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Environmental Impact Assessment Report
Volume 3, Appendix 5.2: Commitments Register
MarramWind Offshore Wind Farm

December 2025

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1. Introduction

- 1.1.1.1 The purpose of the Commitments Register is to provide a summary of the embedded environmental measures that will be implemented during the construction, operation and maintenance (O&M) and decommissioning stages of MarramWind Offshore Wind Farm (hereafter, referred to as 'the Project').
- 1.1.1.2 The Commitments Register has been populated with a range of environmental measures including those designed to avoid, prevent and reduce impacts. See **Volume 1, Chapter 5: Approach to the Environmental Impact Assessment (EIA)** for further information.
- 1.1.1.3 The Commitments Register identifies how each embedded environmental measure will be secured.
- 1.1.1.4 The Commitments Register is presented in **Table 1.1**. Noting, not all commitment reference numbers are sequential due to some commitments, made earlier in Project development, no longer being required as the design of the Project has progressed.

Table 1.1 Commitments register

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-001	Underground cables will be used to connect from the landfall(s) transition joint bays to the onshore substations. An additional section of the onshore export cable corridor will run from the onshore substations to the grid connection point at Scottish and Southern Electricity Network (SSEN) Netherton Hub. Cables are typically installed in ducts in a standard buried trench arrangement with appropriate insulation, providing protection from temperature extremes and changes in soil moisture.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-002	Sensitive sites will be avoided by the temporary and permanent onshore project footprint including Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Sites of Special Scientific Interest (SSSIs), National Nature Reserve (NNR), Local Nature Reserves, Local Wildlife Sites, Ancient woodland, areas of consented development, areas of historic landfill and other known areas of potential contamination, Scottish National Trust land, listed buildings and scheduled monuments, potable water supply abstractions, floodplains and geomorphic risk areas.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.
M-003	A crossing schedule of the grid connection crossings will be prepared that includes crossing methodologies, where required, for all roads, rail, core paths, rights of way and watercourses.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-004	At any sensitive features identified along the route, including sensitive crossing locations, the working width of the temporary construction corridor will be reduced as far as practicable to avoid or minimise potential environmental effects.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-005	To reduce the environmental impact of the landfall(s), a trenchless solution is to be implemented to install ducts. Determination of the most suitable trenchless landfall crossing method will be undertaken during the detailed design stage of the Project, following geotechnical investigation of the onshore and nearshore areas.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.

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M-006	<p><u>Vegetation (trees / woodland / hedgerows)</u></p> <p>Vegetation will be retained where possible as detailed in Volume 3, Appendix 23.10 Arboricultural Impact Assessment and Volume 3, Appendix 23.10, Figure 1 Tree Removal and Protection Plan. Otherwise, vegetation removal will be undertaken in line with British Standard (BS) 5837-2012 (Trees in relation to design, demolition and construction) and scheduled to avoid bird breeding seasons. Ancient woodland will be retained with a stand-off of a minimum of 25m from any surface construction works using HDD (or similar trenchless technique), at a depth >6m.</p> <p>With regards to other woodland / forestry, the onshore export cable construction corridor will be reduced, where practical, to minimise tree loss and where the construction corridor passes close to woodland that is being retained, BS5837:2012 root protection to apply.</p> <p>Hedgerows with trees / tree lines which are crossed by the onshore export cable corridor will be notched to reduce landscape impacts. All hedgerows that are to be retained, coppiced, notched (vegetation removed only where trenching occurs) or lost are to be mapped. Vegetation may be coppiced / pruned to allow access and visibility splays at junctions.</p>	Scoping Amended at EIA Report.	Volume 4: Construction Environmental Management Plan , description of Project and planning conditions.
M-007	Best practice air quality management measures will be applied as described in IAQM (2024) guidance on the Assessment of Dust from Demolition and Construction to avoid adverse effects on sensitive features. Examples of pathway include windblown dust / fibres or tracking back of dust / fibres is a potential contamination migration and vehicle standards.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-008	Pollution control strategy will be in line with good practice and in accordance with Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) Controlled Activities Regulations (CAR) licence regulations, pollution prevention plans and emergency plans to be drawn up to detail how ground and surface waters and the ecological features they support, would be protected in	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

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	construction and operation. These will include information on the storage of any fuels, oils and other chemicals and pollution incidence response planning, plus measures for the protection of licenced and private abstractions. This could include a monitoring regime associated with critical or very proximate receptors.		
M-009	Areas of temporary habitat loss will be reinstated, wherever practicable, following the completion of construction in each area. Wherever possible, reinstatement will be back to the type of habitat crossed.	Scoping	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.
M-011	A lighting design of all temporary and permanent lighting will be developed once contractors are appointed. Joint guidance provided by the Bat Conservation Trust and Institution of Lighting Professionals (2023). The lighting design will account of the potential effects on terrestrial ecology and people (residents) by taking measures to minimise lighting usage, minimise light spill, use most appropriate wave lengths of light and locate lighting in the most appropriate locations – this is to decrease the potential displacement effects on light sensitive fauna, such as bats.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.
M-012	Speed limits (of no greater than 15 miles per hour (mph)) will be imposed on all construction haul roads and access tracks to minimise the risk of road traffic collisions with fauna such as badgers, otters, bats and barn owls.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.
M-013	During both construction and operation stages, vehicle maintenance and refuelling / oil changes for machinery / equipment will be undertaken within designated areas where spillages can be easily contained, and machinery will be routinely checked to ensure it is in good working condition. The areas at risk of spillage or containing hazardous materials, such as vehicle maintenance areas and hazardous substance stores (including fuel, oils and chemicals), will comply with industry good practice for pollution prevention, be appropriately bunded, have appropriate containment and segregation and will be risk assessed and carefully sited to minimise the risk of hazardous substances entering the drainage system, local watercourses, or sensitive land based receptors. Such areas will be sited at	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

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	least 10m from a watercourse, in accordance with the Scottish Environment Protection Agency (SEPA) CAR Practical Guide (SEPA, 2024), and away from areas at risk of flooding. Additionally, the bunded areas will have impermeable bases to limit the potential for migration of contaminants into groundwater following any leakage/spillage. An Incident Management Plan will be in place during construction and operation. All works will be carried out in accordance with The Pollution Prevention and Control (Scotland) Regulations 2012 and the Water Environment (Controlled Activities) (Scotland) Regulations 2011, as amended.		
M-014	No blasting is anticipated to be required, and trenchless crossings will be undertaken by non-impact methods.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-015	During construction topsoil and subsoil will be stored within the construction working corridor of the onshore export cable corridor. The topsoil and subsoil will be stored in separate stockpiles, in line with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Any suspected or confirmed contaminated soils will be separated, contained and tested before removed and adequate leachate / runoff drainage will be implemented to prevent migration of contaminants from stockpiles.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-016	In areas (or during periods of adverse weather) there may be the requirement to import aggregates to minimise erosion or transport of sediment from construction. Options such as bog-matting, geotextiles, floating roads will be considered by the principal contractor for sensitive sections of the onshore export cable corridor to reduce impact. Volume 4: Outline Construction Environmental Management Plan will include a commitment to review and implement additional protective measures for soil stockpiles, if needed, to control sediment run-off due to heavy rainfall / flood conditions and maintain soils in a drier condition.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

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M-017	Potential risks to human health or environmental receptors from any unexpected ground contamination will be avoided by the use of Personal Protection Equipment (PPE) and the adoption of appropriate good working practices by the construction workforce, and by the inclusion of an unexpected contamination protocol in the Volume 4: Outline Construction Environmental Management Plan .	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-018	Prior to construction, an unexpected contamination protocol will be produced in line with UK statutory guidance (land contamination risk management (LCRM)) (Environment Agency, 2020) to minimise the potential risks to human health and the water environment from any unexpected ground contamination. The protocol will take into account the requirements for the use of PPE and adoption of best practice methods during construction.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-019	The onshore export cable will be constructed in sections. The trenches will be excavated, the cable ducts will be laid, the trenches backfilled, and the reinstatement process commenced in as short a timeframe as practicable.	Scoping	Volume 4: Outline Construction Environmental Management Plan .
M-020	Emergency Response Plans (ERPs) for flood events will be prepared for all construction activities, working areas, access and egress routes in floodplain areas, such as the Annachie Burn. These plans will be provided for both construction and operation / maintenance stages and will include evacuation procedures for personnel.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-021	All aspects of the construction work will be in accordance with the Health and Safety at Work Act 1974 and regulations made under the Act, and The Construction (Design and Management) Regulations 2015.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-022	Following completion of construction, temporary construction compounds will be returned to the standard identified and agreed in the Decommissioning Plan.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

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M-023	Particular care will be taken to ensure that the existing land drainage regime is not compromised as a result of construction. These field drains will discharge to local drainage ditches through silt traps, as appropriate, to minimise sediment release.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-024	<u>Inspection and completion</u> Condition surveys and inspections will be undertaken before, during and after the construction stage. If damage has been identified during the construction stage, the damage will be repaired.	Scoping	Volume 4: Construction Environmental Management Plan management plans, description of Project and planning conditions.
M-025	Any disposal off-site of excavated material will be undertaken in consultation with the landowner/occupier and in accordance with the Waste Management Regulations, including the Environmental Protection Act 1990, The Environmental Protection (Duty of Care) (Scotland) Regulations 2014 SSI 4, and The Waste (Scotland) Regulations 2012.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-026	Signage and / or temporary core path / rights of way diversions will be provided during construction where necessary to avoid the construction working areas.	Scoping	Volume 4: Outline Core Paths Management Plan and planning conditions.
M-027	At any sensitive features identified along the route, the working width of the temporary construction corridor will be reduced as far as practicable to avoid or minimise potential environmental effects. Where it is necessary to cross sensitive features, such as watercourses and woodland, trenchless construction methods will be used to install ducts under the crossed feature, which the onshore export cables are then pulled through via entry and exit pits.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-028	An Outline Scour Protection Plan has been submitted within this Application (Volume 4), and includes details of the need, type, quantity and installation methods for scour protection. A Final Scour Protection Plan will be completed prior to construction commencing and will include measures during the O&M stage such as periodic inspection and maintenance requirements and will be submitted to Marine Directorate - Licensing Operations Team (MD-LOT) for approval.	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.

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M-029	<p>An Outline Cable Plan has been submitted within this Application (Volume 4), and includes details of the need, type, quantity and installation methods for cabling. A Final Cable Plan will be completed prior to construction commencing and submitted to MD-LOT for approval. The Final Cable Plan will include:</p> <ul style="list-style-type: none"> a) the vessel types, location, duration and cable laying techniques for export and array cables; b) the finalised location of the export cable route; c) the results of monitoring or data collection work (including geophysical, geotechnical and benthic surveys); d) technical specification of the cables, including a desk based assessment of attenuation of electromagnetic field strengths and shielding; e) a CBRA, to ascertain burial depths and where necessary alternative protection measures; f) methods to be used to mitigate the effects of electromagnetic fields (EMF); g) methodologies and timetable for post-construction and operational surveys (including inspection, over trawl, post-lay) for the cables through its operational life; h) measures to address and report to the Licensing Authority any exposure of cables or risk to users of the sea from cables; and g) methodologies for cable inspection with measures to address and report to Scottish Ministers, any exposure of array cables. 	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-030	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.	Scoping	s.36 conditions and marine licences conditions.
M-031	<p>A Safety Zone Statement has been submitted with this Application. An application for and use of rolling Safety Zones of up to 500m during construction and O&M stages will be submitted to MD-LOT for approval. No permanent operational safety zone is proposed. The safety zone application will include the following:</p> <ul style="list-style-type: none"> - pre-commissioning safety zones: 50m - construction stage: 500m safety zones around active construction works and 	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.

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	<p>evidenced by the presence of a construction vessel;</p> <ul style="list-style-type: none"> - construction stage: 50m safety zones around partially or fully completed structure prior to the overall wind farm commissioning; and - O&M stage: 500m safety zone around the site of major maintenance works. <p>No safety zones are currently proposed for the decommissioning stage, a separate application would be made prior to decommissioning where considered necessary.</p> <p>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 that poses a risk to surface navigation during construction, maintenance and decommissioning stages. Such impacts may include partially installed structures or cables, extinguished navigation lights or other unmarked hazards.</p>		
M-032	<p>An Outline Marine Mammal Mitigation Protocol (MMMP) has been submitted with this Application (Volume 4). The Final MMMP will be completed prior to construction and submitted to MD-LOT for approval. The MMMP will be adhered to and subsequently mitigate potential impacts from underwater noise on marine mammals and fish through good or standard practice actions in order to meet legislative requirements.</p>	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-033	<p>An Outline Marine Pollution Contingency Plan (MPCP) (Appendix to the Outline Environmental Management Plan (EMP)) has been submitted with this Application (Volume 4). This Outline MPCP outlines details of procedures to protect personnel working and to safeguard the marine environment and mitigation measures in the event of an accidental pollution event arising from offshore operations relating to the Project. The Final MPCP will be completed prior to construction commencing and submitted to MD-LOT for approval and will include relevant key emergency contact details.</p>	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.

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M-034	<p>An Outline Written Scheme of Investigation (WSI) (Offshore) has been submitted with this Application (Volume 4). An approved WSI will be in place during the Project, with method statements for specific activities identified and added throughout the project life cycle, along with reference to the Protocol for Archaeological Discoveries (PAD). This will include oversight of activities including geophysical and geotechnical survey specification, planning and review of data, list of recommended mitigation, watching briefs and ground truthing surveys (remotely operated vessel assisted and diver surveys), where required, as well as consultations, and reporting.</p>	Scoping Amended at EIA Report.	s.36 conditions, marine licences conditions and Volume 4, Environmental Management Plan.
M-035	<p>Where practical, marine archaeological remains of lesser significance will be avoided by the temporary and permanent offshore footprint.</p>	Scoping Amended at EIA Report.	Description of Project.
M-036	<p>Loss or disturbance of possible submerged historic landscape elements arising from altered seabed conditions (e.g. scour) will be mitigated, as far as possible, through sensitive design including utilising the mechanisms of Areas of Archaeological Interest (AAI) and exclusion zones where necessary.</p>	Scoping Amended at EIA Report.	Description of Project / Volume 4: Outline Written Scheme of Investigation (Offshore).
M-037	<p>Loss or disturbance of possible submerged historic landscape elements arising from works will be mitigated, as far as possible, through selection of appropriate working methods including utilising the mechanisms of Areas of Archaeological Interest (AAI) and exclusion zones where necessary.</p>	Scoping Amended at EIA Report.	Description of Project / Volume 4: Outline Written Scheme of Investigation (Offshore).
M-038	<p>An Outline Lighting and Marking Plan (LMP) has been submitted with this Application (Volume 4). The Final LMP will be completed prior to construction commencing and submitted to MD-LOT for approval. The LMP will confirm compliance with Northern Lighthouse Board requirements and in Line with International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Recommendation G1162 (IALA, 2021) with regards to shipping, navigation and aviation marking and lighting during construction and operational and maintenance stage of the works.</p>	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.

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M-039	<p>An Outline Vessel Management and Navigational Safety Plan has been submitted with this Application (Volume 4). The Final Vessel Management and Navigation Safety Plan will be completed prior to construction commencing and submitted to MD-LOT for approval. The Final Plan will:</p> <ul style="list-style-type: none"> a) confirm the types and numbers of vessels that will be engaged on the Project; b) consider vessel coordination including indicative transit route planning; d) describe measures put in place by the Project related to navigational safety, including information on Safety Zones, charting construction buoyage, temporary lighting and marking; and e) provide a means of notification of Project activity to other sea users (e.g. via Notice to Mariners). 	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-040	Marine coordination and communication will occur to manage project vessel movements. Proactive Kingfisher notifications and other navigational warnings will be published in a timely manner in addition to distribution to the United Kingdom Hydrographic Office (UKHO).	Scoping	Company Marine Operations Manual and Aids to Navigation Plan, inclusion in Admiralty charts by KHO; condition on the s.36 consent and / or marine licences.
M-043	Development of and adherence to a Development Specification and Layout Plan, which will confirm the Project's layout and design parameters. This will be submitted to MD-LOT for approval post-consent.	Scoping Amended at EIA Report.	Company Marine Operations Manual and Aids to Navigation Plan, s.36 conditions and marine licences conditions.
M-044	Compliance with regulatory expectations on moorings for floating wind and marine devices (Health & Safety Executive (HSE) and Maritime & Coastguard Agency (MCA), 2017).	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-045	Compliance with MCA MGN 654 (MCA, 2021) and its annexes where applicable. Marine Guidance Note (MGN) 654 includes the completion of a Search and Rescue Checklist.	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.

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M-046	There will be a minimum blade tip clearance of at least 22m above mean high water springs.	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-047	Appropriate marking of the Project on Admiralty and aeronautical charts. This will include provision of the positions and heights of structures to the UKHO, Civil Aviation Authority, Ministry of Defence and Defence Geographic Centre.	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-048	An Outline Fisheries Mitigation, Monitoring and Communication Plan (FMMCP) has been submitted with this Application (Volume 4). The Final FMMCP will be completed prior to construction commencing and submitted to MD-LOT for approval. The FMMCP will set out the means of ongoing fisheries liaison through the construction and O&M stages of the Project 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 and Incident Response Policy.	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-049	An Outline Project Environmental Monitoring Programme (PEMP) has been submitted with this Application (Volume 4). The Final PEMP will be completed prior to construction commencing and submitted to MD-LOT for approval. The Final PEMP will set out commitments to environmental monitoring in pre-, during and post-construction stages of the Project.	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-050	Any objects dropped on the seabed during works associated with the Project will be reported and objects will be recovered where they pose a hazard to other marine users and where recovery is possible.	Scoping	s.36 conditions and marine licences conditions.
M-051	Participation in fisheries working group(s) will occur to assist with liaison between the Project and the fishing community.	Scoping	s.36 conditions and marine licences conditions.

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M-052	Adherence to best practice guidance will occur with regards to fisheries liaison and procedures in the event of interactions between the Project and fishing activities (e.g. FLOWW, 2014, 2015, 2025).	Scoping	s.36 conditions and marine licences conditions.
M-053	Appointment of a Company Fisheries Liaison Officer (CFLO). The CFLO will support ongoing liaison and ensure clear communication between the Project and commercial fisheries during design, pre-construction, construction, O&M and decommissioning.	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-054	A detailed Cable Burial Risk Assessment (CBRA) will be undertaken to enable informed judgements about burial depth. This should reduce the risk of buried cables reemerging whilst also limiting the amount of sediment disturbance to that which is necessary. The array and export cables will typically be buried at a target burial depth between 1 to 2m below the seabed surface. The final depth of the cable will be dependent on the seabed mobility and CBRA. The CBRA will manage and mitigate risks from loading and sediment transport across the seabed. The CBRA will be included within the Final Cable Plan.	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-055	Key sensitive habitats will be avoided, where known, through pre-construction surveys and micro-siting of proposed offshore Project infrastructure.	Scoping	s.36 conditions and marine licences conditions.
M-056	To reduce environmental impact of the landfall, a trenchless solution (e.g. horizontal directional drilling (HDD)) is to be implemented to install ducts at landfall. Determination of the most suitable trenchless landfall crossing method will be undertaken during the detailed design stage of the Project, following geotechnical investigations of the onshore and nearshore areas.	Scoping Amended at EIA Report.	Project design, s.36 conditions and marine licences conditions.
M-057	Burial of the cables where possible and / or use of external cable protection such as rock placement and / or concrete mattressing. Concrete mattresses only used in isolation in non-fished areas to ensure no snagging issues for fisheries industry. Where appropriate, nature-inclusive design options will be considered in the selection and placement of cable protection measures.	Scoping Amended at EIA Report.	Project description.

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M-058	Safe distances between electrical components and publicly accessible points.	Scoping	Occupational Exposure Guidelines for Electromagnetic fields.
M-059	Micro-siting will be applied to proposed offshore Project infrastructure such as cables (trenched or ploughed in), or wind turbine generator (WTG) anchor structures, to minimise mobilisation of contaminants from any areas of significantly contaminated sediment detected during pre-construction surveys.	Scoping	s.36 conditions and marine licences conditions.
M-060	Turbidity in the water column caused by sediment mobilisation during construction will be controlled by selection of best practice construction methods.	Scoping	s.36 conditions, marine licences conditions and Environmental Management Plan.
M-061	Minimise potential for creation of a temporary barrier to fish migration in any river adjacent to cable landfall due to a plume of mobilised sediment or released drilling fluid obstructing the river entrance by appropriate timing of operations close to the shore regarding tidal flows and fish migration seasons.	Scoping Amended at EIA Report.	s.36 conditions, marine licences conditions and Environmental Management Plan.
M-062	Minimise adverse effects on water and sediment quality from loss of drilling muds when using HDD across the littoral zone by employment of a site-specific best practice protocol, including drilling, reaming and cleaning the majority of the hole from the land before drilling the final few metres to breakout using non-polluting drill fluid containing the least toxic drilling fluid additives.	Scoping Amended at EIA Report.	s.36 conditions, marine licences conditions and Environmental Management Plan.
M-063	<p>A Construction Environmental Management Plan (CEMP) will be implemented by the contractor in accordance with Volume 4: Outline Construction Environmental Management Plan. The contractor will ensure that the relevant environmental measures within the CEMP and health and safety procedures are implemented.</p> <p>The CEMP identifies the project management structure roles and responsibilities with regard to managing and reporting on the environmental impact of the construction stage. Other measures that feed into the CEMP include:</p> <ul style="list-style-type: none"> -M-016: Protective measures for soil stockpiles; -M-017: Personal protective equipment and working practices; 	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan , Planning conditions.

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	<ul style="list-style-type: none"> -M-090: Construction noise and vibration; -M-097: Risk Assessment Method Statement; -M-098: Reduce greenhouse gases emissions; -M-099: CEMP to include measures to minimise emissions; -M:109: Protection of visual receptors; -M-134: Ecological Clerk of Works; -M:135: Pre-construction ecological surveys; and -M-136: Species Protection Plan. 		
M-064	<p>The Project will ensure that any material to be deposited in the sea (metal components, rock for armour, concrete mattresses) does not contain toxic materials that could leach into the sea water and result in toxic effects.</p>	Scoping	s.36 conditions, marine licences conditions and Environmental Management Plan.
M-066	<p>The permanent rights of servitude for the onshore export cable corridor will be kept to the minimum width needed for safe access for cable maintenance or replacement purposes during operation of the Project.</p>	Scoping Amended at EIA Report.	Planning conditions.
M-067	<p>A Phase 1 Contaminated Land Report (also known as a Preliminary Risk Assessment, or PRA) will be completed prior to submission of the EIA Report to identify the potential for the Project to encounter areas of potential land contamination. The desk study will inform the development of the preliminary conceptual site model (i.e., the plausible sources, pathways and receptors of land contamination) and include a risk assessment to inform any further actions, such as intrusive ground investigation or remediation, needed to ensure that the land is suitable for the intended future use. This is in accordance with the LCRM requirement for a Tier 1: PRA as the first stage of land contamination assessment to determine whether there are any potentially unacceptable risks requiring further assessment / actions.</p>	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

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M-068	Desk-based information review (yet to be supplemented by site investigations) indicates that peat may be encountered by the Project. The Project will therefore apply the general principles in published SEPA guidance 'Developments on Peat and Off-site Uses of Waste Peat' (SEPA, 2017) to peat management, including use of the peat management hierarchy, the first principle of which is to minimise peat excavation and disturbance. A Peat Management Plan will be developed if peat cannot be avoided.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-069	The construction work will comply with regulations, including the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) and associated SEPA guidance. Any necessary authorisations will be obtained from SEPA and complied with. Construction activities which may require authorisation from SEPA include: discharging run-off from construction areas, work on the riverbank; the installation of coffer dams; dewatering excavations; and use of herbicides.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-070	Soils and excavated materials will be managed in accordance with SEPA regulatory guidance on Promoting the Sustainable Reuse of Greenfield Soils in Construction, and Waste Management Guidelines for the re-use of excavated materials and remediation. The best practice for soil handling in the Defra Construction Code of Practice will be applied for handling of topsoil and subsoil. A Soil Management Plan (SMP) will be developed for use during construction to protect soil resources and agricultural land quality. The SMP will be used in conjunction with a Peat Management Plan (PMP) as required i.e., if the Project encounters areas of peat.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-071	During topsoil stripping, machinery with low ground pressure will be used to minimise soil compaction where the soil conditions indicate that compaction is possible. Storage time will be kept to the practicable minimum to prevent the soil deteriorating in quality. Topsoil stripped from different fields will be stored separately, as will soil from hedgerow banks or woodland strips.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-072	Contamination if found will be subject to appropriate risk assessment and if necessary, either removed, treated and/or mitigated as part of the Project, and the Incident Management Plan will be followed.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-073	The Applicant will ensure that the land used for the development is suitable for the proposed use with respect to the potential for soil and groundwater contamination and, where necessary, risk-based remediation is undertaken in line with statutory guidance (LCRM) and other guidance (including BS 10175). The precise design of any remediation strategy will be confirmed in the detailed design after planning consent. If remediation is needed, this will be designed using the sustainable remediation decision-making process set out in the UK Sustainable Remediation Forum (SuRF-UK) Framework for Assessing the Sustainability of Soil and Groundwater Remediation.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-074	All ground investigation work and construction work associated with the Project will be completed in accordance with the Control of Asbestos Regulations 2012 (CAR 2012). With regard to asbestos containing materials or asbestos fibres encountered on or within the ground during ground works, CAR 2012 requires that measures are taken to prevent fibre release and to prevent the spread of asbestos, the location where asbestos is suspected or confirmed must be recorded and control measures put in place to prevent exposure.	Scoping	Volume 4: Construction Environmental Management Plan and planning conditions.
M-075	Where practicable the Project will avoid areas of active mineral extraction, mineral safeguarding or mineral search areas.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-076	Where trenchless techniques are not required or are not practical, the crossing of drainage ditches or engineered channels may be by open cut techniques or the installation of culverts or bridges to allow water to continue flowing. Where this is the case this will be done in accordance with The Water Environment (Controlled Activities) (Scotland) Regulations 2011, as amended, and the General Binding	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	Rules in the SEPA Practical Guide (SEPA, 2024). Appropriate authorisations from SEPA will be applied for, if required for the Project.		
M-077	Where possible micro-siting will be undertaken during detailed design to avoid ponds and-wetlands.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-078	A depth of up to 1.5m to the base of an onshore export cable trench is assumed. In sensitive areas, the amount of topsoil removed will be the width of the trenches only, rather than across the entire temporary construction corridor.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-079	Greenhouse gas (GHG) emissions for the life cycle stages A1-A3, with a view to also consider through O&M and decommissioning stages.	Scoping Amended at EIA Report.	Design approach to sustainability.
M-080	Drainage design to manage and, if necessary, treat surface water run-off will be included in all elements of temporary construction sites and permanent operational infrastructure. A CAR licence will be required for all sites that exceed five hectares in area. Drainage design will follow the SuDS hierarchy principles including allowances for climate change and discharge at pre-development rates (as set out in Volume 4: Outline Operational Drainage Management Strategy). Where the development intersects overland flow pathways or areas of known surface water flooding appropriate measures will be embedded into the design. All subsurface infrastructure will be designed to facilitate subsurface flow pathways to avoid any localised increases in groundwater flooding.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-081	Construction and permanent development in flood plains will be avoided. Where this is not possible mitigation will be developed to ensure the works are compliant with policy requirements.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-082	Licensed and private water supplies will be avoided where practicable; if any impacts are anticipated then appropriate measures will be put in place to avoid impact on the quantity and quality of the supply.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-083	The permanent footprint of the onshore substations, landfall(s), transition joint bays and onshore export cable corridor will be minimised to that required for the safe O&M of the equipment in order to minimise land take.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-084	Avoidance of settlement, open space and land used by the community that might be directly affected or severed from the community.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-085	The Project will avoid causing fragmentation of woodland, semi-natural land or sensitive habitats where possible, through the use of existing breaks in land use or use of HDD (or similar trenchless technique) to avoid disturbance of / change to land cover.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.
M-086	Compliance with the Wildlife and Countryside Act 1981 (as amended by the Wildlife and Natural Environment (Scotland) Act 2012) the use of tried and tested onshore invasive species control and biosecurity measures to avoid the spread of infested materials will be applied.	Scoping	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.
M-087	Archaeological and paleoenvironmental mitigation will entail an agreed programme of archaeological recording and dissemination of onshore archaeological and built heritage assets where avoidance is not feasible to mitigate any significant adverse effects during construction. This will be set out in Volume 4: Written Scheme of Investigation (Onshore) to be agreed with Aberdeenshire Council and Historic Environment Scotland (HES) as appropriate.	Scoping Amended at EIA Report.	Planning conditions.
M-088	Any significant effects on the settings of heritage assets remaining after design iterations will be mitigated as far as reasonably practical through sensitive design treatment of visible elements of the Project, and by restoration and enhancements of historic landscape elements, landscape planting and / or screening.	Scoping	Description of Project and planning conditions.
M-089	Removal of above-ground infrastructure and restoration of sites at the end of the operational period.	Scoping	Description of Project and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-090	Construction noise and vibration to be managed within an Outline CEMP to minimise temporary disturbance to residential properties, recreational users, and existing land users.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-091	Highways condition surveys will be undertaken before, during and after the construction stage and repairs conducted to any damage to highways, as a result of construction heavy goods vehicles (HGVs) on the highways related to the Project. This commitment is included within this Chapter as it minimises the risk from vibration effects at residences from HGVs passing over holes in the road.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-092	Construction accesses to the public highway will be provided with required visibility splays, where permanent accesses are required as well as major construction accesses are proposed. All other locations will be managed via traffic management processes (signage, speed limit reductions and banksmen).	Scoping	Visibility splays will be provided on the relevant planning application plans.
M-093	All new planting at the onshore substation site will be subject to a ten-year establishment period with appropriate maintenance and management as described in Volume 4: Outline Landscape and Architectural Strategy .	Scoping Amended at EIA Report.	Volume 4: Outline Landscape Architectural Strategy , description of Project and Planning conditions.
M-094	A road and core path condition survey will be undertaken on roads and core paths affected by construction traffic before, during and after the construction stage of the Project. The results of these surveys will be used to identify the requirement for any repairs needed as a result of Project related damage.	Scoping Amended at EIA Report.	Volume 4: Outline Core Path Management Plan and planning conditions.
M-095	All road crossings will be agreed with the relevant roads authority. Road closures will be avoided where possible, and where they are required will be scheduled to avoid other local scheduled road works on the highways network.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Traffic Management Plan and planning conditions.
M-096	Access locations and access routes from the strategic road network will be planned to avoid settlements and villages where possible. The use of haul roads and loop road arrangements will be proposed where appropriate and possible to mitigate proposed environmental effects of traffic and transport.	Scoping	Volume 4: Outline Construction Traffic Management Plan and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-097	Construction activities will be planned through use of a Risk Assessment Method Statement (RAMS) alongside safety bulletins as part of the Outline CEMP. The RAMS will put in place procedures in the case of extreme weather (high temperatures, extreme winds, flooding, wildfire risk). This may include altering the construction programme to delaying affected activities, changing shift patterns, PPE and toolbox talks.	Scoping	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-098	Measures to minimise lifecycle GHG emissions from construction plant and equipment will be detailed in Volume 4: Outline Construction Environmental Management Plan . Potential options could include the use of efficient and well-maintained plant and equipment and using mains electricity, if available, rather than diesel-fuelled portable generators, to reduce GHG emissions from fuel and energy consumption.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan .
M-099	<p>Volume 4: Outline Construction Environmental Management Plan will include measures to minimise emissions from construction traffic. This will include measures such as consolidating deliveries where possible. Consideration will be given towards the impact of construction traffic, road traffic and adjacent trunk roads. Sustainable modes of travel for the construction workforce will be promoted.</p> <p>Offshore vessel movements will be programmed to maximise vessel operational efficiencies.</p>	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-100	A Lighting Management Plan will be agreed and implemented in consultation with the Civil Aviation Authority, MCA and Ministry of Defence. This will contain specific requirements in terms of military and civil aviation lighting to be installed on WTGs incorporating the requirements of Civil Aviation Publication (CAP) 393 (CAP393) Public CAP393 and other relevant legislation and guidance.	Scoping	s.36 conditions and marine licences conditions.
M-101	Any temporary obstacles associated with offshore infrastructure (such as WTGs and platforms) that are of more than 91.4m in height (e.g. construction infrastructure such as cranes and/or meteorological masts) are to be identified to	Scoping	s.36 conditions and marine licences conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	military and civil aviation aircrews by notifying the Notice to Aviation (NOTAM) system.		
M-102	An Outline Offshore Invasive Non-Native Species (INNS) Management Plan has been submitted with this Application (Volume 4). The Final INNS Management Plan will be completed prior to construction commencing and submitted to MD-LOT for approval. The Final INNS Management Plan will include management measures to limit the risk of INNS being introduced to the marine environment.	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-103	<u>On-going design:</u> Where practical, sensitive sites for landscape and visual receptors will be avoided by the onshore project footprint-including: <ul style="list-style-type: none"> - landscape receptors including landscape character types, characteristics and elements of high sensitivity (e.g., ancient woodland and veteran trees / tree protection order and other valued trees / woodland); - visual receptors including settlements and residential properties, national level recreational routes, important tourist / visitor attractions including beaches, popular hills; and - Loss or disturbance of sensitive sites for landscape and visual receptors, arising from temporary works will be mitigated, as far as possible, through sensitive design restoration and enhancements. 	Scoping Amended at EIA Report.	Volume 1, Chapter 27: Landscape and Visual, Volume 4: Outline Landscape and Architectural Strategy, Onshore Red Line Boundary, Volume 4: Outline Construction Environmental Management Plan , and planning conditions.
M-104	<u>Construction access and compounds</u> All temporary construction access and contractor's compounds / laydown areas will be sensitively sited to avoid and / or reduce and mitigate adverse landscape and visual effects. Following final phase construction, these areas will be returned to previous conditions. Any areas of hardstanding are likely to remain between phases.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.
M-105	An Outline Piling Strategy has been submitted with this Application (Volume 4). The Final Piling Plan will be completed prior to construction commencing and submitted to MD-LOT for approval. It will detail the method of pile installation and	Scoping Amended at EIA Report.	Piling strategy is required under Section 36 and marine licences consent conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	associated underwater noise levels. It will describe any mitigation measures to be implemented (e.g. soft start and ramp up measures, or the use of acoustic deterrent devices) prior to and during pile installation to manage the effects of underwater noise.		
M-106	The development of and adherence to a Decommissioning Programme. The Decommissioning Programme will outline measures for the decommissioning of the Project. The Decommissioning Programme would be submitted prior to construction commencing to MD-LOT and approved by Scottish Ministers prior to construction.	Scoping Amended at EIA Report.	Required under Section 105 (Energy Act 2004) and marine licences consent conditions.
M-107	A decommissioning plan will be prepared for the project in line with the latest relevant available guidance.	Scoping	Planning conditions.
M-108	<p><u>Onshore export cable</u></p> <p>Volume 4: Outline Landscape and Architectural Strategy provides a mitigation framework to support an application for Planning Permission in Principle (PPiP), with all detailed siting, design, implementation and mitigation measures to be confirmed through post-consent conditions. It has been developed and includes information on the reinstatement of landscape elements (for example, trees, woodland and hedgerows) which may be removed as a result of construction, including construction / HDD (or similar trenchless technique) compounds and construction access. Attention will be given to species selection and landscape patterns within each land capability for agriculture / habitat type post-consent.</p> <p>Woodland cannot be replaced above the onshore export cable, but hedgerows and grassland can be reinstated, including areas of temporary vegetation loss that will be reinstated at the first available planting / seeding season following completion.</p> <p>Reinstatement of vegetation will seek to provide landscape enhancement. Opportunities for enhancement will be identified following further evolution of the Project design and with stakeholder engagement.</p>	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan, Volume 4: Outline Landscape and Architectural Strategy , description of Project and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	It is envisaged that the Project will be built out across a number of phases, with the onshore grid infrastructure for each phase transferring to a dedicated Offshore Transmission Owner appointed by Ofgem for the operational stage. All new planting will be subject to a ten-year establishment period with appropriate maintenance and on-going management throughout the O&M.		
M-109	Construction compounds would be contained by perimeter wooden hoarding up to 2.4m high to minimise effect on visual receptors.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.
M-110	<u>Recreational routes</u> A crossing register / crossing method statement will be prepared which includes crossing methodology for each crossing of a recreational route. Signage and / or temporary recreational route diversions will be provided during construction and opportunities taken where possible to provide a diversion of similar or enhanced amenity.	Scoping	Volume 4: Outline Construction Environmental Management Plan , Appendix 4.1, Crossings Register , Volume 4: Outline Construction Traffic Management Plan , Volume 4: Appendix B Outline Core Path Management Plan , description of Project and planning conditions.
M-111	<u>Onshore substations</u> The final form of the onshore substations will be finished to a suitable standard of design and material selection to accord with the architectural strategy in Volume 4: Outline Landscape and Architectural Strategy . Opportunities for enhancement will be identified following further evolution of the Project design and with stakeholder engagement. All new planting will be subject to a ten year establishment period with appropriate maintenance and on-going management throughout the O&M.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.
M-112	The Project will aim to avoid permanent development on prime agricultural land (class 1, 2 or 3 land capability for agriculture grades) with the aim of preserving the best quality agricultural land for its future food / biomass production capability and other soils functions where reasonably possible.	Scoping Amended at EIA Report.	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-114	The Project will use 'low order' techniques such as deflagration for unexploded ordnance (UXO) disposal, where possible and required.	Scoping	Required under the Habitats Regulations and marine licences consent conditions.
M-115	The UXO Management Plan will mitigate any potential for UXO within the offshore construction area and also disposal once encountered.	Scoping	s.36 conditions and marine licences conditions.
M-116	The Civil Aviation Authority (CAA) will be notified of the confirmed locations, heights and lighting status of the WTGs and platforms within the offshore infrastructure, including estimated and actual dates of construction, the maximum heights of any construction equipment to be used. This will be undertaken at least two months prior to the start of construction.	Scoping	s.36 conditions and marine licences conditions.
M-118	The construction area will be buoyed, as described in the Lighting and Marking Plan. Buoyage will be defined in consultation with the MCA and the Northern Lighthouse Board.	Scoping Amended at EIA Report.	s.36 conditions and marine licences conditions.
M-119	A construction programme will be developed prior to construction commencing and submitted before construction commences for each stage to MD-LOT for approval. The construction programme will include for weather related delays.	EIA Report	s.36 conditions and marine licences conditions.
M-120	An Outline Construction Method Statement (CMS) has been submitted with this Application (Volume 4). The Final CMS will be completed prior to construction commencing and submitted to MD-LOT for approval. The Final CMS will include: a) details of the commence dates, duration and phasing of key elements of construction, working areas, the construction procedures and good working practices; b) details of the roles and responsibilities; and c) details of how the construction related mitigation step proposed are to be delivered.	EIA Report	s.36 conditions and marine licences conditions.
M-121	An Outline Environmental Management Plan has been submitted with this Application (Volume 4) and includes the following Appendix: - Outline Marine Pollution Contingency Plan .	EIA Report	s.36 conditions and marine licences conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	<p>The Final EMP will be completed prior to construction commencing and submitted to MD-LOT for approval. The Final EMP will be implemented by the contractor(s). The contractor(s) will ensure that the relevant environmental measures within the EMP and health and safety procedures are implemented. The Final EMP will identify the project management structure roles and responsibilities with regard to managing and reporting on the environmental impact of the construction and O&M stages. Other measures that feed into the EMP include:</p> <ul style="list-style-type: none"> - A Waste Management Plan (WMP) will be developed as an Appendix of the EMP post-submission to manage all waste generated during the construction and operation stages of the Project. The WMP will be appended to the Environmental Management Plan. The WMP will follow the principles of the waste hierarchy (Department for Environment, Food & Rural Affairs, 2001) which consists of: prevention, re-use, recycle, other recovery and disposal. - The Final EMP will include a Chemical Risk Assessment to identify, evaluate and mitigate potential environmental and health risks associated with the use, storage and disposal of hazardous substances during O&M and decommissioning stages of the Project. <p>The EMP will be the securing mechanism for many measures.</p>		
M-122	Development of and adherence to an Offshore Operations and Maintenance Plan, which will confirm the Project's operations and maintenance activities. This will be submitted to MD-LOT for approval post-consent.	EIA Report	s.36 conditions and marine licences conditions.
M-123	Ensure appropriately qualified offshore Ecological Clerk of Works will be appointed by the Project before pre-construction monitoring requirements commence.	EIA Report	s.36 conditions and marine licences conditions.
M-124	The Project will follow Scottish Water's 'Precautions to Protect Drinking Water and Scottish Water Assets During Windfarm Construction and Operational Activities' guidance. Where it is impractical for infrastructure and activities to be located outside of the River Ugie Drinking Water Protection Area (DWPA), then all	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	infrastructure and activities should be located 100m from any watercourse wherever possible, and a minimum of 50m distance where 100m can be demonstrated to be undeliverable. This includes cable trenches, soil stockpiles, access tracks, trenchless crossing, temporary construction related activities such as plant, refuelling, storage of hazardous materials, cement batching, waste storage, concrete preparation, wheel washing / washout areas, and temporary construction compound areas.		
M-125	<p>If it is not practicable for construction welfare facilities/ wastewater facilities to be located outside of the River Ugie drinking water catchment, then portable toilets should be used and waste disposed of off-site during construction.</p> <p>At the pre-construction post consent stage, the final Drainage Management Strategy will set out the strategy for the operational stage onshore substation waste facilities following further discussion and agreement with Scottish Water.</p>	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-126	River WFD waterbodies (River Ugie and Burn of Faichfield) and their tributary watercourses (within the River Ugie DWPA) will be crossed via trenchless construction techniques to minimise potential impacts on water quality at these locations. The depth of the trenchless crossing will be such that the riverbed and watercourse is undisturbed by construction activities. Specific construction method statements will be prepared.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-127	Entry and/or exit pits for trenchless crossings will be located outside of the fluvial floodplain to minimise potential flood risk and protect construction staff.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-128	The Contractor(s) will identify springs, abstractions and any sewerage infrastructure including treatment plants, septic tanks, soakaways, interconnecting pipes and outfalls that require appropriate protection. These features will be mapped and appropriate exclusion zones will be applied to ensure that construction methods do not disturb the physical infrastructure layout. All appointed Contractor staff will be given training to protect abstractions deemed to	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	be at risk. In the event that an abstraction is identified as being at risk of water quality deterioration, a comprehensive sampling programme will be agreed with the relevant authority for the abstraction in question. Furthermore, in the event that there is an impact on a water supply, an alternative supply will be made available.		
M-129	Where there is a potentially significant detrimental impact identified to Parkhill private water supply (PWS) ID: 30 then an alternative water supply will be considered along with the existing PWS. Prior to the commencement of construction, the property affected would be provided with an alternative water supply (subject to the agreement from the PWS owner). The Applicant will cover the costs of providing alternative supplies. In the event of an alternative water source being implemented, Aberdeenshire Council and SEPA would be advised as soon as practicable. Upon agreement this in turn would negate the need for further assessment and monitoring for that supply.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-131	During construction, a programme of visual inspections will be undertaken to ensure that the potential effects on the River Ugie and its tributaries are appropriately monitored. The visual inspection points will be selected downstream of construction areas.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-132	Contractors will be made aware of their statutory responsibility not to “cause or knowingly permit water pollution.” A Pollution Prevention Plan (PPP) and Pollution Incident Response Plan (PIRP) will be prepared for the Project, the latter in line with Pollution Prevention Guideline 21 (PPG 21, 2025), and all contractors will be briefed on these plans, with copies made available on site.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-133	An ECOW will oversee the construction stage works ensuring that works areas can be appropriately micro-sited where appropriate to avoid or minimise habitat loss, in accordance with the Outline CEMP and latest available species specific guidance.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-134	<p>Pre-construction ecology surveys will be undertaken to inform the specification of relevant impact avoidance and mitigation measures, such as relevant stand off distances etc, in accordance with the Outline CEMP and latest available species specific guidance.</p>	EIA Report	<p>Volume 4: Outline Construction Environmental Management Plan, description of Project and planning conditions.</p>
M-135	<p>An onshore species protection plan (SPP) outlining how the Project will address potential impacts on protected species, in accordance with the Volume 4: Outline Construction Environmental Management Plan and latest available species-specific guidance. This will include a Bird Protection Plan (BPP) to safeguard breeding and wintering bird species. Adherence to the BPP will be employed to ensure careful timing of construction activities within or near to sensitive locations will avoid or minimise effects on all breeding birds as well as foraging winter wildfowl (including geese and swans), including noise reduction measures, including the employment of 'soft-start' measures to all noisy activities to avoid sudden disturbance, minimising the working footprint avoidance or reduction of any working during hours of darkness.</p> <p>The SPP and BPP will be updated with data from the pre-construction surveys. Implementation of the BPP would be overseen by a suitably experienced Ecological Clerk of Works (ECoW) or Project Ecologist in order to inform the construction stage process.</p>	EIA Report	<p>Volume 4: Outline Construction Environmental Management Plan, description of Project and planning conditions.</p>
M-136	<p>Protection of breeding bird nests from damage and/or destruction during the breeding season, in accordance with the Wildlife and Countryside Act 1981 (as amended by the Nature Conservation (Scotland) Act 2004). Wherever reasonably practicable, all vegetation clearance will occur outside the bird breeding season (i.e. between September – mid-March, inclusive), to avoid damage to or destruction of active nests by the proposed works. If work is required after the mid (15th) March, the ECoW will search areas of clearance in advance of works and recommend a buffer around active nests as appropriate. This would include any areas of clearance and vegetation removal for access tracks, compounds or onshore substation areas due to the populations of ground nesting birds on and around the site.</p>	EIA Report	<p>Volume 4: Outline Construction Environmental Management Plan, description of Project and planning conditions.</p>

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-137	A water quality monitoring programme and/or further assessment will be carried out for private water supplies which have been identified as being at potential risk from the Project (PWS ID 10/11 Lunderton Farmhouse, Westfield and PWS ID:26 West Thunderton). PWS monitoring would be undertaken for an appropriate period prior to, during and post construction of the onshore export cable corridor.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-138	Best practice techniques and methodologies will be undertaken during the implementation of HDD (or similar trenchless technique) works. The HDD (or similar trenchless technique) works are to be undertaken in accordance with Pipeline Design for Installation of Horizontal directional drilling (Manual of Practice) by the American Society of Civil Engineers (ASCE) Oct 2014 or similar. Environmentally hazardous drilling fluids, or those containing groundwater hazardous substances, will not be used during trenchless crossings (including HDD (or similar trenchless technique)). The naturally occurring bentonite clay will be used as the base for the drilling fluid, which will line the bore wall, preventing fluid loss and near-surface groundwater ingress. Techniques will be employed by the Contractor(s) to manage the risk of drilling fluid breakout or losses into the deposits or strata surrounding the HDD (or similar trenchless technique) bore. Drilling fluids will be used to seal permeable deposits or strata.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-139	<p>During HDD (or similar trenchless technique) activities, the drilling fluid engineer will carefully monitor the fluid usage in the recycling system and will quickly identify if fluid is being lost into the strata. If fluid loss is identified there are a number of measures that can be taken to seal the bore, including the following, which would be incorporated into a breakout response plan:</p> <ol style="list-style-type: none"> 1. Modifying the drilling fluid properties to increase the effectiveness of the bentonite clay filter cake that lines the wall of the borehole; 2. Standard process and procedures in place for drilling, data collection and communication; 3. Appropriate drill fluid monitoring (fluid properties, fluid volume and flow, and downhole annular pressure); 4. Addition of stop-loss materials to bridge and seal larger voids in the soil; and 	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	5. Modifying the mud weight (drilling fluid density) to either balance or counter the groundwater pressure depending on ground conditions.		
M-140	The Contractor(s) for construction, operation and decommissioning will use a short to medium range weather forecasting service from the Met Office, or other approved meteorological data and weather forecast provider, to inform short to medium-term programme management of activities, including implementation of necessary environmental control and / or impact mitigation measures with respect to climate conditions and extreme weather events. The Contractor(s) will register with the SEPA's flood warning service (Floodline) in areas of flood risk. The Contractor(s) will use this information to ensure that relevant measures, including those within the Outline CEMP and an Environmental Management System (EMS), are implemented and, as appropriate, consider additional measures to ensure the resilience of the programme during extreme weather events.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-141	Access roads will have cross drainage provided where necessary at topographic low points.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-142	Stockpile gaps will be located at topographic low points to preserve existing flow paths and where stockpiles are placed on both sides of the access routes / haul road the gaps will coincide.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-143	Any tanks and associated pipe work containing oils, fuels and chemicals will be double skinned and provided with leak detection equipment. There will be a bunded capacity of 100 percent of the maximum tank volume for non-hazardous fluids. For hazardous chemicals, fuels or oils bund capacity will be the larger of 110 percent of the largest tank volume for single tank bunds (or, in the case of multi tank bunds, 110 percent of the largest tank capacity or 25 percent of the combined tank capacity, whichever is the largest).	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-144	In the event that piling is required for the installation of the onshore substation foundations, a detailed piling risk assessment will be prepared. This will be submitted to the SEPA for approval, prior to the commencement of construction.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-145	In areas where there is a potential for hydrocarbon residues from run-off / isolated leakages, surface water drainage measures will be provided to capture hydrocarbons prior to discharge, such as hydrocarbon interceptors.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-146	The location of statutory undertaker assets (including water supply and sewer pipes, water and waste treatment works etc.) will be confirmed through inspection of detailed plans from the undertakers. All assets potentially affected by the Project will be identified, with particular consideration to access roads and crossings.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-147	To enable access during construction, temporary clear span bridges will be used for those temporary watercourse crossings too wide or deep to be crossed using culverts.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-148	In areas where there are groundwater seepages / flush zones identified along the access tracks at the detailed design stage, the Contractor(s) will utilise geotextiles beneath the track material or bog-mat where necessary to prevent the track from settling into the ground to help maintain sub-surface flow.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-149	If water being pumped from excavations is suspected to be contaminated, appropriate measures will be taken in accordance with SEPA guidance and the Controlled Activity Regulations to prevent uncontrolled or unauthorised releases of this water to ground or to the water environment.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-150	Dewatering of trench excavations will be carefully monitored and groundwater flow disruption and drawdown will be minimised via good construction practices. The time any excavation is open will be kept to a minimum to minimise ingress of water and dewatering requirements.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-151	Temporary cut-off drains will be installed to prevent surface water and shallow groundwater ingress into excavations. Intercepted water will be encouraged to infiltrate into the ground, mimicking natural flow patterns in accordance with the principles of sustainable urban drainage systems (SuDS). Where discharge of cut-off drains to watercourses is the only practical option, appropriate measures will be employed to moderate runoff rates and promote settlement of suspended sediment.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-152	Culverting activities and onshore construction of export cable crossings will take place during periods of normal to low flow conditions to avoid conveyance-related flood risk effects.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-153	Stockpiles will be present for the shortest practicable timeframe, with stockpiles being reinstated as the construction work progresses in order to minimise areas of exposed soil and any associated silt laden run-off. Stockpiles which remain present for six months or longer will be seeded to encourage stabilisation.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-154	Any temporary crossings will be in place for the minimal time possible.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-155	Temporary watercourse crossings will not be provided for the haul road where the export cable crossing will be trenchless. Vehicular access will use existing public highways and bridges.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-156	All permanent export cable crossings will pass beneath the bed of watercourses (there will be no 'within bank' crossings). Sufficient depth between the bed of the watercourse and the top of the cable (whether trenchless or open cut) will be provided to ensure no potential for exposure of cable due to scour.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-157	Run-off from access routes / haul road and working areas will be allowed to infiltrate wherever possible.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-158	Weather forecasts will be monitored to inform short to medium term planning of construction activities.	EIA Report	Volume 4: Outline Construction Environmental Management Plan
M-159	Construction works will be programmed to avoid forecast heatwaves / extreme temperatures, high wind and storms (should they occur during construction stage).	EIA Report	Volume 4: Outline Construction Environmental Management Plan.
M-160	Measures to mitigate and manage adverse weather and flooding will be provided within the Volume 4: Outline Construction Environmental Management Plan .	EIA Report	Volume 4: Outline Construction Environmental Management Plan.
M-161	Construction equipment, machinery or permanent assets with electrical components exposed to water ingress will have suitable Ingress Protection rating.	EIA Report	Volume 4: Outline Construction Environmental Management Plan.
M-162	The Principal Contractor will ensure the construction equipment is well maintained, serviced and provide replacement equipment / machinery as necessary.	EIA Report	Volume 4: Outline Construction Environmental Management Plan.
M-163	Flood prevention measures such as drainage strategy / coastal flood risk assessment / raised height of critical infrastructure.	EIA Report	Drainage strategy, coastal flood risk assessment and design specification.
M-164	Volume 4: Outline Operational Drainage Management Strategy has been provided to provide the outline proposals for drainage required for the operation of the onshore substations. The outline strategy provides a feasible drainage strategy which would adequately control site runoff at the operational onshore substations which can be delivered within the Onshore Red Line Boundary for the onshore substations to meet policy requirements. Volume 4: Outline Operational Drainage Management Strategy has designed the SuDS to accommodate 1:200 year (0.5% annual exceedance probability (AEP)) plus 37% climate change based on the SEPA guidance. The outline strategy retains flexibility in design for the detailed design of the onshore substations. A detailed Operational Drainage Management Strategy would be produced following consent and prior to the construction of the onshore substations. This would be produced in accordance with Volume 4: Outline Operational Drainage Management Strategy and with further consultation with SEPA and Aberdeenshire Council.	EIA Report	Planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-165	Operations and maintenance strategy include for emergency access arrangements.	EIA Report	Operations and maintenance strategy.
M-166	<p>Maintenance activities planned to avoid seasonal poor weather conditions and extreme weather events.</p> <p>Weather forecasts will be monitored to inform short to medium term planning of maintenance activities.</p>	EIA Report	Operations and maintenance strategy.
M-167	Ground investigation studies to inform foundation design and siting of critical infrastructure on level terrain.	EIA Report	Ground investigation and design specification.
M-168	Regular inspection and maintenance regime to monitor any indication of subsidence.	EIA Report	Operations and maintenance strategy.
M-169	Cable installation works will be in line with best practice UK and European standards as appropriate which will account for a range of long-term variations in soil resistivity.	EIA Report	Design specification.
M-170	An inspection and maintenance regime will be in place to monitor any degradation and implement replacement if deemed necessary.	EIA Report	Operations and maintenance strategy.
M-171	Minimum design temperatures for electrical assets will take account of climate change where necessary.	EIA Report	Design specification.
M-172	Regular inspection and maintenance regime to monitor cooling needs, and increase cooling input if required	EIA Report	Operations and maintenance strategy.
M-173	Clearance of vegetation as part of operational and maintenance activities.	EIA Report	Operations and maintenance strategy.
M-174	Fire protection measures in critical infrastructure.	EIA Report	Design specification.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-175	Emergency plans include measures and actions for weather-related risks (such as wildfire, lightning strike) and access / egress contingency plans.	EIA Report	Operations and maintenance strategy.
M-176	Design parameters / design standards allow for cold spells / snow and ice loading.	EIA Report	Design specification.
M-177	Regular inspection and maintenance regime to monitor any degradation of infrastructure following cold spells.	EIA Report	Operations and maintenance strategy.
M-178	Assets will be provided with earthing, grounding and surge protection measures.	EIA Report	Design specification.
M-179	Secondary or emergency power supply will be provided.	EIA Report	Design specification.
M-180	Design parameters / design standards allow for sufficient wind loading.	EIA Report	Design specification.
M-181	Regular inspection and maintenance regime to monitor and repair any damage from high winds as necessary, ensure good housekeeping and removal / repair of any loose materials.	EIA Report	Operations and maintenance strategy.
M-182	Project design will be based on the 50 year return period values for short term gust, peak wind speed and wave conditions.	EIA Report	Design specification.
M-183	Operational noise from the onshore substations shall not give rise to levels in excess of noise rating (NR) NR25 (in habitable rooms of residential receptors) during the day (07:00 - 23:00) or NR20 (in bedrooms) at night (23:00 - 07:00).	EIA Report	Planning conditions.
M-184	Construction noise and vibration mitigation and monitoring requirements are specified within a Noise and Vibration Management Plan included as part of Volume 4: Outline Construction Environmental Management Plan .	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-185	Due to the proximity of the onshore substations to receptors on the A950 and the topography of the onshore substation site, high voltage alternate current (HVAC) electrical infrastructure (maximum height of 18.25m) to be placed to the north of the onshore substation site; and HVDC (maximum height of 30.75m) placed to the	EIA Report	Volume 4: Outline Landscape and Architectural Strategy , description of Project and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	south of the onshore substation site, as described further in Section 27.7.1 of Volume 1, Chapter 27: Landscape and Visual .		
M-186	Crossing or laying of cables over or adjacent to known or future cables will be subject to crossing and / or proximity agreements.	EIA Report	Secured by commercial agreements with pipeline and cable operators.
M-187	Where offshore export cables must cross third party infrastructure, such as existing cables and pipelines, both the third-party asset and the installed cables will be protected.	EIA Report	Secured by commercial agreements with pipeline and cable operators.
M-188	Maintenance activities will be planned through use of a RAMS. The RAMS will put in place procedures in the case of extreme weather (high temperatures, extreme winds, flooding, wildfire risk). This may include altering the maintenance programme to delaying affected activities, changing shift patterns, PPE and toolbox talks.	EIA Report	Operations and maintenance strategy
M-189	WTG design considered a 50-year minimum air temperature at hub height of - 2.8°C. Absolute maxima and minima temperature ranges will be considered within the design.	EIA Report	Design specification.
M-190	Corrosion strategy to be developed to determine requirement for corrosion protection.	EIA Report	Operations and maintenance strategy
M-191	Weather forecasts will be monitored to inform short to medium term planning of decommissioning activities.	EIA Report	Draft Decommissioning Environmental Management Plan.
M-192	Decommissioning works will be programmed to avoid forecast heatwaves / extreme temperatures / storm events.	EIA Report	Draft Decommissioning Environmental Management Plan.
M-193	Decommissioning activities will be planned through use of a RAMS. The RAMS will put in place procedures in the case of extreme weather (high temperatures, extreme winds, flooding, wildfire risk). This may include altering the maintenance	EIA Report	Draft Decommissioning Environmental Management Plan.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	programme to delaying affected activities, changing shift patterns, PPE and toolbox talks.		
M-194	The Decommissioning Contractor will ensure the construction equipment is well maintained, serviced and provide replacement equipment / machinery as necessary.	EIA Report	Draft Decommissioning Environmental Management Plan.
M-195	Emergency plans include measures and actions for weather-related risks (such as wildfire) and access / egress contingency plans.	EIA Report	Draft Decommissioning Environmental Management Plan.
M-196	The requirement for any abstraction activities would be assessed at the point of decommissioning. Programming of water intensive decommissioning works to avoid seasonal dry spells.	EIA Report	Draft Decommissioning Environmental Management Plan.
M-197	Drainage design will include allowance for climate change.	EIA Report	Draft Decommissioning Environmental Management Plan.
M-198	Offshore infrastructure built to appropriate design standards that are suitable for the proposed location.	EIA Report	Design specification.
M-199	Avoidance of known sites of archaeological significance- Use of Archaeological Exclusion Zones (AEZs), Temporary Exclusion Zones (TEZs) or AAI and micrositing. Any sites of significant archaeological interest will be recommended for implementation of a proportional AEZ / TEZ / AAI, in line with standard guidelines, which take into account significance of the heritage asset and the local hydrodynamics and seabed level changes including possible scour. Micrositing will also be taken into consideration as part of the design and planning of the Project, to ensure that avoidance is first priority in line with the mitigation hierarchy.	EIA Report	s.36 conditions, marine licences conditions and Environmental Management Plan.
M-201	Landscape mitigation planting, including 'advance planting' and phased planting onsite within the available land parcel of the onshore substations.	EIA Report	Volume 4: Outline Landscape and Architectural Strategy and planning conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-208	<p>Inverquinzie / Thunderton Royal Observer Corps bunkers x3; Remains of Battle Headquarters, Peterhead Airfield (still intact as a below-ground structures)</p> <p>These extant heritage assets (NK15SW0094; NK15SW0006; NK04NE0125) will be avoided by construction works with a preliminary buffer of approximately 10m applied, to be agreed with Aberdeenshire Council. If avoidance of these assets is agreed, the bunkers will need to be identified on the ground and protection measures should be put in place. These may take the form of barriers and signage, along with a toolbox talk. This protection strategy would be included in Volume 4: Written Scheme of Investigation (Onshore) and Volume 4: Outline Construction Environmental Management Plan.</p>	EIA Report	Design development, Volume 4: Outline Construction Environmental Management Plan , planning conditions
M-209	While the final location of the landfall(s) and the route of the associated landfall ducts have not been determined, the pillboxes (and anti-tank blocks) at Scotstown and Lunderton landfall will be avoided through implementation of HDD (or similar trenchless technique) in relation to the installation of the landfall ducts and associated onshore export cables.	EIA Report	Design development, Volume 4: Outline Construction Environmental Management Plan , planning conditions
M-211	The Decommissioning Plan for the Project will include measures to minimise environmental impacts, whilst taking into account the climate and weather extremes anticipated at the time of decommissioning.	EIA Report	Required under Sections 105 (Energy Act 2004) and marine licences consent conditions.
M-212	After detailed design, and before the commencement of the construction stage, a Noise and Vibration Management Plan will be agreed with the Local Authorities and will set out the noise mitigation measures needed for trenchless crossing and landfall(s) works outside of core hours to meet the required limits.	EIA Report	Volume 4: Outline Construction Environmental Management Plan and planning conditions.
M-213	Good practice measures to prevent harm to fauna will include the careful storage of potentially dangerous substances or materials within construction compounds. All excavations greater than 1m depth would either be temporarily covered at night or designed to include a ramp to allow fauna (such as protected mammals) a means of escape should they fall in.	EIA Report	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-214	Working during the hours of darkness will be avoided as far as practicable to reduce disturbance to protected species. Working during the hours of darkness will likely be unavoidable during winter, therefore lighting will avoid illuminating sensitive habitats including rivers, wetlands and sites where there is known activity of protected or notable species.	EIA Report	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions
M-215	All tree felling where potential roost features (PRFs) have been identified would be preceded by a survey for roosting bats, regardless of the known presence of a roost. This would ensure the baseline information remains valid (e.g., in case of any delays between additional baseline surveys described above and construction start) and reduce the risk of encountering bats during invasive works. For trees, this would comprise an inspection of PRFs (from ground-level or at-height) within 24 to 48 hours before felling, regardless of the time of year. If a new roost is identified, works would be postponed until a licence is in place.	EIA Report	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions
M-216	A bat licensed surveyor would oversee tree felling of any PRFs, regardless of the known presence of a roost or time of year.	EIA Report	Volume 4: Outline Construction Environmental Management Plan , description of Project and planning conditions
M-218	<p>Disruption agreements shall be entered into in relation to the offshore export cable corridor, where significant impacts remain after minimisation and mitigation measures have been applied for any construction or pre-construction stage temporary disruption to fishers. Evidence-based commercial disturbance agreements with fishers shall only be implemented where residual impacts persist despite all reasonable mitigation.</p> <p>Disruption agreements shall include both protocols for how the parties will act during the construction period and, where supported by an appropriate evidence base, payments designed to ensure that affected fishers are neither worse nor better off as a result of development activities.</p> <p>Agreements shall be established with those targeting fisheries upon which the offshore export cable corridor has been identified, within the EIA Report, to have a</p>	EIA Report	s.36 conditions and marine licences conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	significant impact during the construction stage. This requirement applies where significant impacts are identified for either static or mobile fishing fleets.		
M-219	<p>Fisheries Fund: A Fisheries Fund shall be established for the array area (within the OAA) once determined, operating during the construction stage and extending through the first five years of operation. The Fund shall be directed towards fisheries where moderate adverse effects are identified within the EIA Report. The Fisheries Fund shall not provide direct compensation to individual businesses. Instead, it shall support the fishing sector more broadly by funding research and initiatives that promote co-existence, adaptation, and resilience. Priority areas of support shall include:</p> <ul style="list-style-type: none"> • Research and enhancement of target fish and shellfish stocks to strengthen ecological resilience and sustainability for example, Nephrops, monkfish and haddock. • Co-designed initiatives such as gear innovation, diversification, operational adaptation, and business resilience. • Collaborative, evidence-based investment to improve the long-term viability of fisheries. <p>Commitment is made to consult with the fishing industry and the scientific community to define administrative arrangements, identify research priorities, and ensure transparent governance.</p>	EIA Report	s.36 conditions and marine licences conditions.
M-220	<p>Access Corridor along the Golden Eagle to Claymore Oil Export pipeline: No above-seabed infrastructure, including WTG floating units, moorings, anchors, or dynamic cables, shall be located across the existing pipeline situated in the centre of the OAA, nor within a 500m buffer either side of the pipeline. This commitment establishes an Access Corridor equating to approximately 29km², representing 4% of the OAA.</p> <p>Array cables and pipeline crossings may occur within this Access Corridor; however, no other permanent above-seabed infrastructure shall be installed. The purpose of the Access Corridor is to provide opportunity for demersal trawl fishing activity and to maintain passage for transiting fishing vessels.</p>	EIA Report	s.36 conditions and marine licences conditions.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
M-221	<p>Exploration of coexistence within the OAA: An assessment shall be undertaken to investigate opportunities for coexistence with fishing activity within the OAA. The assessment shall consider indicative infrastructure layouts and will provide an evaluation of the practicality of different fishing methods and give consideration to feasible gear adaptations. The Scottish Fishermen's Federation (SFF) shall be consulted during the Development, Specification and Layout Plan process, which shall set out the detailed design and layout of the offshore development. As part of this process, the Applicant will seek input from the SFF to inform consideration of whether areas compatible with floating wind infrastructure could potentially support fishing activity, taking account of gear types, spatial patterns, and operational constraints.</p>	EIA Report	s.36 conditions and marine licences conditions.
M-222	<p>Fisheries monitoring and related updates to FMMCP: A fisheries monitoring programme shall be implemented to understand variations in commercial fisheries activity in response to construction of the project and to inform updates to the FMMCP. The programme shall comprise the collation and analysis of commercial fisheries landings and activity data (including landings statistics, VMS datasets, and other available sources), together with consultation with the fishing industry. Monitoring shall extend across pre-construction, construction, and post-construction stages, with annual reporting.</p> <p>The programme shall assess trends in fishing activity, landings by port and species, and fishing vessel presence, and shall review guard vessel and Marine Coordination Centre records where available. Monitoring outputs shall be used to validate assessment assumptions, identify emerging issues, and inform any necessary updates to the FMMCP. Where monitoring demonstrates the need for additional action, further mitigation shall be developed and implemented in consultation with regulators and stakeholders.</p>	EIA Report	s.36 conditions and marine licences conditions.
M-224	Adherence to the Supply Chain Development Statement (SDCS) in relation to use of local workforce and supply chains.	EIA Report	The Applicant has made commitments to skills, training and employment and intends to draw on local workforce and supply chains where possible and to work with the local

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
			authority employment and economic development teams and other local agencies to maximise benefits for local people.
M-225	Communication of working schedules to avoid and minimise disruption.	EIA Report	The Applicant will implement construction mitigation measures including communication of construction and operational schedules to avoid and minimise potential effects on people and communities including local businesses, and amenity, recreation, and tourism facilities and related resources.
M-226	Communication plan for community engagement and support.	EIA Report	The Applicant will implement a communications plan that provides for community engagement and community support including a public-facing website.
M-227	Customised plan for decommissioning stage.	EIA Report	The Applicant will implement a Decommissioning Programme so that activities meet relevant statutory requirements, reflect commitments made to stakeholders and take account of relevant technology developments and good practice.
M-228	Development, finalisation and implementation of a Socio-Economic Action Plan (SEAP) for the Project.	EIA Report	The SEAP sets out the measures to harness the local and regional opportunities and maximise the social and economic performance of MarramWind offshore wind farm.
M-229	Following consent, a detailed review of existing data and knowledge gaps relating to the interactions between floating offshore wind technology and marine mammals will be undertaken. This review will evaluate the use of appropriate	EIA Report	Project Environmental Monitoring Programme.

ID	Environmental measure proposed	Project stage measure introduced	How the environmental measures will be secured
	monitoring approaches, which will include the deployment of Passive Acoustic Monitoring during different stages of development and collaborative strategic monitoring initiatives. The aim of this review will be to inform post-consent discussions with stakeholders on a potential proportionate marine mammal study.		

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3. Abbreviations

3.1 Abbreviations

Acronym	Definition
AAI	Areas of Archaeological Interest
AEP	Annual Exceedance Probability
AEZ	Archaeological Exclusion Zones
ASCE	American Society of Civil Engineers
BPP	Bird Protection Plan
BS	British Standard
CAA	Civil Aviation Authority
CAP393	Civil Aviation Publication 393
CAR	Controlled Activities Regulations
CBRA	Cable Burial Risk Assessment
CEMP	Construction Environmental Management Plan
CFLO	Company Fisheries Liaison Officer
CMS	Construction Method Statement
DWPA	Drinking Water Protection Area
ECoW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
EMF	Electromagnetic fields
EMP	Environmental Management Plan
EMS	Environmental Management System
ERP	Emergency Response Plan
FLOWW	Fishing Liaison with Offshore Wind and Wet Renewables Group
FMMCP	Fisheries Mitigation, Monitoring and Communication Plan
FMMMS	Fisheries Monitoring, Management and Mitigation Strategy
GHG	Greenhouse Gases
HDD	Horizontal Directional Drilling

Acronym	Definition
HES	Historic Environment Scotland
HGV	Heavy Goods Vehicles
HSE	Health & Safety Executive
HVAC	High Voltage Alternate Current
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
INNS	Invasive Non-Native Species
LCRM	Land Contamination Risk Management
LMP	Lighting and Marking Plan
MCA	Maritime and Coastguard Agency
MD-LOT	Marine Directorate – Licensing Operations Team
MGN	Marine Guidance Note
MMMP	Marine Mammal Mitigation Protocol
MPCP	Marine Pollution Contingency plan
mph	miles per hour
NNR	National Nature Reserve
NOTAM	Notice to Aviation
NR	Noise Rating
O&M	Operation and Maintenance
OAA	Option Agreement Area
PAD	Protocol for Archaeological Discoveries
PEMP	Project Environmental Monitoring Programme
PIRP	Pollution Incident Response Plan
PMP	Peat Management Plan
PPE	Personal Protection Equipment
PPiP	Planning Permission in Principle
PPG	Pollution Prevention Guideline
PPP	Pollution Prevention Plan
PRA	Preliminary Risk Assessment

Acronym	Definition
PRF	Potential Roost Features
PWS	Private water supply
RAMS	Risk Assessment Method Statement
SAC	Special Area of Conservation
SCDS	Supply Chain Development Statement
SEAP	Socio-Economic Action Plan
SEPA	Scottish Environment Protection Agency
SFF	Scottish Fishermen's Federation
SMP	Soil Management Plan
SPA	Special Protection Area
SPP	Species Protection Plan
SSEN	Scottish and Southern Electricity Network
SSSI	Sites of Special Scientific Interest
SuDS	Sustainable Urban Drainage Systems
SuRF-UK	United Kingdom Sustainable Remediation Forum
TEZ	Temporary Exclusion Zones
UKHO	United Kingdom Hydrographic Office
UXO	Unexploded Ordnance
WMP	Waste Management Plan
WSI	Written Scheme of Investigation
WTG	Wind Turbine Generator

MarramWind 