



Code: UKCAL-CWF-CON-EIA-RPT-00007-7007

Volume 7 Standalone Appendices

Appendix 9 Caledonia South Schedule of Mitigation

Caledonia Offshore Wind Farm Limited

5th Floor Atria One, 144 Morrison Street, Edinburgh, EH3 8EX



Volume 7 Appendix 9 Caledonia South Schedule of Mitigation

Code	UKCAL-CWF-CON-EIA-RPT-00007-7007
Revision	Issued
Date	18 October 2024

Table of Contents

1	Introduction	1
2	Marine and Coastal Processes	2
3	Marine Water and Sediment Quality	4
4	Benthic Subtidal and Intertidal Ecology	6
5	Fish and Shellfish Ecology	8
6	Offshore Ornithology	11
7	Marine Mammals.....	13
8	Commercial Fisheries.....	15
9	Shipping and Navigation	18
10	Marine Archaeology and Cultural Heritage	22
11	Military and Civil Aviation	24
12	Seascape Landscape and Visual Impact	26
13	Other Human Activities	27
14	Socio-economics, Tourism and Recreation.....	29
15	Climate Change Resilience	30
16	Greenhouse Gas Emissions.....	31

List of Tables

Table 2-1: Mitigation Measures for Marine and Coastal Processes.	2
Table 3-1: Mitigation Measures for Marine Water and Sediment Quality	4
Table 4-1: Mitigation Measures for Benthic Subtidal and Intertidal Ecology	6
Table 5-1: Mitigation Measures for Fish and Shellfish Ecology.	8
Table 6-1: Mitigation Measures for Offshore Ornithology.	11
Table 7-1: Mitigation Measures for Marine Mammals.	13
Table 8-1: Mitigation Measures for Commercial Fisheries.	15
Table 9-1: Mitigation measures for Shipping and Navigation.	18
Table 10-1: Mitigation measures for Marine Archaeology and Cultural Heritage.	22
Table 11-1: Mitigation measures for Military and Civil Aviation.	24
Table 12-1: Mitigation measures for Seascape Landscape and Visual Impact.	26
Table 13-1: Mitigation measures for Other Human Activities.	27
Table 14-1: Mitigation measures for Socio-economics, Tourism and Recreation.	29
Table 15-1: Mitigation measures for Climate Change Resilience.	30
Table 16-1: Mitigation measures for Greenhouse Gas Emissions.	31

Acronyms and Abbreviations

CAA	Civil Aviation Authority
CaP	Cable Plan
CFLO	Company Fisheries Liaison Officer
CMS	Construction Method Statement
DGC	Defence Geographic Centre
DP	Decommissioning Plan
DSL P	Development Specification and Layout Plan
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EMP	Environmental Management Plan
EPS	European Protected Species
ERCoP	Emergency Response Cooperation Plan
FMMS	Fisheries Management and Mitigation Strategy
IALA	International Association of Lighthouse Authorities
LMP	Lighting and Marking Plan
MCA	Maritime and Coastguard Agency
MGN	Maritime Guidance Note
MMMP	Marine Mammal Mitigation Plan
MoD	Ministry of Defence
MPCP	Marine Pollution Contingency Plan
MSL	Mean Sea Level
NLB	Northern Lighthouse Board

NSP	Navigational Safety Plan
O&M	Operation and Maintenance
PAD	Protocol for Archaeological Discoveries
PEMP	Project Environmental Monitoring Programme
PS	Piling Strategy
SAR	Search and Rescue
UKHO	United Kingdom Hydrographic Office
VMP	Vessel Management Plan
WSI	Written Scheme of Investigation
WTG	Wind Turbine Generator

1 Introduction

- 1.1.1.1 This chapter of the Environmental Impact Assessment Report (EIAR) outlines the proposed mitigation for Caledonia South.
- 1.1.1.2 As detailed within Volume 1, Chapter 7: EIA Methodology, two forms of mitigation are presented in the topic chapters of the EIAR:
- (1) embedded mitigation (also identified as primary and tertiary mitigation); and
 - (2) secondary mitigation.
- 1.1.1.3 Embedded mitigation encompasses measures that have altered the design identified within the design process of the site selection and/or associated construction, operation, or decommissioning methodologies so as to avoid or reduce potential significant environmental effects. This mitigation is also known as primary mitigation.
- 1.1.1.4 Embedded mitigation can also take the form of tried and tested best practice mitigation required by legislation or industry practices, known as tertiary mitigation.
- 1.1.1.5 Where there are significant effects identified which cannot be mitigated through the implementation of the embedded mitigation, secondary mitigation (actions that require further activity) has been identified to further avoid and/or reduce the significant adverse effects.
- 1.1.1.6 Through consultation and agreement with stakeholders, the need for monitoring may also be required to validate the conclusions of the assessment or the effectiveness of mitigation. Where monitoring is required, it is also detailed within this document.
- 1.1.1.7 Mitigation measures are presented for each EIAR topic chapter in the tables below.

2 Marine and Coastal Processes

2.1.1.1 Table 2-1 lists the mitigation measures identified within Volume 4, Chapter 2: Marine and Coastal Processes.

Table 2-1: Mitigation Measures for Marine and Coastal Processes.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-1	Development of and adherence to a Cable Plan (CaP). The CaP will confirm planned cable routing, burial and any additional protection and will set out methods for post-installation cable monitoring.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-2	Development of and adherence to a Development Specification and Layout Plan (DSLPL). The DSLPL will confirm the layout and design parameters of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-3	Development of and adherence to a Construction Method Statement (CMS). The CMS will confirm construction methods and the roles and responsibilities of parties engaged in construction. It will detail any construction-related mitigation measures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-4	Scour protection where there is the potential for scour to develop around infrastructure (foundations and cables).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-5	Where practicable, cable burial will be the preferred means of cable protection. Cable burial will be informed by the cable burial risk assessment and detailed within the CaP.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-7	Suitable implementation and monitoring of cable protection (via burial, or external protection where adequate burial depth as identified via risk assessment is not feasible), as detailed within the CaP.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.

Code	Mitigation Measure	Securing Mechanism
M-106	Landfall installation methodology (Horizontal Directional Drilling) will avoid direct impacts to the intertidal area.	To be secured as a condition of the Transmission Asset Marine Licences.
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Marine and Coastal Processes effects		

3 Marine Water and Sediment Quality

3.1.1.1 Table 3-1 lists the mitigation measures identified within Volume 4, Chapter 3: Marine Water and Sediment Quality.

Table 3-1: Mitigation Measures for Marine Water and Sediment Quality

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-1	Development of and adherence to a CaP. The CaP will confirm planned cable routing, burial and any additional protection and will set out methods for post-installation cable monitoring.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-3	Development of and adherence to a CMS. The CMS will confirm construction methods and the roles and responsibilities of parties engaged in construction.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-4	Scour protection where there is the potential for scour to develop around infrastructure (foundations and cables).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-8	Development of and adherence to an Offshore Environmental Management Plan (EMP). The EMP will set out mitigation measures and procedures relevant to environmental management, including but not limited to the following topics: Chemical usage, invasive non-native marine species, dropped objects, pollution prevention and contingency planning, and waste management.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-9	Development of and adherence to a Marine Pollution Contingency Plan (MPCP). The MPCP will identify potential sources of pollution and associated spill response and reporting procedures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-10	Development of and adherence to a Decommissioning Programme (DP). The DP will outline measures for the decommissioning of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.

Code	Mitigation Measure	Securing Mechanism
M-12	Development of and adherence to a Project Environmental Monitoring Programme (PEMP). The PEMP will set out commitments to environmental monitoring in pre-, during and post- construction phases of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-13	Development of and adherence to a Vessel Management Plan (VMP). The VMP will confirm the types and numbers of vessels that will be engaged on Caledonia South and consider vessel coordination including indicative transit route planning.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-24	Any object dropped on the seabed during works associated with Caledonia South will be reported and objects will be recovered where they pose a hazard to other marine users and where recovery is possible.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-26	Marine coordination and communication to manage project vessel movements.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-106	Landfall installation methodology (Horizontal Directional Drilling) will avoid direct impacts to the intertidal area.	To be secured as a condition of the Transmission Asset Marine Licences.
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Marine Water and Sediment Quality effects.		

4 Benthic Subtidal and Intertidal Ecology

4.1.1.1 Table 4-1 lists the mitigation measures identified within Volume 4, Chapter 4: Benthic Subtidal and Intertidal Ecology.

Table 4-1: Mitigation Measures for Benthic Subtidal and Intertidal Ecology

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-1	Development of and adherence to a CaP. The CaP will confirm planned cable routing, burial and any additional protection and will set out methods for post-installation cable monitoring.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-5	Where practicable, cable burial will be the preferred means of cable protection. Cable burial will be informed by the cable burial risk assessment and detailed within the CaP.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-6	Wind farm infrastructure will be micro-sited, where possible, around any sensitive seabed habitats including Annex I habitat (if present) to avoid any developmental impacts on these conservation features.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-7	Suitable implementation and monitoring of cable protection (via burial, or external protection where adequate burial depth as identified via risk assessment is not feasible), as detailed within the CaP.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-8	Development of and adherence to an Offshore EMP. The EMP will set out mitigation measures and procedures relevant to environmental management, including but not limited to the following topics: Chemical usage, invasive non-native marine species, dropped objects, pollution prevention and contingency planning, and waste management.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-9	Development of and adherence to a MPCP. The MPCP will identify potential sources of pollution and associated spill response and reporting procedures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
M-10	Development of and adherence to a DP. The DP will outline measures for the decommissioning of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-106	Trenchless techniques (Horizontal Directional Drilling) will be used as installation methodology at landfall to avoid direct impacts to the intertidal area.	To be secured as a condition of the Transmission Asset Marine Licences.
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Benthic Subtidal and Intertidal Ecology effects		

5 Fish and Shellfish Ecology

5.1.1.1 Table 5-1 lists the mitigation measures identified within Volume 4, Chapter 5: Fish and Shellfish Ecology.

Table 5-1: Mitigation Measures for Fish and Shellfish Ecology.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-1	Development of and adherence to a CaP. The CaP will confirm planned cable routing, burial and any additional protection and will set out methods for post-installation cable monitoring.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-3	Development of and adherence to a CMS. The CMS will confirm construction methods and the roles and responsibilities of parties engaged in construction. It will detail any construction-related mitigation measures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-5	Where practicable, cable burial will be the preferred means of cable protection. Cable burial will be informed by the cable burial risk assessment and detailed within the CaP.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-7	Suitable implementation and monitoring of cable protection (via burial, or external protection where adequate burial depth as identified via risk assessment is not feasible), as detailed within the CaP.	The CaP will be secured as a condition of the Marine Licences
M-8	Development of and adherence to an EMP. The EMP will set out mitigation measures and procedures relevant to environmental management, including but not limited to the following topics: entanglement, chemical usage, invasive non-native marine species, dropped objects, pollution prevention and contingency planning, and waste management.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-9	Development of and adherence to a MPCP. The MPCP will identify potential sources of pollution and associated spill response and reporting procedures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
M-10	Development of and adherence to a DP. The DP will outline measures for the decommissioning of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-11	Development of and adherence to a Piling Strategy (PS) (applicable where piling is undertaken). The PS will detail the method of pile installation and associated noise levels. It will describe any mitigation measures to be put in place (e.g., soft starts and ramp ups, use of Acoustic Deterrent Devices) during piling to manage the effects of underwater noise on sensitive receptors.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-12	Development of and adherence to a PEMP. The PEMP will set out commitments to environmental monitoring in pre-, during and post-construction phases of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-13	Development of and adherence to a VMP. The VMP will confirm the types and numbers of vessels that will be engaged on Caledonia South, and consider vessel coordination including indicative transit route planning. Vessels will adhere to current guidance such as the Scottish Marine Wildlife Watching Code to minimise the risk of disturbance.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-14	Development of and adherence to a DP. The DP will outline measures for the decommissioning of Caledonia South as secured by Section 36 and Marine Licence consent conditions and Section 105 of the Energy Act 2004 (as amended).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-16	Development of and adherence to Marine Mammal Mitigation Protocol (MMMP). The MMMP will identify appropriate mitigation measures during offshore activities that are likely to produce underwater noise and vibration levels capable of potentially causing injury or disturbance to marine mammals. The draft MMMP is submitted alongside the EIAR and the final version of the MMMP will be developed alongside the PS and referred to in the subsequent European Protected Species (EPS) licence post-consent. This Plan is also applicable to basking sharks.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
M-74	Pre-construction surveys will identify potential Unexploded Ordnance (UXO) hazards within the boundaries of Caledonia South, with UXO removal/clearance activities, and/or construction micro-siting and cable re-routing, undertaken as required.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-106	Trenchless techniques (Horizontal Directional Drilling) will be used as installation methodology at landfall to avoid direct impacts to the intertidal area.	To be secured as a condition of the Transmission Asset Marine Licences.
M-107	UXO hazards will be avoided where practicable and appropriate. If avoidance is not possible, decision making will relate to removal, with disposal in-situ considered if avoidance or removal is not possible. If disposal is required, and where practicable and appropriate, low-order deflagration will be the preferred method. Licensing of UXO clearance works will be subject to a standalone Marine Licence (and Basking Shark licence) application. These applications will provide details of measures to minimising impacts on Other Marine Megafauna where appropriate.	To be secured as a condition of the Marine Licence for UXO clearance and EPS Licence.
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Fish and Shellfish Ecology effects.		

6 Offshore Ornithology

6.1.1.1 Table 6-1 lists the mitigation measures identified within Volume 4, Chapter 6: Offshore Ornithology.

Table 6-1: Mitigation Measures for Offshore Ornithology.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-3	Development of and adherence to a CMS. The CMS will confirm construction methods and the roles and responsibilities of parties engaged in construction. It will detail any construction-related mitigation measures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-8	Development of and adherence to an Offshore EMP. The EMP will set out mitigation measures and procedures relevant to environmental management, including but not limited to the following topics: Chemical usage, invasive non-native marine species, dropped objects, pollution prevention and contingency planning, and waste management.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-11	Development of and adherence to a PS (applicable where piling is undertaken). The PS will detail the method of pile installation and associated noise levels. It will describe any mitigation measures to be put in place (e.g., soft starts and ramp ups, use of Acoustic Deterrent Devices) during piling to manage the effects of underwater noise on sensitive receptors.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-12	Development of and adherence to a PEMP. The PEMP will set out commitments to environmental monitoring in pre-, during and post-construction phases of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-13	Development of and adherence to a VMP. The VMP will confirm the types and numbers of vessels that will be engaged on Caledonia South, and consider vessel coordination including indicative transit route planning.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
M-14	Development of and adherence to a Lighting and Marking Plan (LMP). The LMP will confirm compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-15	Blade clearance of at least 35m above MSL (minimum blade clearance of 35m will be maintained for floating Wind Turbine Generators (WTGs) due to tidal movements).	To be secured as a condition of the Generation Asset Marine Licences
M-106	Trenchless techniques (Horizontal Directional Drilling) will be used as installation methodology at landfall to avoid direct impacts to the intertidal area.	To be secured as a condition of the Transmission Asset Marine Licences.
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Offshore Ornithology effects.		

7 Marine Mammals

7.1.1.1 Table 7-1 lists the mitigation measures identified within Volume 4, Chapter 7: Marine Mammals.

Table 7-1: Mitigation Measures for Marine Mammals.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-1	Development of and adherence to a CaP. The CaP will confirm planned cable routing, burial and any additional protection and will set out methods for post-installation cable monitoring.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-8	Development of and adherence to an Offshore EMP. The EMP will set out mitigation measures and procedures relevant to environmental management, including but not limited to the following topics: Chemical usage, invasive non-native marine species, dropped objects, pollution prevention and contingency planning, and waste management.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-9	Development of and adherence to a MPCP. The MPCP will identify potential sources of pollution and associated spill response and reporting procedures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-10	Development of and adherence to a DP. The DP will outline measures for the decommissioning of the Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-11	Development of and adherence to a PS (applicable where piling is undertaken). The PS will detail the method of pile installation and associated noise levels. It will describe any mitigation measures to be put in place (e.g., soft starts and ramp ups, use of Acoustic Deterrent Devices) during piling to manage the effects of underwater noise on sensitive receptors.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
M-12	Development of and adherence to a PEMP. The PEMP will set out commitments to environmental monitoring in pre-, during and post-construction phases of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-13	Development of and adherence to a VMP. The VMP will confirm the types and numbers of vessels that will be engaged on Caledonia South, and consider vessel coordination including indicative transit route planning.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-16	Development of and adherence to MMMP. This will identify appropriate mitigation measures during offshore activities that are likely to produce underwater noise and vibration levels capable of potentially causing injury or disturbance to marine mammals. This will be developed alongside the PS and referred to in EPS licence applications.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-107	UXO hazards will be avoided where practicable and appropriate. If avoidance is not possible, decision making will relate to removal, with disposal in-situ considered if avoidance or removal is not possible. If disposal is required, and where practicable and appropriate, low-order deflagration will be the preferred method. The indicative mitigation measures for UXO clearance are provided in the draft MMMP (M-16), however, licensing of UXO clearance works will be subject to a standalone Marine Licence and EPS licence application. At the post-consent stage, these applications will provide details of measures to minimising impacts on marine mammals where appropriate.	To be secured as a condition of the Marine Licence for UXO clearance and EPS Licence
M-108	Development of and adherence to an Entanglement Management Plan to reduce the potential entanglement risk to marine life. It will include suitable monitoring of mooring lines and dynamic cables during operational phase according to Caledonia South maintenance plan. Entanglement risk would be evaluated and managed as part of this process. The Entanglement Plan would be detailed within the EMP (M-8).	To be secured as a condition of the Generation Asset Marine Licences
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Marine Mammals effects.		

8 Commercial Fisheries

8.1.1.1 Table 8-1: lists the mitigation measures identified within Volume 4, Chapter 8: Commercial Fisheries.

Table 8-1: Mitigation Measures for Commercial Fisheries.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-1	Development of and adherence to a CaP. The CaP will confirm planned cable routing, burial and any additional protection and will set out methods for post-installation cable monitoring.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-5	Where practicable, cable burial will be the preferred means of cable protection. Cable burial will be informed by the cable burial risk assessment and detailed within the CaP.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-12	Development of and adherence to a PEMP. The PEMP will set out commitments to environmental monitoring in pre-, during and post-construction phases of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-14	Development of and adherence to a LMP. The LMP will confirm compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-17	Development of and adherence to a Fisheries Management and Mitigation Strategy (FMMS). The FMMS will set out the means of ongoing fisheries liaison through construction and operation and maintenance (O&M) phases of the Caledonia South and detail any mitigation measures to be put in place to limit effects on commercial fisheries activity. This will include the following project policies: Fisheries Liaison Policy and Engagement Schedule, Conflict Avoidance Policy, Incident Response Policy.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
M-18	Appointment of a Company Fisheries Liaison Officer (CFLO). The CFLO will support ongoing liaison and ensure clear communication between Caledonia South and Commercial Fisheries.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-19	Development of and adherence to a Navigational Safety Plan (NSP). The NSP will describe measures put in place by Caledonia South related to navigational safety, including information on Safety Zones, charting, construction buoyage, temporary lighting and marking, and means of notification of Project activity to other sea users (e.g., via Notice to Mariners).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-20	Adherence to best practice guidance with regards to fisheries liaison and procedures in the event of interactions between Caledonia South and fishing activities (e.g., FLOWW, 2014; 2015).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-21	Advance warning and accurate location details of construction, maintenance and decommissioning operations, associated Safety Zones and advisory passing distances will be given via Notices to Mariners and Kingfisher Bulletins.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-22	Participation in any fisheries working group to assist with liaison between Caledonia South and the fishing community.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-23	Application for and use of Safety Zones of up to 500 metre (m) during construction, major maintenance and decommissioning phases. Where appropriate, guard vessels will also be used to ensure adherence with Safety Zones or advisory passing distances, as defined by risk assessment, to mitigate any impact which poses a risk to surface navigation during construction, maintenance and decommissioning phases. Such impacts may include partially installed structures or cables, extinguished navigation lights or other unmarked hazards.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-24	Any objects dropped on the seabed during works associated with Caledonia South will be reported and objects will be recovered where they pose a hazard to other marine users and where recovery is possible.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
Secondary Mitigation		
SM-14	Monitoring of fisheries activity pre, during and post-construction using existing data sources including landing statistics, VMS, AIS, OFLO observations and industry consultation.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
SM-15	Commitment to undertake surveys across areas of cable protection deployed across inter-array cables and offshore export cables to establish that fishing can resume safely post construction, this may include over-trawl surveys following consultation with commercial fishing industry. This will be secured within the FMMS (M-17).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
SM-16	Commitment to determine whether the as-built floating infrastructure allows any form of fishing to resume through investigation into defined fishing areas.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
SM-17	Commitment to develop research on fisheries and floating through engagement with the commercial fisheries industry.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

9 Shipping and Navigation

9.1.1.1 Table 9-1 lists the mitigation measures identified within Volume 4, Chapter 9: Shipping and Navigation.

Table 9-1: Mitigation measures for Shipping and Navigation.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-1	Development of and adherence to a CaP. The CaP will confirm planned cable routing, burial and any additional protection and will set out methods for post-installation cable monitoring.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-2	Development of and adherence to a DSLP. The DSLP will confirm the layout and design parameters of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-5	Where practicable, cable burial will be the preferred means of cable protection. Cable burial will be informed by the cable burial risk assessment and detailed within the CaP.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-9	Development of and adherence to a MPCP. The MPCP will identify potential sources of pollution and associated spill response and reporting procedures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-12	Development of and adherence to a PEMP. The PEMP will set out commitments to environmental monitoring in pre-, during and post-construction phases of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-13	Development of and adherence to a VMP. The VMP will confirm the types and numbers of vessels that will be engaged on Caledonia South, and consider vessel coordination including indicative transit route planning.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
M-14	Development of and adherence to a LMP. The LMP will confirm compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-15	Blade clearance of at least 35m above MSL (minimum blade clearance of 35m will be maintained for floating Wind Turbine Generators (WTGs) due to tidal movements).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-17	Development of and adherence to a FMMS. The FMMS will set out the means of ongoing fisheries liaison through construction and O&M phases of Caledonia South and detail any mitigation measures to be put in place to limit effects on commercial fisheries activity. This will include the following project policies: Fisheries Liaison Policy and Engagement Schedule, Conflict Avoidance Policy, Incident Response Policy.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-19	Development of and adherence to a NSP. The NSP will describe measures put in place by Caledonia South related to navigational safety, including information on Safety Zones, charting, construction buoyage, temporary lighting and marking, and means of notification of Project activity to other sea users (e.g., via Notice to Mariners).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-21	Advance warning and accurate location details of construction, maintenance and decommissioning operations, associated Safety Zones and advisory passing distances will be given via Notices to Mariners and Kingfisher Bulletins.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-23	Application for and use of Safety Zones of up to 500m during construction, major maintenance and decommissioning phases. Where appropriate, guard vessels will also be used to ensure adherence with Safety Zones or advisory passing distances, as defined by risk assessment, to mitigate any impact which poses a risk to surface navigation during construction, maintenance and decommissioning phases. Such impacts may include partially installed structures or cables, extinguished navigation lights or other unmarked hazards.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
M-25	Development of and adherence to a Emergency Response Cooperation Plan (ERCoP). The ERCoP will be prepared in line with Maritime and Coastguard Agency (MCA) guidance and confirms what measures Caledonia South has in place to support any emergency response.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-26	Marine coordination and communication to manage project vessel movements.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-27	Compliance with MCA MGN 654 (MCA, 2021) and its annexes where applicable. Also MGN 543 Search and Rescue (SAR) annex 5 (MCA, 2018).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-28	Appropriate marking of Caledonia South on Admiralty and aeronautical charts. This will include provision of the positions and heights of structures to the United Kingdom (UK) Hydrographic Office (UKHO), Civil Aviation Authority (CAA), Ministry of Defence (MoD) and DGC.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-29	The construction area will be buoyed, as described in the NSP. Buoyage will be defined in consultation with the Northern Lighthouse Board (NLB).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-30	Marine navigation marking and lighting of the Project, as described in the LMP, will be defined in agreement with NLB and in line with International Association of Lighthouse Authorities (IALA) Recommendation O-139 (IALA, 2013).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-31	Compliance with regulatory expectations on moorings for floating wind and marine devices (Health and Safety Executive and MCA, 2017).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-104	The VMP will include consideration of towing operations for floating WTGs.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
M-105	The Applicant will liaise with the MCA and NLB pre-installation of mooring lines and dynamic cables to confirm available clearance and to determine if any additional mitigation is required.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
Secondary Mitigation		
SM-18	<p>The implementation of a Structure Exclusion Zone with no surface piercing infrastructure within the following coordinates:</p> <p>Point 1: 534142.0769E 6457516.0421N</p> <p>Point 2: 539478.2685E 6443317.1324N</p> <p>Point 3: 541003.8019E 6449861.5115N</p>	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
SM-19	Consultation will be initiated with the MCA on dynamic cables and the height of mid-water float (associated with lazy wave).	To be secured as a condition of the Generation Asset Marine Licence

10 Marine Archaeology and Cultural Heritage

10.1.1.1 Table 10-1 lists the mitigation measures identified within Volume 4, Chapter 10: Marine Archaeology and Cultural Heritage.

Table 10-1: Mitigation measures for Marine Archaeology and Cultural Heritage.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-1	Development of and adherence to a CaP. The CaP will confirm planned cable routing, burial and any additional protection and will set out methods for post-installation cable monitoring.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-2	Development of and adherence to a DSLP. The DSLP will confirm the layout and design parameters of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-4	Scour protection where there is the potential for scour to develop around infrastructure (foundations and cables).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-10	Development of and adherence to a DP. The DP will outline measures for the decommissioning of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-32	Development of and adherence to a Written Scheme of Archaeological Investigation (WSI). The Marine WSI will include the implementation of a Protocol for Archaeological Discoveries in accordance with 'Protocol for Archaeological Discoveries (PAD): Offshore Renewables Projects'.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-33	Seabed preparation, installation activities and installed infrastructure will avoid any identified seabed heritage assets and anthropogenic geophysical anomalies identified as Archaeological Exclusion Zones and described in the WSI.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Marine Archaeology and Cultural Heritage effects.		

11 Military and Civil Aviation

11.1.1.1 Table 11-1 lists the mitigation measures identified within Volume 4, Chapter 11: Military and Civil Aviation.

Table 11-1: Mitigation measures for Military and Civil Aviation.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-2	Development of and adherence to a DSLP. The DSLP will confirm the layout and design parameters of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-3	Development of and adherence to a CMS. The CMS will confirm construction methods and the roles and responsibilities of parties engaged in construction. It will detail any construction-related mitigation measures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-10	Development of and adherence to a DP. The DP will outline measures for the decommissioning of Caledonia South.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-13	Development of and adherence to a VMP. The VMP will confirm the types and numbers of vessels that will be engaged on Caledonia South, and consider vessel coordination including indicative transit route planning.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-14	Development of and adherence to a LMP. The LMP will confirm compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-25	Development of and adherence to a ERCoP. The ERCoP will be prepared in line with MCA guidance and confirms what measures Caledonia South has in place to support any emergency response.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
M-27	Compliance with MCA MGN 654 (MCA, 2021) and its annexes where applicable. Also MGN 543 SAR annex 5 (MCA, 2024).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences.
M-28	Appropriate marking of Caledonia South on Admiralty and aeronautical charts. This will include provision of the positions and heights of structures to the UK UKHO, CAA, MoD and DGC.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-34	Aviation lighting and marking, as described in the LMP, will be installed in accordance with Article 223 of CAP 393, the UK Air Navigation Order 2016 which sets out the mandatory requirements to be followed for lighting of offshore WTGs.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-35	The layout of Caledonia South, as presented in the DSLP, will be finalised in discussion with the MCA and the NLB in order to ensure the specific WTG layout is compatible with potential Search and Rescue activity.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-36	Failures to Caledonia South lighting and marking will be appropriately reported and rectified as soon as practicable. Interim hazard warnings will be put in place as required.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
Secondary Mitigation		
SM-20	Commercial agreement will be sought with NATS to secure appropriate mitigation for impacts relating to the Allanshill Primary Surveillance Radar (PSR).	To be secured as a condition of the Generation Asset Marine Licence.
SM-21	Agreement with Highlands & Islands Airports Limited will be sought to secure suitable revisions to Instrument Flight Procedures.	To be secured as a condition of the Generation Asset Marine Licence.
SM-22	Commercial agreement will be sought with MoD to secure appropriate mitigation for identified PSR systems (RRH Buchan and RAF Lossiemouth)	To be secured as a condition of the Generation Asset Marine Licence.

12 Seascape Landscape and Visual Impact

12.1.1.1 Table 12-1 lists the mitigation measures identified within Volume 4, Chapter 12: Seascape Landscape and Visual Impact.

Table 12-1: Mitigation measures for Seascape Landscape and Visual Impact.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-14	Development of and adherence to a LMP. The LMP will confirm compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-103	The Applicant has committed to install sensors so that when visibility of the WTGs lights from all sensors is greater than 5km in the hours of darkness the aviation lighting is reduced from 2000cd to 200cd.	To be secured within the LMP (M-14).
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Seascape Landscape and Visual Impact effects.		

13 Other Human Activities

13.1.1.1 Table 13-1 lists the mitigation measures identified within Volume 4, Chapter 13: Other Human Activities.

Table 13-1: Mitigation measures for Other Human Activities.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-1	Development of and adherence to a CaP. The CaP will confirm planned cable routing, burial and any additional protection and will set out methods for post-installation cable monitoring.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-3	Development of and adherence to a CMS. The CMS will confirm construction methods and the roles and responsibilities of parties engaged in construction. It will detail any construction-related mitigation measures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-8	Development of and adherence to an Offshore EMP. The EMP will set out mitigation measures and procedures relevant to environmental management, including but not limited to the following topics: Chemical usage, invasive non-native marine species, dropped objects, pollution prevention and contingency planning, and waste management.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-9	Development of and adherence to a MPCP. The MPCP will identify potential sources of pollution and associated spill response and reporting procedures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-14	Development of and adherence to a LMP. The LMP will confirm compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-19	Development of and adherence to a NSP. The NSP will describe measures put in place by Caledonia South related to navigational safety, including information on Safety Zones, charting, construction buoyage, temporary lighting and marking,	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences

Code	Mitigation Measure	Securing Mechanism
	and means of notification of Project activity to other sea users (e.g., via Notice to Mariners).	
M-21	Advance warning and accurate location details of construction, maintenance and decommissioning operations, associated Safety Zones and advisory passing distances will be given via Notices to Mariners and Kingfisher Bulletins.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-23	Application for and use of Safety Zones of up to 500m during construction, major maintenance and decommissioning phases. Where appropriate, guard vessels will also be used to ensure adherence with Safety Zones or advisory passing distances, as defined by risk assessment, to mitigate any impact which poses a risk to surface navigation during construction, maintenance and decommissioning phases. Such impacts may include partially installed structures or cables, extinguished navigation lights or other unmarked hazards.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-24	Any objects dropped on the seabed during works associated with Caledonia South will be reported and objects will be recovered where they pose a hazard to other marine users and where recovery is possible.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-25	Development of and adherence to a ERCoP. The ERCoP will be prepared in line with MCA guidance and confirms what measures Caledonia South has in place to support any emergency response.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-26	Marine coordination and communication to manage project vessel movements.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-38	Crossing and proximity agreements with known existing pipeline and cables operators will be sought.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Other Human Activities effects.		

14 Socio-economics, Tourism and Recreation

14.1.1.1 Table 14-1 lists the mitigation measures identified within Volume 6, Chapter 2: Socio-economics, Tourism and Recreation.

Table 14-1: Mitigation measures for Socio-economics, Tourism and Recreation.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-13	Development of and adherence to a VMP. The VMP will confirm the types and numbers of vessels that will be engaged on Caledonia South and consider vessel coordination including indicative transit route planning.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-14	Development of and adherence to a LMP. The LMP will confirm compliance with legal requirements with regards to shipping, navigation and aviation marking and lighting.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-19	Development of and adherence to a NSP. The NSP will describe measures put in place by Caledonia South related to navigational safety, including information on Safety Zones, charting, construction buoyage, temporary lighting and marking, and means of notification of Project activity to other sea users (e.g., via Notice to Mariners).	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-21	Advance warning and accurate location details of construction, maintenance and decommissioning operations, associated Safety Zones and advisory passing distances will be given via Notices to Mariners and Kingfisher Bulletins.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Socio-economics, Tourism and Recreation effects.		

15 Climate Change Resilience

15.1.1.1 Table 15-1 lists the mitigation measures identified within Volume 6, Chapter 3: Climate Change Resilience.

Table 15-1: Mitigation measures for Climate Change Resilience.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-3	Development of and adherence to a CMS. The CMS will confirm construction methods and the roles and responsibilities of parties engaged in construction. It will detail any construction-related mitigation measures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-8	Development of and adherence to an Offshore Environmental Management Plan. The Offshore Environmental Management Plan will set out mitigation measures and procedures relevant to environmental management, including but not limited to the following topics: Chemical usage, invasive non-native marine species, dropped objects, pollution prevention and contingency planning, and waste management.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-84	Caledonia South will be designed to be resilient to impacts arising from weather events and climatic conditions in accordance with current planning, design and engineering practice, standards, and codes.	Design review undertaken at detailed design stage and secured through condition to the PPP. Also to be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Climate Change Resilience effects.		

16 Greenhouse Gas Emissions

16.1.1.1 Table 16-1 lists the mitigation measures identified within Volume 6, Chapter 4: Greenhouse Gas Emissions.

Table 16-1: Mitigation measures for Greenhouse Gas Emissions.

Code	Mitigation Measure	Securing Mechanism
Embedded Mitigation		
M-3	Development of and adherence to a CMS. The CMS will confirm construction methods and the roles and responsibilities of parties engaged in construction. It will detail any construction-related mitigation measures.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
M-8	Development of and adherence to an Offshore EMP. The Offshore EMP will set out mitigation measures and procedures relevant to environmental management, including but not limited to the following topics: Chemical usage, invasive non-native marine species, dropped objects, pollution prevention and contingency planning, and waste management.	To be secured as a condition of the Generation Asset and Transmission Asset Marine Licences
Secondary Mitigation		
No secondary mitigation has been proposed or is practicable with respect to the Greenhouse Gas Emissions effects.		

Caledonia Offshore Wind Farm
5th Floor, Atria One
144 Morrison Street
Edinburgh
EH3 8EX

www.caledoniaoffshorewind.com

