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## Glossary

Application Site	The area within the red line Planning Boundary comprising the Onshore Transmission Works (OnTW), as defined.
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).
ICOL's Offshore Transmission Works (OfTW)	Offshore substation platforms (OSPs) and their foundations and substructures, interconnector cables and Offshore Export Cables. This refers to either the Consented OfTW or Revised OfTW, as defined.
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 Export Cables	Electricity cables from the Onshore Substation to the grid connection point.
Onshore Substation	The electrical substation comprising of all the equipment and associate infrastructure required to enable connection to the electrical transmission grid.
Onshore Substation Site/Substation Site	The indicative area within the Application Site where the Onshore Substation and screening will be located.
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 EIA	The Environmental Impact Assessment (EIA) that was prepared to support the planning application for the Original OnTW and reported in the Original OnTW ES, as defined.
Original OnTW ES	The Environmental Statement (ES) that was submitted to support the application for the Original OnTW in 2014.
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.
Scoping Opinion	The Scoping Opinion adopted by ELC as to the scope and information to be provided in support of an application for the OnTW, as defined.
Scoping Report	Report prepared as the first stage of the EIA process in support of a request for a Scoping Opinion from ELC, under Regulation 17 of the EIA Regulations. The Report was submitted in July 2017.

## Abbreviations and Acronyms

<b>AA</b>	Appropriate Assessment
<b>CEMP</b>	Construction Environmental Management Plan
<b>EcIA</b>	Ecological Impact Assessment
<b>EIA</b>	Environmental Impact Assessment
<b>ELC</b>	East Lothian Council
<b>ES</b>	Environmental Statement
<b>FRA</b>	Flood Risk Assessment
<b>HRA</b>	Habitats Regulations Appraisal
<b>ICOL</b>	Inch Cape Offshore Limited
<b>IEMA</b>	Institute of Environmental Management and Assessment
<b>LSE</b>	Likely Significant Effect
<b>OfTW</b>	Offshore Transmission Works
<b>OnTW</b>	Onshore Transmission Works
<b>PAC</b>	Pre-Application Consultation
<b>PPP</b>	Planning Permission in Principle
<b>pSPA</b>	Proposed Special Protection Area
<b>SEPA</b>	Scottish Environmental Protection Agency
<b>SNH</b>	Scottish Natural Heritage
<b>SPA</b>	Special Protection Area

## **3 Process and Methodology**

### **3.1 Introduction**

- 1 This chapter describes the process and methodology used for the Environmental Impact Assessment (EIA), carried out in support on an application for Planning Permission in Principle (PPP) for the Onshore Transmission Works (OnTW), the findings of which are presented in this EIA Report.
- 2 This EIA Report meets the requirements of *the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017*, hereafter referred to as the EIA Regulations.

### **3.2 Environmental Impact Assessment (EIA) Regulations**

- 3 The EIA Regulations came into force in May 2017 and implement changes to the EIA Directive arising out of Directive 2014/52/EU. This EIA Report has been prepared in accordance with the requirements of the EIA Regulations.

### **3.3 The EIA Process**

#### **3.3.1 Scoping**

- 4 Scoping is a voluntary part of the EIA process which seeks to identify the potential effects which are likely to be significant and to exclude (scope out) effects which are not considered to be significant
- 5 The Scoping Report for the OnTW was submitted in July 2017 (<http://www.inchcapewind.com/publications/OnshoreScopingReport07-2017/OnshoreScopingReport07-2017>). The Scoping Report scoped out, where possible, elements which did not need to be considered in the EIA and identified the areas where the EIA should focus, calling upon the findings of the Original OnTW EIA, where relevant and appropriate. The Scoping Report set out the methods that would be used in the assessment as advised by Planning Advice Note (PAN) 1/2013 Environmental Impact Assessment (Scottish Government, 2017). Further consultation has been undertaken with East Lothian Council (ELC), Historic Environment Scotland (HES), Scottish Natural Heritage (SNH), Scottish Water and Scottish Environment Protection Agency (SEPA) and members of the public (as detailed in the Pre-Application Consultation (PAC) Report included with the planning application to ELC. This consultation along with recognised best practice has informed the methodology for the assessment of the OnTW.
- 6 A Scoping Opinion from ELC was received 6 September 2017. A summary of the scoping response is provided in Table 3.1 below. Detailed scoping responses and additional feedback from consultation for each topic is included in a table in each environmental topic chapter. *Appendix 3A*, Volume 2, contains the Scoping Opinion and other consultation responses received during the consultation process.

**Table 3.1 Scoping Responses**

<b>Consultee</b>	<b>Summary of Response / Comments</b>	<b>EIA Report Reference / ICOL Response</b>
<p>ELC</p>	<p>It is the Council's view that the onshore and offshore works are an integral part of the main project, which consists of the offshore Inch Cape Wind Farm and the onshore transmission works. Their approval should therefore only be considered once the EIA for the whole project is carried out.</p> <p>The EIA Report should include assessment of the project as a whole. This includes the offshore works covered by separate consents. The ES must consist of a "single and accessible compilation" (Scottish Government Circular 2017/1 paragraph 76). Information on and assessment of the offshore works should therefore be included.</p> <p>If a revised scheme is taken forward, a description of this scheme and its significant environmental impacts should be available, and a clear link made to this information within the EIA Report for the onshore works. Assessment could be done by use of the 'Rochdale envelope', assessment of the worst case impact scenario if the precise details of the scheme are not known at this stage.</p>	<p>A note relating to the Scoping Opinion was submitted to ELC on the 20 November 2017 which discusses the onshore/offshore interaction (see <i>Appendix 3B</i>, Volume 2).</p> <p>ICOL are in agreement that the 'Rochdale envelope' approach to EIA is appropriate, enabling environmental impact assessment to proceed where the final design has not been resolved by assessing on the basis of worst case design parameters.</p> <p>With regards to assessing the whole project, as ICOL hold a consent for the Consented Offshore Wind Farm the project assessment carried out in this EIA Report for the OnTW will be carried out on the assessment for the Consented Offshore Wind Farm, which would be constructed if the Revised Offshore Wind Farm is not consented by the Scottish Ministers.</p> <p>The EIA Report for the Revised Offshore Wind Farm which is currently being prepared and is due for submission in 2018 will assess the OnTW (for which this application relates to) in its assessment, which ELC will be consulted upon.</p> <p>ELC responded to the note stating that they agree with ICOL that if planning permission is granted for the OnTW, ICOL would be able and entitled to implement planning permission with the existing consents as a 'whole project' - provided EIA is up to date (see <i>Appendix 3C</i>, Volume 2).</p> <p>As such, ICOL have produced a Project Assessment document which has been submitted alongside this EIA Report. This document has been written to provide an overview of the likely impacts for all the elements of the project as a whole. It draws upon on this EIA Report and draws upon work completed for the Consented Offshore Wind Farm and Consented Offshore Transmission Works 2014 ES. A summary of the 2014 consented</p>

<p>impacts has been provided and for each, professional experts in each field have provided commentary on the validity of the assessment and outcomes.</p>	
<p>This suggested approach is noted and has been adopted within the EIA Report. The baseline data and technical studies undertaken for the Original OnTW ES have been used where relevant with additional material to update and provide relevant baseline for the Application Site.</p>	<p>It is agreed that the baseline data and technical studies undertaken for the previous ES are likely to remain broadly relevant, though may require supplementing or updating.</p>
<p>Addressed in <i>Chapter 3: Process and Methodology</i>. For the purposes of this assessment those residual positive and negative effects indicated as Moderate, Moderate/Major and Major are considered significant, unless otherwise specified in individual technical chapters.</p>	<p>There is some potential for effects which are described as 'Moderate' to be significant. A Low magnitude effect on a highly sensitive receptor could have this impact as any shift away from baseline could (potentially) have a significant effect on such a receptor. The inclusion of impacts which affect the integrity of a key feature as 'Moderate Impact', if impacting on a Moderately sensitive receptor could also be significant. The total loss (High impact) of a Low sensitivity receptor might also in some circumstances be considered significant. Impacts that are described as 'Moderate' should therefore be considered as 'potentially significant' and a further justification provided as to whether they are or are not.</p>
<p><i>Chapter 1: Introduction</i> includes a table of the OnTW EIA Team Technical Specialists and full details of their experience are provided in <i>Appendix 1B, Volume 2</i>.</p>	<p>The developer must ensure that the EIA Report is prepared by competent experts. The EIA Report should be accompanied by a statement outlining the relevant qualifications and experience of those involved in preparing the study.</p>
<p>This is in line with relevant guidance and is the approach used within the EIA Report.</p>	<p>The assessment should be focused on the <b>significant</b> impacts of the proposal on the environment. Less attention should be paid to impacts which are not significant, and where the impact is of little or no significance a short paragraph outlining a particular aspect to show if that possible relevance has been considered will be sufficient. To encourage focus on significant impacts of the proposal the developer is encouraged to submit separately any information they wish to include in support of the planning application but which is not required for the purposes of the EIA Report.</p>
<p>Description of development provided within <i>Chapter 5: Description of Development</i> and where relevant within <i>Chapters 6-13</i>, of the EIA Report. A description of the Consented Offshore Wind Farm and the Offshore Wind Farm ES can be accessed via the Inch Cape website: <a href="http://www.inchcapewind.com/home">http://www.inchcapewind.com/home</a>.</p>	<p>Require a description of the development comprising information on the site, design, size and other relevant features of the development. This description should include information on the offshore element, either within the ER for the onshore works or by reference to a publicly available ES/EIA Report for the offshore works.</p>

<p>The expected lifetime of the development should be included, along with a Decommissioning Statement.</p>	<p><i>Chapter 5: Description of Development</i> discusses the decommissioning phase of the OnTW. The OnTW will be not fixed but would be for the lifetime of ICOL's Offshore Wind Farm. A draft decommissioning plan will be prepared prior to construction and a final plan prior to decommissioning. The draft decommissioning plan at the pre-construction stage will be a high level plan and will only address the principles of decommissioning, as the ultimate decommissioning activity will be undertaken in accordance with applicable guidance at the relevant time.</p>
<p>A description of the reasonable alternatives studied by the developer, relevant to the proposed project, and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of environmental effects should be provided.</p> <p>The EIA regulations require a description of the relevant aspects of the current state of the environment (the baseline scenario) and an outline of its likely evolution without the project, as far as is reasonably foreseeable using relevant available information and scientific knowledge.</p>	<p>Addressed in <i>Chapter 4: Site Selection and Alternatives</i>.</p> <p>Addressed in <i>Chapters 6-13</i> of the EIA Report. In general, it is noted throughout the EIA Report that if the OnTW were not implemented, it is likely that there would be change to the context of the Application Site and immediately surrounding area with some form of development occurring on the site of the former Cockenzie Power Station as well as the development of other proposed projects. The site of the former Cockenzie Power Station is identified as a location for energy related development in National Planning Framework 3 and is identified in the adopted Local Plan 2008 for use as, or in association with, a power generating station, as discussed further in <i>Chapter 2: Policy and Legislation</i>.</p>
<p><b>Noise</b></p> <p>The Scoping Report identifies the relevant policy and guidance documents of which the Noise Impact Assessment should take cognisance. In addition to the receptors noted in the Scoping Report, sensitive receptors at Hawthornbank located on the B1348 Edinburgh Road should be considered for impacts.</p> <p>Noise from demolition works currently being undertaken on the proposed site shall not be included in any assessment of the baseline noise climate.</p>	<p>Hawthorn Bank has been included within the assessment as a sensitive receptor, as indicated in Table 10.2 and on Figure 10.1 in <i>Chapter 10: Noise and Vibration</i>.</p> <p>Measurement of the baseline noise climate in 2017 was undertaken on a Sunday, and did not include noise from demolition works on the Application Site.</p>

<p>The measured baseline noise levels are presented in Table 10.5 and Table 10.6 of <i>Chapter 10: Noise and Vibration</i> for daytime and night-time respectively.</p>	
<p>The maximum ambient noise levels (LAeq) associated with the construction and operation of the OnTW have been considered, as per <i>Section 10.8.1</i> and <i>Section 10.8.2</i> respectively of <i>Chapter 10: Noise and Vibration</i>.</p>	
<p>A night-time baseline survey was undertaken and the assessment has considered the predicted noise levels during both the daytime and night-time periods.</p> <p>As per the guidance of BS4142:2014, the assessment of internal sound levels is not required; however, consideration has been made to the guidance of BS8233:2014 and the World Health Organisation for suitable internal daytime and night-time noise limits, as detailed in <i>Section 10.8.2</i> of <i>Chapter 10: Noise and Vibration</i>.</p> <p>This approach was included within the note to ELC (<i>Appendix 3B</i>, Volume 2) and ELC agreed with this approach (see <i>Appendix 3C</i>, Volume 2) stating that they would accept the use of the guidance as ICOL have indicated.</p>	
<p>ICOL responded to ELC on this in their note which can be found in <i>Appendix 3B</i>, Volume 2 stating that the bund located to the south of the Application Site, to the north of Atholl View, is well established and is likely to remain in place for the operational life of the Onshore Substation. It has therefore been considered within the assessment of noise impact, along with the surrounding local topography and landscape mitigation plan.</p> <p>However, ELC responded (<i>Appendix 3C</i>, Volume 2) by stating that they are aware of previous aspirations to remove the bund from residents (which may or may not be the case currently). Regardless of the owners aspirations for the bund, and how bedded in it looks, if it is not under the control of the applicants it cannot be relied on</p>	<p>Section 10.4.2 of the Scoping Report 'Embedded Mitigation' states that the acoustic bund constructed to protect occupiers from the noise of Cockenzie Power Station will be taken into account. This bund was constructed specifically to avoid noise from Cockenzie Power Station, which use has now ceased. There would not now therefore appear to be an obligation on the part of its owner to retain it. The continued existence of the bund should not be relied upon, unless the bund is under control of the applicants and the application includes provision for it to remain in place.</p>

<p>to stay in position. As such, noise and visual assessment may include 'with' the bund if the applicant chooses, but it must also include 'without'.</p> <p>A noise and visual assessment without the bund has therefore been carried out, however as the assessment is based on a theoretical situation it is considered that the assessment should not sit within the impact assessment sections of <i>Chapter 8: Landscape and Visual</i> or <i>Chapter 10: Noise and Vibration</i> and instead has been included as an Appendix to <i>Chapter 3: Process and Methodology</i> (see <i>Appendix 3D, Volume 2</i>).</p>		
<p>The assessment of vibration as set out in the Scoping Report is satisfactory. There should be cross references to impacts of vibration on biodiversity and material assets.</p>	<p>The assessment of vibration impact has been considered with respect to the construction phase, as detailed in <i>Section 10.8.1 of Chapter 10: Noise and Vibration</i>.</p>	
<p><b>Socio-Economics, Tourism, Land-Use and Recreation</b></p>		
<p>The Assessment covers the main likely impacts on public outdoor access and core paths. However, public access is not confined to the designated core paths in this area, and public recreation is popular in the open space areas adjacent to this site in particular the 'Green Hills' area immediately to the west of the site and impacts on this wider recreational access should be fully addressed. The proposed mitigation during construction for the Core Paths and the John Muir Way is acceptable.</p>	<p>Impacts upon other public recreational areas adjacent to the Application Site, in particular the 'Green Hills' area are assessed within <i>Sections 12.7, 12.8 and 12.9 of Chapter 12: Socio-Economics, Tourism, Land-Use and Recreation</i>.</p>	<p>These additional documents are considered within the baseline section (<i>Section 12.4</i>) of <i>Chapter 12: Socio-Economics, Tourism, Land-Use and Recreation</i>, where relevant. Assessments of the impact on the resources identified within these documents are considered within <i>Sections 12.7, 12.8 and 12.9 of Chapter 12: Socio-Economics, Tourism, Land-Use and Recreation</i>.</p>
<p>Regarding assessment methodology for access and recreation, in addition to the documents listed consideration is given to:</p> <ul style="list-style-type: none"> <li>• Designated Rights of Way ("Public Access Including Rights of Way" document, East Lothian Council, 1994).</li> <li>• National Cycle Routes (details on Sustrans website).</li> <li>• East Lothian Council Active Travel Improvement Plan (currently in preparation).</li> </ul>		<p>Given that the Onshore Export Cable will be underground and fully restored during the operational phase, it is confirmed that impacts during operation on tourism has been scoped out of the EIA. Instead, the assessment of operation effects is confined to</p>
<p>In terms of tourism, the assessment as outlined in the Scoping Report is acceptable. It is not clear what the anticipated effect of the operation of the landfill and export cable would be on this receptor given that it is underground, and it may be possible to scope operation of the landfill and export cable from the assessment. The</p>		

	<p>impact on visitors from access to the coast road should be included in the assessment as noted. The assessment should refer to key local and national tourism documents, including East Lothian tourism (<a href="http://www.eastlothian.gov.uk/info/200193/tourism_and_hospitality/1353/tourism_and_hospitality_businesses">http://www.eastlothian.gov.uk/info/200193/tourism_and_hospitality/1353/tourism_and_hospitality_businesses</a>) and National Strategy (<a href="http://scottishtourismalliance.co.uk/page/national-strategy/">http://scottishtourismalliance.co.uk/page/national-strategy/</a>)</p>	<p>consideration of the landscape and visual impact of the Onshore Substation only (see <i>Section 12.8 Chapter 12: Socio-Economics, Tourism, Land-Use and Recreation</i>).</p> <p>It is confirmed that the key local and national tourism documents referenced by ELC are included in the assessment scope.</p>
<b>Ecology</b>		
	<p>ELC acknowledged that the site of the former Cockenzie Power Station would reduce disruption to locally occurring habitats. It was also agreed that the baseline data and technical studies undertaken for the Original OnTW ES were likely to remain broadly relevant and SNH’s acceptance of the validity of the data collected for the Original OnTW was acknowledged and supported. Nonetheless, the proposed approach to carry out revised habitat and protected species surveys was agreed with ELC. ELC also generally agreed with the proposed scope of the Ecological Impact Assessment (EiA) and the ecological features of interest to be considered, although consideration of potential impacts on marine mammals was also advised. Consideration of potential impacts on all relevant European Protected (Natura 2000) Sites including the Firth of Forth SPA and the proposed Outer Firth of Forth and St Andrews Bay Complex Proposed Special Protection Area (pSPA) through the EIA and Habitat Regulations Appraisal (HRA) processes was also explicitly advised.</p>	<p>EiA carried out as proposed in Scoping Report incorporating ELC recommendations.</p> <p>Consideration of impacts on marine mammals has been carried out. It is not considered that impacts from the OnTW would lead to significant environmental effects and therefore it is not assessed in the EIA. This is due to the fact that landfill works will have no greater impact than the installation of the Offshore Export Cable than described and assessed for the Consented Offshore Wind Farm, which has been assessed as not significant. In their recent Scoping Opinion for the Revised Offshore Wind Farm application, both SNH and Marine Scotland have noted that the impacts from the installation of the Offshore Export Cable does not need to be assessed, as it will not lead to significant effects. Therefore, not assessing marine mammals is also consistent with the advice of both Marine Scotland and SNH. Further to this is the fact that there is low marine mammal presence in the vicinity of the coast line at this location.</p> <p>This approach was included in the Note to ELC sent on 20 November 2017 (<i>Appendix 3B, Volume2</i>).</p>
<b>Hydrology, Geology and Hydrogeology</b>		
	<p>Paragraph 147 of the Scoping Report notes that constraints might include the history of contamination of the site from past use for coal mining. The Scoping Report notes that a desktop study of the baseline environment, inclusive of mining, will be conducted and submitted as part of the EIA report. The embedded</p>	<p>The coal mining risks are assessed in <i>Chapter 7: Hydrology, Geology and Hydrogeology</i> on the basis of a Coal Mining Risk Assessment (CMRA) which is included in <i>Appendix 7B, Volume 2</i>.</p>

	<p>mitigation includes targeted site investigation information which will allow for a detailed design of the proposals to avoid destabilisation of mine workings.</p> <p>The eastern part of this site is within a Coal Authority Referral Area. This means area that has been defined by the Coal Authority as containing potential hazards from former coal mining activity. These hazards can include: mine entries (shafts and adits); shallow coal workings; geological features (fissures and break lines) mine gas and previous surface mining sites. Although such hazards are seldom readily visible, they can often be present and problems can occur in the future, particularly as a result of development taking place.</p> <p>Model Template and Guidance". The CMIRA should be prepared by a competent person and include site specific information as well as information on how this affects the development and layout.</p> <p>Part of this development proposal lies within an area covered by The Coal Authorities Standing Advice. This area lies within a former coal mining area which may contain unrecorded coal mining related hazards. If any coal mining feature is encountered during development, this should be reported immediately to the Coal Authority on 0845 762 6848.</p> <p>Your attention is drawn to the Coal Authority policy in relation to new development and mine entries available at <a href="http://www.coal.decc.gov.uk">www.coal.decc.gov.uk</a> . Please note that any intrusive activities which disturb or enter any coal seams, coal mine workings, or coal mine entries (shafts and adits) requires the prior written permission of The Coal Authority. Such activities could include site investigation boreholes, digging of foundations, piling activities, other ground works and any subsequent treatment of coal mine workings and coal mine entries for ground stability purposes.</p>	<p>As noted in <i>Chapter 7: Hydrology, Geology and Hydrogeology, Section 7.4</i>, a site investigation would be carried out as part of the detailed design of the Application Site, and stability and contamination issues would be accommodated in the final design.</p> <p>As noted in <i>Chapter 7: Hydrology, Geology and Hydrogeology, Sections 7.7 and 7.8</i>, the works are not considered likely to impact on remnant coal mine workings or mining-related hazards.</p>
<b>Air Quality</b>		Assessed within <i>Chapter 13: Air Quality</i> .
<b>Traffic and Transport</b>		

<p>Impacts on the road network should be included as described in the Scoping Report. Impacts on pedestrian delay, accidents, safety and hazardous loads also have links to human health and cross reference should be included</p> <p>For cumulative assessment, the Scoping Report states that development at Blindwells will be considered. Other sites especially those within the proposed East Lothian Local Development Plan should also be considered for their potential for cumulative impact. East Lothian Council has commissioned traffic modelling in relation to the pLDP. This information may help with understanding the impacts of construction traffic from the proposal. For further information contact East Lothian Council Transportation.</p>	<p>Full assessment undertaken in <i>Chapter 11: Traffic and Transport</i> in accordance with recognised guidance and advice.</p> <p>Full cumulative assessment undertaken with Blindwells development in accordance with recognised guidance and advice. The timescales to gain planning consent, construct and occupy the possible developments in Tranent and Longniddry South detailed within the proposed East Lothian LDP do not align with the timescales of the OnTW. Even if these developments were to commence construction during the same timescales as the OnTW, the routes that their construction vehicles would use are different to the local roads to the Application Site. Therefore, given that the emerging sites in the proposed LDP within Tranent and Longniddry South would not generate any traffic within the Traffic and Transport Study Area during the timescales being considered for the OnTW, they do not need to be included as part of a cumulative assessment. Furthermore, a site allocation is no guarantee that site will come forward and remains speculative and not considered proportionate to the OnTW which are subject to a planning application.</p>
<p><b>Cultural Heritage</b></p> <p>Due to the brownfield nature of the site, it is considered that direct effects are unlikely, though this should be checked against the Historic Environment Record held by East Lothian Councils archaeology service.</p> <p>For setting effects, a ZTV should be supplied overlain with the locations of cultural heritage assets including listed buildings, scheduled monuments, Conservation Areas. From this, those which may be affected due to views of or to them can be identified. Views 'through' a receptor should also be considered, which may be more challenging as it may involve consideration of receptors which do not have visibility of the development (and so are not included on the ZTV overlay) but are seen in context with it from other key viewpoints.</p> <p>Receptors that should be considered include Cockenzie Conservation Area, and listed buildings within it, including Cockenzie Harbour.</p>	<p>Cockenzie Harbour and Cockenzie Conservation Area have been visited as a setting impact assessment on 19 July 2017 and 2 August 2017 as part of the overall assessment. The Harbour has been included specifically as a receptor and assessed within <i>Chapter 9: Cultural Heritage</i>.</p> <p>Setting assessment of impacts to the setting of cultural heritage receptors has been completed in <i>Sections 9.7 and 9.8 of Chapter 9: Cultural Heritage</i>.</p> <p>Cumulative assessment of impacts to setting of cultural heritage receptors have been completed in Section 9.9 of <i>Chapter 9: Cultural Heritage</i>.</p>

	<p>There is the potential for cumulative impact with other development on cultural heritage receptors for which the view from them is important including those on higher ground. This should be considered through assessment of the individual receptors and should not be scoped out without identification of those receptors and their cultural heritage qualities</p>	
	<p><b>Landscape and Visual</b></p> <p>The Application Site is located in landscape type "Musselburgh / Prestonpans Coast" character area as defined by ASH 1998 study (ASH, 1998).</p> <p>Proposed Special Landscape Areas and Countryside Around Town should be included in the LVIA.</p> <p>A description of any measures envisaged preventing, reducing and where possible offset any significant adverse effects on the environment should be given. A monitoring plan for mitigation measures should also be included.</p> <p>An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant or appellant in compiling the required information should be given, including any data that has not been available.</p>	<p>This is noted and the character assessment highlighted by the consultee has been used as the basis of assessment in <i>Chapter 8: Landscape and Visual</i>.</p> <p>These designations are included in a proposed Local Development Plan (LDP). Effects of the OnTW on designations contained in the adopted and extant Local Plan have been assessed in the LVIA.</p> <p>However, the designations proposed in the LDP are draft policy only and at this stage can only be accorded limited weight. While they do not form the basis of assessment, reference is made to these designations where appropriate.</p> <p>A description of embedded mitigation is included as part of <i>Chapter 8: Landscape and Visual</i> in <i>Section 8.5</i>.</p> <p>The LVIA and accompanying indicative visualisations of the OnTW are based on the approximate parameters, as appropriate for an application for PPP. The final detailed design for the OnTW will be submitted for approval, should PPP be granted.</p>
<p>SNH</p>	<p><b>Ecology</b></p> <p>As part of the preparatory work for the OnTW Application, SNH was consulted regarding the validity of the original ornithological survey data collected over 2012 and 2013. Through this consultation, and following the provision of further analysis and justification (RPS, 2016), SNH agreed that the baseline ornithological conditions were unlikely to have changed substantially and that as such the original survey data would remain valid until autumn 2018.</p>	<p>No additional/ updated ornithological surveys undertaken.</p> <p>Ecological Impacts Assessment (EclA) carried out as proposed in Scoping Report and approved by SNH.</p>

	<p>In their response to the Scoping Report, SNH acknowledged that the site of the former Cockerzie Power Station is currently of negligible nature conservation and that many of the impacts associated with the OnTW will be of a similar magnitude as previously assessed for the Original OnTW. SNH also agreed that much of the previous assessment, conclusions and mitigation will remain relevant and while some of the survey data may technically be out of date, they reiterated their support of the data validity assessment on which they were previously consulted. Consideration of potential impacts on the Outer Firth of Forth and St. Andrews Bay Complex proposed Special Protection Area (pSPA) through the EIA and Habitat Regulations Appraisal (HRA) processes, as was proposed in the Scoping report, was also agreed with. The proposed approach of considering a ‘worst-case’ scenario to assess environmental effect was also welcomed.</p>	
	<p><b>Landscape and Visual</b></p> <p>SNH “highlight the visual prominence of the Application Site in a key location between Cockerzie and Prestonpans communities”.</p> <p>SNH has advised that reduction of potential LVIA effects could be achieved through consideration of the design of the OnTW and mitigation proposals.</p> <p>It is advised that “selection of appropriate viewpoints should be based on identified likely significant impacts”.</p>	<p>This is noted and potential effects resulting have been considered as part of the LVIA, particularly in relation to residential receptors in the local communities and to those travelling through the area. Refer to <i>Section 8.8.2 of Chapter 8: Landscape and Visual</i>.</p> <p>SNH’s advice provided on site during the consultation meeting of 27 July 2017, was helpful and has been taken into consideration in the evolution of the layout of the OnTW as well as related mitigation. Refer to <i>Section 8.5 of Chapter 8: Landscape and Visual</i>.</p> <p>A proportionate range of viewpoints has been used to represent landscape and visual receptors within the 5 km radius study area. While not necessarily all illustrated with viewpoints, relevant receptors have been visited and predicted effects assessed as part of the LVIA.</p>
<p>SEPA</p>	<p><b>Hydrology, Geology and Hydrogeology</b></p> <p>Within the site SEPA Flood Maps have identified surface water and fluvial flood extents. SEPA believe that the fluvial flood extents shown on this map are possibly the result of demolition of the previous Cockerzie Power Station causing a depression. However, there is a drainage ditch identified on the OS maps which is south east of the proposed development. This may be culverted through the development potentially causing this fluvial flood extent. SEPA will require that a Flood Risk Assessment (FRA) assesses all sources of flooding including fluvial and</p>	<p>A Flood Risk Assessment (FRA) is included in <i>Appendix 7A, Volume 2</i> and summarised in <i>Section 7.6.5 of Chapter 7: Hydrology, Geology and Hydrogeology</i>. It considers all potential sources of flooding. The FRA considers the potential for a culvert to be present beneath the Application Site and concludes it’s very unlikely to be present. The FRA includes an assessment of tidal flood risk and outlines appropriate mitigation measures.</p>

	<p>investigation into a potential culvert running through the development. We would advise that there should be no buildings erected over the culvert to ensure access if maintenance or repairs to the culvert are required. For information, an approximate 1 in 200 year water level for the area is 3.96m AOD based on extreme still water level calculations using the Coastal Flood Boundary Method. This does not take into account the potential effects of wave action, funnelling or local bathymetry at this location. SEPA also recommend that the applicant contact the Flood Prevention Authority with regard to the appropriate levels of freeboard for the area.</p> <p>Refer to Appendix 2 of SEPA's Standing Advice for advice on flood risk. Watercourse crossings must be designed to accommodate the 0.5 per cent Annual Exceedance Probability (AEP) flows, or information provided to justify smaller structures. If it is thought that the development could result in an increased risk of flooding to a nearby receptor then a Flood Risk Assessment must be submitted in support of the planning application. Our Technical flood risk guidance for stakeholders outlines the information SEPA require to be submitted as part of a Flood Risk Assessment.</p> <p>Groundwater investigations should be updated due to the demolition of the previous power station. Groundwater level data must be acquired for post demolition of the power station.</p> <p>Excavations and other construction works can disrupt groundwater flow and impact on existing groundwater abstractions. The submission must include:</p> <ul style="list-style-type: none"> <li>• A map demonstrating that all existing groundwater abstractions are outwith a 100 m radius of all excavations shallower than 1 m and outwith 250 m of all excavations deeper than 1 m and proposed groundwater abstractions. If micro-siting is to be considered as a mitigation measure the distance of survey needs to be extended by the proposed maximum extent of micro-siting. The survey needs to extend beyond the site boundary where the distances require it.</li> </ul> <p>If the minimum buffers above cannot be achieved, a detailed site specific qualitative and/or quantitative risk assessment will be required. We are likely to seek conditions securing appropriate mitigation for all existing groundwater abstractions affected.</p>	
		<p>Figure 7.4 in Chapter 7: <i>Hydrology, Geology and Hydrogeology</i> outlines the regional hydrogeology and the location of licensed or private abstractions within a two kilometre radius of the Application Site.</p> <p>The elevation of shallow groundwater beneath the Application Site is also considered and assessed. See Section 7.5.4 in Chapter 7: <i>Hydrology, Geology and Hydrogeology</i>.</p> <p>An intrusive site investigation will be undertaken following completion of remediation works to confirm groundwater elevations.</p>

	<p>SEPA note that the East Lothian Shoreline Management Plan is from 2002 and has not been updated since. SEPA recommend that contact is made with East Lothian Council to glean any information on the coastal regime and flooding in the area.</p>	<p>ELC in their Scoping Opinion note that The East Lothian Council Shoreline Management Plan is available here: <a href="http://www.eastlothian.gov.uk/downloads/download/2303/shoreline_management_plan">http://www.eastlothian.gov.uk/downloads/download/2303/shoreline_management_plan</a> which contains information on coastal processes. To the extent relevant to the OnTW, the Shoreline Management Plan has been reviewed as noted in <i>Section 7.6.5 of Chapter 7: Hydrology, Geology and Hydrogeology</i> and within the FRA (<i>Appendix 7A, Volume 2</i>).</p>
<p>Investigation of into any formal and informal coastal defences will also be required and assessed as part of any Flood Risk Assessment. A Flood Risk Assessment for this site has previously been undertaken to support a previous redevelopment proposal for this site. There has been demolition since 2009 and as a result it is important to either update that Flood Risk Assessment or undertake a new one to determine the current and future risk of flooding at the application site and the potential impact of the proposed development on the risk of flooding elsewhere. The detailed Flood Risk Assessment should include the following:</p> <ul style="list-style-type: none"> <li>• Investigation into the potential culverted watercourse through the site</li> <li>• Investigation into all sources of flooding including coastal, fluvial, surface water and ground water</li> <li>• Groundwater levels post demolition of the power station; and</li> <li>• Investigation into any coastal flood defences that may remain on site</li> </ul>	<p>An FRA has been carried out as part of this EIA Report (refer to <i>Appendix 7A, Volume 2</i>).</p> <p>An intrusive site investigation and coastal study will be undertaken in due course as outlined within <i>Section 7.4 of Chapter 7: Hydrology, Geology and Hydrogeology</i>.</p>	<p>Section 7.4 of <i>Chapter 7: Hydrology, Geology and Hydrogeology</i> – The foul drainage will be designed and connection agreements reached with Scottish Water at the detailed design stage. The scale of facilities is envisaged to be relatively modest, and there is a very low risk that these flows would not be acceptable for discharge into Scottish Water mains.</p> <p><i>Chapter 7: Hydrology, Geology and Hydrogeology</i> has considered the effects on the water environment, including the requirement to avoid impacts on watercourses.</p> <p>It is shown that with exception of the Landfall no works are required within or close to watercourses.</p>
<p>SEPA requires that the scheme must be designed to avoid impacts upon the water environment. Where activities such as engineering works in the water environment cannot be avoided the ER should include a map showing:</p> <ul style="list-style-type: none"> <li>• All proposed temporary or permanent infrastructure overlain with all watercourses</li> </ul>	<p>SEPA require that the EIA Report contains confirmation (or not) that Scottish Water has confirmed the acceptability of the discharge of foul waste from welfare facilities for construction and operation of the proposal into the foul water mains.</p>	<p><i>Chapter 7: Hydrology, Geology and Hydrogeology</i> has considered the effects on the water environment, including the requirement to avoid impacts on watercourses.</p> <p>It is shown that with exception of the Landfall no works are required within or close to watercourses.</p>

	<ul style="list-style-type: none"> <li>• A buffer of at least 10 m drawn around each watercourse. If this buffer cannot be achieved each breach should be numbered on a plan with an associated photograph of the location, dimensions of the watercourse and drawings of what is proposed</li> <li>• Detailed layout of all proposed mitigation including all cut off drains and settlement ponds</li> </ul> <p>Further advice and best practice guidance are available within the water engineering section of SEPAs website. Guidance on the design of water crossings can be found in our Construction of River Crossings Good Practice Guide. This map should include details of all proposed upgraded, temporary and permanent site infrastructure. This includes all tracks, excavations, buildings, borrow pits, pipelines, cabling, site compounds, laydown areas, storage areas and any other built elements.</p> <p>If water abstractions of dewatering are proposed, a table of volumes and timings of groundwater abstractions and related mitigation measures must be provided. Note that the proposed development may require an authorisation from SEPA under the Water Environment (Controlled Activities)(Scotland) Regulations 2011 (as amended) (CAR).</p>	<p>Potential groundwater levels are considered and mitigation proposed to minimise the need for groundwater abstraction and for the control and management of surface water.</p>
<p>Scottish Water</p>	<p><b>Hydrology, Geology and Hydrogeology</b></p> <p>Scottish Water general advice for development is among other things that any potential effect on the hydrology of the area resulting from the construction and operation of the proposed development should be assessed and the findings presented in the ER. This should include consideration of natural drainage patterns, base flows/volume, retention/run-off rates and potential changes to water quantity. Mitigation and proposed monitoring should also be detailed in the ER. Any potential pollution risk which could affect water quality should be considered and mitigation measures implemented to prevent deterioration in water quality and pollution incidents. This includes sediment run-off soil or peat erosion, and management of chemicals and oils, etc. This should be considered for all operations at all stages of development including pre-and post- construction. Mitigation measures to prevent pollution to watercourses should be outlined in the EIA Report.</p>	<p>The hydrological setting is outlined within Section 7.6.5 and assessment of impacts and appropriate mitigation are outlined in Sections 7.8 – 7.10 of Chapter 7: Hydrology, Geology and Hydrogeology.</p>

	<p>The EIA Report should set out the principles of all proposed pollution prevention and mitigation measures that are relevant to the proposed site.</p> <p>A schedule of mitigation supported by the site specific maps and plans detailed below must be submitted. These must include reference to best practice pollution prevention and construction techniques, regulatory requirements, the daily responsibilities of Ecological Clerk of Works, how site inspections will be recorded and acted upon and proposals for a planning monitoring enforcement officer.</p>	
<p>Historic Environment Scotland (HES)</p>	<p><b>Cultural Heritage</b></p> <p>HES are content that impacts on their historic environment interests are not likely to be significant.</p> <p>They note that a small part of the development boundary lies within the inventory battlefield, the Battle of Prestonpans. They are content that due to the scale of the area and its location on the battlefield, any impacts on the overall designation area are not likely to be significant for their interests.</p> <p>They therefore have no specific advice regarding the scope of the assessment to be undertaken.</p>	<p>Response noted and no action required with regards <i>Chapter 9: Cultural Heritage</i>. However, assessment of potential effects on HES Inventory listed gardens and designed landscapes within the 5 km radius study area has been carried out as part of the LVIA. See <i>Section 8.8.2 of Chapter 8: Landscape and Visual</i>.</p>

### 3.4 EIA Regulations 2017 Requirements

- 7 This EIA Report has been produced in accordance with the EIA Regulations.
- 8 Table 3.2 below summarises where the information required by the EIA Regulations can be found in this EIA Report. The individual technical assessments have been carried out with reference to relevant legislative and policy requirements and current best practice and where relevant this is quoted in each technical chapter.

**Table 3.2 Matters for Inclusion in EIA Reports as Required by Schedule 4, of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017**

Requirement	Location within this EIA Report
<p>1. Description of the development, including in particular:</p> <p>a description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;</p> <p>a description of the main characteristics of the production process, for instance, nature and quantity of the materials used;</p> <p>an estimate by type and quantity, of expected residues and emissions (water, air, and soil pollution, noise, vibration, light, heat, radiation etc.) produced during the construction and operation phases.</p>	<p>Addressed in <i>Chapter 5: Description of Development.</i></p> <p>Addressed in <i>Chapter 5: Description of Development.</i></p> <p>Addressed in <i>Chapter 7: Hydrology, Geology and Hydrogeology, Chapter 10: Noise and Vibration, Chapter 11: Traffic and Transport and Chapter 13: Air Quality.</i></p>
<p>2. A description of the reasonable alternatives studied by the developer which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.</p>	<p>Addressed in <i>Chapter 4: Site Selection and Alternatives.</i></p>

Requirement	Location within this EIA Report
<p>3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.</p>	<p>ICOL has reviewed all data collected as part of the EIA and as a result of the industrial Brownfield nature of the Application Site and NPF3 safeguarding for development, it is predicted that some form of industrial development would be likely to occur without the implementation of the OnTW.</p>
<p>4. A description of the factors specified in regulation 4(3) likely to be significantly affected by the development:</p> <p>population;</p> <p>human health;</p> <p>biodiversity (fauna and flora);</p> <p>land (land-take);</p> <p>soil;</p> <p>water;</p> <p>air and climatic factors;</p> <p>material assets;</p> <p>cultural heritage;</p> <p>landscape;</p>	<p>Addressed in <i>Chapter 6: Ecology, Chapter 7: Hydrology, Geology and Hydrogeology, Chapter 8: Landscape and Visual, Chapter 9: Cultural Heritage, Chapter 10: Noise and Vibration, Chapter 11: Traffic and Transport, Chapter 12: Socio-Economics, Tourism, Land-Use and Recreation and Chapter 13: Air Quality.</i></p>
<p>5. A description of the likely significant effects of the development on the environment resulting from inter alia:</p> <p>the construction and existence of the development, including, where relevant, demolition works;</p> <p>the use of natural resources, in particular land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;</p>	<p>Addressed in <i>Chapter 6-13</i> of the EIA Report.</p> <p>Addressed in <i>Chapter 6: Ecology and Chapter 7: Hydrology, Geology and Hydrogeology.</i></p>

Requirement	Location within this EIA Report
<p>the emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances and the disposal and recovery of waste;</p> <p>the risks to human health, cultural heritage or the environment (due to accidents and/or disasters);</p> <p>the accumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;</p> <p>the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;</p> <p>the technologies and the substances used.</p>	<p>Addressed in <i>Chapter 10: Noise and Vibration, Chapter 11: Traffic and Transport and Chapter 13: Air Quality.</i></p> <p>Addressed in <i>Chapters 6-13.</i></p> <p>Addressed in <i>Chapters 6-13.</i></p> <p>Addressed in <i>Chapter 13: Air Quality.</i></p> <p>Addressed in <i>Chapter 7: Hydrology, Geology and Hydrogeology, Chapter 10: Noise and Vibration, Chapter 11: Traffic and Transport and Chapter 13: Air Quality.</i></p>
<p>6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.</p>	<p>Addressed in <i>Chapter 6-13.</i></p>
<p>7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.</p>	<p>Addressed in <i>Chapter 6-13.</i></p>

Requirement	Location within this EIA Report
<p>8. A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to Union legislations such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.</p>	<p><i>Chapter 4: Site Selection and Alternatives</i> of this EIA Report discusses the vulnerability of the OnTW to risks of major accidents and/or disasters. As detailed in <i>Chapter 5: Description of Development</i>, a Construction Environmental Management Plan (CEMP) will be produced prior to the commencement of works. It is envisaged that this will include details of all precautionary methods of working and pollution prevention measures in order to avoid or minimise the risk of any pollution incidents occurring. <i>Chapter 6: Ecology</i> also considers pollution of habitats and <i>Chapter 7: Hydrology, Geology and Hydrogeology</i> assesses the risk of flooding and considers the risk of pollution further.</p>
<p>9. A non-technical summary of the information provided under paragraphs 1-8.</p>	<p>A non technical summary will accompany the EIA Report.</p>
<p>10. A reference list detailing the sources used for the descriptions and assessments included in the EIA Report.</p>	<p>Reference lists are included at the end of each chapter of the EIA Report.</p>

## 3.5 Approach to Environmental Impact Assessment

### 3.5.1 Identification of Impacts

9 In the EIA Report a common approach has been used for the assessment of each environmental topic. This included:

- Establishing the baseline conditions through a combination of desk review, consultations and site surveys;
- Identifying potential environmental impacts which could result from development of the OnTW, in isolation and cumulatively with ICOL's Offshore Wind Farm and Offshore Transmission Works (OfTW) and other projects (see *Section 3.6* below on cumulative impacts) taking account of any embedded mitigation to minimise environmental effects;
- Identification of additional mitigation measures to prevent, reduce and, where possible offset any impacts which could either by themselves, or in combination with other impacts have a significant adverse effect; and
- Assessment of the level of significance of all residual effects (direct and indirect, adverse and beneficial, short-term and long-term, permanent and temporary) taking account of committed mitigation measures.

### 3.5.2 Assessment of Impacts

10 For the purposes of these assessments, significance has been attributed by correlating the magnitude of the change arising from the OnTW with the sensitivity of the particular receptor under consideration.

11 Categorisation of magnitude of change will vary for specific receptors/technical assessments but has broadly followed the principles of Table 3.3 below in so far as it is relevant.

**Table 3.3 Magnitude of Impacts**

Magnitude	Description
High	Total loss or major alteration to key elements/features of the baseline conditions
Moderate	Partial loss or alteration to one or more key elements/features of the baseline conditions
Low	Minor shift away from baseline conditions
Negligible	Very slight change from baseline conditions

12 In EIA, the sensitivity of the resource or receptor must be defined. The specific scale of sensitivity is dependent on the discipline but in general it may be defined in terms of quality, value, rarity or importance of the receptor being assessed. The scale of sensitivity is classed as 'Low', 'Moderate' or 'High'. Guidance has also been taken from the value attributed to elements through designation or protection under law.

- 13 The consideration of magnitude of potential impact and sensitivity of the receptor will determine an expression, often qualitative, for the significance of the residual positive and negative effects. This is demonstrated in Table 3.4: Significance of Effects below.

**Table 3.4 Significance of Effects**

Magnitude of Impact	Sensitivity of Resource/Receptor		
	Low	Moderate	High
Negligible	Negligible/Minor	Minor	Minor/Moderate
Low	Minor	Minor/Moderate	Moderate
Moderate	Minor/Moderate	Moderate	Moderate/Major
High	Moderate	Moderate/Major	Major

- 14 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.
- 15 For the purposes of this assessment those residual positive and negative effects indicated as Moderate, Moderate/Major and Major are considered significant, unless otherwise specified in individual technical chapters.
- 16 This methodology is followed in each of the environmental topic chapters, unless otherwise stated in the relevant chapter.

### 3.5.3 Information Gaps and Limitations

- 17 Due to the nature of EIA, scientific understanding and the design parameters outlined in *Chapter 5: Description of Development*, a number of assumptions are required to fill any information gaps and complete the necessary assessments. These are contained, where relevant, in each topic chapter and the assumptions are based upon industry standards, consultation with relevant bodies and professional expertise.
- 18 As part of the necessary assessments baseline data for each topic Study Area has also been collected. All baseline data used in the EIA Report is considered to be representative and reflective of the baseline conditions of each Study Area, however any information gaps or limitations in the baseline data has been recorded within each topic chapter.

### 3.5.4 Impact Interactions

- 19 The EIA Regulations require that the assessment of significant effects of relevant factors includes the “*interaction between those factors*”. Impact interactions are also advised in PAN 1/2013 (Scottish Government 2013) when considering the potential impact of a particular proposal on the environment, planning authorities will wish to take account of impact

interactions described as “the reactions between impacts whether between the impacts of just one project or between the impacts of other projects in the area”. Interactions between different impacts of the OnTW on the same receptor are assessed in each topic chapter where relevant and included in *Chapter 14: Summary of Assessment*. The approach to the assessment of cumulative impacts of the OnTW, ICOL’s Offshore Wind Farm and OfTW spatially and with other agreed projects is described in *Section 3.6* below.

### 3.6 Cumulative Impact Assessment

#### 3.6.1 Requirement for Cumulative Assessment

20 The impacts from the OnTW will be assessed with ICOL’s Offshore Wind Farm and OfTW (using the assessment carried out for the Consented Offshore Wind Farm and OfTW).

21 Consideration of the OnTW cumulatively with other relevant projects is also required. This list of proposed projects (*Section 3.6.2* below) has been identified through consultation with relevant stakeholders.

22 European Commission (EC) Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions (1999) provides a definition of cumulative and in combination impacts which has been used in this document:

*"Cumulative impacts are impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project".*

23 This EIA Report presents the result of the assessment of the cumulative impacts of the parameters as assessed in the Consented Offshore Wind Farm and OfTW 2014 ES. Table 3.5 below details the design envelope for the Consented Offshore Wind Farm and OfTW.

**Table 3.5 Design Parameters for the Consented Development**

Design Parameter	Design Envelope (Consented Offshore Wind Farm and OfTW, ICOL 2013)
Number of Turbines	Up to 213
Minimum blade clearance above highest astronomical tide	22 m
Hub height above lowest astronomical tide	92-129 m
Blade tip height above lowest astronomical tide	152-215 m
Indicative minimum separation between turbines	820 m

### 3.6.2 Other Projects

24 Based on the applicant's understanding of the status and scope of various projects at the time of commissioning this EIA Report, the following projects have been identified as potentially having a cumulative impact when considered with OnTW:

- The Blindwells New Development, Approved Development Framework was approved in 2010. Subsequently, an application for PPP (14/00768/PPM) was recommended for approval at committee in March 2017. The development is described as a new settlement which will include up to 1600 residential units, a school campus, 10 hectares of employment land, a local centre with commercial units, a supermarket, a park and ride facility, playing fields, open space, allotments, a cemetery, landscaping, roads, footpaths and associated infrastructure provision<sup>1</sup>.
- The Longniddry South development submitted an application for PPP in June 2016 (16/00485/PPM) and is described as a new settlement which will include up to 474 residential units, a mix of commercial uses at the renovated Longniddry Farm steading, football pitch, village green, restored pond, community orchard and play park.
- Change of use of former gas holder site to car wash facilities, erection of two storage containers, covered area and associated works for a temporary period of one year (17/00465/P). This development is for land at the former gas holder site on the B1348 (Edinburgh Road) which is located opposite the Application Site. The car wash was granted consent and is for temporary use.

### 3.7 Additional Mitigation and Monitoring

25 Schedule 4 Part 1 (5) of the EIA Regulations requires this EIA Report to provide. *“A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment, and, where, appropriate, of any proposed monitoring arrangements”*.

26 Where additional mitigation measures are required, these are clearly identified in each topic specific chapter. Both embedded mitigation and additional mitigation comprise the committed mitigation set unless otherwise stated.

### 3.8 Assessment of Residual Effects

27 A further assessment has been undertaken taking into consideration the proposed additional mitigation and any remaining significant effects that have been identified and is presented in each specific topic chapter where required.

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<sup>1</sup> East Lothian Council, Planning Committee Report, Application No. 14/00768/PPM, March 2017.

## References

European Commission (1999). *Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions*. Available at: <http://ec.europa.eu/environment/eia/eia-studies-and-reports/guidel.pdf>

ScottishPower (2014). *Cockenzie Power Station - Overview*. Available at: <http://www.cockenziepowerstation.com/>

Scottish Government (2013). *PAN 1/2013 Environmental Impact Assessment*. Available at: <http://www.scotland.gov.uk/Publications/2013/08/6471>