



Inch Cape Onshore Transmission Works

New Energy for Scotland

OnTW Habitats Regulations
Appraisal

2018

SDIC 
Red Rock Power Limited

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Glossary

Consented Offshore Transmission Works (OfTW)	Offshore substation platforms and their foundations and substructures, interconnector cables and offshore export cables, as consented by the Scottish Ministers on 10 October 2014.
Consented Offshore Wind Farm	Wind turbine generators and their foundations and substructures, and inter-array cables., as consented by the Scottish Ministers on 10 October 2014.
EIA Report	Report presenting the findings of the Environmental Impact Assessment (EIA).
European Designated Sites	European Designated Sites form part of a wider international network to protect the most important wildlife sites across member states of the EU, called Natura 2000, which include Special Protection Areas (SPAs).
ICOL's Offshore Wind Farm	This includes proposed wind turbine generators, foundations and substructures and inter-array cables. This refers to either the Consented Offshore Wind Farm or Revised Offshore Wind Farm, as defined.
Landfall	Point where up to two Offshore Export Cables from ICOL's Offshore Wind Farm will be brought ashore.
Offshore Export Cable	The subsea, buried or protected electricity cables running from ICOL's Offshore Wind Farm offshore substation to the Landfall.
Onshore Transmission Works (OnTW)	All proposed works within the Application Site, typically including the Onshore Substation, cables transition pits, cable jointing pits, underground electricity transmission cables connecting to the Onshore Substation and further underground cables required to facilitate connection to the national grid. This includes all permanent and temporary works required. See <i>Chapter 5: Description of Development</i> for full details.
Original OnTW	The OnTW, as was granted planning permission in principle in September 2014, under ELC reference 14/00456/PPM.
Original OnTW ES	The Environmental Statement (ES) that was submitted to support the application for the Original OnTW in 2014.
Revised Offshore Transmission Works (OfTW)	Offshore substation platforms and their foundations and substructures, interconnector cables and Offshore Export Cables, as per the scoping report submitted to Marine Scotland Licensing Operations Team on behalf of the Scottish Ministers in April 2017.
Revised Offshore Wind Farm	Wind turbine generators and their foundations and substructures, and inter-array cables, as per the scoping report submitted to Marine Scotland Licensing Operations Team on behalf of the Scottish Ministers in April 2017.
The Approved Scheme	Consented Offshore Wind Farm, Consented OfTW and Original OnTW

Abbreviations and Acronyms

AA	Appropriate Assessment
CEMP	Construction Environment Management Plan
ELC	East Lothian Council
EIA	Environmental Impact Assessment
HDD	Horizontal Directional Drilling
HRA	Habitats Regulations Appraisal
ICOL	Inch Cape Offshore Limited
LSE	Likely Significant Effect
MLWS	Mean Low Water Springs
MS LOT	Marine Scotland Licensing Operations Team
NETS	National Electricity Transmission System
OfTW	Offshore Transmission Works
OnTW	Onshore Transmission Works
PPP	Planning Permission in Principle
pSPA	Proposed Special Protection Areas
SNH	Scottish Natural Heritage
SPA	Special Protection Areas
WeBS	Wetland Bird Survey

1 OnTW Habitats Regulations Appraisal

1.1 Introduction

- 1 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 Substation, electricity cables and associated infrastructure, collectively referred to as the Onshore Transmission Works (OnTW), which is required to connect ICOL's Offshore Wind Farm to the National Electricity Transmission System (NETS). An Environmental Impact Assessment (EIA) Report has been submitted to ELC in support of this application, which documents the likely significant effects associated with the OnTW.
- 2 This document provides information to inform the OnTW Habitat Regulations Appraisal (HRA) to be undertaken by the Competent Authority (ELC) in accordance with Article 6 of the Habitats Directive (Directive 92/43/EEC) and Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994.
- 3 An Appropriate Assessment (AA) is required when a project which is not directly connected with or necessary to the management of a European Designated Site is likely to have a significant effect thereon, either in isolation or in combination with other plans and projects.
- 4 The HRA process involves a defined set of evidence-based reasoned judgments to determine whether or not a European Designated Site will remain successfully protected if the development proceeds. European Designated Sites form part of a wider international network to protect the most important wildlife sites across member states of the EU, called Natura 2000, which include Special Protection Areas (SPAs).
- 5 In Scotland, the HRA process is implemented through the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (the Habitats Regulations) and involves three stages:
 - **Stage One:** is the proposal directly connected to or necessary for the conservation of a European Designated Site? In the case of this application for consent of the OnTW it is not. Therefore, the following stages must be followed.
 - **Stage Two:** will the proposal have a Likely Significant Effect (LSE), alone or in combination with other reasonably foreseeable plans and projects, on a European Designated Site? This test acts as a screening stage to remove proposals that do not need further consideration under Stage Three. Where it can be concluded on the basis of objective information, and taking into account mitigation measures, that there will no LSE on the European Designated Site, no further steps are required. Where no such conclusion can be reached, an AA is required under Stage Three.
 - **Stage Three:** can it be ascertained beyond reasonable scientific doubt and in light of the best scientific knowledge available that the proposal, including any necessary mitigation measures, will not adversely affect the integrity of a European Designated Site? Government policy (e.g. UK Planning Policy Guidance 9, Department of the Environment (1994, now superseded) and Scottish Office (1995) Circular 6/1995) defines the integrity

of a site as *‘the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitats and/or, the levels of the populations of the species for which it was classified’*. This definition has been subsequently reinforced by European Commission guidance (European Commission, 2000).

6 The competent authority, in this case ELC for the OnTW, carries out the AA. Consideration of the conservation objectives associated with a European Designated Site is required in determining effects on site integrity and an AA must be carried out in view of these. Conclusions must be made on the basis of there being no reasonable scientific doubt as to the absence of adverse effects.

7 If it cannot be ascertained beyond reasonable scientific doubt that the proposal will not adversely affect the integrity of a European Designated Site, the proposal can only proceed if:

- There are no alternative solutions;
- There are imperative reasons of over-riding public interest for doing so; and
- Any necessary compensatory measures are taken to secure the coherence of the Natura 2000 network, to ensure the long term survival of Europe’s most valuable and threatened species and habitats.

8 Guidance from SNH on the HRA of plans (David Tyledesley & Associates 2010) provides more detail on this process.

1.2 Screening for LSE

9 An HRA Screening Report (see Inch Cape Offshore Environmental Statement *Appendix 15B*, Annex 15B.1) and Information to inform a HRA (IIHRA) has been already provided for the Consented Offshore Wind Farm, Consented Offshore Transmission Works (OfTW) and the Original OnTW (referred to within the HRA as the Approved Scheme) on the Firth of Forth SPA and the Forth Island SPA (see Section 15.12 of *Chapter 15* of the Inch Cape Offshore ES (ICOL, 2013)). This was submitted to Marine Scotland on 3 July 2013 along with the EIA in support of applications for marine licences and consents under Section 36 of the Electricity Act 1989 for Consented Offshore Wind Farm and OfTW. At the time of writing that assessment, two cable landfall options were under consideration, including the one at Cockenzie which has now been selected as the Landfall and which has been assessed as part of this EIA for the OnTW. The IIHRA for the Approved Scheme therefore covers the landfall area to be assessed in relation to the OnTW for the same aspect of the proposed development (i.e. the Offshore Export Cable landfall and installation works).

10 The HRA Screening Report (see Inch Cape Offshore Environmental Statement *Appendix 15B*, Annex 15B.1) considered potential connectivity between the Approved Scheme and SPAs. Of the SPAs considered during the screening process seven sites in total were identified to have the potential for LSE and therefore require an AA. These SPAs were agreed with SNH (pers. comm., 2012).

11 Of the seven SPAs where LSE was identified, two (the Slamannan Plateau, and the Upper Solway Flats and Marshes) were designated solely for their over-wintering qualifying interests.

The third, (the Firth of Forth) is designated for its over-wintering bird species and Sandwich tern on passage. The remaining four were designated due to their qualifying interests in the breeding season (Forth Islands, Fowlsheugh, St Abb's Head to Fast Castle, and Buchan Ness to Collieston Coast).

- 12 At the time of the assessments for the Original OnTW, the only SPA for which LSE could not be discounted was the Firth of Forth SPA through which the Offshore Export Cable passes where it makes landfall at Cockenzie. This SPA is designated for its over-wintering bird species which include waders, wildfowl, seaducks and grebes and Sandwich tern on passage. The full list of Firth of Forth SPA qualifying species and their respective populations at both classification and in the five year period 2006/07 - 2010/11 is presented in Table 7.3 of *Chapter 7* of the Original OnTW ES.
- 13 Since submission of the original assessments, formal proposals regarding the designation of a new suite of marine SPAs were submitted to Government for consideration on 30 June 2015. These sites are now considered as proposed SPAs (pSPAs). Although not formally designated, it is Scottish Government policy that these pSPAs are protected as if they were fully designated (Scottish Government, 2014). Of these pSPAs, the Outer Firth of Forth & St Andrews Bay pSPA is considered to have potential connectivity to the OnTW since the boundary of this pSPA lies immediately adjacent to the landfall at Cockenzie.

1.3 Information to Inform Appropriate Assessment

1.3.1 Firth of Forth SPA

- 14 The IHHRA completed for the Approved Scheme concluded that there would be no adverse impact on the integrity of the Firth of Forth SPA (ICOL, 2014: *Appendix 7B*).
- 15 Wetland Bird Survey (WeBS) data from 2010/11 – 2014/15 for the relevant count sectors which corresponded to the baseline intertidal and near-shore water bird survey area were analysed (see *Appendix 6C* of the EIA Report). It was concluded that the 2012/2013 baseline survey data (used to inform the Original HRA) continues to be an accurate representation of the typical occurrence and abundance of waterbirds along this section of the coastline. This was agreed through consultation with SNH, noting that the original intertidal and near-shore waterbird survey data would remain valid until autumn 2018¹.
- 16 Whilst the Application Site is located approximately 300 m further west along the shore from the Original OnTW and associated landfall site, the original assessments still cover the same wider landfall zone (see Figure 1). The intertidal and near-shore bird survey report for the OnTW (see *Appendix 6C* of the EIA Report) identifies that the intertidal and near-shore habitats adjacent to the Application Site continue to support a number of species which occur in significant numbers compared to their respective Firth of Forth SPA population estimates (i.e. >1 per cent). Therefore, as there would be no increase in impact from the OnTW and there have been no changes to SPA designations (such as the boundary or associated qualifying

¹ E-mail from Malcolm Fraser (SNH, Forth Area Operations Officer) dated 9 November 2016.

interests), the conclusions from the Original HRA remain valid and no adverse impacts on the integrity of the Firth of Forth SPA are predicted.

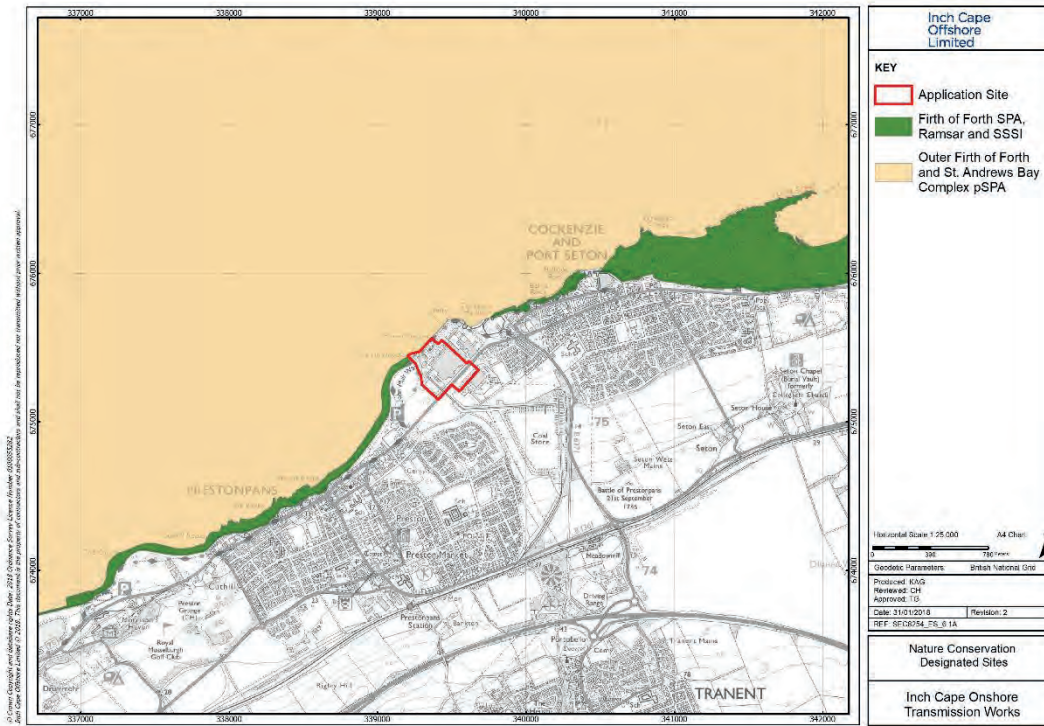


Figure 1: Nature Conservation Designated Sites

1.3.2 Outer Firth of Forth and St. Andrews Bay Complex pSPA

- 17 The Outer Firth of Forth and St. Andrews Bay Complex pSPA stretches from Arbroath in Angus to St. Abb’s Head in the Scottish Borders encompassing the Firth of Forth, the outer Firth of Tay and St. Andrews Bay and extending over 12 nautical miles offshore (SNH, 2016). The site is recognised for supporting one of the largest and most diverse concentrations of marine birds in Scotland, representing important breeding grounds for seabirds and wintering grounds for seabirds, seaducks, divers and grebes.

Conservation Objective 1: avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species

Habitat Deterioration

- 18 There will be no habitat loss from the Outer Firth of Forth and St. Andrews Bay Complex pSPA as the Application Site does not overlap with this European Designated Site. As such, the OnTW would not contribute to any cumulative impacts of habitat loss which may arise in combination with other plans or projects.
- 19 Although there will be no direct loss of habitat from within the Outer Firth of Forth and St. Andrews Bay Complex pSPA itself, the Offshore Export Cables will be brought ashore through

a small (approximately 0.2 ha) area of intertidal rock and boulder shoreline within the north western corner of the Application Site which may be used by some of the species associated with the pSPA. This could either be achieved by Open Cut Trenching or Horizontal Directional Drilling (HDD), of which the former would result in temporary, reversible disturbance to the habitat.

- 20 However, the extent of intertidal habitat which could be affected by the works is considered to be negligible and inconsequential (approximately 0.2 ha) in relation to the availability of similar habitat close to the Application Site and in the wider Forth Estuary. There are alternative areas of equivalent intertidal foraging and roosting habitat elsewhere along the immediately adjacent shoreline, to which qualifying wader species could be temporarily displaced. Given the limited tidal range and the relatively small area of habitat affected, it is considered highly unlikely that the Application Site would be of particular value to other qualifying species of the pSPA. Therefore, installation works in the intertidal zone are unlikely to cause significant deterioration of habitats used by species associated with the pSPA.
- 21 There is the potential for fuel or chemical spillage during cable installation, which may result in the contamination of near-shore waters used by qualifying species. However, the risk of any pollution incidents will be minimised through the implementation of best practice methods of working and pollution prevention measures prescribed in the Construction Environmental Management Plan (CEMP). Therefore, deterioration of the habitats through by pollution incidents would not be significant, if not avoided altogether.
- 22 In terms of cumulative habitat deterioration impacts, it is expected that construction of ICOL's Offshore Wind Farm and OfTW would be carried out under similarly strict environmental protection measures and would therefore not be significant. There are not expected to be any in combination effects with the Blindwells Settlement, given that it is located approximately one kilometre inland from the coast.

Disturbance of Qualifying Species

- 23 Disturbance associated with the OnTW is expected to be localised and temporary. The main sources of disturbance to qualifying species will be unpredictable noise events associated with construction activities, particularly those associated with cable installation, although the presence of construction workers may also cause localised disturbance. The exact degree of disturbance to qualifying species will depend on the construction and installation methods used and the duration and timing of activities.
- 24 At worst this might result in the temporary displacement of the qualifying species most susceptible to disturbance to alternative areas of intertidal or near-shore waters located along the adjacent coastline, where foraging and roosting habitat is expected to be of equivalent quality. Furthermore, those qualifying species which utilise the habitats adjacent to the Application Site are expected to be habituated to relatively high levels of disturbance from both the historical operation and recent demolition of the former Cockenzie Power Station as well as regular human disturbance from public walking behind the seawall. Therefore, the OnTW, and in particular the works associated with the installation of the Export Cables, are

not expected to cause significant disturbance to any of the qualifying species associated with the Firth of Forth SPA

- 25 In regard to cumulative disturbance effects, there are only likely to be in combination effects between the OnTW and ICOL's OfTW through cable installation seaward of the Mean Low Water Springs (MLWS). However, disturbance associated with the ICOL's OfTW would be temporary, localised and of low intensity (limited to a small number of slow moving vessels) with any disturbed birds displaced to alternative foraging and roosting habitat of equivalent quality elsewhere (ICOL, 2014: *Appendix 7B*). There are not expected to be any in combination effects with the Blindwells Settlement, given that it is located approximately one kilometre inland from the coast. Therefore, it is considered that there will be no significant in combination disturbance effects on qualifying species of the Outer Firth of Forth and St. Andrews Bay Complex pSPA.

Conservation Objective 2: avoidance of significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long-term.

Mortality and Injury

- 26 None of the equipment, machinery or operational components involved in the construction, operation or decommissioning of the OnTW are expected to pose a threat of mortality or injury to birds. Therefore, the risk of any qualifying species of the Outer Forth and St. Andrews Bay pSPA being killed or injured as a result of works associated with the OnTW, or in combination with other plans or projects, is considered to be negligible.

Disturbance of Qualifying Species

- 27 The effect of disturbance on the qualifying species of the Outer Forth and St. Andrews Bay pSPA has been considered in relation to Conservation Objective 1. It is concluded that the OnTW will not cause significant disturbance to any of the qualifying species, either alone or in combination with other plans or projects.

Conservation Objective 3: maintenance of the habitats and food resources of the qualifying features in favorable condition.

- 28 The effect of habitat deterioration on the qualifying species of the Outer Forth and St. Andrews Bay pSPA has been considered in relation to Conservation Objective 1. Furthermore, given the limited extent of intertidal habitat which could be affected by cable installation (approximately 0.2 ha), any reduction in prey availability for qualifying species is considered to be negligible. Therefore, the OnTW is not expected to affect the favourable condition of habitats or food resources of the qualifying interests of the pSPA, either alone or in combination with other plans or projects.

Conclusion

- 29 Having considered the conservation objectives of the Outer Forth and St. Andrews Bay pSPA in relation to the predicted effects of the OnTW, both alone and in combination with other plans and projects, it can be concluded that there will be no adverse effect on the integrity of the Outer Firth of Forth and St. Andrews Bay Complex pSPA.

1.4 Conclusions

- 30 Formal Scoping Opinion was received from Scottish Ministers in August 2017 on the Revised Offshore Wind Farm and associated OfTW (MS LOT, 2017). Marine Scotland Licensing Operations Team (MS LOT) and their advisors considered changes to turbine numbers and parameters to be the key consideration for reassessment of potential ornithological impacts and therefore only those qualifying interests with potential connectivity to the Revised Offshore Wind Farm would require consideration.
- 31 SNH and MS LOT confirmed that they had fully considered non-breeding waterfowl interests as qualifying features of the Firth of Forth SPA and that therefore the HRA carried out in respect of the Original OnTW remains valid for the OnTW. They also confirmed that they had fully considered the OnTW in relation to the qualifying interests of the Outer Firth of Forth & St Andrews Bay pSPA and confirmed that there were no outstanding matters requiring further assessment. They stated that relevant conditions on the existing marine licence should be transferred to any new licence in order to ensure good working practice is adopted for cable installation.
- 32 Following consideration of the Scoping Opinions provided by both East Lothian Council and Scottish Ministers, and the HRA documentation provided in support of the previous applications, ICOL consider that the conclusions of the existing HRA documentation can be relied upon in respect of this application for the OnTW. In combination with good practice mitigation to be outlined in the CEMP, ICOL conclude that the OnTW will not have an adverse effect on the site integrity of any SPA.
- 33 Those SPAs and qualifying interests identified by Scottish Ministers as having potential connectivity to ICOL's Offshore Wind Farm will be considered separately on the submission of a new offshore application.

References

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SNH (2016). *Outer Firth of Forth and St. Andrews Bay proposed Special Protection Area (pSPA) Advice to Support Management. Advice under Regulation 33(2) of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and Regulation 18 of the Offshore Marine Conservation (Natural Habitats &c.) Regulations 2007*. Available at: <http://www.snh.gov.uk/docs/A2020842.pdf>

