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# **Volume 6 Intertidal and Combined Assessments**

## Chapter 6 Summary and Conclusions

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## Acronyms and Abbreviations

<b>AMSC</b>	Approval of Matters Specified in Conditions
<b>DE</b>	Design Envelope
<b>EIA</b>	Environmental Impact Assessment
<b>EIAR</b>	Environmental Impact Assessment Report
<b>IEMA</b>	Institute of Environmental Management and Assessment
<b>MLWS</b>	Mean Low Water Spring
<b>MD-LOT</b>	Marine Directorate - Licensing Operations Team
<b>OEC</b>	Offshore Export Cable
<b>OECC</b>	Offshore Export Cable Corridor
<b>OSP</b>	Offshore Substation Platforms
<b>OfTI</b>	Offshore Transmission Infrastructure
<b>ONEC</b>	Onshore Export Cable Corridor
<b>OnTI</b>	Onshore Transmission Infrastructure
<b>OWF</b>	Offshore Wind Farm
<b>PPP</b>	Planning Permission in Principle
<b>RLB</b>	Red Line Boundary
<b>SMP</b>	Sectoral Marine Plan
<b>WTG</b>	Wind Turbine Generators

## 6 Summary and Conclusions

### 6.1 Introduction

- 6.1.1.1 Volume 6 contains assessments where there is potential for inter-relationships between offshore and onshore impacts within the intertidal area as well as combined assessments that consider onshore and offshore together (Climate and Carbon and Socioeconomics, Tourism and Recreation).
- 6.1.1.2 This chapter of Volume 6, Intertidal and combined assessments of the Environmental Impact Assessment Report (EIAR) provides a summary of the Environmental Impact Assessment (EIA) methodology employed to avoid and reduce impacts and determine potential significant effects, and a summary of the residual effects for each Volume 6 technical chapter.
- 6.1.1.3 A summary of the mitigation and monitoring commitments is provided in Volume 7, Appendix 7: Proposed Development (Onshore) Schedule of Mitigation, Volume 7, Appendix 8: Caledonia North Schedule of Mitigation, and Volume 7, Appendix 9: Caledonia South Schedule of Mitigation
- 6.1.1.4 Next steps following submission and acceptance of the EIAR are also identified.

### 6.2 Summary of EIA

#### 6.2.1 EIA Process and Design Envelope

- 6.2.1.1 Volume 6 of the EIAR provides an assessment of the potential environmental effects of the Proposed Development (Offshore) and Proposed Development (Onshore) where there is potential for inter-relationships between offshore and onshore impacts within the intertidal area as well as combined assessments that consider onshore and offshore together. The impact assessment has been undertaken using the methodology as described in Volume 1, Chapter 7: EIA Methodology as well as any topic specific methodologies used to determine significant environmental effects.
- 6.2.1.2 A Design Envelope (DE) approach has been adopted given the Proposed Development is in the early stages of design development. The DE identifies the main components of the Proposed Development and a range of design parameters. Within each topic chapter in the EIAR the combination of parameters that would result in the greatest impact (e.g., largest footprint, longest exposure, or largest dimensions) is considered and identified as the worst case assessment scenario. By employing the design envelope approach, the Applicant seeks to retain a level of flexibility

in the design of the Proposed Development within reasonable maximum extents and ranges.

- 6.2.1.3 The first outline DE of the Proposed Development (Offshore) was presented within the Offshore Scoping Report (Volume 7, Appendix 2), submitted to MD-LOT in September 2022. The first outline DE of the Proposed Development (Onshore) was presented within the Onshore EIA Scoping Report (Volume 7, Appendix 1), submitted to Aberdeenshire Council in December 2022.
- 6.2.1.4 Following submission of the Scoping Reports, and as part of an iterative EIA process, the Applicant has refined the area within which the Proposed Development will be located through environmental surveys, technical and engineering studies and discussion with project stakeholders such as statutory and non-statutory consultees and through a programme of community consultation.
- 6.2.1.5 By utilising the DE approach a robust impact assessment is achieved with the likely significant environmental effects of the Proposed Development, no greater than those identified within the EIAR.
- 6.2.1.6 Potential impacts from the construction, operation and maintenance and decommissioning stages of the Proposed Development DE were identified and subsequently assessed for potential significant effects on the receiving environment. To determine significance of an effect each topic assessment defined the sensitivity of each receptor being impacted (based on criteria such as tolerance to change, ability to recover from impacts and value) and the magnitude of impact (based on criteria such as duration, spatial extent and frequency). Sensitivity and magnitude were determined taking account of industry guidance and professional judgement. For each potential impact, the sensitivity and magnitude were then combined using a matrix approach to determine the potential significance of the effect.
- 6.2.1.7 Embedded mitigation measures have been considered as part of the impact assessment process, prior to assigning significance of effect. Where significant effects were identified in the assessment, taking account of embedded mitigation, secondary mitigation measures are proposed to reduce the residual effects to non-significant levels. Volume 7, Appendix 7: Proposed Development (Onshore) Schedule of Mitigation, Volume 7, Appendix 8: Caledonia North Schedule of Mitigation and Volume 7, Appendix 9: Caledonia South Schedule of Mitigation details the embedded mitigation and secondary mitigation measures employed by each topic to avoid, reduce or minimise impacts.
- 6.2.1.8 Table 6-1 provides a summary of the residual effects anticipated as a result of the Proposed Development. Through the application of embedded and secondary mitigation measures, the majority of potential effects as a result of the Proposed Development are predicted to be non-significant in EIA terms.

- 6.2.1.9 Within Volume 6, Chapter 4: Greenhouse Gases it is identified that given the nature and scale of the Proposed Development it is expected that there will be residual construction and decommissioning-related emissions associated with the Proposed Development. However, the Proposed Development is, by design, reducing national emissions as well as Scotland's and the UK's reliance on fossil fuels within the national electricity generation and transmission system. The conclusion for the operation of the Proposed Development is significantly beneficial due to the generation of low carbon electricity, aligning with Institute of Environmental Management and Assessment (IEMA) guidance (IEMA, 2022<sup>1</sup>). Overall, for the Proposed Development (Onshore) and the Proposed Development (Offshore) combined the assessment conclusions are significantly beneficial, when considering the needs case for helping the UK and Scotland achieve national carbon targets of net zero by 2050 and 2045 respectively.
- 6.2.1.10 Within Volume 6, Chapter 5: Intertidal Assessment, there is the potential for effects along the coast in the vicinity of the Proposed Development (Onshore) Landfall Site where it will be visible at close range during construction whilst there are also views out to sea where the Proposed Development (Offshore) will also be visible during construction. Effects during construction on receptors on NCR1, B9139, the NE250 which follows the B9139 and then the same minor road as the NCR1 and coastal core path are assessed as not significant. Effects on residents at Whitehills are assessed as being of medium-high sensitivity to the construction of the Proposed Development (Onshore). The effect during construction is assessed as significant, adverse, short-term and reversible. The effect will extend across the western edges of the village, where there is potential visibility of the Proposed Development (Onshore) during construction, while no effect will occur within the village where buildings screen it from view from more distant parts of the village to the east. Effects on residents at Whitehills is assessed in as being of Medium-High sensitivity in regards the construction of the Proposed Development (Offshore). The effect during construction is assessed Significant (Borderline) due to size and scale of the WTG particularly in comparison to existing OWF visible along the horizon for installation of turbines within Caledonia South. Effects are identified as adverse, short to medium term and temporary. The indicative programme shows that the Proposed Development (Onshore) construction works (which may include the Landfall Site Horizontal Directional Drilling) and the installation of the WTGs for the Proposed Development (Offshore), may occur during a period of six months of the overall construction period.



6.2.1.11 It is assessed that the magnitude of change on the residential receptors and users of NCR1 and the core path between Whitehills and Easter Whyntie would increase only slightly from the Medium magnitude of change assessed locally in relation to the Proposed Development (Onshore) construction alone and would remain at a Medium magnitude as a result of the effects of the Proposed Development. The effect is assessed as Moderate and Significant, adverse, short-term and temporary. No further significant effects are assessed as a result of the short-term effects of the Proposed Development at this location.

## 6.2.2 Summary of Effects

Table 6-1: Summary of Residual Effects for the Proposed Development

Chapter	Construction Stage Effects	Operation and Maintenance Stage Effects	Decommissioning Stage Effects
2. Socio-Economics, Tourism and Recreation	No residual significant effects identified	No residual significant effects identified	No residual significant effects identified
3. Climate Change Resilience	No residual significant effects identified	No residual significant effects identified	No residual significant effects identified
4. Greenhouse Gases	The Proposed Development will have residual emissions relating to the construction phase. Good practice will seek to reduce residual emissions through mitigation measures.	The Proposed Development will have residual emissions relating to the operational phase. Good practice will seek to reduce residual emissions through mitigation measures. Significant beneficial effects due to the generation of low carbon energy.	The Proposed Development will have residual emissions relating to decommissioning phase. Good practice will seek to reduce residual emissions through mitigation measures

Chapter	Construction Stage Effects	Operation and Maintenance Stage Effects	Decommissioning Stage Effects
5. Intertidal Assessment	Temporary significant (borderline) effects identified for seascape, landscape and visual.	No residual significant effects identified	No residual significant effects identified

## 6.3 Next Steps

### 6.3.1 Proposed Development (Offshore)

6.3.1.1 Upon the submission and acceptance of the Section 36/Marine Licence applications for Caledonia North and Caledonia South, the subsequent key steps are:

- Notifications and further consultation with relevant parties:** MD-LOT will advise the Applicant of the publicity requirements and guide the Applicant to the relevant public notice template, with a complete draft to be sent to MD-LOT for approval at least two weeks in advance. MD-LOT will also advise the applicant to publish a public notice in the Edinburgh Gazette and any other publications that will come to the attention of those likely to be affected by the Proposed Development (Offshore). MD-LOT will also publish the notice on the Marine Directorate website. The Applicant will supply MD-LOT with copies of these adverts as published;
- Determination and notification of decision:** MD-LOT, or Scottish Ministers (taking account of recommendations by MD-LOT), will determine whether consent should be granted based on the environmental information provided within the EIAR and supporting documentation as well as any additional information, any Appropriate Assessment, and representations from the public and statutory consultees. If successful in obtaining consent, a decision notice will be issued by Scottish Ministers outlining the conditions to which the decision is subject. A notice will also be published on the Applicant’s application website, in the Edinburgh Gazette and a newspaper circulating in the locality in which the Proposed Development (Offshore) is sited;
- Post-consent design refinement and consent condition discharge:** The Applicant (or other legal entity progressing with the development of the Proposed Development (Offshore)) will continue to refine and finalise the DE during the post-consent stage. All relevant Marine Licence conditions will be discharged and/or complied within the

timeframe specified and in consultation with stakeholders and relevant parties; and

- **Construction, operation and maintenance and decommissioning.**

## 6.3.2 Proposed Development (Onshore)

6.3.2.1 Upon the submission and acceptance of the PPP application, the subsequent key steps are:

- **Notifications and further consultation with relevant parties:** Aberdeenshire Council will notify owners which are subject of the PPP application. Aberdeenshire Council will additionally publish the application as appropriate upon validation and consultation with stakeholders;
- **Determination and notification of decision:** Aberdeenshire Council will determine whether PPP should be granted based on the information provided within the EIAR and supporting documentation as well as representations from the public and statutory consultees. If successful in obtaining the PPP, a decision notice will be issued by Aberdeenshire Council outlining the conditions to which the decision is subject;
- **Post-consent and Approval of Matters Specified in Conditions (AMSC) application:** the Applicant (or other legal entity progressing with the development of the Proposed Development (Onshore)) will continue to refine and finalise the DE during the post-consent stage. All relevant PPP conditions will be discharged and/or complied with through a subsequent AMSC application(s) within the timeframe specified and in consultation with stakeholders and relevant parties; and
- **Construction, operation and maintenance and decommissioning.**

## 6.4 References

<sup>1</sup> Institute of Environmental Management and Assessment (IEMA) (2022) 'Institute of Environmental Management & Assessment (IEMA) Guide: Assessing Greenhouse Gas Emissions and Evaluating their Significance'. Available at: <https://www.iema.net/resources/blog/2022/02/28/launch-of-the-updated-eia-guidance-on-assessing-ghg-emissions> (Accessed 01/10/2024).

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