastline in Scotland. The Wind Farm has a grid connection agreement at Cockenzie in East Lothian.

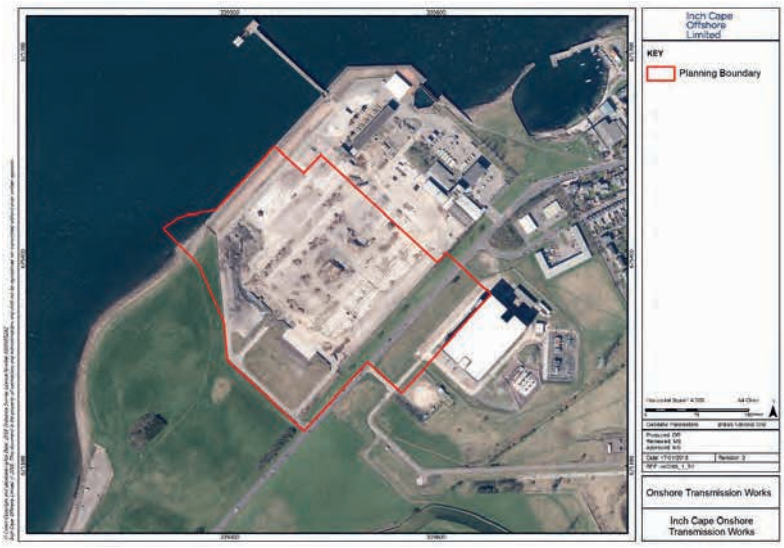
Inch Cape Offshore Limited (ICOL) is applying to East Lothian Council (ELC) for Planning Permission in Principle (PPP) under the Town and Country Planning (Scotland) Act 1997 (as amended) for the Onshore Transmission Works (OnTW)), required to connect ICOL's Offshore Wind Farm to the National Electricity Transmission System (NETS). This Non-Technical Summary (NTS) summarises the key findings of the Environmental Impact Assessment (EIA) carried out as part of the application and presented within the EIA Report.

In this NTS, reference is made to the OnTW which is located on the site of the former Cockenzie Power Station and comprised of all the proposed works within the Planning Boundary (see Figure 1). These works include the Onshore Substation, cables transition pits, cable jointing pits, underground electricity transmission cables connecting the Offshore Export Cables to the Onshore Substation and further underground cables required to facilitate connection to the national grid. This includes all permanent and temporary works required. Details of the OnTW are below and within Chapter 5: Description of Development, of the EIA Report.

ICOL is a company formed to develop, finance, construct, operate, maintain and decommission ICOL's Offshore Wind Farm.

Following the sale from Repsol in May 2016, ICOL is now owned by Red Rock Power Limited (RRPL), a UK company based in Edinburgh established to develop, own and operate clean energy projects owned by SDIC Power Holdings Co Ltd. of China. RRPL is already supporting the development of new and clean energy in Scotland through its investment in the Beatrice Offshore Wind Farm project, led by Scottish and Southern Energy Plc (SSE). The project is currently under construction and represents one of the largest ever private investments in Scottish infrastructure.

Figure 1: Application Site



Project Background

- The Project
- Environmental Impact Assessment
- Consultation
- Site Selection and Alternatives Considered
- Project Construction and Decommissioning

The Project

Offshore

In July 2013 ICOL made applications under Section 36 of the Electricity Act 1989 to the Scottish Ministers (through Marine Scotland) to construct and operate the Original Offshore Wind Farm. In addition, applications for Marine Licences under the Marine (Scotland) Act 2010 were made for the Original Offshore Wind Farm and Offshore Transmission Works (OfTW)[1]. Consent was granted in 2014.

In July 2016 following a petition brought by the Royal Society for Protection of Birds (RSPB) the offshore consents were quashed. The Scottish Ministers successfully appealed this decision and in May 2017 the offshore consents were reinstated. RSPB filed an application to the Supreme Court seeking permission to appeal this decision. However, on the 6 November 2017 the Supreme Court ordered that permission to appeal be refused. The consent granted in 2014 is therefore valid.

ICOL is now in the process of preparing a new consent application for the Revised Offshore Wind Farm and OfTW which is being developed to take advantage of advancements in offshore wind technology to improve project efficiency while reducing associated environmental effects through the reduction in WTG numbers. In terms of location, the Revised Offshore Wind Farm and OfTW are comparable to the Consented Offshore Wind farm and OfTW. It should be noted that it is ICOL's intention to construct either the Consented Offshore Wind Farm or the Revised Offshore Wind Farm, but not both.

A Scoping Report for the Revised Offshore Wind Farm and OfTW was submitted to the Scottish Ministers in April 2017, a copy of which is available online at: http://www.gov.scot/Topics/marine/Licensing/marine/scoping/InchCape/InchCapeScoping2017

Onshore

In September 2014, the Original OnTW received PPP from East Lothian Council (ELC) and was to be located to the south of the former Cockenzie Coal Store. As a result of further design work and feedback received during the course of the OnTW development, a potential alternative location for the OnTW was investigated. The result of this investigation is that ICOL no longer intends to pursue the Original OnTW as consented in 2014 and the current application is for the OnTW to be situated on the site of the former Cockenzie Power Station.

ICOL's Offshore Wind Farm

ICOL's Offshore Wind Farm will be located across a 15 to 22 kilometres (km) range to the east of the Angus coastline in Scotland (see Figure 2).

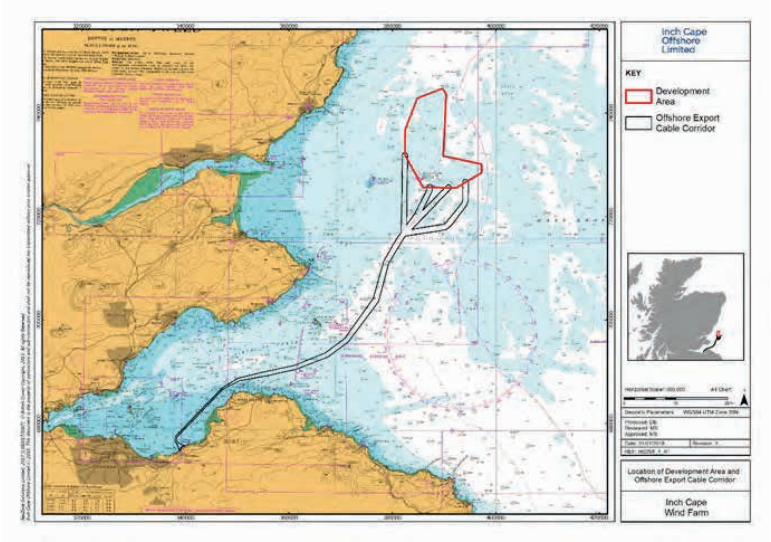
Transmission infrastructure will connect ICOL's Offshore Wind Farm to the NETS and will comprise the OnTW and OfTW. The components and all permanent and temporary works required to generate or transmit electricity from ICOL's Offshore Wind Farm to the national grid are grouped as follows:

- ICOL's Offshore Wind Farm which includes Wind Turbine Generators (WTG), inter-array cables (which will all be located within the Development Area shown in Figure 1);
- The OfTW includes up to two Offshore Substation Platforms (which will be located within the Development Area shown in Figure 2) and Offshore Export Cables to shore; and
- The OnTW includes the underground Onshore Export Cables and an Onshore Substation (the subject of this application).

The OnTW

A Proposal of Application Notice (PAN), as required by the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 (Scottish Parliament, 2013), was submitted to East Lothian Council in May 2017. The Inch Cape Onshore Scoping Report was submitted on 14 July 2017 in support of a request for a Scoping. The Scoping Opinion and feedback from stakeholder consultations,

Figure 2: Inch Cape Wind Farm and Offshore Transmission Works



has helped to inform the content of the EIA Report. The OnTW Application Site is located on the site of the former Cockenzie Power Station and comprises of the following primary elements:

- Landfall where the Offshore Export Cables from the Inch Cape Offshore Wind Farm will be brought ashore and will run underground to the Cable Transition Pits;
- Cable Transition Pits where the Offshore Export Cables interface with the Onshore Export Cables;
- Onshore Export Cables running from the Cable Transition Pits to the Onshore Substation, laid in two trenches for running between the Cable Transition Pits and the Onshore Substation;
- If the Onshore Export Cables are installed in sections, jointing pits will be required to join the sections together;
- Onshore Substation which is required to process the electricity from ICOL's Offshore Wind Farm and to comply with the requirements of the NETS;
- Onshore Substation screening measures including walls and earth mounding parts of which will be planted with a mix of mainly native tree and shrub species;
- Security fencing will be erected around the perimeter of the Onshore Substation;
- Onshore Export Cables from the Onshore Substation to the grid connection point, laid in trenches and/or ducts for running the underground Onshore Export Cables between the Onshore Substation and the grid connection point;
- Construction compound to accommodate a temporary work site;
- Application Site Access will be via an existing access from the B1348; and
- Remedial/enabling work will be required prior to any OnTW works commencing which will include the raising of the Onshore Substation construction elevation above the ground water table to overcome risk of flooding.

1 http://www.inchcapewind.com/publications/environmental-statement/introduction

Environmental Impact Assessment

The OnTW EIA Report meets the requirements of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations).

The EIA has been undertaken in consultation with a number of different organisations, groups and individuals and has been developed in accordance with industry good practice. Where an EIA is undertaken, the EIA Regulations require the information to be provided to the determining authority (in this case ELC) by the applicant in the form of an EIA Report.

This information and the findings of the assessments have been used to develop the preliminary design of the OnTW. Where feasible, adverse effects on people and on the natural and cultural environment will be avoided or reduced.

For certain elements of the OnTW assumptions have been made to allow the EIA to be undertaken. An initial appraisal of potential impacts indicated where mitigation should be included as part of the design process.

This is referred to as embedded mitigation, and is clearly set out in the EIA Report and taken into account in the assessments. Worst case parameters have been assumed to ensure the potential environmental effects of the OnTW are not underestimated. For some elements additional mitigation measures have also been identified which will be considered further as part of the detailed design.

Desk study research, feedback from consultation and site survey has informed the understanding of the baseline environmental interests of the Application Site and its surroundings. Potential impacts on the environment have been assessed for the construction, operation and decommissioning phases of the OnTW on relevant receptors. The significance of effects of the proposals have been described as required by the EIA Regulations. In general terms the significance of an effect results from the interaction between its magnitude (which is related to the extent of the physical change, its spatial extent, duration and frequency) and the value of the resource or the number and sensitivity of the receptor which might be affected.

Consultation

ICOL has undertaken a range of consultation activities in advance of submission of the application for PPP for the OnTW including:

- Community consultation events held at Prestonpans Primary School on the 6 June 2017 and at the Port Seton Centre in Port Seton on the 14 June 2017;
- Attendance at the Prestonpans Community Council meeting on 13 June 2017 and, separately Cockenzie and Port Seton Community Council meeting on 5 September 2017;
- Engagement with consultees on the Scoping Report for the OnTW EIA Report which was submitted to ELC for a Scoping Opinion; and
- Following scoping, on-going consultation was held with key consultees to refine and inform the approach to the EIA.

Information obtained from the public and stakeholder engagement process has been taken into account, where relevant, in scoping and undertaking the EIA.

As part of the determination process ICOL and ELC will undertake formal consultation with a number of groups and organisations, including: Scottish Natural Heritage (SNH); Scottish Water; the Scottish Environment Protection Agency (SEPA); and Historic Environment Scotland (HES) and Transport Scotland.

In addition, all stakeholders will be given an opportunity to make representations on the information submitted.

Site Selection and Alternatives Considered

In 2011, a range of possible locations where ICOL's Offshore Wind Farm could connect to the NETS were identified through a process involving ICOL, National Grid and the relevant onshore Transmission Owners.

Locations considered included Arbroath and Tealing in Angus, several locations in East Lothian such as New Braxton, Cockenzie and Torness, Crystal Rig and locations in the North East of England at Blyth and Hawthorn Pit.

Following this assessment National Grid offered ICOL a grid connection point at the existing power station in Cockenzie. Cockenzie was primarily chosen due to its capacity to accommodate the power output of ICOL's Offshore Wind Farm without the need for significant enhancement works to the onshore transmission network. Enhancement works would result in increased environmental impacts and an overall cost which would not be as economically efficient for the UK consumer.

Following acceptance of the grid connection offer in 2012, ICOL initiated an identification and assessment process for a location capable of accommodating the OnTW as close as practicable to the NETS connection point to reduce environmental impacts and to minimise project costs, that ultimately get passed onto the UK consumer via electricity bills.

An initial site selection assessment was undertaken by ICOL in 2012-2014, which investigated potential landfall options, cable routes and substation locations. The study focused upon land within Cockenzie and the surrounding area.

A staged assessment was undertaken which identified and assessed 15 possible substation locations and associated export cable routes. Assessment of these sites concluded that the site to the south of the former Cockenzie Coal Store (as granted PPP in 2014) offered a range of key advantages over the other sites.

Since the Original OnTW application for PPP was submitted to ELC, there has been a number of changes in the area. Scottish Power is no longer progressing plans to replace the former Cockenzie Power Station with Combined Cycle Gas Turbine (CCGT) generating units and the former Cockenzie Power Station has since been decommissioned and demolished. ELC has recently published a Masterplan for Cockenzie, which includes the site of the former Cockenzie Power Station, to identify options that will allow for the redevelopment of the site in an economic and sustainable way.

ICOL's grid connection offer remains at the existing Cockenzie substation.

In 2017 ICOL undertook further feasibility work to re-assess the various merits of several locations within Cockenzie. The sites which were discounted in 2013 were not re-assessed as it was considered that the conclusions from the 2013 site assessments were still valid.

The sites which were considered during the 2017 feasibility study are shown in Figure 3.

The 2017 feasibility work concluded that the site of the Former Cockenzie Power Station would be a more favourable location, in environmental terms, for the OnTW Application Site compared to the alternatives considered by the Applicant.

Project Construction and Decommissioning

Construction by the chosen contractors will begin following agreement of the detailed design and discharge of planning conditions with ELC and other relevant statutory authorities. Construction activities for the OnTW will include:

- Pre-construction surveys and investigations;
- Enabling works;
- Preparation of access roads and landscaping;
- Civil works including construction of the substation buildings and associated works;
- Works in the intertidal areas to prepare the cable landfall;
- Installation and commissioning of the Export Cables; and
- Electrical plant installation and electrical system commissioning.

A detailed construction programme will be developed as design and procurement activities progress and will be dependent on the offshore programme.

The construction of the OnTW will take place over approximately 24 months. Activities may not be continuous and the sequence of activities may change based on optimisation of procurement and construction logistics. Work durations are subject to changes which may arise, for example, from weather, site conditions, equipment lead times and supply programmes, sequential work requirements, and logistical issues.

Much of the infrastructure will be manufactured offsite and transported to the site for installation. Further studies will be undertaken to ensure that ground conditions are suitable prior to the commencement of works.

Working hours will be agreed with ELC including permitted working hours for noisy operations on the Application Site that are audible at the Application Site boundary. It is expected that these will be restricted to between 0700–1900 Monday to Friday inclusive, and 0800–1300 on Saturdays. It is assumed there will be no working on Sundays unless with prior arrangement with ELC.

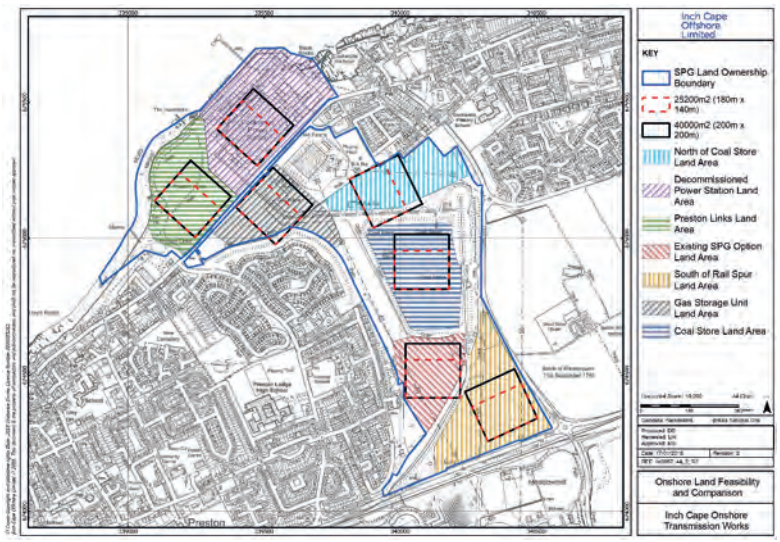
However, twenty four hour working, seven days per week has been assumed for the installation of the Export Cables at the Landfall. Local residents will be consulted with regards to work patterns and appropriate controls will be implemented.

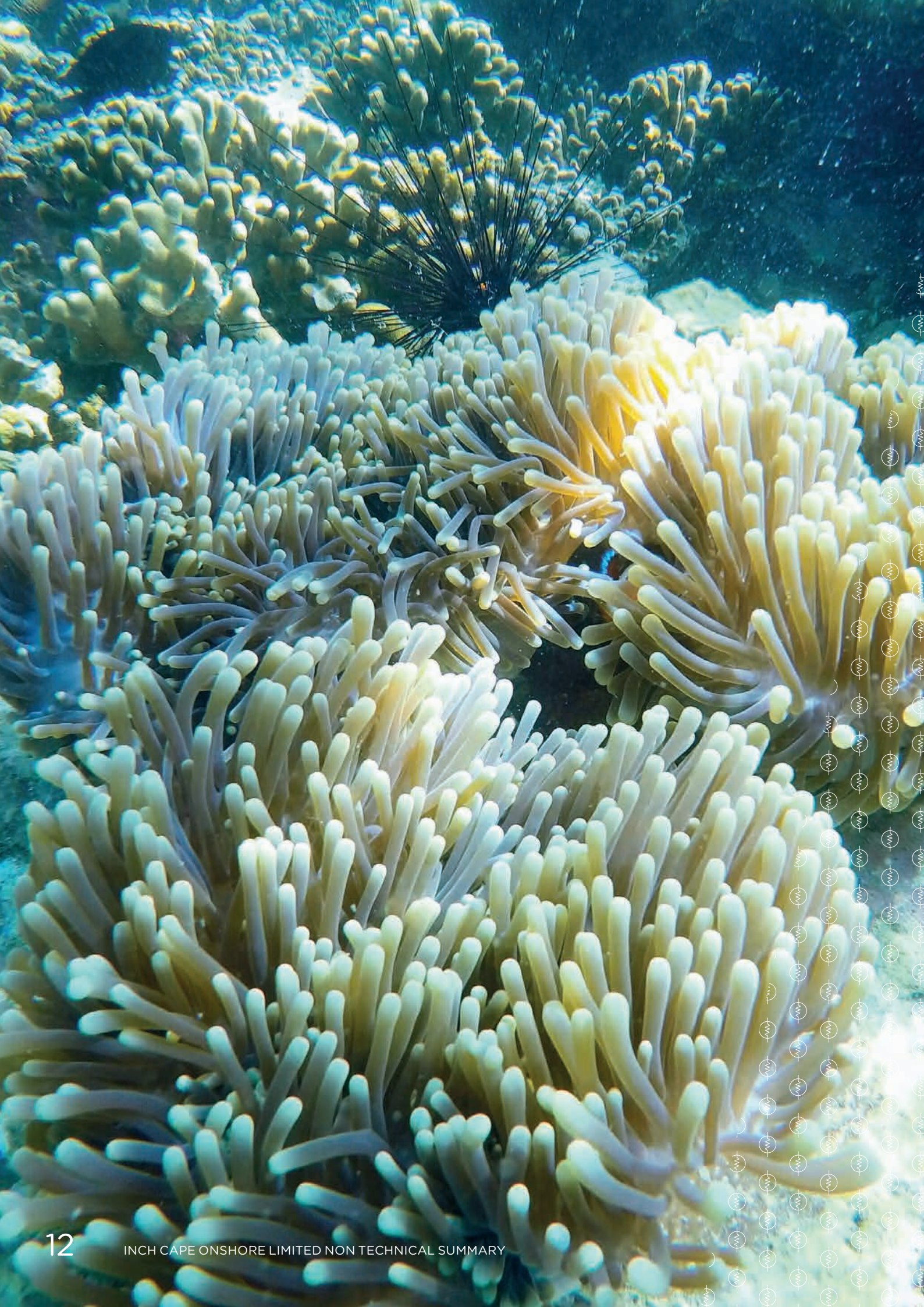
A Construction Environmental Management Plan (CEMP) will be agreed prior to construction.

This document, or suite of documents, will set out procedures to ensure all activities with potential to affect the environment and all contractors and personnel involved in construction activities are appropriately managed by ICOL.

The OnTW will be decommissioned following the end of their operational life which is not fixed but would be for the lifetime of ICOL's Offshore Wind Farm.

Figure 3: Sites Considered as Potential Substation Locations 2017





Biological Environment

- Ecology

Ecology

Ecology refers to features of nature conservation importance including habitats, species and sites protected for their nature conservation value.

Consultation

Early consultation with SNH as well as ELC's formal Scoping Opinion informed the scope and methodology for the assessment which followed recognised guidance and best practice.

Through the scoping process it was recognised that the site of the former Cockenzie Power Station where the Application Site is situated is of negligible ecological value and that consequently the disruption of locally occurring habitats would be reduced.

The EIA considered potential impacts on:

- The Firth of Forth Special Protection Area[2] (SPA);
- The proposed Outer Firth of Forth and St. Andrews Bay Complex pSPA and their associated qualifying interests; and
- Any other European designated (Natura 2000) sites which may be relevant.

Baseline Environment

The baseline has been characterised through the evaluation of existing survey data collected to inform the Original OnTW, supplemented by an updated desk study and a phase 1 habitat and protected species survey.

The majority of the Application Site is comprised of concrete and compacted hardcore associated with the demolished former Cockenzie Power Station and the existing Cockenzie Substation. Semi-natural habitats are generally limited to small patches of managed, low biodiversity value grassland interspersed with very occasional scattered scrub and broad-leaved trees. There is also a very small area of intertidal rock and boulder habitat associated with the Firth of Forth shoreline.

Although there are no designated sites of nature conservation value within the Application Site, the intertidal shoreline immediately to the west is part of the Firth of Forth Special Protection Area (SPA), Ramsar Site and SSSI.

Furthermore, the adjacent coastal waters are part of the proposed Outer Firth of Forth and St. Andrews Bay Complex pSPA. These protected sites include a variety of coastal and estuarine habitats which support large numbers of overwintering and passage wetland birds and breeding seabirds.

Intertidal and near shore waterbird surveys identified that the coastal habitats immediately adjacent to the Application Site support a variety of waterbirds, many of which are qualifying species of these designated sites as well as the Forth Islands SPA. In contrast, breeding and winter bird surveys identified that very few species of conservation value used any of the habitats within or immediately surrounding the Application Site.

The only evidence of protected mammal species found in proximity to the Application Site was an old, disused outlier badger sett which was considered to have been inactive for some time. There was no evidence of any other protected species or plant species subject to legal control.

Impact Assessment

Potential impacts resulting from construction, operation and decommissioning of the Onshore Export Cables and Onshore Substation included: loss, disturbance and potential contamination of habitats (including those associated with the Firth of Forth SPA, Ramsar Site and SSSI and Outer Firth of Forth and St. Andrews Bay Complex pSPA); and disturbance of intertidal and near shore waterbirds.

Embedded Mitigation to avoid or minimise these potential impacts includes: the implementation of a CEMP; monitoring of construction works by an ECoW; pre-construction protected species surveys; and best practice relating to locally occurring wildlife, breeding birds and marine non-native species.

The assessment carried out did not identify any significant effects on ecology during the construction, operation or decommissioning of the OnTW. Likewise, the cumulative assessment also resulted in no significant effects.

As part of the mitigation, a mix of native tree planting will be carried out. This planting is expected to provide some minor ecological benefits, by creating a diverse habitat that could benefit wildlife.

[2] SPAs are areas designated for their European importance for nature conservation value under Directive 2009/147/EC (the Birds Directive). Under the Birds Directive, SPAs are designations which protect birds which are particularly rare or vulnerable, and migratory birds.

Physical Environment

- Hydrology, Geology and Hydrogeology
- Landscape and Visual
- Cultural Heritage

Hydrology, Geology and Hydrogeology

Hydrology, Geology and Hydrogeology (including potential land contamination, coal mining and flood risks) have been assessed in the EIA Report. Potential receptors have been identified which include the Leith Docks to Port Seton Coastal Water body, groundwater bodies, hydrology catchments, soils, and geology.

Consultation

The methodology and scope for the assessment was based on relevant responses received from ELC, Scottish Water, Scottish Environment and Protection Agency (SEPA), the Coal Authority and Scottish National Heritage (SNH), along with the formal Scoping Opinion and recognised best practice.

Baseline Environment

The baseline has been characterised through the evaluation of existing survey data, desk studies and a walkover survey to inspect coastline, water features and general ground conditions. The surface water environment of relevance to the Application Site is limited to the area immediately surrounding the Application Site – there are no significant rivers or burns that flow through or near the Application Site that would be affected by the OnTW.

It has been identified that parts of the Application Site may be at risk of localised flooding due to surface water, groundwater and any overtopping coastal water not being able to drain away to the sea, although the Application Site is not at risk of tidal flooding except in the most extreme events.

The Leith Docks to Port Seton Coastal water body is classified by SEPA as heavily modified with an overall status of Moderate ecological potential. It has no associated protected areas such as EC Bathing Waters or Shellfish Growing Waters, but it is part of the habitat for the Firth of Forth Site of Special Scientific Interest (SSSI).

There are no public or private water supplies from the Water Environment within the Application Site. There are no significant Scottish Water sewers or water pipes within the Application Site or that are likely to affected by the OnTW.

The hydrogeology beneath the Application Site comprises the Esk Valley and Dalkeith Groundwater Bodies which have Good and Poor status respectively as classified by SEPA. The underlying geology comprises man-made deposits associated with the former Cockenzie Power Station. The bedrock comprises mostly sedimentary rocks including coal seams, which are present at depth beneath the site.

The site specific Coal Mining Risk Assessment confirmed that the site is not at risk from previous coal mining.

Impact Assessment
Potential impacts considered included changes to runoff and flooding, groundwater infiltration, changes to the hydrogeological regime, water quality impacts due to construction materials/ machinery, disturbance of mine shafts/shallow mineral workings, and disturbance of potentially contaminated soils.

Embedded Mitigation to remove or minimise these potential impacts includes the implementation of a Construction Environmental Monitoring Plan (CEMP), site investigation to inform the detailed site design and use of construction drainage systems, and a Sustainable Drainage System (SuDS).

With implementation of this mitigation there are anticipated to be no significant effects on Hydrology, hydrogeology and geology as a result of construction or operation (and decommissioning) of the OnTW.

Cumulative impacts were also considered but these were not found to increase the significance of the effects assessed.

Landscape and Visual

Landscape and Visual Impact Assessment (LVIA) refers to changes to the landscape resource and related changes to views and general visual amenity experienced by people.

Consultation

Responses to the Scoping Report received from ELC and SNH have informed the methodology and scope of the assessment.

Baseline Environment

The Application Site baseline has been characterised through the evaluation of existing survey data and desk studies and implementation of site specific baseline surveys as well as by reference to various illustrations prepared for the LVIA.

The LVIA Study Area comprises a five kilometre radius extending from the Application Site. This includes parts of the Urban Area associated with the coastal settlements on the Firth of Forth of Musselburgh, Prestonpans, Cockenzie and Port Seton, as well as the Musselburgh/Prestonpans Fringe. At greater distance from the site, the Mayfield Tranent Ridge occurs to the south and the North Berwick and Haddington Plains to the east. These landscapes contain a mix of residential settlement; commercial and some industrial development; main roads and railway lines; as well as arable agricultural areas.

Impact Assessment

Potential impacts from the OnTW on landscape and visual amenity comprise construction vehicles and related activities during the construction phase, followed by the introduction of an additional industrial scale building opposite the existing Cockenzie substation building with associated infrastructure.

Mitigation will comprise reinstatement of all ground disturbed to install the Onshore Export Cable. It will also comprise formation of approximately four metre high bunds around the south west, north west and north east of the Onshore Substation as well as associated planting of trees and shrub species.

During the operation of the OnTW, the Onshore Export Cable will be underground, as such there will be no impact on landscape or visual amenity resulting from the Onshore Export Cable.

Implementation of the mitigation at the commencement of the construction phase will contribute to minimising effects on landscape character and visual amenity during the operation of the OnTW. Significant effects on landscape and visual amenity will be limited to the immediate vicinity occurring within two kilometres of the Onshore Substation. These will occur for the parts of the urban area in the immediate vicinity of the Onshore Substation and the Coastal Margins Landscape Character Type; some residents on the open edges of Cockenzie and Prestonpans; tourists on the Golf Coast Road (B1348); walkers on a short section of the John Muir Way; and recreational users of Preston Links to the west of the site. These effects will reduce with maturation of the mitigation planting.

Cumulative impacts have been assessed but it is not considered that these would differ from the landscape and visual effects of the OnTW on its own.

Cultural Heritage

Cultural heritage and archaeology refers to the physical remains of past human activity including prehistoric sites and artefacts, historic buildings and other cultural material and structures.

Consultation

Responses received from Historic Environment Scotland and ELC to the formal Scoping Opinion and recognised best practice, informed the methodology and scope for the assessment of the impacts on cultural heritage and archaeology.

Baseline Environment

The baseline has been characterised through the evaluation of existing survey data, desk studies and implementation of site specific baseline surveys. The site-specific surveys comprised site visits of cultural heritage assets within five kilometres of the Application Site.

While there are inherent uncertainties in the distribution of archaeological material, due to the location of the Application Site within the footprint of the former Cockenzie Power Station, it is considered that all archaeological assets will have already been removed by the former building. No mitigation is therefore necessary.

There are a large number of archaeological sites in the area including later prehistoric scheduled monuments, Roman camps, medieval towers to historic listed buildings. Early industry at Birsley Brae medieval coal mine presages the significant coal industry that characterises the post-medieval 18th, 19th and 20th century history of the area.

The post-medieval expansion of the towns and villages and improvement of the agricultural landscape of East Lothian are well-represented in the listed buildings across the region. Significant development of the coal industry occurs through the 18th century with the establishment of many collieries. The Tranent to Cockenzie waggonway, constructed in 1722, and Scotland's first railway was a key route for transporting coal to the coast. This period is punctuated by the 1745 Battle of Prestonpans.

Impact Assessment

As it is assumed that there are no archaeological assets within the Application Site, there are no direct physical impacts being considered as part of the EIA.

Indirect impacts to the setting of selected cultural heritage receptors are assessed including the Battle of Prestonpans battlefield, Tranent to Cockenzie Waggonway, Cockenzie Harbour and Seton Collegiate Church.

Embedded Mitigation to remove or minimise potential indirect impacts includes:

- An Onshore Substation location and preliminary design which reduces the visual impacts upon cultural heritage assets including the Battle of Prestonpans view point; and
- Screening of the Onshore Substation using bunding and planting.

During all phases of the OnTW lifecycle, effects are expected to be of no more than minor significance following mitigation. This comprises indirect impacts to setting during operation on nearby cultural heritage assets. Cumulative impacts were not predicted to differ from the impacts of the OnTW alone.

Human Health and Population

- Noise and Vibration
- Traffic and Transport
- Socio-Economics, Tourism, Land Use and Recreation
- Air Quality

Noise and Vibration

Noise and vibration impacts have been assessed in the EIA Report. Receptors considered within the impact assessment were selected based upon their proximity to the construction and operational noise sources (the Onshore Substation). The assessment was based on relevant guidance and best practice to determine the noise levels likely to be generated by the construction and operation of the OnTW.

Consultation

ELC provided comments and recommendations in terms of the methodology and approach to the measurement of baseline noise levels and the impact assessment.

Baseline Environment

Baseline noise surveys were conducted to determine the daytime and night-time noise environment at properties most likely to be impacted by the construction and operational activities at the Application Site.

The baseline noise environment in the vicinity of the Application Site is influenced by a number of sources, but predominantly by road traffic on the B1348. This was confirmed during baseline measurements at the closest receptors, whereby traffic on the B1348 was the predominant source of noise at all locations, but at a lower level with increased distance from the road. Other noise sources such as aircraft, birds and the nearby harbour are also present and can be heard in the absence of traffic. Fewer cars and buses pass during the night-time period, and aircraft was still audible until approximately midnight. Based on the observations made during the surveys, it is considered that the measured baseline noise levels are representative of the existing noise environment at the closest properties.

Impact Assessment

For the construction and decommissioning phases, the impact assessment considered noise and vibration impacts to the closest receptors from construction activities and additional traffic movements. During the operational phase, the impact assessment considered the components of the Onshore Substation and their impact on the closest receptors during 24/7 operation.

Embedded mitigation includes a noise barrier which will be in place during the construction phase providing a visual screen between ground-based construction activities and the closest receptors. Control of construction activities would be undertaken to ensure noise levels at the closest receptors meet the required threshold limits during the construction phase.

The assessment of construction noise has shown that the adopted daytime criterion of 70 dB LAeq is not expected to be exceeded at the closest receptors. This is also applicable for the night-time period, whereby noise levels due to the construction of the landfall and onshore cable route are predicted to be below the adopted night-time criterion of 45 dB LAeq at the closest receptors. Construction noise is therefore assessed as not significant.

The predicted increase in total traffic would be below 25 per cent for all road sections during the construction phase. As a result, changes to existing noise levels would be less than 1 dB, and this relates to the average construction period (and corresponding average HGV movements) over an anticipated 24-month programme.

It is unlikely that the proposed construction methods would give rise to significant vibration impacts at the closest receptors, as piling and/or blasting methods are not anticipated. There is a minimum distance of approximately 180 m between the Application Site boundary and the closest receptors on the B1348 and levels of vibration are found to decrease rapidly with distance. These levels are expected to below the threshold limits within BS5228-1:2009+A1:2014 for vibration impact.

For the operational phase, embedded mitigation comprises enclosures around some of the components of the Onshore Substation. This provides a level of noise attenuation and additional noise reduction is provided through the consideration of a landscape mitigation plan. The predicted noise levels are predicted to be no more than 5dB above the measured background noise levels, and in most cases the predicted levels are below the background. Overall, operational noise levels are predicted to be not significant and are within daytime and night-time limits set by the World Health Organisation.

The assessment of construction and operational noise concluded that there would be no significant noise impact at the closest receptors. In the same respect, the assessment of cumulative noise concluded that there would be no significant impact when the OnTW is considered with other projects in the study area.

Traffic and Transport

The traffic and transport chapter assesses potential impacts resulting from the traffic generated by the OnTW. The traffic generated by the OnTW will travel to and from the Application Site using the B6371, A198 and the A1.

Consultation

Responses received from ELC Roads and Transport Officers which were relevant to the traffic and transport EIA, along with the formal Scoping Opinion and recognised best practice, informed the methodology and scope for the assessment.

Baseline Environment

Local roads have been characterised within and around the Application Site through the evaluation of traffic survey data, records of Personal Injury Accident data, site visits and observations and desk studies. Traffic surveys have determined that as the road network progresses towards the Application Site from the A1, to the A198 and then to the B6371, the volume of traffic reduces.

There are footways along the A198 and the B6371 and pedestrians use these on occasion whilst cyclists occasionally use the main carriageway. Pedestrians and cyclists are not permitted to use the A1. There are a number of public footpaths and Core Paths surrounding the site.

A study of Personal Injury Accident data and an inspection of the road layout has indicated that there are no specific road safety issues on the local road network.

Impact Assessment

Potential impacts resulting from construction, operation and decommissioning of the OnTW which were considered in this assessment included severance, driver delay, pedestrian delay, pedestrian amenity, accidents and safety, and hazardous loads.

The assessments undertaken have considered the change in traffic flows along the road network as a result of the OnTW. The assessments have been made relative to the baseline conditions, which means that roads with small baseline traffic volumes are more sensitive to changes in traffic in comparison to those with larger baseline traffic volumes.

Embedded mitigation includes production of a Construction Traffic Management Plan (CTMP). The CTMP will include detail on approved access routes and any necessary restrictions; temporary signage in the vicinity of the Application Site warning of construction traffic; arrangements for road maintenance and cleaning; and wheel cleaning arrangements and regular road sweeping runs (to ensure dust and dirt is not transported onto the public roads etc.).

The predicted traffic changes associated with the OnTW (and when considering other projects cumulatively) concluded that with the suggested CTMP in place, there will be no significant effect.

Socio-Economics, Tourism, Land Use and Recreation

The Socio-Economics assessment considers the potential impacts of the OnTW on:

- Direct, indirect and induced effects on employment and the economy through job creation and expenditure;
- Effects on land use, including consideration of the implications of changes to existing land uses;
- Effects on public access and recreation, including consideration of Rights of Way, Core Paths and other promoted outdoor access routes; and
- Effects on tourism.

Baseline Environment

Although East Lothian is considered to be an area of high employment and general affluence there is a considerable variation in economic activity, unemployment and the financial position of households within East Lothian. According to the Scottish Index of Multiple Deprivation 2016, Prestonpans (the nearest settlement to the Application Site) falls within the 20 per cent most income deprived areas in Scotland.

The Application Site is located on the site of the former Cockenzie Power Station. Decommissioning of the power station commenced in April 2015.

With over 40 miles of coastline, East Lothian is a popular destination for those who enjoy the outdoors. It is a popular destination for walkers, water sports and bird watchers. It is also a leading golf tourism location, whilst food and drink is also gaining prominence as a key driver for tourism in East Lothian.

Key tourism routes and attractions at the Application Site include the John Muir, National Cycle Route (NCR) 76 and the Golf Coast Road. The Golf Coast Road is a promoted tourism route that stretches from Musselburgh to Dunbar and incorporates 22 golf courses along its length. It is also a well-used coastal route for visitors from Edinburgh to North Berwick, the most popular visited place in East Lothian.

The East Lothian Core Path Plan identifies one Core Path which crosses through the Application Site. This is Core Path 276, which runs along the north of the Application Site and forms part of the John Muir Way. Sections of Core Path 276 are also designated as a Right of Way.

Given the previous use of the site of the former Cockenzie Power Station and ongoing demolition works, there is currently no public right of access to the Application Site for safety reasons. To the immediate west of the Application Site lies the 'Green Hills' area which is popular with walkers, dog walkers and other recreational users.

Impact Assessment

The construction of the OnTW will directly support around 40 full time equivalent jobs for a period of approximately 16 to 18 months. The construction of the OnTW will require both specialist and general construction workers. Indirectly, the OnTW may also create further employment opportunities down the supply chain for those companies providing services to the contractors during construction. In addition, there will be induced economic benefit to the local economy relating to additional expenditure from construction workers spending their income in local shops, pubs, cafes and takeaways. Although short-term they are considered to be positive, it is not predicted that these effects will be significant.

Where public access along the John Muir Way will be temporarily disrupted during construction, maintenance or decommissioning activities, a suitable diversion that minimises the length of path affected will be put in place by ICOL along with signage at each end of the route where the route is diverted. Following the adoption of these mitigation measures, no significant effects

are predicted upon this or any other public access routes as a result of the OnTW.

To avoid temporary disturbance during construction to cyclists and visitors along the B1348 (which forms part of both NCR 76 and the promoted Golf Coast Road), it is proposed to use either the existing ducts which run under the road or the use of Horizontal Directional Drilling for the laying of the Onshore Export Cable. This installation of the Onshore Export Cable is anticipated to take up to 12 weeks. In the event that this is not feasible and open cut trenching is required, it is proposed that a local traffic management scheme be put in place to minimise any potential disturbance to users. With this mitigation in place, no significant effects are predicted upon users of NCR 76 or the Golf Coast Road during construction.

Once operational, those travelling along the Golf Coast Road would be able to obtain views of the Onshore Substation for a distance of approximately 700 metres of this total 45 kilometre route at worst. Given the limited duration of these views, it is not considered that they would detract from the enjoyment and experience of visitors using this route and their likely future propensity to use it.

There will be a requirement for temporary closure of a small area of open space at Green Hills within the Application Site along the north-western boundary for health and safety reasons during site construction for a period of up to three months. Given that the remainder of open space within Green Hills which will remain accessible and undisturbed during construction and the extent of other amenity space in the local area, it is not considered that there will be any significant effects upon recreational users.

It is not anticipated that the addition of the employment associated with ICOL's Offshore Wind Farm and Offshore Transmission Works (OfTW) will result in a significantly greater effect upon employment and economic activity in the local area than that predicted to occur during the construction of the OnTW in isolation given the majority of these jobs will be located outwith the local area. It is however important to note that the significant employment and economic opportunities presented to the east coast of Scotland and further afield by the development of ICOL's Offshore Wind Farm are entirely dependent upon the development of the OnTW. These opportunities include the development of business and industry networks, infrastructural strengthening of various ports, skills and training initiatives and attracting major international energy investors and manufacturing businesses. The importance of these economic opportunities should consequently not be ignored when considering the economic effects of the OnTW.

Depending upon the construction programme for the proposed Blindwells New Settlement, it is considered that there is potential for temporary positive significant effects on employment and the local economy during peak periods of sequential construction activity. The potential for other significant cumulative effects upon land use, recreation and tourism from these other developments are considered unlikely.

Air Quality

Air Quality refers to the potential impacts of air pollution on the natural or built environment. The assessment considered effects to nearby residential areas such as housing at the eastern side of Prestonpans and the western side of Cockenzie.

Consultation
Responses received from ELC in the formal Scoping Opinion which were relevant to the Air Quality EIA informed the methodology and scope for the assessment.

Baseline Environment
Existing survey data and desk studies were used to inform the Air Quality assessment. Reference to available monitoring data indicates that air quality in the vicinity of the Application Site is good with background levels of air pollutants well within statutory levels set by national legislation.

Impact Assessment
The effects of the OnTW on air quality have primarily been assessed in relation to the potential for construction (and decommissioning) activities to generate emissions of dust which can give rise to nuisance effects on nearby sensitive receptors as a result of deposition. Emissions of other local air pollutants such as particulate matter (PM_{10}) and nitrogen dioxide (NO_2) have been considered from construction traffic and plant movements.

The assessment has taken account of the proximity of the proposed construction works to nearby residential areas and ecological receptors, the existing background air quality in the vicinity of the OnTW and the potential for the scale and nature of the works to generate emissions including dust.

Embedded mitigation includes a dust management plan which will be implemented during construction by the appointed contractor. This will include measures such as damping down of working areas and keeping site roads clean to ensure that activities with the potential to create dust, particularly during dry and windy weather conditions, are minimised. Dust arisings during construction will be monitored and appropriate dust suppression measures will be taken to respond to conditions and activities on site when required.

No significant effects on residential properties in proximity to the OnTW are predicted during construction and decommissioning from dust emissions or from emissions resulting from other activities such as construction traffic movements.

Further Information

Further Information

The EIA Report will be submitted with an application to ELC for PPP to construct and operate the OnTW. Once the application has been formally registered, ELC will undertake consultation and invite public representations on the proposals before reaching a decision.

A copy of the planning application, with the respective plans showing the area to which it relates, together with a copy of this EIA Report, is available for inspection, free of charge, via the Inch Cape website (http://www.inchcapewind.com/publications) and during opening hours at:

- East Lothian Council,
  John Muir House,
  Brewery Park, Haddington,
  East Lothian, EH41 3HA;
- Longniddry Library,
  Churchway, Longniddry,
  East Lothian, EH32 0LW;
- Port Seton Library,
  Community Centre,
  South Seton Park,
  Port Seton, EH32 0BG;
- Prestonpans Library,
  West Loan ,
  Prestonpans, EH32 9NX; and
- Tranent Library,
  The George Johnstone Centre,
  35 Winton Place,
  Tranent, EH33 1AE

The EIA Report comprises three volumes:

- **A Non Technical Summary (this document)**
- **Volume 1: Written statement; and**
- **Volume 2: Technical Appendices.**

A copy of the NTS can also be requested from the address below free of charge or downloaded from the project website.

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www.inchcapewind.com

ICOL welcome all representations on this application. If you wish to comment on this EIA Report or make representations to ELC, please write to ELC at the following address:

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John Muir House
Brewery Park, Haddington
East Lothian, EH41 3HA

Designed by Tayburn

Inch Cape Onshore Transmission Works
New Energy for Scotland

Non Technical Summary

www.inchcapewind.com