codling wind park

Environmental Impact Assessment Report

Volume 4

Appendix 15.2 Representative Scenario and Limits of Deviation Assessment


codling
wind park

Table of contents

List of tables

APPENDIX 15.2 REPRESENTATIVE SCENARIO AND LIMITS OF DEVIATION ASSESSMENT

1 Introduction

1. Complex, large-scale infrastructure projects with a terrestrial and marine interface such as the Codling Wind Park (CWP) Project, are consented and constructed over extended timeframes. The ability to adapt to changing supply chain, policy or environmental conditions and to make use of the best available information to feed into project design, promotes environmentally sound and sustainable development. This ultimately reduces project development costs and therefore electricity costs for consumers and reduces carbon dioxide (CO_2) emissions.

2. Case law recognises that the plans and particulars submitted with planning applications can allow for a certain limited flexibility, where this is applied reasonably and, in a context-specific way. In addition, section 287A of the Planning and Development Act (PDA) (as inserted by the Planning and Development, Maritime and Valuation (Amendment) Act 2022) has expanded the flexibility available and allows planning applications to be made and decided before the Applicant has confirmed certain details of the project.

3. Due to the complexity of the CWP Project, significant and rapid progression in wind farm technology development, potential changes in environmental conditions and in policy and legislation, Codling Wind Park Limited (CWPL) considers that consenting a degree of design flexibility is appropriate and legally compliant.

4. In this regard the approach to the design development of the CWP Project has sought to introduce flexibility where required to enable the best available technology to be constructed, whilst at the same time to specify project boundaries, project components and project parameters wherever possible, whilst having regard to known environmental constraints.

2 Approach to Presenting the Project Design

5. The approach to the design development of the CWP Project considers permanent infrastructure, temporary infrastructure and installation methods.

6. In general, the CWP Project has sought to specify the location, scale and extents of permanent and temporary infrastructure, however, in some cases a degree of design flexibility is required. Subject to the detail concerned, this flexibility is presented in three ways:

   - **Options**: Consent is sought for up to two options for certain permanent infrastructure details and layouts, for example, wind turbine generator (WTG) Layout Option A (250m rotor diameter) or WTG Layout Option B (276m rotor diameter). Each design option is described in detail in **Chapter 4 Project Description**, which provides the details associated with each option.
   - **Dimensional flexibility**: Dimensional flexibility is described as a limited parameter range i.e. upper (maximum) and lower (minimum) values for a given detail such as cable length.
   - **Locational flexibility**: Locational flexibility of permanent infrastructure is described as a limit of deviation (LoD) from a specific point or alignment.

7. Installation methods for permanent infrastructure have been identified and described in full, however, as with the design of permanent infrastructure, a degree of flexibility is required as final decisions on

methods and techniques to be employed will not be made until the appointment of the primary contractors closer to the time of construction.

8. Where required, flexibility concerning installation methods is presented by means of options. The details associated with the installation methods are specified, where possible, or otherwise described as a limited parameter range i.e. upper (maximum) and lower (minimum) values for a given detail.

3 Representative Scenario Assessment

9. The CWP Project Environmental Impact Assessment Report (EIAR) identified, described and assessed all of the likely significant effects of the proposed development on the environment. To achieve this for all options and dimensional flexibility, and at the same time to produce application documents that were concise and readable, each chapter of the EIAR assessed a selection of representative scenarios, rather than assessing every possible scenario. A "representative scenario" is a combination of options and dimensional flexibility that has been selected to represent all of the likely significant effects of the project on the environment. Some topics required several representative scenarios to be identified to ensure all impacts are identified, described and assessed.

10. For Seascape, Landscape and Visual Impact Assessment (SLVIA) this analysis for construction / decommissioning and operational and maintenance (O&M) phase impacts is presented in **Table 1 and Table 2** respectively. Each table identifies one or more representative scenarios for each impact with supporting text to demonstrate that no other scenarios would give rise to new or materially different effects; taking into consideration the potential impact of other scenarios on the magnitude of the impact or the sensitivity of the receptor(s) that is being considered.

11. Where the potential for a new or materially different impact was identified, then further representative scenarios were assessed in full within **Chapter 15 SLVIA.**

12. This is distinct from the approach to assessing locational flexibility, where differences in impacts are assessed in this Appendix. The difference in approaches arose as there is a much higher degree of confidence in the locations and alignments assessed in **Chapter 15 SLVIA** than there was for the final options and dimensions.

13. Overall, this approach ensures that the EIAR identifies, describes and assesses:

- Every impact type that could arise from the proposed development, taking account of the full range of options and dimensional flexibility;
- Every materially different magnitude of impact that could arise from the proposed development within the proposed options and dimensional flexibility; and
- Every materially different sensitivity of receptor that could arise from the proposed development within the proposed options and dimensional flexibility.

Table 1 Representative scenario assessment - construction / decommissioning phase impacts (day and nighttime)

Impact	Relevant project details			Representative scenario(s) and notes / assumptions	Rationale for representative scenario(s)	
	Generating station (including WTGs, inter-array cables (IACs) and interconnectors)	WTG Option A	WTG Option B		Questions to demonstrate assessment has considered all scenarios	Response
Impact 1 (Construction): Direct / indirect temporary impacts on / seascape / landscape / townscape /national designated landscapes and visual receptors **Impact 5 (Decommissioning):** Direct / indirect temporary impacts on seascape / landscape / townscape / national designated landscapes and visual receptors	Permanent infrastructure (emerging)			Construction / decommissioning activities would not occur at the same time and from a seascape, landscape / townscape, national designated landscape and visual perspective, the most visible parts of the offshore development area would be the above sea-surface infrastructure including the WTGs, offshore substation structure (OSS) and temporary lighting to aid installation and navigation. Layout Options A and B would have a similar horizontal extent when viewed from the coastline and the overall tip height difference between layout options would be subtle at distances of 11 – 50 km from the array site. WTG Option A has a blade tip height above LAT (m) of 288 compared to WTG Option B of 314 m. The overall extent of the layouts directly north-south would be 15.87 km (Option A WTG A layout) and 15.88 km Option B WTG layout) refer to **Figure 15.2a Option A WTG layout and Figure 15.2b Option B WTG layout, Appendix 15.10 SLVIA Figures.** The difference in WTG numbers would be difficult to perceive during construction due to the layout being set in a grid pattern, resulting in WTG stacking. The only perceivable difference between the two layouts would be WTG spacing, although this would vary depending on the angle of	*1. Are there infrastructure layout options (permanent or temporary) which may introduce new impacts?* *Note - this could be a new impact entirely or the introduction of an existing impact pathway to a new receptor.* *2. Are there infrastructure layout options (permanent or temporary) which may introduce a materially different magnitude of impact?* *3. Are there infrastructure layout options (permanent or temporary) which may introduce a material change in the sensitivity of the receptor(s) (greater or lesser)?* *4. Are there alternative installation methods which may introduce new impacts?* *5. Are there alternative installation methods which may introduce a materially different magnitude of impact?* *6. Are there alternative installation methods which may materially alter the sensitivity of the relevant receptor(s) (greater or lesser).*	1. No, there are no alternative options which have not been assessed in full as part of the assessment. For Impact 1, the construction / decommissioning of WTG Option A and B have been assessed to demonstrate subtle differences between them, based on layouts, supporting zone of theoretical visibility (ZTV) studies and visualisations. The differences between WTG Option A and B were compared as part of the assessment of both options. 2. No, there are no alternative options which have not been assessed in full as part of the assessment. For Impact 1, the construction / decommissioning of WTG Option A and B have been assessed to demonstrate subtle differences between them, based on layouts, supporting ZTVs and visualisations. There are subtle variations in the magnitude of change between the WTG Option layouts which were identified based on an assessment of seascape, landscape / townscape, national designated landscapes and visual receptors refer to **Appendix 15.4 Seascape Character Assessment; Appendix 15.5 Landscape Character Assessment; Appendix 15.6 Viewpoint Assessment; Appendix 15.7 Settlement Assessment; Appendix 15.8 Sequential Route Assessment and Appendix 15.9 National Designated Landscapes.** 3. No, there are no alternative options which have not been assessed in full as part of the assessment. For Impact 1, WTG Option A and B, both layouts would not influence the sensitivity of seascape, landscape / townscape, national designated landscape and visual receptors. The sensitivity of the receptor is identified through a combination of value and susceptibility which would not be influenced by both WTG layout options and vessel movements. 4. No, there are no alternative installation methods which have not been assessed in full as part of this assessment. From a seascape, landscape / townscape, national designated landscapes and visual receptor perspective, impacts from installation would be associated with views of vessels. The visual impact and duration of effect between the various installation methods proposed would not alter the assessment. 5. No, the magnitude of change between the installation methods would not materially change and would be limited to views of vessels over a short duration. 6. No, the installation methods would not influence the sensitivity of seascape, landscape / townscape, national designated landscapes and visual receptors.
	Number of WTG monopile foundations	75	60			
	Number of WTG transition pieces (TP)	75	60			
	Height of WTG monopile above lowest astronomical tide (LAT) prior to TP installation (m)	6.5				
	Height of transition piece above LAT (m)	31.1				
	Number of WTGs comprising tower structure, nacelle, and rotor with associated access arrangements.	75	60			
	WTG lighting and marking	See **Lighting and Marking Plan**				
	No. IACs and interconnector cable strings per OSS	6				
	OfTI	WTG Option A	WTG Option B			
	Permanent infrastructure (emerging)					
	Number of offshore substation structures (OSS) (including monopile foundations and topsides)	3				
	Height of OSS topside above LAT (m)	55				
	Number of offshore export cables	3				
	Total length of offshore export cables (km)	126.0–146.0				
	Installation methods and effects (Generating station and OfTI)					
	Vessel movements within the array site and along the offshore export cable corridor (OECC), including Jack Up and / or Dynamic Positioning vessels supporting underwater activities such as pre-construction surveys, unexploded ordnance (UXO) and boulder clearance, pre-lay grapnel run (PLGR), scour protection and installation of monopile, foundations, transition piece, inter array					

<table>
<tr><td></td><td colspan="3">and interconnector cables using vessels to tow WTGs and OSSs topside alongside the use of vessel cranes for the construction of offshore infrastructure. This is also included for seascape, landscape / townscape and nationally designated landscape receptors the Mid Support Platform.</td><td>view from the coastline and the difference would be small between layout options.
During the construction / decommissioning phase, visual impacts would arise due to a concentration of vessels within the array site and along the OECC. This would involve a higher than usual number of vessels on the sea surface, compared to the baseline, including Jack-up and / or Dynamic Positioning Vessels</td><td></td><td></td></tr>
<tr><td rowspan="15">Impact 2 (Construction): Direct / indirect temporary nighttime impacts on seascape / landscape / townscape and national designated landscapes and visual receptors
Impact 6 (Decommissioning): Direct / indirect temporary nighttime impacts on seascape / landscape / townscape / national designated landscapes and visual receptors</td><td>Generating station (including WTGs, inter-array cables (IACs) and interconnectors)</td><td>WTG Option A</td><td>WTG Option B</td><td rowspan="15">From a seascape, landscape / townscape, national designated landscape and visual perspective, the most visible parts of the offshore development area would be the temporary lighting to aid installation and navigation. During the construction / decommissioning phase, nighttime impacts would arise due to a concentration of vessels within the array site and along the OECC. This would involve a higher than usual number of vessels on the sea surface, compared to the baseline, including Jack-up Vessels / Dynamic Positioning Vessels</td><td>Questions to demonstrate assessment has considered all scenarios</td><td>Response</td></tr>
<tr><td colspan="3">Permanent infrastructure (emerging)</td><td rowspan="14">1. Are there infrastructure layout options (permanent or temporary) which may introduce new impacts associated with nighttime lighting?
Note - this could be a new impact entirely or the introduction of an existing impact pathway to a new receptor.

2. Are there infrastructure layout options (permanent or temporary) which may introduce a materially different magnitude of impact associated with nighttime lighting?

3. Are there infrastructure layout options (permanent or temporary) which may introduce a material change in the sensitivity of the receptor(s) (greater or lesser) at night?

4. Are there alternative installation methods which may introduce new impacts at nighttime?</td><td rowspan="14">1.No, there are no alternative options which have not been assessed in full as part of the assessment. For Impact 2, the construction / decommissioning of WTG Option A and B has been assessed to demonstrate subtle differences between them at nighttime based on layouts, supporting ZTVs and visualisations. The differences between WTG Option A and B were compared as part of the assessment of both options.

2. No, there are no alternative options which have not been assessed in full as part of the assessment. For Impact 2, the construction / decommissioning of WTG Option A and B has been assessed to demonstrate subtle differences between them based on layouts, supporting. ZTVs and visualisations at nighttime. There are subtle variations in the magnitude of change between the WTG Option layouts which were identified based on an assessment of seascape, landscape / townscape, national designated landscapes and visual receptors. refer to Appendix 15.4 Seascape Character Assessment; Appendix 15.5 Landscape Character Assessment; Appendix 15.6 Viewpoint Assessment; Appendix 15.7 Settlement Assessment; Appendix 15.8 Sequential Route Assessment and Appendix 15.9 National Designated Landscapes.

3. No. For Impact 2, WTG Option A and B layouts would not influence the sensitivity of seascape, landscape / townscape, national designated landscape and visual receptors. The sensitivity of the receptor is identified through a combination of value and susceptibility which would not be influenced by lighting associated with both WTG layout options and vessel movements.

4. No, from a seascape, landscape / townscape, national designated landscapes and visual receptor perspective, impacts from installation would be associated with nighttime views of</td></tr>
<tr><td>Number of WTG monopile foundations</td><td>75</td><td>60</td></tr>
<tr><td>Number of transition pieces (TP)</td><td>75</td><td>60</td></tr>
<tr><td>Height of WTG monopile above lowest astronomical tide (LAT) prior to TP installation (m)</td><td colspan="2">6.5</td></tr>
<tr><td>Height of transition piece above LAT (m)</td><td colspan="2">31.1</td></tr>
<tr><td>Number of WTGs comprising tower structure, nacelle, and rotor with associated access arrangements.</td><td>75</td><td>60</td></tr>
<tr><td>WTG lighting and marking</td><td colspan="2">See Lighting and Marking Plan</td></tr>
<tr><td>OfTI</td><td>WTG Option A</td><td>WTG Option B</td></tr>
<tr><td colspan="3">Permanent infrastructure (emerging)</td></tr>
<tr><td>Number of OSSs (including monopile foundations and topsides)</td><td colspan="2">3</td></tr>
<tr><td>Height of OSS topside above LAT (m)</td><td colspan="2">55</td></tr>
<tr><td>Number of offshore export cables</td><td colspan="2">3</td></tr>
<tr><td>Total length of offshore export cables (km)</td><td colspan="2">126.0–146.0</td></tr>
</table>

	Installation methods and effects (Generating station and OfTI) Presence of nighttime marine / navigational lighting as well as temporary lighting associated with vessel movements within the array site and along the OECC , including vessels supporting underwater activities such as pre-construction surveys, UXO and boulder clearance, PLGR, scour protection and installation of monopile, foundations, transmission piece, inter array and interconnector cables using vessels to tow WTGs and OSSs topside alongside the use of vessel cranes for the construction of offshore infrastructure and heli hoist lighting. This also included for seascape, landscape / townscape and nationally designated landscape receptors the Mid Support Platform.		*5. Are there alternative installation methods which may introduce a materially different magnitude of impact at nighttime?* *6. Are there alternative installation methods which may materially alter the sensitivity of the relevant receptor(s) (greater or lesser) at nighttime?*	vessels. The visual impact and duration of effect between the various installation methods proposed would not alter the assessment. 5. No, the magnitude of change between the nighttime installation methods would not materially change and would be limited to nighttime views of vessels over a short duration. 6. No, the installation methods which would include nighttime lighting would not influence the sensitivity of seascape, landscape / townscape, national designated landscapes and visual receptors.

Note: Conclusions reached regarding Impact 1 and 2 would be relevant to Decommissioning Impacts 5 and 6.

Table 2 Representative scenario assessment - operational phase impacts (day and nighttime)

Impact	Relevant project details			Representative scenario(s) and notes / assumptions	Rationale for representative scenario(s)	
Impact 1 (Operation / Maintenance): Direct / indirect long term though reversible impacts on seascape, landscape / townscape and national designated landscapes and visual receptors.	Generating station (including WTGs, inter-array cables (IACs) and interconnectors)	WTG Option A	WTG Option B		Questions to demonstrate assessment has considered all scenarios	Response
	Permanent infrastructure			From a seascape, landscape / townscape, national designated landscapes and visual receptor perspective, the most visible parts of the CWP Project's offshore infrastructure would be the above sea-surface infrastructure including the WTGs, OSS, aviation and navigation lighting. Layout Options A and B would have a similar horizontal extent when viewed from the coastline and the overall tip height difference between layout options would be subtle at distances of 11 – 50 km from the array site. The difference in WTG numbers would be difficult to perceive during operation due to the layout being set in a grid pattern resulting in WTG stacking. WTG spacing and foreshortening would be discernible and would vary depending on the elevation, angle of view from the coastline and the difference would be small between layout options. The Comparative Zone of Theoretical Visibility (ZTV) mapping indicates that WTG Option B would have a slightly greater visual envelope in comparison to WTG Option A refer to	*1. Are there infrastructure layout options (permanent or temporary) which may introduce new impacts?* *Note - this could be a new impact entirely or the introduction of an existing impact pathway to a new receptor.* *2. Are there infrastructure layout options (permanent or temporary) which may introduce a materially different magnitude of impact?* *3. Are there infrastructure layout options (permanent or temporary) which may introduce a material change in the sensitivity of the receptor(s) (greater or lesser)?* *4. Are there alternative installation methods which may introduce new impacts?* *5. Are there alternative installation methods which may introduce a materially different magnitude of impact?* *6. Are there alternative installation methods which may materially alter the sensitivity of the relevant*	1. No, there are no alternative options which have not been assessed in full as part of the assessment. For Impact 3, WTG Option A and B have been assessed to demonstrate subtle differences between them based on layouts, supporting ZTVs and visualisations. The differences between WTG Option A and B were compared as part of the assessment of both options. 2. No, there are no alternative options which have not been assessed in full as part of the assessment. For Impact 3, WTG Option A and B have been assessed to demonstrate subtle differences between them based on layouts, supporting ZTVs and visualisations. There are subtle variations in the magnitude of change between the WTG Option layouts which were identified based on an assessment of seascape, landscape / townscape, national designated landscapes and visual receptors. 3. No, there are no alternative options which have not been assessed in full as part of the assessment. For Impact 3, WTG Option A and B, both layouts would not influence the sensitivity of seascape, landscape / townscape, national designated landscape and visual receptors. The sensitivity of the receptor was identified through a combination of value and susceptibility which would not be influenced by both WTG layout options and vessel movements. 4. Not applicable. 5. Not applicable. 6. Not applicable.
	Number of WTGs	75	60			
	WTG rotor diameter (m)	250	276			
	Hub height above LAT (m)	163	176			
	Tip height above LAT (m)	288	314			
	Blade tip clearance above LAT (m)	37.72				
	WTG tower diameter (m)	8	9			
	Rotor swept area of per turbine (m^2)	49,087	59,829			
	Total rotor swept area of project (m^2)	3,681,554	3,589,710			
	Area of array site (km^2)	125				
	OfTI	WTG Option A	WTG Option B			
	Permanent infrastructure					
	Number of OSSs (including monopile foundations and topsides)	3				
	Height of OSS topside above LAT (m)	55				
	Length of OSS topside (m)	45				
	Width of OSS topside (m)	35				

<table>
<tr><td></td><td></td><td></td><td></td><td>Figure 15.12c Comparative blade tip height ZTV (bare earth), Figure 15.12f Comparative hub height ZTV (bare earth), Figure 15.13c Comparative blade tip height ZTV (obstructed) and Figure 15.13.f Comparative hub height ZTV (obstructed) (Appendix 15.10 SLVIA Figures).</td><td>receptor(s) (greater or lesser).</td><td></td></tr>
<tr><td rowspan="8">Impact 2 (Operation /Maintenance): Direct / indirect long term though reversible nighttime impacts on seascape, landscape / townscape / national designated landscapes and visual receptors.</td><td>Generating station (including WTGs, inter-array cables (IACs) and interconnectors)</td><td>WTG Option A</td><td>WTG Option B</td><td rowspan="8">From a seascape, landscape / townscape, national designated landscapes and visual perspective, the most visible parts of the offshore infrastructure at nighttime would be the navigational / maritime and aviation lighting.

Layout Options A and B would have a similar horizontal extent when viewed from the coastline and the overall tip height difference between layout options would be subtle at distances of 11 – 50 km from the array site.

The difference in WTG numbers would be difficult to perceive during operation due to the layout being set in a grid pattern resulting in WTG stacking. WTG spacing and foreshortening would be discernible and would vary depending on the elevation and angle of view from the coastline. The Comparative Zone of Theoretical Visibility (ZTV) mapping indicates that</td><td rowspan="8">1. Are there infrastructure layout options (permanent or temporary) which may introduce new impacts associated with nighttime lighting?

Note - this could be a new impact entirely or the introduction of an existing impact pathway to a new receptor.

2. Are there infrastructure layout options (permanent or temporary) which may introduce a materially different magnitude of impact associated with nighttime lighting?

3. Are there infrastructure layout options (permanent or temporary) which may introduce a material change in the sensitivity of the receptor(s) (greater or lesser) at night?

4. Are there alternative installation methods which may introduce new impacts at nighttime?</td><td rowspan="8">1.No, there are no alternative options which have not been assessed in full as part of the assessment. For Impact 4, WTG Option A and B have been assessed to demonstrate subtle differences between them at nighttime based on layouts, supporting ZTVs and visualisations. The differences between WTG Option A and B were compared as part of the assessment of both options.

2. No, there are no alternative options which have not been assessed in full as part of the assessment. For Impact 4, WTG Option A and B have been assessed to demonstrate subtle differences between them at nighttime based on layouts, supporting. ZTVs and visualisations. There are subtle variations in the magnitude of change between the WTG Option layouts which were identified based on an assessment of seascape / landscape / townscape, national designated landscapes and visual receptors.

3. No. For Impact 4, WTG Option A and B layouts would not influence the sensitivity of seascape, landscape / townscape, national designated landscape and visual receptors. The sensitivity of the receptor was identified through a combination of value and susceptibility which would not be influenced by lighting associated with both WTG layout options and vessel movements.

4. Not applicable.

5. Not applicable.

6. Not applicable.</td></tr>
<tr><td>Permanent infrastructure</td><td colspan="2"></td></tr>
<tr><td>Number of navigational / maritime and aviation lighting associated with WTGs and WTG identifier markings</td><td>75</td><td>60</td></tr>
<tr><td>OfTI</td><td>WTG Option A</td><td>WTG Option B</td></tr>
<tr><td>Permanent infrastructure</td><td colspan="2"></td></tr>
<tr><td>OSS identifier markings</td><td colspan="2">3</td></tr>
<tr><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td colspan="2"></td><td colspan="2"></td></tr>
</table>

			WTG Option B would have a slightly greater visual envelope in comparison to WTG Option A refer to **Figure 15.12c Comparative blade tip height ZTV (bare earth), Figure 15.12f Comparative hub height ZTV (bare earth), Figure 15.13c Comparative blade tip height ZTV (obstructed) and Figure 13.f Comparative hub height ZTV (obstructed) (Appendix 15.10 SLVIA Figures).**	*5. Are there alternative installation methods which may introduce a materially different magnitude of impact at nighttime?* *6. Are there alternative installation methods which may materially alter the sensitivity of the relevant receptor(s) (greater or lesser) at nighttime?*	

4 Limit of deviation assessment

14. As described in **Section 2** of this document, locational flexibility of permanent and temporary infrastructure is described as a LoD from a specific point or alignment.

15. The project components for which a LoD has been defined are presented in **Table 3**. These are further described in EIAR **Chapter 4 Project Description** and have been presented on the planning drawings that accompany the planning application.

Table 3 Defined limits of deviation

Project component	LoD
Offshore project components	
WTGs	100 m from the centre point of each WTG location
WTG monopile locations	Same as WTGs.
WTG monopile scour protection	Same as WTGs.
OSSs	100 m from the centre point of each OSS location
OSS monopile locations	Same as OSSs.
OSS monopile scour protection	Same as OSSs.
IACs and interconnector cables	100 m either side of the preferred alignment of each IAC and interconnector cable 200 m from the centre point of each WTG location
Offshore export cables	250 m either side of the preferred alignment within the array site. The OECC outside of the array site.
Landfall	
Transition Joint Bays (TJBs)	0.5 m either side (i.e. east / west) of the preferred TJB location.
Landfall cable ducts (and associated offshore export cables within the ducts)	Defined LoD boundary
Intertidal cable ducts (and associated offshore export cables within the ducts).	The OECC
Intertidal offshore export cables (non ducted sections).	The OECC
Onshore substation	
Location of onshore substation revetment perimeter structure	Defined LoD boundary

16. For the purposes of the EIAR, the main chapter for the SLVIA assessed the specific preferred location for permanent infrastructure. However, this document provides further analysis to determine if the proposed LoD for permanent infrastructure may give rise to any new or materially different effects, taking into consideration the potential impact of the proposed LoD on the magnitude of the impact.

17. The SLVIA determined that the potential for a LoD to cause a new or materially different impact or material different magnitude would not arise as presented in the suite of supporting **Appendices 15.4 to 15.10**. This is because the scale of potential variation defined by the relevant LoD to the SLVIA are small in comparison to the context and scale of the infrastructure within which it is assessed, thus a variation in the effects on landscape, seascape, visual receptors and designated landscapes would not be discernible.