MORAY WEST
OFFSHORE WINDFARM

Onshore Transmission Infrastructure Environmental Impact Assessment (EIA)

Moray Offshore Windfarm (West) Ltd

Chapter 14 Whole Project Assessment

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Acronyms	
Acronym	**Expanded Term**
CfD	Contract for Difference
CTV	Crew Transfer Vessel
EIA	Environmental Impact Assessment
GVA	Gross Value Added
HAT	Highest Astronomical Tide
HV	High Voltage
HVAC	High Voltage Alternating Current
LVIA	Landscape and Visual Impact Assessment
MHWS	Mean High Water Springs
MINNS	Marine Invasive Non Native Species
MLWS	Mean Low Water Springs
MPS	Marine Policy Statement
MW	Megawatt
OfTI	Offshore Transmission Infrastructure
OnTI	Onshore Transmission Infrastructure
OSP	Offshore Substation Platform
PAB	Planning Application Boundary
PPP	Planning Permission in Principle
RCCA	Regional Coastal Character Area
SSC	Suspended sediment concentration
SLVIA	Seascape, Landscape and Visual Impact
SOV	Special Operations Vessel
TJB	Transition Joint Bay
UK	United Kingdom
UPS	Uninterrupted Power Supply
WTG	Wind Turbine Generator

14 Whole Project Assessment

14.1 Introduction

14.1.1.1 This chapter considers the likely significant effects arising from the Project (i.e. the Onshore Transmission Infrastructure (OnTI), the Moray West Offshore Wind Farm and the Moray West Offshore Transmission Infrastructure (OfTI)) in its entirety based on the extent to which the components and location of the three elements are defined at the time of writing. The assessment is provided to ensure that this Onshore EIA Report contains sufficient information on the Moray West Offshore Wind Farm and Moray West OfTI (referred to as 'the Development') to assist Aberdeenshire Council, Moray Council and other statutory consultees with their decision making on the planning application being submitted for Planning Permission in Principle (PPP) in the context of the overall Project.

14.1.1.2 A separate Offshore EIA Report, which fully assesses the likely significant effects of the Development, has been prepared in support of the following consent applications which are required to construct and operate the Moray West Offshore Wind Farm and Moray West OfTI:

- Section 36 consent under the Electricity Act 1989 as required for generating stations with capacity of > 50 MW – this is required for the Moray West Offshore Wind Farm; and
- Marine Licences (one for the Moray West Offshore Wind Farm and one for the Moray West OfTI) as required under the Marine and Coastal Access Act 2009 and the Marine (Scotland) Act 2010.

14.2 The Offshore Wind Farm and Offshore Transmission Infrastructure

14.2.1.1 The Moray West Offshore Wind Farm and Moray West OfTI will comprise of up to 85 WTGs and all offshore infrastructure required to transmit the power generated by the WTGs to shore. The area of overlap between the Development and the Moray West OnTI is illustrated in Figure 14.2.1.

14.2.2 Key Components

14.2.2.1 The key components of the Moray West Offshore Wind Farm and Moray West OfTI are summarised below and the location of the Development boundary is shown in Figure 1.1.1. A detailed description of these components is provided in the Offshore EIA Report (Chapter 4: Description of Development).

14.2.2.2 The key offshore components of the development will be as follows:

- Up to 85 offshore Wind Turbine Generators (WTGs);
- Up to two Offshore Substation Platforms (OSPs);
- Substructures and associated seabed foundations (for WTGs and OSPs);
- Subsea inter-array cables linking individual WTGs with each other and linking strings of WTGs with the OSPs;
- Subsea interconnector cables linking OSPs (if two OSPs are installed);
- Subsea export cables running from the OSPs to shoreline Onshore Landfall Area;
- Scour protection around substructures and cable protection (if required); and
- Monitoring equipment, such as metocean buoys (if required).

Wind Turbine Generators (WTGs)

14.2.2.3 The Design Envelope for the Moray West Offshore Wind Farm considers four different sizes of WTG. These are referred as Model 1 (smallest), Model 2, Model 3 and Model 4 (largest). Each WTG Model is based on the conventional offshore wind turbine design with three blades and a horizontal rotor axis (Image 14.2.1).

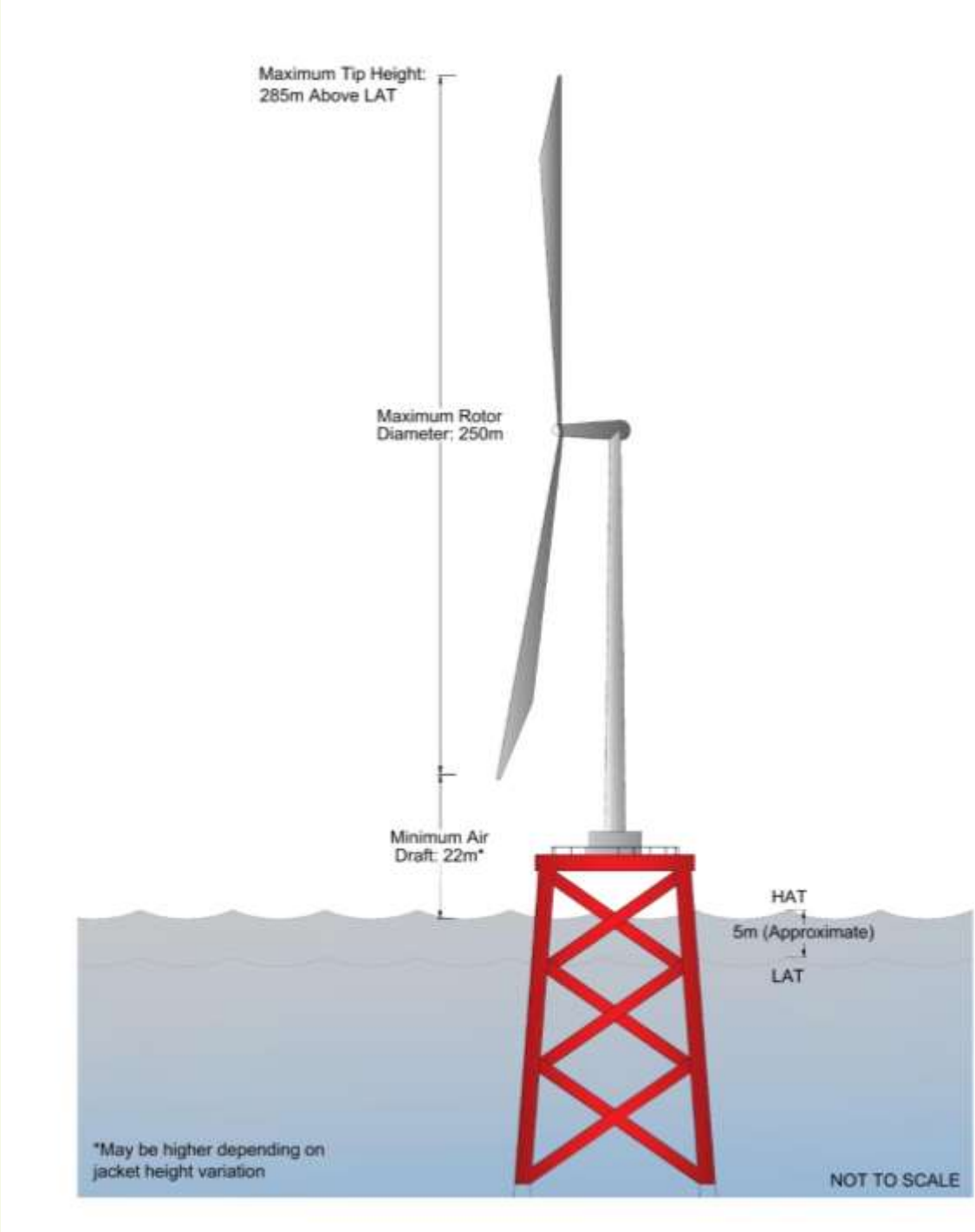


Image 14.2.1: Illustration of WTG

14.2.2.4 The total number of WTGs installed within the Moray West Site will vary depending on the size of the selected WTG Model. In general, the number of WTGs required will decrease as the size of the WTG Model increases. This is illustrated in Table 14.2.1 below.

Table 14.2.1: WTG Parameters				
Parameter	**Maximum Design Envelope**			
	Model 1 WTGs	**Model 2 WTGs**	**Model 3 WTGs**	**Model 4 WTGs**
Maximum number of WTGs	85	85	72	62
Minimum height of lowest blade tip above HAT (m)	22	22	22	22
Maximum blade tip height above HAT (m)	199	230	265	285
Maximum rotor blade diameter (m)	164	195	230	250

14.2.2.5 The WTGs are designed to operate across a range of wind speeds (including light winds). At very high wind speeds the WTGs will gradually shut down to prevent the WTGs becoming damaged. The WTGs are also designed with a 'yaw' function which enables the rotor hub to rotate to face into the wind so that the turbine blades can maximise the amount of energy that they can capture. Each WTG will also have a minimum clearance between the Highest Astronomical Tide (HAT) sea level and the lowest point of the blade of 22 m. The WTGs will be arranged within the Moray West Site in a grid layout with at least 1 km gap between the turbines.

14.2.2.6 Each of the WTGs will also have their own control system and will contain oils and other fluids required for the operation of the gears and other components of the WTG. Each of the WTGs will have a heli-hoist platform on the nacelle to enable access to the WTGs by helicopter in the event of a breakdown.

Offshore Inter-Array Cable Circuits

14.2.2.7 Inter-array cable circuits carry the electrical current produced by the WTGs. They link the WTGs to the OSP(s), from where the electricity generated can be transformed in voltage and transferred to shore. A small number of WTGs will typically be grouped together on the same cable 'circuit' or 'string', with multiple 'circuits/strings' connecting back to each OSP.

14.2.2.8 The inter-array cable circuits will consist of a number of power conductor cores, usually made from copper or aluminium, and fibre optic communication cables surrounded by layers of insulating material as well as material to armour the cable for protection from external damage and material to keep the cable watertight.

14.2.2.9 Further information on the Design Envelope for the inter-array cables is shown in Table 4.4.8 of Chapter 4: Description of Development within the Offshore EIA Report.

Offshore Substation Platforms

14.2.2.10 Up to two OSPs will be located within the Moray West Site (see Figure 4.4.1, Volume 3a of the Moray West Offshore EIA Report). OSPs provide a centralised connection point for the inter-array cable circuits and contain the primary electrical equipment and ancillary components that are required to transform the voltage of the electricity generated at the WTGs to a higher voltage that is suitable for transporting power to the onshore electricity transmission network.

14.2.2.11 In terms of appearance, the most common designs use a platform consisting of a single or multi-level 'topside' within or upon which sits the primary electrical equipment and ancillary components. The topside is supported above sea level on a foundation structure. The primary electrical equipment on the topside typically includes step-up transformers and switchgear. The

ancillary components typically include communication and control equipment as well as emergency refuge facilities. The OSP(s) will be high voltage alternating current (HVAC).

14.2.2.12 Table 4.5.1 of Chapter 4: Description of Development within the Offshore EIA Report presents the Design Envelope parameters for the OSPs.

Offshore OSP Interconnector Cables

14.2.2.13 If two OSPs are installed, an interconnector cable circuit may be used to link the two OSPs. The extent of the possible cabling between OSP(s) will depend upon the distance between OSP(s), which will be located within the Moray West Site. The voltage for the OSP interconnector cables will be between 33 and 400 kV as presented in the Design Envelope table (Table 4.5.3) within Chapter 4: Description of Development of the Offshore EIA Report.

Offshore Export Cables

14.2.2.14 Offshore export cable circuits will transfer power from the OSPs to the Onshore Landfall Area. Two export cable circuits will be installed, with these being located within the Offshore Export Cable Corridor shown in Figure 14.2.1. The whole Offshore Export Cable Corridor is further illustrated in Figure 1.1.1. As the Onshore Landfall Area offers a narrower corridor of intertidal coverage, it should be assumed that landfall will occur within this more constrained area.

14.2.2.15 Like the inter-array cables, the offshore export cables will consist of a number of conductor cores, usually made from copper or aluminium. These will be surrounded by layers of insulating material as well as material to armour the cable for protection from external damage, and material to keep the cable watertight. Export cables however, are typically larger in diameter than inter-array cables, due to the larger conductor cores required to transport greater volumes of power. Fibre optic cabling, which allows for communication with the Development, is typically wrapped around the export cables, though may be installed separately.

14.2.2.16 The Design Envelope for export cables is shown in Table 4.5.4 within Chapter 4: Description of Development of the Offshore EIA Report.

Onshore Landfall Area and Transition Joint Bays

14.2.2.17 The offshore export cable circuits will make landfall at a location located on the Aberdeenshire Coast in the vicinity of Redhythe Point. The offshore and onshore export cable circuits will interface in two buried Transition Joint Bays (TJBs), which will be located above Mean High Water Springs (MHWS) and as close to the point of landfall as practicable. The intertidal zone between MHWS and MLWS demarcates the area of overlap between the Offshore EIA and the Onshore EIA, with consideration of development above MHWS being considered in this EIA Report, while consideration of development below MLWS is considered within the Offshore EIA Report.

Other Offshore Infrastructure

14.2.2.18 It is anticipated that up to five buoys would be required across the Moray West site, these would be LiDAR, wave and/or guard buoys.

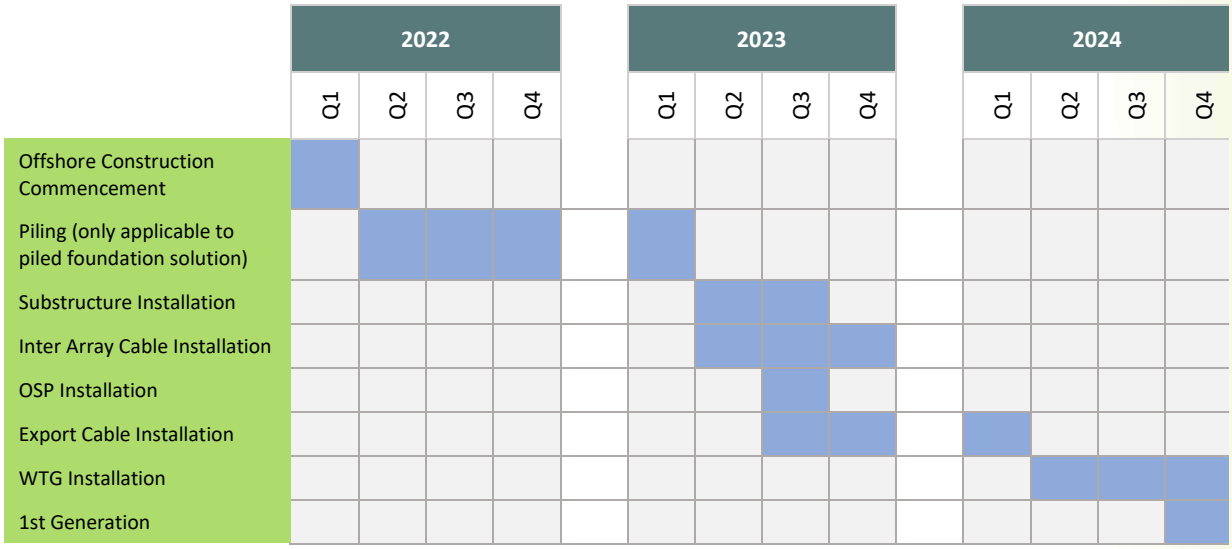
14.2.2.19 These devices would be attached to the sea bed using mooring devices such as common sinkers (small block of heavy material such as concrete, steel, etc.) or anchored by means of regular anchors. They could have one single mooring point or several points (usually up to three).

14.2.3 Indicative Construction Programme

14.2.3.1 A high-level indicative construction programme is presented in Graph 14.2.1 below. The programme illustrates the likely duration of the major installation elements, and how they may relate to one another if built out in a single construction campaign. It covers installation of the major components and does not include elements such as preliminary site preparation and commissioning of the wind farm post-construction. Offshore construction is currently planned

to commence in 2022 and complete in 2024. First generation is currently predicted to occur in 2024 and the Wind Farm is currently predicted to be fully commissioned in 2025.

14.2.3.2 Timing of construction works will be subject to Contract for Difference (CfD) and actual works durations will be dependent on a number of factors including, component and vessel availability, weather and final construction strategy. Construction is intended to take place 24 hours per day, 365 days per year, subject to weather conditions, until construction is complete.



Graph 14.2.1: Offshore Construction Programme

14.2.3.3 The sequence of activities associated with the installation of the offshore elements of the Development are likely to be as follows, with various activities set out below being undertaken concurrently:

- Detailed pre-construction site investigations – some of these may be subject to separate licence applications;
- Onshore manufacture of components;
- Seabed preparation works;
- Transport to site and installation of foundations (monopiles, pin-piles, suction caissons and GBSs);
- Transport to site and installation of substructures (TPs and jacket structures) on pre-installed foundation structures;
- Transport to site and installation of inter-array cables;
- Transport to site and installation of OSPs;
- Transport to site and installation of export cables;
- Transport to site and installation of wind turbine generators; and
- System testing and commissioning.

14.2.4 Operation and Maintenance of the OfTI

14.2.4.1 Once commissioned, the Moray West Offshore Wind Farm would operate for the licensed period and / or the duration of the seabed lease held by Moray West. All offshore infrastructure including wind turbines, substructures, cables and offshore substations would be monitored and maintained during this period in order to maximise operational efficiency and safety for other sea users.

14.2.4.2 The operation and control of the Wind Farm would be managed by a Supervisory Control and Data Acquisition (SCADA) system, connecting each turbine to the onshore control room. The SCADA system would enable the remote control of individual turbines, the Wind Farm in general, as well as remote interrogation, information transfer, storage and the shutdown or restart of any wind turbine if required.

14.2.4.3 The indicative programme suggests that Operation and Maintenance (O&M) activity will commence in 2024 based on a construction start date of 2022.

14.2.4.4 The overall O&M strategy will be finalised once the technical specification of the Development is known, including WTG type and final Development layout. O&M activities will most likely be coordinated from an onshore O&M harbour base located in close proximity to the Development.

14.2.4.5 The O&M strategy for the Development will allow for the use of either a Special Operations Vessel (SOV) that will accommodate O&M personnel offshore, or a combination of Crew Transfer Vessels (CTVs), supply vessels, and helicopters. Larger heavy lift vessels or jack up barges may be used for occasional major maintenance works.

14.2.4.6 Maintenance activities can be categorised into two levels: preventative and corrective maintenance. Preventative maintenance is according to scheduled services whereas corrective maintenance covers unexpected repairs, component replacements, retrofit campaigns and breakdowns.

14.2.4.7 Typical maintenance activities would include: general wind turbine service; oil sampling / change; UPS (uninterruptible power supply)-battery change; service and inspections of wind turbine safety equipment, nacelle crane, service lift, high voltage (HV) system and blades; major overhauls (typically every few years); wind turbine repairs and restarts.

14.2.4.8 During the life of the Development, there should be no need for scheduled repair or replacement of the sub-sea cables, however, reactive repairs may be required and periodic inspection may be required. Periodic surveys would also be required to ensure the cables remain buried and if they do become exposed, re-burial works would be undertaken.

14.3 Consideration of the Moray West Offshore Wind Farm and Associated OfTI in this Onshore EIA Report

14.3.1.1 As noted in Section 14.1, all offshore aspects of the Project (the Moray West Offshore Wind Farm and OfTI) are subject to separate consent applications, to be submitted to the Scottish Ministers. The Moray West Offshore Wind Farm and Moray West OfTI application is supported by a separate Offshore EIA Report.

14.3.1.2 In accordance with the EIA Regulations and the UK Marine Policy Statement (MPS) (HM Government, 2011) there is a requirement to ensure that information about the whole project, and associated environmental effects, including inter-relationships between the marine and terrestrial consenting regimes, is provided as part of the application for the Development. This is necessary to ensure that, where projects extend across multiple jurisdictions and comprise multiple components, Scottish Ministers have sufficient information available to enable them to consider the project, and associated environmental effects, as a whole, rather than the different components being considered in isolation.

14.3.1.3 Information presented in this Chapter therefore comprises the following:

- Summary of all potential effects assessed as part of the Offshore EIA Report and conclusions from that assessment in terms of effect significance; and
- Identification, and description of, potential inter-related effects on terrestrial and intertidal receptors as a result of effects arising from the Moray West Offshore Wind Farm and Moray West OfTI on the same receptor.

14.3.1.4 Once this PPP application is submitted to Moray and Aberdeenshire Councils, copies of the Offshore EIA Report will be available to view in the public viewing locations identified in the Offshore EIA Report as well as on the Marine Scotland website. A copy of the Onshore EIA Report will also be provided to MS-LOT and The Highland Council.

14.3.1.5 Electronic copies will be made available on request. Hard copies are also available at a cost of £300.

14.3.2 Spatial Overlaps and Receptor Interactions

14.3.2.1 There is a spatial overlap between the application boundaries for the Development and the OnTI. This occurs at the Onshore Landfall Area where the OfTI application boundary extends up to MHWS and the OnTI application boundary extends down to MLWS. Potential effects within the overlap area (intertidal zone) have been assessed within both this Onshore EIA Report (Chapter 5: Hydrology, Hydrogeology and Geology and Chapter 6: Ecology and Nature Conservation) and the Offshore EIA Report (Chapter 6: Physical Processes and Water Quality and Chapter 7: Benthic and Intertidal Ecology).

14.3.2.2 Where there is also potential for onshore components of the Project to affect offshore receptors (for example visual receptors or coastal watersport activities such as surfing) these have also been assessed in both this Onshore EIA Report (Chapter 7: Landscape and Visual Impact Assessment (LVIA) and Chapter 12: Socioeconomics, Tourism and Recreation) as well as the Offshore EIA Report (Chapter 14: Seascape, Landscape and Visual Impact Assessment (SLVIA) and Chapter 15: Socioeconomics, Tourism and Recreation).

14.3.3 Conclusions on Effect Significance from Offshore EIA Report and Potential Inter-Relationships

14.3.3.1 Conclusions on effect significance from the Offshore EIA Report and potential inter-relationships with the Onshore EIA Report, are summarised in Table 14.3.1 below. The shaded boxes in Table 14.3.1 indicate potential effects that were scoped out during the Scoping exercise.

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects				
Impacts Assessed in the Offshore EIA Report	**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
	Construction	**Operation and Maintenance**	**Decommissioning**	
Physical Processes and Water Quality (Volume 2, Chapter 6 of Offshore EIA Report)				
The following were assessed as pathway changes only (not receptor related impacts) and therefore were not assigned any impact magnitude or significance. Pathway changes during construction: • Increases in suspended sediment concentration (SSC) and deposition of disturbed sediments to the seabed due to dredging for seabed preparation prior to foundation installation; • Increases in SSC and deposition of disturbed sediments to the seabed due to the release of drill arisings during foundation installation; • Increases in SSC and deposition of disturbed sediment to the seabed due to cable installation within the Moray West Site and Offshore Export Cable Corridor Increases in SSC and deposition of disturbed sediment to the seabed within the Moray West Site and Offshore Export Cable Corridor; and • Indentations left on the seabed by jack-up vessels and large anchors. Pathway changes during operation: • Changes to the tidal regime; • Changes to the wave regime; • Changes to sediment transport and sediment transport pathways; • Scour of seabed sediments; and	N/A Pathway change only and not a receptor - receptors insensitive to change.			N/A No potential for inter-related effects as no receptors.

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects				
Impacts Assessed in the Offshore EIA Report	**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
	Construction	**Operation and Maintenance**	**Decommissioning**	
• Increases in SSC and deposition of disturbed sediment to the seabed within the Moray West Site and Offshore Export Cable Corridor. The effect of these pathway changes on specific receptors are summarised below.				
Impacts to designated marine features (due to construction activities)	Not significant			There is potential for inter-related effects to occur at the Onshore Landfall Area, in particular with respect to effects on coastal water quality and sensitive geological features (Cullen to Stake Ness Coast SSSI) which are located at the coast. The main source of inter-related effects on these receptors include Open Cut Trenching (OCT) or Horizontal Direction Drilling (HDD) operations required to bring the cables ashore. Both operations (OCT and HDD) extend from a point landward of MHWS to a point seaward of the MLWS and will be carried out as one continuous operation. Construction compounds and set up of OCT operations or drilling rigs required for the HDD solution will be located landward of the MHWS. The effects associated with these activities are assessed in this EIA Report. Where the cables are routed through, or beneath, the intertidal area, resulting potential effects on coastal water quality and the Cullen to Stake Ness Coast SSSI are assessed in the Offshore EIA Report (Chapter 6: Physical Processes and Water Quality) and in this EIA Report (Chapter 5: Hydrology, Hydrogeology and Geology and Chapter 6: Ecology and Nature Conservation). All assessments have concluded no significant effects. There are no inter-related effects on these receptors (coastal water quality and the Cullen to Stake Ness Coast SSSI) associated with the onshore cable route (landward
Impacts to designated coastal geomorphological features	Not significant	Not Significant	Not Significant	
Impacts to recreational surfing venues	Not significant	Not significant		
Impacts to Smith Bank	Not significant	Not significant	Not significant	
Changes to water quality from chemical releases	Not significant	Not significant	Not significant	
Changes to water quality from contaminated sediments	Not significant	Not significant	Not significant	

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects				
Impacts Assessed in the Offshore EIA Report	**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
	Construction	**Operation and Maintenance**	**Decommissioning**	
				of MHWS) or substation on the basis that there is no potential for interactions between OnTI and any freshwater systems that feed into the Onshore Landfall Area, or onshore soils / geological features.
Benthic and Intertidal (Volume 2, Chapter 7 of Offshore EIA Report)				
Temporary Habitat Loss / Habitat Disturbance (Subtidal)	Not significant		Not significant	As with effects on physical processes and water quality above, due to the overlap between the OnTI and OfTI application boundaries, it has been necessary to assess potential effects on intertidal ecology (in the overlap area) in both this Onshore EIA Report (Chapter 6: Ecology and Nature Conservation) and the Offshore EIA Report (Chapter 7: Benthic and Intertidal Ecology). Both assessments have concluded no significant effects with respect to direct habitat and species loss and disturbance, increased suspended sediment concentrations / deposition, introduction of MINNS and accidental discharges and contamination. Where the preferred solution is HDD, the cables will be routed underground, limiting the potential for any effects on intertidal ecological receptors within the Onshore Landfall Area. Given that the construction compounds / HDD drill rig (if required) will be located landward of MHWS (and therefore assessed in this Onshore EIA Report), there is limited potential for any inter-related effects associated with the OfTI works. Potential effects on seals, seabirds (which breed in coastal locations), waterfowl and waders are assessed in the Offshore EIA Report (Chapter 10). Effects on otters
Temporary Habitat Loss / Habitat Disturbance (Intertidal)	Not significant			
Increased Suspended Sediment Concentrations/Sediment Deposition (Subtidal)	Not significant		Not significant	
Increased Suspended Sediment Concentrations/Sediment Deposition (Intertidal)	Not significant		Not significant	
Noise and Vibration	Not significant		Not significant	
Accidental and Controlled Discharges	Not significant	Not significant	Not significant	
Risk of Introduction of Marine Invasive Non-Native Species (MINNS)	Not significant	Not significant	Not significant	
Long Term Habitat Loss		Not significant		
Scouring of Benthic Habitats at Foundations and Around Cables		Not significant		
Creation of New Substrate and Habitat		Not significant		

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
EMF			Not significant		(coastal) are assessed in this Onshore EIA Report (Chapter 6: Ecology and Nature Conservation). In terms of species present in, and associated with the Onshore Landfall Area, all effects are assessed to be not significant. There are no inter-related effects on these receptors associated with the onshore cable route or substation.
Seabed Sediment Heating from Cables			Not significant		
Loss of Habitat from Removal of Introduced Hard Substrate				Not significant	
Fish and Shellfish (Volume 2, Chapter 8 of Offshore EIA Report)					
Temporary and long term habitat loss / disturbance	Brown crab, European lobster, scallops, Nephrops	Not significant	Not significant	Not significant	There are no potential inter-related effects on fish and shellfish associated with the presence of the OnTI and the Moray West Offshore Wind Farm and Moray West OfTI. This is on the basis that the onshore cable circuits and onshore substation do not encounter or overlap with key fish habitats. The cable circuits will make landfall through installation by HDD or open cut trenching. HDD will lead to all cable being buried below the seabed with entrance and exit points below MLWS and above MHWS, meaning that there will be not potential effects upon fish within the intertidal zone. If open cut trenching is used then there may be some localised increased sediment concentrations but these have been assessed within Chapter 6: Physical Processes and Water Quality of the Offshore EIA Report. As it is the same activities that are assessed within both the Offshore and Onshore EIA Reports, there is no cumulative effects between MLWS and MHWS.
	Sandeel	Not significant	Not significant	Not significant	
	Herring, cod and other spawning adults	Not significant	Not significant	Not significant	
	All other fish and shellfish	Not significant	Not significant	Not significant	
Increased SSC / sediment deposition	Scallops	Not significant		Not significant	
	Spawning grounds	Not significant		Not significant	
	Fish	Not significant		Not significant	
	Shellfish	Not significant		Not significant	
Noise and vibration	Sea lamprey	Not significant	Not significant	Not significant	
	Herring, sprat, cod, whiting, salmonids	Not significant	Not significant	Not significant	

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
	Other fish and shellfish	Not significant	Not significant	Not significant	
Accidental release of hydrocarbons and chemicals	All fish and shellfish species	Not significant	Not significant	Not significant	
Creation of new substrate and habitat	Scallop and other shellfish		Not significant		
	Soft substrate species e.g. *Nephrops*, sandeel, flatfish)		Not significant		
	Fish		Not significant		
EMF	Shellfish		Not significant		
	Elasmobranchs		Not significant		
	Migratory Fish		Not significant		
	All other fish		Not significant		
Seabed sediment heating	Fish		Not significant		
	Shellfish		Not significant		
	Spawning activity		Not significant		
Removal of structures and hard substrates	Shellfish			Not significant	
	Fish			Not significant	

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
Marine Mammals (Volume 2, Chapter 9 of Offshore EIA Report)					
'Instantaneous' PTS	Harbour porpoise	Not significant			There are no potential inter-related effects on marine mammals associated with the presence of the OnTI and the Moray West Offshore Wind Farm and Moray West OfTI. Although there is a small (6-10 animals) grey seal haul-out at the edge of the Offshore Export Cable Corridor at Logie Head (approximately 3 km from Sandend Bay), this haul-out site is not considered to be an important breeding or moulting haul-out site for grey seals. Therefore, there are not expected to be any effects on seals at this haul-out site associated with either the OfTI or OnTI works at the Onshore Landfall Area (see Chapter 9 of the Offshore EIA Report). Marine mammals (including seals) are also not considered to be a key receptor in the context of the Onshore EIA Report.
	Bottlenose dolphin	Not significant			
	Minke whale	Not significant			
	Harbour seal	Not significant			
	Grey Seal	Not significant			
PTS from prolonged cumulative exposure	Harbour porpoise	Not significant			
	Bottlenose dolphin	Not significant			
	Minke whale	Not significant			
	Harbour seal	Not significant			
	Grey Seal	Not significant			
Disturbance (displacement)	Harbour porpoise	Not significant			
	Bottlenose dolphin	Not significant			
	Minke whale	Not significant			
	Harbour seal	Not significant			
	Grey Seal	Not significant			

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
Vessel collision risk	All species	Not significant	Not significant	Not significant	
Reduction in prey availability	All species	Not significant	Not significant	Not significant	
Reduction in foraging ability	All species	Not significant	Not significant	Not significant	
Ornithology (Volume 2, Chapter 10 of Offshore EIA Report)					
Disturbance	Eider	Not significant		Not significant	As with terrestrial ecology, due to the overlap between the OnTI and OfTI application boundaries, it has been necessary to assess potential effects on ornithology (in the overlap area) in both the Offshore EIA Report (Chapter 10: Ornithology) and this Onshore EIA Report (Chapter 6: Ecology and Nature Conservation). Both assessments have concluded no significant effects with respect to direct habitat and species loss and disturbance. Where the preferred solution is HDD, the cables will be routed underground, limiting the potential for any effects on coastal ornithological receptors within the Onshore Landfall Area. Given that the construction compounds / HDD drill rig (if required) will be located landward of MHWS (and therefore assessed in the Onshore EIA Report), there is limited potential for any inter-related effects associated with the OfTI works. Potential effects on seabirds (which breed in coastal locations), waterfowl and waders are assessed in the Offshore EIA Report (Chapter 10: Ornithology). Effects on terrestrial bird populations are assessed in this Onshore EIA Report (Chapter 7: Ecology and Nature Conservation).
	Long-tailed duck	Not significant		Not significant	
	Common scoter	Not significant		Not significant	
	Velvet scoter	Not significant		Not significant	
	Goldeneye	Not significant		Not significant	
	Red-breasted merganser	Not significant		Not significant	
	Red-throated diver	Not significant		Not significant	
	Great northern diver	Not significant		Not significant	
	Shag	Not significant		Not significant	
	Slavonian grebe	Not significant		Not significant	
	Guillemot	Not significant		Not significant	
	Razorbill	Not significant		Not significant	

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
	Puffin	Not significant		Not significant	In terms of potential effects upon birds associated with both the OfTI and OnTI these are assessed to be not significant.
	Scaup	Not significant		Not significant	
Indirect effects (prey and habitat loss)	Eider	Not significant		Not significant	
	Long-tailed duck	Not significant		Not significant	
	Common scoter	Not significant		Not significant	
	Velvet scoter	Not significant		Not significant	
	Goldeneye	Not significant		Not significant	
	Red-breasted merganser	Not significant		Not significant	
	Red-throated diver	Not significant		Not significant	
	Great northern diver	Not significant		Not significant	
	Fulmar	Not significant		Not significant	
	Gannet	Not significant	Not significant	Not significant	
	Shag	Not significant		Not significant	
	Slavonian grebe	Not significant		Not significant	
	Guillemot	Not significant	Not significant	Not significant	
	Razorbill	Not significant	Not significant	Not significant	

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
	Puffin	Not significant	Not significant	Not significant	
	Kittiwake	Not significant	Not significant	Not significant	
	Herring gull	Not significant	Not significant	Not significant	
	Great black-backed gull	Not significant	Not significant	Not significant	
	Scaup	Not significant		Not significant	
Pollution effects	Eider	Not significant	Not significant	Not significant	
	Long-tailed duck	Not significant	Not significant	Not significant	
	Common scoter	Not significant	Not significant	Not significant	
	Velvet scoter	Not significant	Not significant	Not significant	
	Goldeneye	Not significant	Not significant	Not significant	
	Red-breasted merganser	Not significant	Not significant	Not significant	
	Red-throated diver	Not significant	Not significant	Not significant	
	Great northern diver	Not significant	Not significant	Not significant	
	Fulmar	Not significant	Not significant	Not significant	
	Gannet	Not significant	Not significant	Not significant	
	Shag	Not significant	Not significant	Not significant	

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
	Slavonian grebe	Not significant	Not significant	Not significant	
	Guillemot	Not significant	Not significant	Not significant	
	Razorbill	Not significant	Not significant	Not significant	
	Puffin	Not significant	Not significant	Not significant	
	Kittiwake	Not significant	Not significant	Not significant	
	Herring gull	Not significant	Not significant	Not significant	
	Great black-backed gull	Not significant	Not significant	Not significant	
	Scaup	Not significant	Not significant	Not significant	
Displacement / Barrier Effects	Puffin		Not significant		
	Razorbill		Not significant		
	Guillemot		Not significant		
	Kittiwake		Not significant		
	Fulmar		Not significant		
Collision risk	Gannet		Not significant		
	Kittiwake		Not significant		
	Herring gull		Not significant		

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
	Great black-backed gull		Not significant		
Attraction to lit structures and disorientation	Fulmar		Not significant		
	Gannet		Not significant		
	Puffin		Not significant		
	Razorbill		Not significant		
	Guillemot		Not significant		
	Kittiwake		Not significant		
	Herring gull		Not significant		
	Great black-backed gull		Not significant		
	Arctic skua		Not significant		
	Scaup		Not significant		
Commercial Fisheries (Volume 2, Chapter 11 of Offshore EIA Report)					
Adverse effects on commercially exploited Fish and Shellfish Populations	All fleets	Not significant	Not significant	Not significant	Although certain fishing fleets (e.g. creelers (crab and lobster), mackerel jigging and in some locations, the local squid fleet) fish very close to shore, they do not generally fish above MLWS and therefore do not interact with the PAB for the OnTI. Therefore, while, impacts on these fleets associated with the installation and operation of the offshore export cable circuits (up to MHWS) have
Temporary loss or restricted access to	Creel fleet	Not significant			
	Mackerel jigging fleet	Not significant			

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
traditional fishing grounds	Demersal trawl fleet in general	Not significant			been assessed in detail in the Offshore EIA Report (Chapter 11: Commercial Fisheries), there is no requirement for these receptors to be considered in the Onshore EIA Report on the basis that there is no potential for construction activities onshore and within the intertidal zone to affect these fleets.
	Local Nephrops fleet	Not significant			
	Local squid fleet	Not significant			
	Local whitefish fleet	Not significant			
	Local scallop fleet	Not significant			
	Nomadic scallop fleet	Not significant			
	Scottish seine fleet	Not significant			
Safety issues for fishing vessels	All fleets	Not significant	Not significant	Not significant	
Increased steaming times to fishing grounds	Creel fleet	Not significant	Not significant	Not significant	
	Mackerel jigging fleet	Not significant	Not significant	Not significant	
	Demersal trawl fleet (including local fleets)	Not significant	Not significant	Not significant	
	Scallop dredging fleet (local and nomadic)	Not significant	Not significant	Not significant	
	Scottish seine fleet	Not significant	Not significant	Not significant	
Interference with fishing activities	Creel fleet	Not significant	Not significant	Not significant	
	Mackerel jigging fleet	Not significant	Not significant	Not significant	
	Demersal trawl fleet (including local fleets)	Not significant	Not significant	Not significant	

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
	Scallop dredging fleet (local and nomadic)	Not significant	Not significant	Not significant	
	Scottish seine fleet	Not significant	Not significant	Not significant	
Displacement of fishing activity into other areas	Creel fleet	Not significant	Not significant	Not significant	
	Mackerel jigging fleet	Not significant	Not significant	Not significant	
	Demersal trawl fleet in general	Not significant	Not significant	Not significant	
	Local Nephrops fleet	Not significant	Not significant	Not significant	
	Local squid fleet	Not significant	Not significant	Not significant	
	Local whitefish fleet	Not significant	Not significant	Not significant	
	Local scallop fleet	Not significant	Not significant	Not significant	
	Nomadic scallop fleet	Not significant	Not significant	Not significant	
	Scottish seine fleet	Not significant	Not significant	Not significant	
Obstacles on the seabed post construction	All fleets	Not significant	Not significant	Not significant	
Permanent loss or restricted access to fishing grounds	Creel fleet		Not significant		
	Mackerel jigging fleet		Not significant		
	Demersal trawl fleet (including local fleets)		Not significant		
	Scallop dredging local fleet		Not significant		

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
	Scallop dredging nomadic fleet		Not significant		
	Scottish seine fleet		Not significant		
Shipping and Navigation (Volume 2, Chapter 12 of Offshore EIA Report)					
Vessel Displacement	Commercial vessels	Broadly acceptable	Broadly acceptable		There are no potential inter-related effects on shipping and navigation associated with the presence of the OnTI and the Moray West Offshore Wind Farm and Moray West OfTI. This is on the basis that there is no potential for any activities associated with the OnTI works to interact with any elements of the marine environment below MLWS. Given that all shipping and navigation activities occur below MLWS, including transit of local fishing and recreational vessels to and from local harbours, there is limited potential for any inter-related effects on shipping and navigation. There are no land based navigation assets within the onshore PAB.
	Oil and gas vessels	Tolerable with mitigation	Broadly acceptable		
	Recreational vessels	Broadly acceptable	Broadly acceptable		
	Fishing vessels	Broadly acceptable	Broadly acceptable		
Increased collision (vessel to vessel) risk	All vessels	Broadly acceptable	Broadly acceptable		
Allision (vessel to structure) risk	All vessels	Broadly acceptable	Broadly acceptable		
Anchor interaction and snagging	All vessels	Broadly acceptable	Broadly acceptable		
Diminishing emergency response capability	Emergency response resources		Broadly acceptable		
Reduction in under keel clearance	All vessels		Broadly acceptable		
Military and Civil Aviation (Volume 2, Chapter 13 of Offshore EIA Report)					
Interference with aircraft approach procedures		Significant	Significant		There are no potential inter-related effects on military and civil aviation associated with the presence of the OnTI

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
Interference with helicopter approach procedures		Significant	Significant		together with the Moray West Offshore Wind Farm and Moray West OfTI..
Minimum safe altitude		Significant	Significant		
Radar interference from operating turbines			Significant		
Helicopter Main Route X-RAY			Not significant		
Seascape, Landscape and Visual (Volume 2, Chapter 14 of Offshore EIA Report)					
Daytime visual effects on representative viewpoints	Viewpoint 1: Duncansby Head	Not significant	Not significant	Not significant	There are no potential inter-related effects on visual amenity associated with the presence of the onshore substation and the Moray West Offshore Wind Farm on the basis that due to the distance of the substation from the coast (23 km in a direct line from the Onshore Landfall Area and 19 km from nearest coastal location) there are no locations where it is possible to see both the Moray West Offshore Wind Farm and the onshore substation at the same time. At the Onshore Landfall Area, during construction, it is likely that activities offshore (presence of construction and cable lay vessels) will be visible at the same time as construction activities onshore. Potential effects of construction / cable installation activities at the Onshore
	Viewpoint 2: Keiss (A99)	Not significant	Not significant	Not significant	
	Viewpoint 3: Wick (path south of South View)	Significant	Significant	Significant	
	Viewpoint 4: Sarclet (Sarclet Haven Info Board)	Significant	Significant	Significant	
	Viewpoint 5: Whaligoe Steps	Significant	Significant	Significant	
	Viewpoint 6: Minor Road (south east of Osclay)	Significant	Significant	Significant	
	Viewpoint 7: Lybster (end of Main Street)	Significant	Significant	Significant	

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
	Viewpoint 8: Latheron (A9)	Significant	Significant	Significant	Landfall Area on landscape and visual amenity have been assessed in both the Offshore EIA Report (Chapter 14: Seascape, Landscape and Visual Impact Assessment (SLVIA)) and this Onshore EIA Report (Chapter 7: Landscape and Visual Impact Assessment (LVIA)). Where inter-related effects occur these will be short term, localised and temporary in nature during construction only. Once installed, the cables and the TJBs will be buried and not visible. It has also been concluded that views of the Moray West Offshore Wind Farm from within the Onshore Landfall Area are very limited. Based on conclusions within the Offshore EIA Report (Chapter 14: SLVIA) and this Onshore EIA Report (Chapter 7: LVIA) it is concluded that potential inter-related effects on visual amenity receptors will be not significant. In terms of effects on landscape character, it was concluded in Chapter 14; SLVIA of the Offshore EIA Report that there would be no significant effects on the Sandend Bay Regional Coastal Character Area (RCCA) due to the presence of the Moray West Offshore Wind Farm. Due to the distance of the onshore substation from this RCCA, there is no potential for any inter-related effects due to presence of the onshore substation cumulatively with the Moray West Offshore Wind Farm. With the exception of joint bays, onshore cables will be buried and therefore not visible, further reducing the
	Viewpoint 9a: Dunbeath (near Heritage Centre)	Significant	Significant	Significant	
	Viewpoint 9b: Dunbeath (by harbour)	Significant	Significant	Significant	
	Viewpoint 10: Morven	Not significant	Not significant	Not significant	
	Viewpoint 11: Berriedale (A9)	Significant	Significant	Significant	
	Viewpoint 12: Navidale	Significant	Significant	Significant	
	Viewpoint 13a: Brora (picnic area off Salt Street)	Not significant	Not significant	Not significant	
	Viewpoint 13b: Dornoch (beach parking)	Not significant	Not significant	Not significant	
	Viewpoint 14: Tarbat Ness Lighthouse	Not significant	Not significant	Not significant	
	Viewpoint 15: Burghead Visitor Centre	Not significant	Not significant	Not significant	
	Viewpoint 16: Lossiemouth Harbour – day and night time	Not significant	Not significant	Not significant	
	Viewpoint 17: Buckie (Cliff Terrace)	Not significant	Not significant	Not significant	
	Viewpoint 18: Bin Hill	Not significant	Not significant	Not significant	

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
	Viewpoint 19 Portnockie (Bow Fiddle Rock Info Point):	Not significant	Not significant	Not significant	potential for any inter-related effects on landscape character with this OnTI and the Development.
	Viewpoint 20: Cullen (viaduct)	Not significant	Not significant	Not significant	
	Viewpoint 21: Findlater Castle	Not significant	Not significant	Not significant	
	Viewpoint 22: Sandend	Significant		Significant	
	Viewpoint 23: Portsoy	Not significant	Not significant	Not significant	
Visual effects on people in settlements	Wick	Significant	Significant	Significant	
	Thrumster	Not significant	Not significant	Not significant	
	Lybster	Significant	Significant	Significant	
	Latheronwheel	Significant	Significant	Significant	
	Dunbeath	Significant	Significant	Significant	
	Helmsdale	Significant	Significant	Significant	
	Brora	Not significant	Not significant	Not significant	
	Sandend	Significant		Significant	
Visual effects on people using routes	A9 (Brora to Spittal)	Significant	Significant	Significant	
	A99 (Latheron to Wick)	Significant	Significant	Significant	

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
	Far North Line (Brora to Helmsdale)	Significant	Significant	Significant	
Night time visual effects on representative viewpoints	Viewpoint 3: Wick (path south of South View)	Not significant	Not significant	Not significant	
	Viewpoint 9a: Dunbeath (nr Heritage Centre)	Significant	Significant	Significant	
	Viewpoint 12: Navidale	Significant	Significant	Significant	
	Viewpoint 16: Lossiemouth Harbour	Not significant	Not significant	Not significant	
Impact on Landscape character types	Sweeping Moorland	Not significant	Not significant	Not significant	
	Small Farms and Crofts	Significant	Significant	Significant	
	Moorland Slopes and Hills	Significant	Significant	Significant	
	Coastal Shelf	Not significant	Not significant	Not significant	
	Coastal High Cliffs and Sheltered Bays	Significant	Significant	Significant	
	Long Beaches Dunes and Links	Not significant	Not significant	Not significant	
Regional coastal characters areas	Sarclet Head	Significant	Significant	Significant	
	Lybster Bay	Significant	Significant	Significant	
	Dunbeath Bay	Significant	Significant	Significant	
	Helmsdale to Berriedale Coastal Shelf	Significant	Significant	Significant	

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects					
Impacts Assessed in the Offshore EIA Report		**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
		Construction	**Operation and Maintenance**	**Decommissioning**	
	Brora to Helmsdale Deposition Coast	Not significant	Not significant	Not significant	
Landscape planning designations	Dunbeath Castle GDL (Gardens and Designed Landscapes)	Significant	Significant	Significant	
	Dunrobin Castle GDL	Not significant	Not significant	Not significant	
	Flow Country and Berriedale Coast SLA (Special Landscape Area)	Significant	Significant	Significant	
	Loch Fleet, Loch Brora and Glen Loth SLA	Not significant	Not significant	Not significant	
Socio Economics, Tourism and Recreation (Volume 2, Chapter 15 of Offshore EIA Report)					
Direct and indirect construction employment		**Local study area:** not significant for the low assessment scenario; Significant for the high assessment scenario. **Scotland:** not significant for low assessment scenario Significant for high assessment scenario.			It was concluded in Chapter 15: Socio-economics, Tourism and Recreation of the Offshore EIA Report that there is potential for the Development to have significant positive effects with the local study area (Aberdeenshire, Moray and Highland local authority areas) in terms of employment opportunities and Gross Value Added (GVA) creation during construction and positive effects during operation and decommissioning. These employment opportunities and GVA creation assume a certain level of supply of goods and services from the local study area during construction, operation and decommissioning of the Development. The conclusions also assume construction ports and O&M bases will be located within the local study area.

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects				
Impacts Assessed in the Offshore EIA Report	**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
	Construction	**Operation and Maintenance**	**Decommissioning**	
Direct and indirect construction GVA	**Local study area:** not significant for the low assessment scenario; Significant for the high assessment scenario. **Scotland:** not significant for low assessment scenario Significant for high assessment scenario.			<u>Employment and GVA</u> Opportunities for employment and GVA creation associated with the OnTI relate specifically to installation of the onshore cables and the construction and long term operation of the substation. While the opportunities are geographically more constrained (mainly in Aberdeenshire and Moray), and the total number of jobs created will be lower than for the Moray West Offshore Wind Farm and Moray West OfTI, the potential effects are still considered to be of positive significance. The Project therefore as a whole, has the potential to create a range of jobs and opportunities for GVA creation. <u>Recreation and Tourism</u> The PAB excludes the beach at Sandend. In the Offshore EIA Sandend Beach is acknowledged as an important surfing location. Potential effects on the quality of the waves for surfing, the surfing community and local surfing businesses are assessed in Chapter 15: Socio-economics, Tourism and Recreation of the Offshore EIA Report. This
Change in demand for housing and local services associated with influx of labour in the local study area	Not significant			

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects				
Impacts Assessed in the Offshore EIA Report	**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
	Construction	**Operation and Maintenance**	**Decommissioning**	
Access to, and enjoyment of, watersports activity in the local study area	Not significant			concluded that, although the final location of the Onshore Landfall Area is still to be determined, any potential effects on the quality of the areas used for surfing would be not significant. This is on the basis that potential effects upon waves during installation of the cable will be temporary and short term in nature. Potential long terms effect on the quality of the surf, due to the presence of the cable were also assessed as not significant. Effects on surfers in terms of restricted access to the beach are assessed in this EIA Report (Chapter 12: Socio-economics, Tourism and Recreation). These effects were assessed as not significant due to the exclusion of Sandend Beach from the PAB. Potential long term effects are also therefore not significant
Change in economic activity onshore supported by local watersports activity: local study area	Not significant			

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects				
Impacts Assessed in the Offshore EIA Report	**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
	Construction	**Operation and Maintenance**	**Decommissioning**	
Direct and indirect O&M employment: Scotland and Local Study Area		Not significant under low and high assessment scenario and in both study areas.		
Direct and indirect O&M GVA: Scotland and Local Study Area		Not significant under low and high assessment scenario and in both study areas.		
Archaeology and Cultural Heritage (Volume 2, Chapter 16 of Offshore EIA Report)				
Contamination, damage to, or loss of, marine archaeology assets resulting from direct physical impacts	Not significant		Not significant	There is potential for open cut trenching at the Onshore Landfall Area to affect known and undiscovered archaeological assets present in the intertidal and onshore parts of the Onshore Landfall Area. However, given the highly spatially discrete nature of archaeological assets, the potential for any interactions between archaeological receptors (assets) in different parts of the Onshore Landfall Area is limited. Potential effects on assets in the Onshore Landfall Area have been assessed in the Offshore EIA Report (Chapter 16: Archaeology and Cultural Heritage) and this Onshore EIA Report (Chapter 8: Historic Environment). No significant effects were identified.

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects				
Impacts Assessed in the Offshore EIA Report	**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
	Construction	**Operation and Maintenance**	**Decommissioning**	
Destabilisation of marine archaeology assets through changed hydrography and sedimentary regimes		Not significant		In terms of potential inter-related effects on the setting of designated sites and archaeological features, as concluded for effects on landscape and visual amenity, given that there are no locations where both the Moray West Offshore Wind Farm and onshore substation are visible at the same time, and that the onshore cable at the Onshore Landfall Area will be buried underground and therefore not visible, there is no potential for any inter-related effects during operation on the setting of designated sites and archaeological features. A detailed assessment of potential effects on the setting of coastal and onshore designated sites and archaeological features is provided in Chapter 14: SLVIA of the Offshore EIA Report.
Indirect effect due to changes to the setting of designated cultural heritage assets		Not significant		
Other Human Activities (Volume 2, Chapter 17 of Offshore EIA Report)				
Disturbance of existing offshore wind farm activities	Not significant		Not significant	There are no potential inter-related effects on other human activities associated with the presence of the OnTI

Table 14.3.1: Summary of Effects from the Offshore EIA Report and Potential Inter-Related Effects				
Impacts Assessed in the Offshore EIA Report	**Phase**			**Potential Inter-Relationships between the OnTI and the Development (Moray West Offshore Wind Farm and Moray West OfTI)**
	Construction	**Operation and Maintenance**	**Decommissioning**	
				and the Moray West Offshore Wind Farm and Moray West OfTI. This is on the basis that the onshore cable circuits and onshore substation do not encounter or overlap with any of these offshore receptors.
Disturbance of existing subsea cables	Not significant		Not significant	
Disturbance of oil exploration and decommissioning activities	Not significant		Not significant	
Disturbance of marine disposal activities	Not significant		Not significant	
Risks associated with UXO	Not significant		Not significant	
Disturbance of existing offshore wind farm activities		Not significant		
Disturbance of existing subsea cables		Not significant		
Disturbance of oil exploration and decommissioning activities		Not significant		
Disturbance of marine disposal activities		Not significant		
Risks associated with Unexploded Ordnance (UXO)		Not significant		

14.4 References

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