1.3 Environmental Impact Assessment

1.3.1 Requirement for Environmental Impact Assessment (EIA)

1.3.1.1 EU Directive 2011 / 92 / EU (the codified EIA Directive) requires certain types of development which are considered likely to cause significant environmental effects to be subject to EIA. The types of development to which the Directive applies are specified in Annexes I and II to the Directive. The purpose of the EIA Directive is to ensure that, in considering whether to grant consents for developments that are likely to have significant environmental effects, the consenting authorities have all the necessary environmental information on which to base their decision.

1.3.1.2 Different consenting regimes apply to different parts of the modified transmission infrastructure (modified TI) as it involves both offshore and onshore elements. This means a Marine Licence must be applied for to cover the offshore elements of this infrastructure (OSPs and export cable) under the Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009, while planning permission onshore must be applied for under the Town and Country Planning (Scotland) Act 1997. For more information on legislation see Chapter 1.2 (Regulatory and Policy Context) and Technical Appendix 1.2 A.

1.3.1.3 Under the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011, the onshore substations are classified as Schedule 2 development (given the development area) and therefore require an EIA. MORL has elected to include the export cables (onshore and offshore) and OSPs in the EIA as they form an integral part of the modified TI and therefore are a part of EIA development.

1.3.1.4 It is MORL's view that the offshore transmission infrastructure (OfTI) may also be subject to the requirement for an EIA under the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) and so MORL have also followed these Regulations in the preparation of this EIA.

1.3.1.5 This ES contains an update to the assessments carried out in the MORL ES (MORL, 2012). The approach to the EIA as set out below is consistent with that adopted for the MORL ES. Any variations in methodology are set out in each EIA discipline chapter and unless stated otherwise are as used in the MORL ES.

1.3.2 The EIA Stages

Screening

1.3.2.1 A screening assessment is used to determine whether EIA is necessary. The onshore substations, due to the area they cover, fall within Schedule 2 of The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 and therefore require EIA. For this reason, there was no need for MORL to carry out the screening stage of the EIA process.

Scoping

1.3.2.2 Where a development is required to undergo EIA, the developer may request a scoping opinion from the consenting authorities which will assist in the identification of environmental issues and likely significant effects to be considered, as well as discussing methods of impact assessment.

1.3.2.3 The scoping document for the modified TI was submitted in April 2014. The scoping document submitted by MORL set out the details of the proposed development and an assessment of where there are likely to be environmental effects.

1.3.2.4 The views of statutory consultees, all relevant stakeholders and the general public were sought as part of the scoping process; scoping is therefore very much a process of stakeholder engagement. A list of the stakeholders that were provided with a copy of the scoping report and invited to comment can be found in Chapter 1.4 (Stakeholder Consultation).

1.3.2.5 A formal scoping opinion was received from Marine Scotland and Aberdeenshire Council as the local planning authority in June 2014 (Technical Appendix 1.3 A). Tables are presented at the end of this Chapter providing a summary of the scoping opinion received from Marine Scotland and Aberdeenshire Council, for the modified OfTI and modified OnTI respectively, and the other responses received from stakeholders and highlights the approach taken to the issues raised.

Environmental Impact Assessment

1.3.2.6 EIA is a process that identifies the aspects of the environment likely to be significantly affected by the modified TI, and which describes the likely significant environmental effects of the modified TI. It also identifies the methodologies employed to assess the main effects that the modified TI is likely to have on the environment. EIA also involves consideration and description of the measures envisaged to prevent, reduce and offset any significant adverse effects on the environment and a summary of the residual effects of the development after mitigation. The assessment covers the full life cycle of the development, from planning to decommissioning.

1.3.2.7 The information resulting from the EIA process is presented in an Environmental Statement so that a decision maker has full information on the likely significant environmental effects of a proposed development, at the time that the decision on whether to grant consent is made.

1.3.3 Environmental Impact Assessment Process

Baseline Data Gathering

1.3.3.1 Desk–based research of available literature was used to collect information for the EIA. In addition, specific surveys and studies that were required to support the EIA were identified through a review of the available literature and research for the Moray Firth area, the scoping opinions received for the modified TI and through consultation with various stakeholders. Many of the baseline surveys undertaken for the MORL ES are relevant for this ES. A summary of the baseline surveys and studies completed are listed in Table 1.3-1 below.

Table 1.3-1 Summary of Baseline Surveys and Studies Conducted for Modified TI

Receptor	Surveys Conducted	Location of Full Methodology
Seabed Sediments and Composition	The geophysical survey campaign was undertaken April - June 2014 for the modified OfTI. This was in addition to geophysical surveys undertaken on the EDA in 2010.	Chapter 3.1
Geological Horizons	The geotechnical survey campaign was undertaken In April – July 2014, a total of 12 cone penetrometer tests were taken to depths between 0.3 m and 3.06 m on the modified cable route to Inverboyndie.	Chapter 3.1
Benthic Ecology	In May 2014 a benthic survey was undertaken on the modified cable route. This involved continuous drop-down video survey and seven grab samples along the proposed cable route.	Chapter 4.1

Receptor	Surveys Conducted	Location of Full Methodology
Marine Ornithology	Boat based visual observations were made between April 2010 and March 2012 across the Telford, Stevenson and MacColl sites and within a 4 km buffer zone around the outer perimeter of the sites. Migration surveys were done in September – November 2010 and March – May 2011 using dedicated observers on the boat based surveys and at coastal vantage points. GPS tracking of kittiwake, fulmar, guillemot and razorbill from the Birriedale Cliffs , within the East Caithness Cliffs SPA, was done in 2011 to monitor potential bird movements between the sites and the SPA. Aerial surveys were done of the entire zone plus a 4 km buffer zone in May, June, August, November and December 2009 and two more during February 2010. The first three surveys used high definition video using a 400 m wide transect and cameras with 2 cm resolution. The remaining 2009 and 2010 surveys were done using traditional aerial survey methods. Further aerial surveys were done in summer 2011 across a survey area between the EDA and nearby SPAs (East Caithness Cliffs, North Caithness Cliffs and Troup, Pennan and Lion's Head). This information is still relevant for the assessment in this ES.	Chapter 4.5 of the MORL ES and Chapter 4.4 in this ES
Marine Mammals	Boat based visual observations were made between April 2010 and March 2012 across the Telford, Stevenson and MacColl sites and within a 4 km buffer zone around the outer perimeter of the sites. Aerial surveys were done of the entire zone plus a 4 km buffer zone in May, June, August, November and December 2009 and two more during February 2010. The first three surveys used high definition video using a 400 m wide transect and cameras with 2 cm resolution. The remaining 2009 and 2010 surveys were done using traditional aerial survey methods. Acoustic devices (TPODs, CPODs and EARs) were deployed in the Moray Firth and within the zone to monitor for cetaceans between 2009 – 2012. This information is still relevant for the assessment in this ES.	Chapter 4.4 of the MORL ES and Chapter 4.3 in this ES
Fish and Shellfish Ecology	In 2013, MORL undertook sandeel and cod spawning surveys within the EDA.	Chapter 4.2
Commercial Fisheries (including salmon and sea trout)	Desk based studies and consultations have been ongoing since submission of the MORL ES.	Chapter 5.1 of the MORL ES and Chapter 5.1 in this ES.
Shipping and Navigation	Automatic Identification Systems (AIS) surveys were undertaken with radars on board the geophysical vessels during April–May 2010 and August–October 2011. A fixed AIS radar has been placed onshore at Helmsdale and an additional one will be fitted on the offshore met mast which MORL intends to install in 2014. Further AIS information is being collected during the geophysical survey campaign on the wind farm (March – June 2014)	Chapter 5.2 of the MORL ES and Chapter 5.2 in this ES.

Receptor	Surveys Conducted	Location of Full Methodology
Seascape, Landscape and Visual Receptors	For the MORL ES Twenty four viewpoints selected and photographed for SLVIA assessment and a full assessment of seascape and landscape characteristics within 50 km of the Telford, Stevenson and MacColl sites undertaken. These viewpoints remain relevant for the assessments undertaken in this ES. For this ES, 8 viewpoints have been selected and photographed for the LVIA assessment, particularly at the substations location.	Chapter 5.4 of the MORL ES and Chapter 5.3 in this ES
Archaeology and Cultural Heritage	A detailed geophysical and geotechnical campaign has been undertaken in 2010 and in 2014, data from these will be analysed for archaeological interest. For onshore archaeology, a full walkover survey has been undertaken along the OnTI route.	Chapter 5.4
Terrestrial Ecology	Ecological Field studies have been undertaken to inform the assessment of the modified transmission infrastructure. These included: Wintering: birds November 2013 - March 2014 Ecology: May 2014 Breeding birds: May – July 2014	Chapter 4.6
Onshore Noise	Acoustic surveys were undertaken along the onshore cable route in May/June 2014.	Chapter 3.3
Traffic & Transport	Automatic traffic counts along the onshore cable routes were done in May/June 2014.	Chapter 5.6
Hydrology	Site visits along the onshore cable route and peat probing at the onshore substation site were undertaken in May/June 2014.	Chapter 3.2

Scope of Assessment

1.3.3.2 The discipline chapters of this ES identify all likely significant environmental effects of the modified TI. These effects cover a wide range of separate environmental topics. Therefore, a common format has been applied to each discipline, with consistent methodologies applied to assess the effects relating to each topic. The assessments were carried out by a range of consultants who are experts in their respective fields; a full list of the consultants involved in each discipline can be found in Table 1.3-2 below.

1.3.3.3 The methodologies for the assessment of each EIA discipline are outlined in the individual EIA discipline chapters and are based upon recognised good practice for that topic area. The standard format for each discipline is as follows:

Baseline Description Including:

- A short introduction to the discipline to be assessed;
- Interrelationships with other topics / receptors covered in other chapters of this ES;
- List of consultations undertaken (and a summary of how consultation responses have been acted upon) during baseline and impact assessment studies;
- A description of all baseline surveys, including methods and results; and
- Background to the receptor specific legislative and planning framework (where required) and relevant guidance;

Impact Assessments;

- Summary – provides concise summary of the salient points from the assessment of the relevant topic under discussion;
- A table detailing the expected residual effects and their significance;
- A description of the impact assessment methodology;
- A description of the Rochdale Envelope - each of the impact assessments is based on the Rochdale Envelope and the identified realistic worst case scenario during construction, operation and decommissioning;
- The Impact Assessment, setting out the likely significant effects arising from development of the modified TI;
- Identification of the proposed mitigation measures during construction, operation and decommissioning;

Cumulative Impact Assessments:

- Summary – provides concise summary of the salient points from the assessment of the relevant topic under discussion;
- A table detailing the expected residual effects and their significance for the modified TI; the modified TI with Telford, Stevenson and MacColl (the Whole Project) and the Whole Project with other relevant developments;
- A description of the impact assessment methodology;
- A description of the worst case scenarios for projects where detailed assessment is possible;
- The Cumulative Impact Assessment, setting out the likely significant cumulative effects arising from development of the Whole Project together with other developments;
- A total cumulative assessment of the likely significant effects for the whole project with all other relevant projects.
- General commentary of some anticipated future developments located in the Moray Firth and elsewhere.

Table 1.3-2 List of Consultants Undertaking Assessments by Discipline

EIA Team	
Discipline	**Organisation Responsible**
Physical Environment	
Hydrodynamics, Sedimentary and Coastal Processes	ABPmer
Hydrology, Geology and Hydrogeology	Arup
Onshore Noise	Whyte Young Green
Biological Environment	
Benthic Ecology	Fugro EMU
Fish and Shellfish Ecology	Brown and May Marine
Marine Mammals	Natural Power
Marine Ornithology	Natural Power
Intertidal Ecology	Fugro EMU

EIA Team	
Discipline	**Organisation Responsible**
Terrestrial Ecology	RPS
Human Environment	
Commercial Fisheries	Brown and May Marine
Shipping and Navigation	Anatec
Seascape Landscape and Visual Receptors	Optimised Environments
Archaeology and Cultural Heritage	Wessex Archaeology
Socio–economics, Recreation and Tourism	SQW
Other Human Activities	RPS

Transmission Infrastructure Impact Assessments

1.3.3.4 The assessment has been carried out on the selected route corridor, representing the impact assessment for the export cable route both offshore and onshore together with the offshore and onshore substations. The effects assessed include construction, operation and decommissioning phases of the modified Project.

EIA Methodology

1.3.3.5 The significance of an effect is based on an initial two phased approach to determine (i) the magnitude of the likely effects and (ii) the sensitivity of the receptor. The criteria used to classify both effect magnitude and receptor sensitivity have been substantially guided by current receptor specific guidance documents and best practice. It should also be noted that effects include the direct effects and any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects of the development, resulting from:

- The existence of the development;
- The use of natural resources; and
- The emission of pollutants, the creation of nuisances and the elimination of waste.

1.3.3.6 This ES also describes the forecasting methods used to assess the effects on the environment. Each Impact Assessment describes the methodology which has been used in respect of the relevant EIA discipline to assess the significance of the effects.

Mitigation and Residual Effects

1.3.3.7 Where likely significant adverse effects are identified, mitigation measures will be proposed to reduce the level of significance. The effect of the mitigation will be tested and the significance of residual effects will be determined.

ES Linkages

1.3.3.8 This ES considers the inter–relationships between the aspects of the environment that are likely to be affected by the construction, operation and decommissioning of the modified TI. This ES also assesses these effects cumulatively.

1.3.3.9 The consideration of inter–relationships is required under the EIA Directive, which states that an ES should include: "An assessment of the aspects of the environment likely to be significantly affected by the proposed Project, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter–relationship

between the above factors." These inter–relationships are explained further in Plate 1.3–1 below

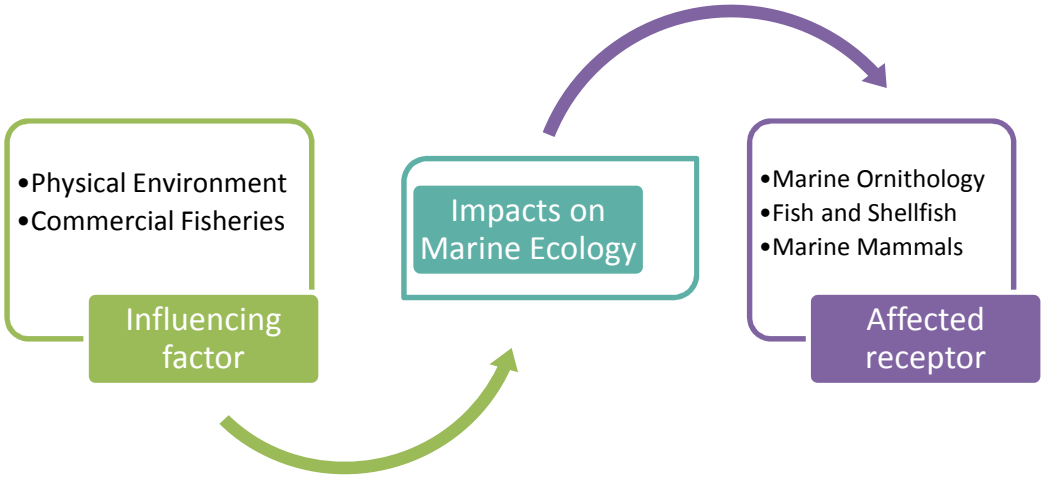

Plate 1.3–1 Example of Inter–linkages within the EIA

1.3.3.10 Inter–relationships are considered within each relevant ES chapter but, as a guide, Table 1.3-5 indicates where such inter–relationships have been identified.

Cumulative EIA Methodology

1.3.3.11 There is also a requirement to consider cumulative effects as part of the EIA process. Projects to be included in such an assessment must include existing projects, consented projects, those currently in the planning system and (where adequate information is available) other relevant future projects not yet in a consenting process, with potential to affect the same sensitive receptors as the modified TI.

1.3.3.12 There is no single statutory definition of what a cumulative effect is; however guidance is provided as to how the term should be defined. European Commission Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions (European Commission, 1999) provides the following definition of cumulative effects:

1.3.3.13 Cumulative impacts are *"impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the Project. For example:*

- Incremental noise from a number of separate developments;
- Combined effect of individual effects, e.g. noise, dust and visual, from one development on a particular receptor;
- Several developments with insignificant effects individually but which together have a cumulative effect".

1.3.3.14 Additionally, the EC guidance refers to 'impact interactions' which themselves can combine to create a cumulative effect, defined as follows:

1.3.3.15 Impact interactions are *"the reactions between impacts whether between the impacts of just one project or between the impacts of other projects in the area".*

1.3.3.16 Examples of this are:

- A chemical plant producing two streams of waste that are individually acceptable but react together to produce highly significant levels of pollution;
- Emissions to air from one project reacting with emissions from an existing development; and

- Two major developments being constructed adjacent to one another and during overlapping time periods will have many interactive impacts, from visual impacts to construction and operational noise.

1.3.3.17 To ensure consistency across assessments two comprehensive tables of current and potential offshore and onshore developments was created. Assessment was carried out in relation to the developments that could potentially have a direct / indirect effect on receptors in combination with the modified TI. The developments that were considered are detailed in Table 1.3-3 and table 1.3-4 below and shown on Figure 1.3-1. For the purposes of the assessment of likely significant cumulative effects on receptors, guidance on the scope and method is taken from the Moray Firth Offshore Wind Developers Group (MFOWDG) discussion document "Moray Firth Offshore Wind Developers Group Cumulative Impact Assessment Discussion Document" (Appendix 1.3 D, MORL 2012). Projects included for assessment were confirmed in feedback during scoping and in discussions with key stakeholders.

1.3.3.18 In terms of the cumulative assessment for all onshore disciplines, each chapter provides relevant information on the other developments considered relevant to the cumulative impact assessment.

1.3.3.19 The cumulative impact assessments include a Whole Project assessment, i.e. the modified TI and the three consented wind farms (Telford, Stevenson and MacColl) and a total cumulative impact assessment, i.e. the Whole Project plus any other consented or unconsented projects relevant to that discipline, where sufficient information is available. For terrestrial disciplines (excluding Seascape, Landscape and Visual Assessments) the Whole Project assessment consists of the modified TI as a whole where relevant i.e. the three consented wind farms are not included since there is no potential for cumulative effects predicted between the OnTI and the wind farms.

1.3.3.20 Where there is no increase in the level of significance of effect for the total cumulative impact assessment from that predicted for the residual effects of the modified TI on its own, or where the increase in significance is below the level which is significant in EIA terms, then the assessment is presented on the basis of the overall cumulative effect of the Whole Project with all other developments.

1.3.3.21 In the event that total cumulative impact assessment is significant in EIA terms, then the assessment details the cumulative effects of the Whole Project with (1) consented projects and the Western Development Area and (2) unconsented but reasonably foreseeable projects.

1.3.3.22 Where due to lack of detail about programmes and design parameters, it has not been possible to carry out an assessment of the likely cumulative effects of some anticipated future developments relevant to the cumulative impact assessment a general commentary has been provided but a level of significance is not assessed.

Table 1.3-3 Developments Considered Alongside the Modified OfTI in Cumulative Impact Assessment

Project	Summary	Source
Offshore Wind Farms		
European Offshore Wind Deployment Centre - EOWDC (Aberdeen Bay)	11 wind turbines, up to 100 MW capacity.	http://www.vattenfall.co.uk/en/aberdeen-bay.htm
Beatrice Offshore Wind Farm (BOWL)	Up to 140 wind turbines, inter-array cabling. Maximum 750 MW.	http://www.scotland.gov.uk/Resource/0044/00446511.pdf
MORL Western Development Area (WDA)	Up to 100 wind turbines (plans still in development)	Chapter 1 - Background, of original Telford, Stevenson and MacColl Offshore Wind Farms ES and this Modified Transmission Infrastructure ES.

Project	Summary	Source
Beatrice Wind Farm Demonstrator Project	2 x 5 MW wind turbines	http://www.beatricewind.co.uk/home/
Firth of Forth - Phase 1	Phase 1 consists of 2 x 525 MW offshore wind farms (Projects Alpha and Bravo) in the Firth of Forth Offshore Wind Zone. Up to 75 wind turbines per wind farm, subsea cables, offshore substations, meteorological masts.	http://www.seagreenwindenergy.com/news.asp?s=2&nid=SWE-N10011
Firth of Forth - Phase 2 & 3	Phases 2 and 3 will comprise up to 5 wind farms, with a total installed capacity of up to approximately 2.6 GW.	www.seagreenwindenergy.com/assets/phase2-offshore/offshore-phase-2-report.pdf
Inch Cape	Up to 213 wind turbines, inter-array cables, up to 3 meteorological masts, up to 5 offshore substations, up to 6 offshore export cables. Capacity up to 1,000 MW.	http://www.inchcapewind.com/files/NTS/NTS.pdf
Hywind	Up to 5 wind turbines with a maximum individual generating capacity of 6 MW each mounted on a floating spar type structure. The whole structure is then held in place by a mooring system laid on the seabed.	http://www.scotland.gov.uk/Resource/0044/00446946.pdf
Kincardine Offshore Wind Farm	A pilot-scale offshore wind farm utilising floating foundation technology, which will demonstrate the technological and commercial feasibility of floating offshore wind	http://www.scotland.gov.uk/Resource/0044/00448819.pdf
Moray Firth - Eastern Development Area - Telford, Stevenson and MacColl	Total installed capacity of up to 1,116 MW, up to 186 wind turbines, inter-array cables,	http://morayoffshorerenewables.com/Document-Library.aspx?path=environmental+statement&fileid=58
Neart na Gaoithe	Up to 125 wind turbines, up to 2 offshore substations, inter-array cables, two export cables, up to 450 MW capacity.	http://www.neartnagaoithe.com/environmental-statement1.asp http://mainstream-downloads.opendebate.co.uk/downloads/Neart-na-Gaoithe-Brochure-A5-%28low-res%29.pdf
Initial Plan Framework for Offshore Wind Energy in Scottish Waters	The Framework details the draft Plan Options for future commercial scale offshore wind developments on a regional basis around the Scottish coastline. In the North East region, within which the Moray Firth in located, there are two draft Plan Option areas for offshore wind development, referred to as 'OWNE1' and 'OWNE2'. OWNE2 is located closest to the MORL Project and modified OfTI, lying to the east, off Rattray Head. The Plan Option areas are earmarked as medium to long term development options.	Other Human Activities Chapter, MORL Modified Transmission Infrastructure Environmental Statement

Project	Summary	Source
Wave and Tidal		
Meygen	Tidal stream project covering an area of 3.5 km^2 in the channel between the island of Stroma and the north-eastern tip of the Scottish mainland. The Agreement for Lease is for 398 MW of installed capacity and will be consented in two separate phases. Phase 1 will involve the installation of up to 86 tidal turbines, with a maximum capacity of 86 MW.	http://www.scotland.gov.uk/Topics/marine/Licensing/marine/scoping/MeyGen
Other Tidal and Wave Developments in the Pentland Firth and Orkney Waters	A number of tidal and wave energy development have been proposed for the Pentland and Orkney waters. They have only been considered qualitatively in the cumulative assessment.	
CCS		
CCS Demonstration Project	A CCS demonstration project where CO_2 will be captured and transported via existing pipelines for offshore storage in Shell's Goldeneye depleted gas field.	Other Human Activities Chapter, MORL Modified Transmission Infrastructure Environmental Statement
Mains CCS Site	Further potential offshore storage hubs for carbon dioxide (CO^2) in Scottish waters have been identified, including a site within the Moray Firth, referred to as 'Mains'.	Other Human Activities Chapter, MORL Modified Transmission Infrastructure Environmental Statement
Subsea Cables and Pipelines		
Beatrice Offshore Wind Farm Ltd (BOWL) Transmission Works	The Transmission Works infrastructure includes the offshore cable, onshore cable and substation	http://sse.com/media/113142/BeatriceScopingReport2011.pdf
SHE-T Offshore HVDC Reinforcement	Caithness – Moray Link, which will be a subsea High Voltage Direct Current (HVDC) reinforcement of the transmission network between Caithness and Moray with two convertor stations to allow for future connection to Shetland and offshore generation. Current route would cross modified OfTI.	http://www.scotland.gov.uk/Resource/00044/00449004.pdf
SHEFA Telecoms Cable	Existing SHEFA-2 fibre-optic submarine cable, running through the Moray Firth from the Faroe Islands via Shetland and Orkney to Banff.	http://www.shefa.fo/cable/
Pipelines in Proximity to the Moray Firth Zone	PL252; PL112; 16 MOL Beatrice A to Shandwick Bay; Beatrice Bravo Oil Export.	http://www.scotland.gov.uk/Topics/marine/seamanagement/nmpihome/nmpi
Oil and Gas		
Beatrice Hydrocarbon Field	Block 11/30a, including Beatrice Alpha, Bravo and Charlie platforms, seabed cables and pipelines linking the platforms.	Other Human Activities Chapter, MORL Modified Transmission Infrastructure Environmental Statement
Jacky Hydrocarbon Field	Block 12/21c, including the Jacky platform, seabed cables and pipelines.	Other Human Activities Chapter, MORL Modified Transmission Infrastructure Environmental Statement

Project	Summary	Source
Wells	Several plugged and abandoned wells, suspended and completed wells.	Other Human Activities Chapter, MORL Modified Transmission Infrastructure Environmental Statement
Licenced Blocks in Inner Moray Firth	Licence blocks awarded during oil and gas licensing rounds. Operator's holding licences have rights to explore the blocks for potential oil and gas resources. The modified OfTI boundaries overlap with currently active but as yet unexploited licence blocks: -Licence Block 12/21b (Sendero) -Licence Block 12/26b and 12/27 (Suncor Energy UK Limited)	UK DEAL: https://www.ukdeal.co.uk/dp/jsp/PleaseLoginDeal.jsp Other Human Activities Chapter, MORL Modified Transmission Infrastructure Environmental Statement
28th Round Blocks on Offer in Inner Moray Firth	28th oil and gas licencing round. Several blocks overlap with the modified OfTI: -12/22 -12/23 -12/28 -18/2 -18/7 -18/8	Other Human Activities Chapter, MORL Modified Transmission Infrastructure Environmental Statement
Marine Disposal Sites		
Open Disposal Sites	Including: -Wick -Helmsdale -Burghead -Lossiemouth -Buckie -Macduff	http://www.scotland.gov.uk/Topics/marine/seamanagement/nmpihome/nmpi
Other Activities		
Shipping and Navigation	Existing commercial and recreational shipping routes and activity are described within the ES. Ferry routes include: -Aberdeen to Kirkwall ferry route.	http://www.scotland.gov.uk/Topics/marine/seamanagement/nmpihome/nmpi

Project	Summary	Source
Military Activities	Practice and Exercise Areas (PEXA) are used for various military practice activities by the Royal Navy, the Army, the Royal Air Force (RAF) and the Ministry of Defence (MoD). Portions of the modified OfTI lie within offshore Danger Area D809(South), which is used by the RAF for a variety of practice flying and firing exercises, and offshore Danger Area D807, which is used by the RAF for live firing, bombing and sonobuoy training. However, since 1st March 2012, D807 has been permanently and completely withdrawn (Notice to Airmen No. B0238 /12). The closest coastal Danger Area to the modified OfTI landfall is located approximately 35 km to the west at the Binn Hill Firing Range between Buckie and Lossiemouth. MOD Danger areas include: Old Wick, Tain, Binn Hill, Fort George.	http://www.scotland.gov.uk/Topics/marine/seamanagement/nmpihome/nmpi Other Human Activities Chapter, MORL Modified Transmission Infrastructure Environmental Statement
Aviation	Existing aviation infrastructure and activity are described within the ES.	
Commercial Fisheries	Existing commercial fishing activity is described within the ES.	
Port Redevelopment Opportunities (Nigg and Ardesier for Integrated Manufacturing Supporting Sites Include Buckie, Deephaven, Invergordon, Inverness, Wick)	Moray Firth ports are being / are expected to be redeveloped, primarily in order to support a growing marine renewable and offshore wind industry. Development projects are at various stages.	Inner Moray Firth Ports and Sites Strategy: http://www.highland.gov.uk/businessinformation/economicdevelopment/economicdevelopmentprojects/innermorayfirthportsandsitesstrategy.htm Scottish Offshore Renewables Development Sites (Moray Firth Cluster): http://www.sdi.co.uk/~/media/SDI/Files/documents/energy/Brochures/SDI%20NRIP%20Moray%20Firth.ashx
Coastal Capital and Maintenance Dredging	Ongoing and proposed dredge activities at port locations.	http://www.scotland.gov.uk/Topics/marine/seamanagement/nmpihome/nmpi

Table 1.3-4 Developments Considered Alongside the modified OnTI in Cumulative Impact Assessment

Project	Summary	Source
Onshore Wind Farms		
Cairnhill Farm (Turriff, Aberdeenshire, AB53 5TN)	Erecton of 3 no. Wind Turbines and Infrastructure. Operational	Aberdeenshire Council Planning - https://upa.aberdeenshire.gov.uk/online-applications/
Gairnieston Farm (Turriff, AB53 5RP)	Erection of Wind Turbine and Associated Infrastructure (1 turbine). Operational	Aberdeenshire Council Planning - https://upa.aberdeenshire.gov.uk/online-applications/
Backhill of Yonderton (Craigston, Turriff AB53 5PT)	Erection of 2 no. Enercon E70 2.3MY (4.6MW) Wind Turbines on 64 metre masts (Total Height 99.5 meters) and associated infrastructure. Application received 2010. Approved	Aberdeenshire Council Planning - https://upa.aberdeenshire.gov.uk/online-applications/
South Colleonard (Banff, AB45 3TP)	Full Planning Permission for Erection of 1 no. Wind Turbine, Hub Height 55.6 metres (Total Height 79.6 metres) and Associated Infrastructure. Application Received 2012. Pending	Aberdeenshire Council Planning - https://upa.aberdeenshire.gov.uk/online-applications/
Knock Thunder Farm (Fiskaidly, Banff AB45 3AB)	Erection of 1 no. turbine of 77 m height and substation plus associated infrastructure. Application submitted 2013. Pending	Aberdeenshire Council Planning - https://upa.aberdeenshire.gov.uk/online-applications/
Overhead Line		
Overhead Line Deviation (Upper Mains of Asleid Turriff)	Overhead line deviation. Application submitted 2004 Approved	Aberdeenshire Council Planning - https://upa.aberdeenshire.gov.uk/online-applications/
Overhead Line (Sprottyneuk, New Deer, Turriff, Aberdeenshire, AB53 6XX)	Erection of 11kV Overhead Line (Retrosepctive). Application submitted 2006. Approved	Aberdeenshire Council Planning - https://upa.aberdeenshire.gov.uk/online-applications/
33,000 Volt Line (Land at Strath of Brydock, Banff)	Installation of 33,000 Volt Line.	Aberdeenshire Council Planning - https://upa.aberdeenshire.gov.uk/online-applications/
Reinforcement and Reinsulation of Existing Overhead Electricity Transmission Line (Land Rothienorman T Junction to Peterhead 275kV Electricity Sub Station)	Notification under Electricity Act 1989 for Section 37 Notification for Reinforcement and Reinsulation of Existing Overhead Electricity Transmission Line to Upgrade Voltage from 275kV to 400kV. Application granted 2013 Approved	Aberdeenshire Council Planning - https://upa.aberdeenshire.gov.uk/online-applications/

Project	Summary	Source
Solar		
Cairnhill Farm (Turiff, AB53 5TN)	Installation of 2.4MW Solar Farm comprising 10000 PV Panels and Associated Infrastructure. Application granted 2013. Approved	Aberdeenshire Council Planning - https://upa.aberdeenshire.gov.uk/online-applications/
Anemometer Masts		
Cairnhill Farm	Single anemometer masts Approved	Aberdeenshire Council Planning - https://upa.aberdeenshire.gov.uk/online-applications/

Habitats Regulations Appraisal (HRA) Approach within this ES

1.3.3.23 High level conservation objectives of Special Areas of Conservation (SACs) and Special Protection Area (SPAs) (together referred to as European sites) are identified by each of the European member states to ensure that the integrity of the site is maintained by avoiding deterioration of the habitats of qualifying species or significant disturbance to qualifying species. The conservation objectives for each SPA or SAC are designed to ensure that the qualifying interest of each site is maintained in the long term. Whilst these are specific to each site, there are some general principles including:

- Population of the species as a viable component to the site;
- Distribution of the species within the site;
- Distribution and extent of habitats supporting the species;
- Structure, function and supporting processes of habitats supporting the species; and
- No significant disturbance to the species.

1.3.3.24 The information provided in this ES has taken into account the relevant information provided by MORL in support of the HRA for modified Transmission Infrastructure (modified TI). This information will allow the competent authority (in relation to the offshore aspects it will be Marine Scotland and in relation to onshore aspects it will be Aberdeenshire Council) to carry out a Habitats Regulations Appraisal (HRA), including if necessary an Appropriate Assessment (AA) under the Conservation (Natural Habitats & c.) Regulations 1994 (as amended) (the 'Habitats Regulations') and the Offshore Marine Conservation (Natural Habitats & c.) Regulations 2007 (as amended) (the 'Offshore Habitats Regulations'). The AA will be undertaken with advice given from statutory stakeholders.

1.3.3.25 The ES has been structured to allow all HRA information relevant to a particular receptor to be contained within a single ES chapter. A series of surveys and studies have been undertaken to inform both EIA and HRA. The potential for a significant adverse effect to occur as a result of the modified TI (alone, in its component parts and as a whole, and in-combination with other projects and activities) has been assessed and the results of assessment are presented in the relevant chapters (e.g. effects on SACs with migratory fish designated features are considered in the Fish and Shellfish Ecology chapter, and effects on SPAs and their designated bird species are considered in the Marine Ornithology and Terrestrial Ecology chapters). Potential direct, indirect and in-combination effects are assessed against the integrity of the sites, taking into account their Conservation Objectives.

1.3.3.26 The HRA assessment is undertaken as a four stage process:

- **Stage 1 Screening** - The process to identify the likely effects of a project upon a European site, either alone or in combination with other plans and projects, and consider whether the effects are likely to be significant.
- **Stage 2 Appropriate Assessment** - The consideration of the effects on the integrity of the European site, either alone or in combination with other plans and projects, with regard to the site's structure and function and its conservation objectives. Where adverse effects cannot be discounted, an assessment of mitigation options is carried out. If these mitigation options cannot avoid adverse effects on integrity then development consent can only be given if stages 3 and 4 are followed.
- **Stage 3 Assessment of Alternatives** - Examining alternative ways of achieving the objectives of the project to establish whether there are solutions that would avoid or have a lesser effect on European sites; and
- **Stage 4 Assessment of "imperative reasons of overriding public interest" (IROPI)** - This is the assessment where no alternative solution exists and where adverse effects remain. The process to assess whether the development is necessary for IROPI and, if so, the potential compensatory measures needed to maintain the overall coherence of the integrity of the European site network.

1.3.3.27 Three main approaches have been used in this ES to assess the likely effects of the modified TI (in isolation or cumulatively with other projects/proposals) on European Sites:

- **HRA Approach 1:** Where the results of the EIA have indicated no significant effects on the species/habitats for which sites have been designated (and taking into account the relevant European site conservation objectives) it has been possible at the screening stage to discount any likely significant effects and it was not therefore necessary to go on to consider the second stage of the HRA (ie Appropriate Assessment)"
- **HRA Approach 2:** Where an assessment has been undertaken for the three MORL consented wind farms and original TI in-combination with other developments/projects (MORL, 2012) and the assessment and conclusions remain valid, no additional information has been presented; and
- **HRA Approach 3:** Where it has not been possible to rule out a likely significant effect on a European Site at the screening stage, detailed information to support an AA has been presented.

1.3.3.28 The HRA Approach 1 was followed by two following disciplines:

- Marine Ornithology (Chapter 4.4); and
- Terrestrial Ecology (Chapter 4.6 and Technical Appendix 4.6 A).

1.3.3.29 The HRA Approach 2 was followed by Marine Mammals (Chapter 4.4).

1.3.3.30 Fish and Shellfish Ecology followed HRA Approach 3 (see Chapter 4.2 and Technical Appendices 4.2 A and 4.2 B).

1.3.3.31 The information to support the HRA is detailed in each of the above chapters and relevant appendices and summarised in Chapter 6.1 Habitats Regulations Appraisal.

Table 1.3-5 ES Chapter Inter-relationship

	Hydrodynamics, Sedimentary and Coastal Processes	Hydrology, Geology and Hydrogeology	Onshore Noise	Benthic Ecology	Fish and Shellfish Ecology	Marine Mammals	Intertidal Ecology	Terrestrial Ecology	Marine Ornithology	Commercial Fisheries	Shipping and Navigation	Seascape, Landscape and Visual Receptors	Archaeology and Visual Receptors	Socio-Economics, Recreation and Tourism	Traffic and Transport	Other Human Activities
Hydrodynamics, Sedimentary and Coastal Processes				√	√		√			√			√			
Hydrology, Geology and Hydrogeology								√								
Onshore Noise								√							√	
Benthic Ecology	√				√	√	√		√	√	√					
Fish and Shellfish Ecology	√			√		√			√	√						
Marine Mammals				√	√					√	√			√		
Intertidal Ecology	√			√												
Terrestrial Ecology		√	√						√							
Marine Ornithology				√	√			√		√	√					
Commercial Fisheries	√			√	√	√			√		√			√		
Shipping and Navigation				√		√			√	√			√	√		√
Seascape, Landscape and Visual Receptors													√	√		
Archaeology and Visual Receptors	√										√	√		√		
Socio-Economics, Recreation and Tourism						√			√	√	√	√				
Traffic and Transport			√													
Other Human Activities											√					

References

ERM (2011). Moray Firth Offshore Wind Developers Group Cumulative Impacts Assessment Discussion Document. March 2011.

European Commission (1999). Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions. May 1999.

IEEM (2010). Guidelines for ecological impact assessment in Britain and Ireland: Marine and Coastal. Published by Institute of Ecology and Environmental Management.

MORL (2010). Environmental Impact Assessment Scoping Report Eastern Development Area. Offshore Wind Farm Infrastructure: Offshore Wind Turbines, Substations and Inter-array Cables.

MORL (2011). Environmental Impact Assessment Scoping Report Offshore Transmission Infrastructure: Offshore Substations, offshore export cables and onshore substation.

MORL(2012). Telford, Stevenson and MacColl Wind Farms and Associated Transmission Infrastructure Environmental Statement.

Annex 1 to Chapter 1.3

Table 1 Relevant to Marine Scotland- Summary of Modified TI Scoping Opinions Received and Approach Taken to Issues Raised

Organisation	Summary of Response	MORL Approach
Marine Scotland	**1. Introduction** * Moray Offshore Renewables Limited ("MORL") is seeking an Environmental Impact Assessment ("EIA") scoping opinion for the Modified Offshore Transmission Infrastructure ("MOfTI") from Marine Scotland ("MS"), on behalf of the Scottish Ministers, under Section 13 of the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) (the EIA Regulations").	N/A
	* The MOfTI proposal is to connect the recently consented MORL Telford, Stevenson and MacColl Wind farms, under section 36 of the Electricity Act 1989 (19th March 2014) to the National Electricity Transmission System ("NETS"), close to New Deer in Aberdeenshire. MORL no longer has the option to connect to the NETS at Peterhead Power Station, therefore, the supporting Environmental Statement ("ES") for the recently issued marine licence (6th June 2014) for the original MORL Offshore Transmission Infrastructure will require to be amended for this revised route.	N/A
	* I refer to your letter of 11th April 2014, enclosing a scoping report, requesting a scoping opinion under the EIA Regulations. The outcomes of the EIA will result in the preparation of an Environmental Statement ("ES") to support the application, submitted 4th April 2014, for a marine licence under part 4 of the Marine (Scotland) Act 2010, and Part 4 of the Marine and Coastal Access Act 2009.	N/A
	* Please note that the EIA process is vital in generating an understanding of the biological and physical processes that operate in the area and those that may be impacted by the proposed transmission infrastructure. MS would however, state that references made within the scoping document with regard to the significance of impacts, should not prejudice the outcome of the EIA process.	Noted
	* It is important that any transmission infrastructure, in connection with any renewable energy devices, should be accompanied by a robust assessment of its environmental impacts. The assessment should also consider how any negative environmental impacts could be avoided or minimised, through the use of mitigating technologies or regulatory safeguards, so that the quality and diversity of Scotland's wildlife and natural features are maintained or enhanced. The Scottish Ministers welcome the commitment given in the report that the EIA process will identify mitigation measures in order to avoid, minimise or reduce any adverse impacts. Marine Scotland Licensing Operations Team ("MS LOT") would suggest that the range of options considered should be informed by the EIA process in order that these objectives can be achieved. Consultation with the relevant nature conservation agencies is essential and it is advised that this is undertaken as appropriate.	Noted

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	**2. Aim of this Scoping Opinion** * The Scottish Ministers are obliged under the EIA regulations to respond to requests from developers for a scoping opinion on outline design proposals.	Noted
	* The purpose of this document is to provide advice and guidance to developers collated from expert consultees selected by MS. It provides clear advice enabling developers to address issues identified with the proposed project. The advice steers the developer as to the content required in the EIA and the ES in accordance with the EIA Regulations.	Noted
	3. Description of the development The MOfTI will comprise of: * Up to two OSPs located within the Eastern Development Area ("EDA"). These will house substations which will form the interface between the inter-turbine cables and the offshore transmission system; * Transmission cables (up to four triplecore cables, separated by approximately four times water depth), buried to a target depth of one metre. Where this burial depth cannot be achieved, cable armouring will be implemented (e.g. rock placement or concrete mattressing). Landfall for the transmission cables with either be at or near Inverboyndie or Sandend on the North coast of Aberdeenshire.	The OfTI also includes inter-platform cabling. See Chapter 2.2 Project Description for details on the modified OfTI project parameters. Please note that Inverboyndie has been selected as landfall location and the assessments presented in this ES take this into account. The letter which accompanies this ES provides the revised co-ordinates to be used in any Marine Licence granted in respect of the modified OfTI.
	4. Land Use Planning * The Scottish Government's planning policies are set out in the National Planning Framework, Scottish Planning Policy, Designing Places and Circulars.	The Regulatory and Policy Context is presented in Chapter 1.2, and the Planning Statement which accompanies this ES.
	* The National Planning Framework is the Scottish Government's Strategy for Scotland's long term spatial development.	The Regulatory and Policy Context is presented in Chapter 1.2, and the Planning Statement which accompanies this ES.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	Scottish Planning Policy ("SPP") is a statement of Scottish Government policy on land use planning and contains: * The Scottish Government's view of the purpose of planning, * the core principles for the operation of the system and the objectives for key parts of the system, * statutory guidance on sustainable development and planning under Section 3E of the Planning etc. (Scotland) Act 2006, * concise subject planning policies, including the implications for development planning and development management, and * The Scottish Government's expectations of the intended outcomes of the planning system.	The Regulatory and Policy Context is presented in Chapter 1.2, and the Planning Statement which accompanies this ES.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	Other land use planning documents which may be relevant to this proposal include: * Planning Advice Note ("PAN") 2/2011: Archaeology–Planning Process and Scheduled Monument Procedures * PAN 50: Controlling the Environmental Effects of Surface Mineral Workings * PAN 51: Planning, Environmental Protection and Regulation * PAN 1/2011: Planning and Noise * PAN 1/2013: Environmental Impact Assessment * PAN 60: Planning for Natural Heritage * PAN 62: Radio Telecommunications * PAN 68: Design Statements * PAN 69: Planning and Building Standards Advice on Flooding * PAN 75: Planning for Transport * PAN 79: Water and Drainage * Marine Guidance Note 371 (M) * Aberdeen City and Shire Structure Plan * Aberdeen City and Shire Strategic Development Plan * Aberdeenshire Local Development Plan * Moray Structure Plan * Moray Local Plan * Moray Economic Strategy	The Regulatory and Policy Context is presented in Chapter 1.2, and the Planning Statement which accompanies this ES.
	5. Natural Heritage * Scottish Natural Heritage ("SNH") has produced a Service Level Statement ("SLS") for renewable energy consultation. This statement provides information regarding the level of input that can be expected from SNH at various stages of the EIA process. Annex A of the SLS details a list of references, which should be fully considered as part of the EIA process. A copy of the SLS and other vital information can be found on the renewable energy section of their website – http://www.snh.gov.uk/docs/A1070243.pdf	Noted

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	**6. General Issues** <u>Economic Benefit</u> * The concept of economic benefit as a material consideration is explicitly confirmed in the consolidated SPP. This fits with the priority of The Scottish Government to grow the Scottish economy and, more particularly, with our published policy statement "Securing a Renewable Future: Scotland's Renewable Energy", all of which highlight the manufacturing potential of the renewables sector. The application should include relevant economic information connected with the project, including the potential number of jobs, and economic activity associated with the procurement, construction operation and decommissioning of the development.	Chapter 5.5 socio-economics provides an assessment on the Gross Added Value (GVA) and Employment effects from the construction, operation and decommissioning of the modified TI.
	7. Contents of the Environmental Statement * Guidance can be found in the Marine Works (Environmental Impact Assessment) Regulations 2007, Schedule 3	Noted
	<u>Format</u> * Developers should be aware that the ES should also be submitted in a user-friendly PDF format which can be placed on The Scottish Government website. A description of the methodology used in assessing all impacts should be included.	A CD with the ES and associated planning application documents for the modified TI will be submitted to Marine Scotland (and key stakeholders as advised by Marine Scotland and Aberdeenshire Council) and will be made available on the Moray Offshore Renewables Ltd. Website.
	* It is considered good practice to set out the qualifications and experience of all those involved in collating, assessing or presenting technical information within the ES.	Noted

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	Non Technical Summary This should be written in simple non-technical terms to describe the various options for the proposed development and the mitigation measures against the potential adverse impacts which could result. Within an ES it is important that all mitigating measures should be: * clearly stated; * fully described with accuracy; * assessed for their environmental effects; * assessed for their effectiveness; * their implementation should be fully described; * how commitments will be monitored; and * if necessary, how they relate to any consents or conditions	A NTS has been produced (for submission along with the ES and the relevant applications for the modified TI) in line with Marine Scotland's guidelines. The NTS forms Volume 1 of this ES.
	* Given that the layout and design of the proposals are still developing and evolving, the exact nature of the work that is needed to inform the EIA may vary depending on the design choices. The EIA must address this uncertainty so that there is a clear explanation of the potential impact of each of the different scenarios. It should be noted that any changes produced after the ES is submitted may result in the requirement of further environmental assessment and public consultation if deemed to be significant by the licensing authority.	Information on the design of the modified TI has been included in Chapter 2.2 Project Description. All disciplines have clearly stated the parameters used in each of the assessments taking into account the worst case scenario option (from those listed within the "Rochdale Envelope" parameters included in Chapter 2.2) and associated uncertainties for the effects assessed.
	Baseline Assessment and Mitigation * Refer to Annex 1 for consultee comments on specific baseline assessment and mitigation.	Noted

Organisation	Summary of Response	MORL Approach
Marine Scotland **(continued)**	**8. Contents of the Environmental Statement** <u>General Principles</u> * The ES should address the predicted impacts on both the marine historic environment and the potential for the onshore impacts of terrestrial elements of the development. It should also describe the mitigation proposed to avoid or reduce impacts to a level where they are not significant. Historic environment issues should be taken into consideration from the start of the site selection process and as part of the alternatives considered.	The predicted effects and associated mitigation measures (for the modified TI and cumulatively with other projects/proposals) have been clearly stated in each discipline chapter. The overall EIA approach followed has been described in Chapter 1.3 Environmental Impact Assessment.
	Codes of practice relating to heritage and seabed development; * JNAPC Code of Practice for seabed development http://www.jnapc.org.uk/jnapc_brochure_may_2006.pdf * COWRIE guidelines for offshore renewables and the historic environment http://www.offshorewind.co.uk/Assets/archaeo_guidance.pdf * COWRIE guidelines on cumulative assessment of offshore renewables and the historic environment http://www.offshorewind.co.uk/Assets/cowrie_ciarch%20web.pdf * Offshore Geotechnical Investigations and Historic Environment Analysis: Guidance for the Renewable Energy Sector, January 2011 http://www.offshorewindfarms.co.uk/Assets/Offshore%20Geotech%20Guidance%20web.pdf * Model Clauses for Archaeological Written Schemes of Investigation: Offshore Renewables Projects http://www.wessexarch.co.uk/system/files/WSI%20Renewables_low%20res.pdf * British Marine Aggregates Producers Association protocols for archaeological discoveries http://www.wessexarch.co.uk/files/projects/BMAPA-Protocol/BMAPA-EH-Guidance-Note-April-2003.pdf * Protocol for Archaeological Discoveries: Offshore Renewables Projects http://www.wessexarch.co.uk/files/The%20Crown%20Estate_Offshore%20Renewables-PAD.pdf	Noted. Each of the EIA discipline chapters sets out the relevant legislation and policies which have been taken into account within each of the assessments.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	**National policy and advice for the historic environment is set out in:** * SPP http://www.scotland.gov.uk/Topics/Built-Environment/planning/National-Planning-Policy/newSPP * The Scottish Historic Environment Policy ("SHEP") http://www.historic-scotland.gov.uk/shep-dec2011.pdf * Planning Advice Note 02/2011 Planning and Archaeology (PAN 02/2011) http://www.scotland.gov.uk/Resource/Doc/355385/0120020.pdf	Noted. Each of the EIA discipline chapters sets out the relevant legislation and policies which have been taken into account within each of the assessments.
	* The Scottish Minister's policies for the historic environment are set out in paragraphs 110 – 124 of SPP. Amongst other things, SPP stresses that scheduled monuments should be preserved in situ and within an appropriate setting and states that developments must be managed carefully to preserve listed buildings and their settings to retain and enhance any special architectural or historic features of interest. Further information on setting can be found in the following document: Managing Change in the Historic Environment http://www.historic-scotland.gov.uk/setting-2.pdf. Impacts on undesignated aspects of the historic environment should also be taken into account as part of any EIA.	The relevant policies on cultural heritage have been taken into account in Chapter 5.4 Archaeology and Cultural Heritage.
	* Historic Scotland recommend that you engage a suitably qualified archaeological/historic environment consultants to advise on, and undertake, the detailed assessment of impacts on the historic environment and advise on appropriate mitigation strategies.	Wessex Archaeology has advised MORL on archaeology and cultural heritage matters. Wessex Archaeology has a wide experience in archaeology and cultural heritage assessments for similar developments and have produced a number of guidelines for such assessments. Data collection and assessment approaches have been agreed with Historic Scotland.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	Baseline Information * Information on the location of all archaeological/historic sites held in the National Monuments Record of Scotland, including the locations and, where appropriate, the extent of scheduled monuments, listed buildings and gardens and designed landscapes can be obtained from www.PASTMAP.org.uk	Noted and taken into account within the description of the archaeology and cultural heritage environment within section 5.4.1 of Chapter 5.4 Archaeology and Cultural Heritage and Technical Appendix 5.4 A Transmission Work EIA: Baseline Review of Offshore and Onshore Archaeology.
	* Data on scheduled monuments, listed buildings, Inventory gardens and designed landscapes, historic battlefields and properties in the care of Scottish Ministers can also be downloaded from Historic Scotland's Data Services website http://data.historic-scotland.gov.uk/pls/htmldb/f?p=2000:10:3234826639166657.	Noted and taken into account within the description of the archaeology and cultural heritage environment within section 5.4.1 of Chapter 5.4 Archaeology and Cultural Heritage and Technical Appendix 5.4 A Transmission Work EIA: Baseline Review of Offshore and Onshore Archaeology.

Organisation	Summary of Response	MORL Approach
Marine Scotland **(continued)**	**9. Navigation** The ES should include the following details on the possible impact on navigation for both commercial and recreational craft. * Collision Risk * Navigational Safety * Visual intrusion and noise * Risk Management and Emergency response * Marking and lighting of Tidal Site and information to mariners * Effect on small craft navigational and communication equipment * Weather and risk to recreational craft which lose power and are drifting in adverse conditions * Evaluation of likely squeeze of small craft into routes of larger commercial vessels.	Noted and taken into account within Chapter 5.1 Commercial Fisheries and Chapter 5.2 Shipping and Navigation.
	10. Ecology, Biodiversity and Nature Conservation * Refer to Annex 1 for comments from advisors on ecology, biodiversity and nature conservation.	Noted

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	Species The ES should show that the applicants have taken account of the relevant wildlife legislation and guidance, namely * Marine (Scotland) Act 2010 * Marine and Coastal Access Act 2009 (as amended) * Council Directives 92/43/EES on The Conservation of Natural Habitats and of Wild Flora and Fauna * Conservation of Wild Birds (commonly known as the Habitats and Birds Directives) * Wildlife & Countryside Act 1981 * Nature Conservation (Scotland) Act 2004 * Wildlife and Natural Environment (Scotland) Act 2011 * Protection of Badgers Act 1992 * Conservation (Natural Habitats, &c.) Regulations 1994 * Conservation of Habitats and Species Regulations 2010 * Offshore Marine Conservation (Natural Habitats, &c) Regulations 2007 * Scottish Government Interim Guidance on European Protected Species * Development Sites and the Planning System and the Scottish Biodiversity Strategy and associated Implementation Plans	The relevant wildlife legislation has been taken into account within the assessment of effects for the Biological Environment Disciplines (Chapter 4). Information on the Regulatory and Policy Context is also included within Chapter 1.2
	* In terms of The Scottish Government Interim Guidance, applicants must give serious consideration to/recognition of meeting the three fundamental tests set out in this Guidance. **It may be worthwhile for applicants to give consideration to this immediately after the completion of the scoping exercise.**	Noted and taken into account.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	* It needs to be categorically established which species are present on and near the site, and where, before the application is considered for consent. The presence of protected species such as Schedule 1 Birds or European Protected Species must be included and considered as part of the application process, not as an issue which can be considered at a later stage. Any consent given without due consideration to these species may breach European Directives with the possibility of consequential delays or the project being halted by the European Commission. Likewise the presence of species on Schedules 5 (animals) and 8 (plants) of the Wildlife & Countryside Act 1981 should be considered where there is a potential need for a licence under Section 16 of that Act.	Surveys and desk-studies have been used to inform the baseline characterisation of the environment as agreed with key stakeholders (information on the presence and distribution of protected species and Scheduled 5 and 8 of the Wildlife and Countryside Act 1981 have been considered within the relevant discipline chapters, i.e. Chapter 4.3 Marine Mammals, Chapter 4.4 Marine Ornithology and Chapter 4.6 Terrestrial Ecology).
	11. Water Environment * The Scottish Environment Protection Agency ("SEPA") encourages pre-application engagement to help the development process and to minimise risk of modifications later in the application process and avoidable delays or objections.	SEPA has been consulted pre-application and their advice taken into account within the relevant chapters (Chapter 3.1 Hydrodynamics, Sedimentary and Coastal Processes, Chapter 3.2 Hydrology, Geology and Contaminated Land and Chapter 4.6 Terrestrial Ecology).
	* Information on energy proposals and issues that should be addressed in the ES can be found on the energy section of SEPA's website at www.sepa.org.uk/planning/energy.aspx. The webpage also contains a link to the marine environment section of SEPA's website which provides more specific guidance.	Noted and taken into account in the assessment of cumulative effects (see Chapter 1.3 Environmental Impact Assessment for a summary of the cumulative impact assessment approach followed).

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	* If the proposal includes both onshore and offshore components the applicant should be aware that the development may be subject to a range of different consenting regimes. SEPA is the regulatory body responsible for the implementation of The Controlled Activities Regulations (CAR). Further information specifically in relation to the water environment and SEPA's water related regulations can be found at; www.sepa.org.uk/water/water_publications.aspx and www.sepa.org.uk/water/water_regulation.aspx. * Developers are strongly advised at an early stage to consult with SEPA to identify 1) if a CAR licence is necessary and 2) clarify the extent of the information required by SEPA to assess fully any licence application.	Noted. SEPA consulted for advice on legislative EIA matters associated with the water environment.
	Construction contractors may be unaware of the potential for impacts such as those listed below but, when proper consultation with the local fishery board is encouraged at an early stage, many of these issues can be averted or overcome. * increases in silt and sediment loads resulting from construction works. * point source pollution incidents during construction. * obstruction to upstream and downstream migration both during and after construction. * disturbance of spawning beds during construction - timing of works is critical. * drainage issues. * sea bed and land contamination	The Spey and Deveron District Salmon Fishery Boards were consulted as part of the scoping process for this application. Their comments were taken into account within the relevant chapter disciplines. Details of the consultation are set out in Table 4.6-1 of Chapter 4.6.
	* The ES should identify location of, and protective/mitigation measures in relation to, all private water supplies within the catchments impacted by the scheme, including modifications to site design and layout.	The assessment of effects on private water supplies has been taken into account in Chapter 3.2 Hydrology, Geology and Contaminated Land. Mitigation measures have also been proposed (see section 3.2.2.43 of Chapter 3.2 for information on proposed mitigation measures).

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	* Developers should also be aware of available Construction Industry Research and Information ("CIRIA") guidance on the control of water pollution from construction sites and environmental good practice (www.ciria.org). Design guidance is also available on river crossings and migratory fish (The Scottish Executive consultation paper, 2000) at www.scotland.gov.uk/consultations/transport/rcmf-00.asp.	Noted and taken into account within Chapter 3.1 Hydrodynamics, Sedimentary and Coastal processes, Hydrology, Geology and Contaminated Land and Chapter 4.2 Fish and Shellfish Ecology.
	12. Other Material Issues <u>Traffic Management</u> * The ES should provide information relating to the preferred route options for delivering equipment etc. via the trunk road network. The EIA should also address access issues, particularly those impacting upon the trunk road network; in particular, potential stress points at junctions, approach roads, borrow pits, bridges, site compound and batching areas etc.	In relation to the OfTI impacts on the road network are scoped out as the delivery of the OfTI elements will be carried out by sea. In relation to the onshore elements of the TI baseline information has been collected through site and desktop studies. Information on traffic and transport is presented within Chapter 5.6 and in detail on Technical Appendices 5.6 A -D.
	Where potential environmental impacts have been fully investigated but found to be of little or no significance, it is sufficient to validate that part of the assessment by stating in the report: * the work has been undertaken, e.g. transport assessment; * what this has shown i.e. what impact if any has been identified, and * why it is not significant?	Noted and taken into account within Chapter 5.6 Traffic and Transport.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	**13. General ES Issues** * In the application for consent the applicant should confirm whether any proposals made within the ES, e.g. for construction methods, mitigation, or decommissioning, form part of the application for consent.	Information regarding construction methods was included as part of the Marine Licence application and also within this ES within Chapter 2.2. The mitigations presented within this ES also from part of the Marine Licence application.
	<u>Consultation</u> * Developers should be aware that the ES should also be submitted in a user-friendly PDF format which can be placed on The Scottish Government website. Developers are asked to issue ES directly to consultees. Consultee address lists can be obtained from MS.	A CD with the ES and associated planning application documents for the modified TI will be submitted to Marine Scotland (and key stakeholders as advised by Marine Scotland and Aberdeenshire Council) and will be made available within the Moray Offshore Renewables Ltd. Website.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	* Where the developer has provided the Scottish Ministers with an ES, the developer must publish their proposals in accordance with Part 3 of the Marine Works (Environmental Impact Assessment) Regulations 2007 and as amended by the Marine Works (Environmental Impact Assessment) (Amendment) Regulations 2011. Licensing information and guidance, including the specific details of the adverts to be placed in the press, can be obtained from MS.	MORL has elected to include the export cables (onshore and offshore) and OSPs in the EIA as they form an integral part of the Modified TI and therefore are a part of EIA development. It is MORL's view that the offshore transmission infrastructure (OfTI) may also be subject to the requirement for an EIA under the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) and so MORL have also followed these Regulations in the preparation of this EIA. The form of advertising has been discussed and agreed with Marine Scotland.
	<u>New requirement for Public Pre-Application Consultation</u> * From 6th April 2014, applications received for certain activities will be subject to a public pre-application consultation requirement. Activities affected will be large projects with the potential for significant impacts on the environment, local communities and other legitimate uses of the sea. The new requirement will allow those local communities, environmental groups and other interested parties to comment on a proposed development in its early stages – before an application for a marine licence is submitted.	MORL's application was submitted on 4 April 2014 and is not subject to this requirement.
	* Guidance on public pre-application consultation can be found at the following: http://www.scotland.gov.uk/Resource/0043/00439649.pdf	N/A
	<u>Gaelic Language</u> * Where applications are located in areas where Gaelic is spoken, developers are encouraged to adopt best practice by publicising the project details in both English and Gaelic.	Gaelic is not widely spoken within the area affected by the proposed development and therefore information has only been presented in English.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	Ordinance Survey ("OS") Mapping Records * Developers are requested at application stage to submit a detailed OS plan showing the site boundary and all turbines, access tracks and onshore supporting infrastructure in a format compatible with The Scottish Governments Spatial Data Management Environment ("SDME"), along with appropriate metadata. The SDME is based around Oracle RDBMS and ESRI ArcSDE and all incoming data should be supplied in ESRI shape file format. The SDME also contains a metadata recording system based on the ISO template within ESRI ArcCatalog (agreed standard used by The Scottish Government); all metadata should be provided in this format.	A detailed OS plan with the Application Area (modified TI boundary) has been included as part of the Application documentation. This ES contains further plans (see Figures 1.1-1 to 1.1-6) and reflects the refined offshore export cable route corridor in line with MS-LOT's advice below that the EIA should reduce the degree of design flexibility required.
	Difficulties in Compiling Additional Information * Developers are encouraged to outline their experiences or practical difficulties encountered when collating / recording further information supporting the application. An explanation of any necessary information not included in the ES should be provided, complete with an indication of when an addendum will be submitted. It should be noted that submission of an addendum will increase the time taken to determine an application. Any addendum will be subject to the same advertising and consultation as the original ES.	Information on information collated to support the assessments has been presented within each discipline chapter together with an indication of practical difficulties encountered when collecting information. All assessments have been undertaken using a precautionary principle particularly when data gaps have been encountered. Robust assessments have been presented.
	Application and ES * A developer checklist is enclosed with this opinion to assist developers in consideration and collation of the relevant ES information to support their application. In advance of publicising the application, developers should be aware this checklist will be used by the licensing authority in consideration of formal applications.	The checklist provided has been used to support the compilation of all information required to support the current application.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	Consent Timescale and Application Quality * Developers are advised to consider all aspects of this scoping opinion when preparing a formal application to reduce the need to submit further information in support of your application. The developer, in accordance with section 13 (3) of the EIA Regulations, must ensure that the ES contains all of the information specified in the scoping opinion, unless agreed with MS. The consultee comments presented in this opinion are designed to offer an opportunity to consider all material issues relating to the development proposals.	All scoping responses received have been taken into account within the relevant disciplines. This table presents a summary of how the stakeholder responses have been taken into account within the assessments presented in this ES ('MORL Approach').
	* Upon receipt, the licensing authority will use the enclosed checklist and scoping opinion in assessing the quality and suitability of the application in the gate check process. Developers are encouraged to seek advice on the contents of ES prior to applications being submitted, although this process does not involve a full analysis of the proposals. In the event of an application being void of essential information, the licensing authority reserves the right not to accept the application. Developers are advised not to publicise applications in the local or national press, until their application has been accepted by the licensing authority.	Consultation with licensing authorities (MS-LOT for the offshore elements of this application and Aberdeenshire Council for the onshore elements) has been undertaken to inform the level of information required for the application.
	* Under the Marine Licensing Appeals (Scotland) Regulations 2011, a person who has applied for a marine licence may by summary application, appeal to the sheriff of any sheriffdom against a decision taken by the licensing authority under section 29 (1) of the Marine (Scotland) Act 2010, or section 71 (1) of the Marine and Coastal Access Act 2009.	Noted
	MS-LOT has reviewed the scoping report and has the following advice to offer along with comments which MORL should take note of:- * MS LOT would comment on the use of a Design Envelope for flexibility both in the EIA process and in the final ES. It is the developers responsibility to give due consideration to what changes might be necessary and to provide details as to what might be required. The developer must also be able to justify whether or not a change is material to the EIA process. Where flexibility is required the developer should define either the alternatives or ranges within which parameters might fall. In the EIA process the various effects should be quantified and consideration given to effects on potential receptors. The ES should clearly state the reasoning for requiring such flexibility, the criteria for selecting the "worst case scenario" and the impacts which would arise from such a scenario.	Information on the Project Description is provided within Chapter 2.2 respectively. The assessments of effects have used the parameters within the Rochdale Envelope which would result in the greatest potential effects. The rationale for the selection of 'worst case scenario' has been described within each discipline chapter.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	* Failure to give such consideration or a major change to a parameter outside those considered may invalidate the ES submitted, requiring the marine licence consultation process to be repeated. Considering the tight timelines associated with the requirement for issue of a marine licence on this project, no cause for repetition can be afforded. It is expected that the EIA will reduce the degree of design flexibility required and that the ES provided for consent will be further refined as a condition of consent to be finalised in a construction statement, at least 6 months before construction commences. Information regarding the impacts from construction of the infrastructure and the types of vessels to be used will be required in the construction statement.	Noted. The EIA is presented on the basis of a refined offshore export cable route corridor with a reduced width where is runs from the southern boundary of the MacColl wind farm to a single landfall point at Inverboyndie (see Figure 1.1-4).
	* The ES will have to go through the gate check process as it has to be considered in proportion to other projects of a similar type. MS LOT offers a Gate Check prior to formal submission of applications and advises MORL to take full advantage of this service. The gate check is not designed as an in depth evaluation of the content of an ES. However it will allow MS LOT the confidence that minimum legislative requirements have been met prior to formal submission of the ES. To assist the gate check process, a thorough gap analysis of the issues listed here by MS LOT and the consultee comments that follow, should be drawn up by MORL for submission with the ES.	Noted. This table provides a thorough gap analysis.
	* The ES must show a map of the cable route showing the exact positions where the cable is to be buried, unburied and what physical protection is proposed before MS LOT will issue any marine licence. MS LOT reiterates the need for early discussions and the need for the aforementioned information to be provided in support of the marine licence application. If MORL do not provide the detailed seabed information for the route in time for the consultation on the marine licence application, then objections will likely be raised and that the time taken to resolve any differences will delay any issue of any marine licence.	Figure 1.1-4 of the ES shows the modified OfTI cable route for which a Marine Licence is being sought. Information on the geophysical and geotechnical conditions along the offshore export cable route is not available at the time of this application. Nevertheless surveys are currently being undertaken and the results will be used to inform the length of the cable which will likely need to be protected. This information will be provided to Marine Scotland post-application.
	* This project may require capital dredging, and if so an amendment to the application submitted on 4th April 2014 will be required. The dredged material will require to be chemically analysed to ensure that it is suitable for sea disposal. Guidance on pre-dredge sampling, along with the Action Levels MS use to determine suitability for sea disposal can be obtained upon request from MS LOT.	No dredging will be required as part of this application.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	* Please be aware that, dredging of harbours and disposal of spoils, and the removal of aggregates, are two separate activities entirely and should not be confused as on page 125 of the Scoping Report. Dredging in the quoted context and sea disposal are activities associated with the periodic removal of material from harbours. Aggregate dredging is a completely separate industry. Should dredging be required for the OSPs, MORL must identify suitable sites for dredge spoil (surplus and unsuitable material). MORL must provide a list of all the existing sea disposal sites in the Moray Firth, on a single admiralty chart showing the quantities deposited at each site for each year for the last ten years.	No dredging will be required as part of this application.
	* Regardless of the method of installation used for the transmission cables from the OSPs to the landfall point, modelling of sediment release, as a result of the burial process, will be required.	Information on suspended sediments modelling has been presented in Chapter 3.1 Hydrodynamics, Sedimentary and Coastal Processes and Technical Appendix 3.1 A Hydrodynamics, Sedimentary and Coastal Processes.
	* The ES must include what measures are proposed to be in place to do a pre-sweep for Unexploded Ordnance ("UXO's"). If discovered, the time it takes to remove such an object may have detrimental effects on the project timelines. This is of particular importance as the cable route passes through a firing practice area. MS LOT recommend that MORL engage with the Ministry of Defence on this matter.	Chapter 5.7 Other Human Activities presents information on the risk of encountering UXO and the measures which will be followed to minimise the risk.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	* MORL must include in the ES a Reporting Protocol which sets out what the developer must do on discovering any marine archaeology during the construction, operation, maintenance and monitoring of the proposed transmission infrastructure.	MORL has committed to prepare a Written Scheme of Investigation (WSI) and follow a Protocol for Archaeology Discoveries (PAD) as part of measures to mitigate risk of effects on archaeology and cultural heritage features (see Chapter 5.4 Archaeology and Cultural Heritage). An example of a WSI and PAD have been included within the MORL ES, 2012 (Technical Appendix 1.3 A Environmental Management Plan) which has been referred to in this ES in Chapter 5.4.
	* The cable landfall point methodologies must be detailed in the ES, i.e. cable trenching or horizontal directional drilling ("HDD"), to name a few. MS LOT recommend the developer hold discussions with the local council (Aberdeenshire), the SNCBs and MSS to establish best options and any major consenting issues that may arise. These can be hosted by MS-LOT if required.	The cable landfall methodologies under consideration have been discussed with Aberdeenshire Council and are consistent with those methodologies proposed and consented for the original offshore transmission infrastructure. These are described in detail within Chapter 2.2 Project Description.
	* It is critical that MORL set up a meeting post scoping to engage with statutory consultees including stakeholders such as the SFF to run through the various scenarios which would include, but not be restricted to: cable envelope surveys, trenching and non-trenching options, post lay mitigation measures to reduce snagging hazards, dredging activity, scour protection and impact protection, long-term cable envelope monitoring programme, appointing Ecological Clerk of Works ("ECoW's) and Fisheries Liaison Officers ("FLO's").	MORL engagement strategy with stakeholders is presented within Chapter 1.4. Specific discussions on fisheries have also been included within Chapter 5.1 Commercial Fisheries.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	* MORL must ensure the safety of navigation is not compromised by the works. The navigable depth must not be altered by more than 5% of stated chart datum unless otherwise agreed, in writing, with MS, the Maritime Coastguard Agency ("MCA") and NLB. A Navigational Risk Assessment ("NRA") will be required for any location likely to infringe on the 5% threshold.	Navigational safety is assessed in Chapter 5.2 (Shipping and Navigation). No significant effects on navigable depth are predicted, and this will be further assessed by a final Navigational Risk Assessment and cable burial index study on the finalised route within the corridor.
	* MS LOT requires clarification on the additional Data Sources listed on page 115. Do MORL mean the Marine Scotland District Fisheries Inspectors to be Marine Scotland Compliance? MS LOT suggest additional data sources as Scottish Renewables and the Scottish Salmon Netting Association. Care should be given to include any local harbour authorities.	Marine Scotland Compliance should have been stated, in place of Marine Scotland District Fisheries Inspectors. Data has also been collected in relation to salmon netting locations in the area.
	* The applicant should be made aware of the definition of disturbance and the legal provisions on European Protected Species ("EPS") and that an EPS Licence may be required. Therefore MS LOT recommends that an EPS risk assessment is submitted to MS LOT well in advance of any planned surveys or construction activities. Basking sharks are now subject to similar considerations through the Wildlife and Natural Environment (Scotland) Act 2011, with licensing requirements now applicable. MS is responsible for issuing these if required.	MORL acknowledges that an EPS licence may be required during the construction phase of the modified OfTI works and has referred to the information presented within Technical Appendix 7.3 H (EPS Assessment: Supplementary Information) of the MORL ES, 2012 to support the assessment presented within Chapter 4.3 Marine Mammals.

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	* MS LOT require the developer to be aware of proposed new Marine Protected Areas ("MPAs") located nearby the proposed development area and take account of possible impacts on these within the EIA process and ES itself. MORL should be aware of the nearest search locations.	MORL is aware of the proposed MPAs and also the MPA Search Area within the Moray Firth. The assessments have been carried out including the features which may be MPA designating features (e.g. minke whale was assessed as a key species within the marine mammal assessment Chapter 4.3).
	* Piling noise should be modelled for the OSPs and assessed in combination with all other developments in the Moray Firth, and perhaps further afield. Discussions with MS LOT, the SNCBs and MORL will take place as soon as possible to determine the relevant projects.	The assessment presented within Chapter 4.3 Marine Mammals has taken into account the results of piling noise modelling for the OSPs and for the MORL and BOWL consented wind farms. The assessments have been carried out taking into account potential cumulative effects with projects within the Moray Firth and further afield as detailed within section 4.3.3 cumulative impact assessment.
	* The proposed revised landfall points for the transmission cables at or near Inverboyndie or Sandend, increase the possible interaction of the works with diadromous fish, as the works are now closer to the River Spey SAC and the River Deveron. Timing of construction of the works, as it comes into the intertidal area, will be important so as to try and avoid unnecessary impacts on diadromous fish.	Potential effects (including a Habitats Regulations Appraisal on the River Spey SAC) on diadromous fish are assessed in Chapter 4.2 (Fish and Shellfish Ecology). It should be noted that following refinement of the offshore export cable route corridor that the export cable landfall is proposed at Inverboyndie (see figure 1.1-4).

Organisation	Summary of Response	MORL Approach
Marine Scotland (continued)	* The ES must include some calculations to demonstrate the degree of alteration of natural electromagnetic fields ("EMF") that would be caused by the cables. MS-LOT require MORL to model EMF under operational and shutdown conditions and relate this to fauna. This may have an effect on marine species directly (impact on species itself) or indirectly (impact on prey). Modelling the EMF will involve knowing the current in the cables, the degree of shielding inherent in the cable, the depth of burial and/or armouring, and the consequential alteration to natural fields at the sediment surface and in the water column. The predicted changes to fields should then be compared with what is known about sensitivity of mammals and fish to EMF. A cumulative consideration of other cables in the Moray Firth should be completed.	Potential effects of EMF on benthic, marine mammal, fish and shellfish ecology have been assessed in the ES (chapters 4.1 to 4.3), including calculations of worst-case EMF levels. No significant effects are predicted. Each chapter also includes a cumulative impact assessment.
	* On review of the Cumulative and In-combination Impacts assessment (page 34), consideration of the projects under the National Renewables Infrastructure Plan will be required. Please add the projects of Nigg, Invergordon and Ardersier to the list.	The cumulative impact assessment approach followed within the ES is summarised within Chapter 1.3 Environmental Impact Assessment, including a list of the projects considered for cumulative assessment (which include Nigg, Invergordon and Ardersier).
	* MS LOT recommend that the applicant checks for Annex 1 habitats and Priority Marine Features ("PMF") during survey work as well as any Biodiversity Action Plan ("BAP") habitats and species.	Annex 1 Habitats, PMF and BAP habitats and species have been considered within the Benthic Ecology assessment (see section 4.1.1 of Chapter 4.1 Benthic Ecology and Technical Appendix 4.1 A Subtidal Ecology Characterisation for details on benthic survey results).
	* MS LOT recommends that the assessment of any impacts on Fisheries in the ES be as robust as it can be.	Fisheries are assessed in chapters 4.2 (Fish and Shellfish Ecology) and 5.1 (Commercial Fisheries). These studies included analysis of up-to-date data and consultation with relevant stakeholders.

Organisation	Summary of Response	MORL Approach
Marine Scotland Science (MSS)	**1. Fish Ecology and Commercial fisheries** **(i) Fish and Shellfish Ecology** *Sandeels* * Sandeel populations tend to be patchy in nature due to the reliance on a specific range of sediment. There are patches of sandeels present in and around the site and there is a strong possibility that there may be patches of sandeels along the cable route. Providing a patch is not completely within the cable route, there should be the opportunity for re-colonisation post disturbance. There may be some localised disturbance and suspended sedimentation but this should be limited due to the sediments involved.	Potential effects on sandeels are assessed in Chapter 4.2 (Fish and Shellfish Ecology). Any effects are temporary during construction and are not assessed to be significant.
	Herring * It would be preferable to avoid works during the herring spawning period if possible (Aug-Sep). This becomes more of an issue towards the land fall end of the route where sediments become more suitable for herring spawning and this area is known to be important North East spawning ground. Not only are herring sensitive to disturbance from noise but their eggs and larvae may also be sensitive to noise.	The effects of suspended sediment concentrations on herring are assessed in Chapter 4.2 (Fish and Shellfish Ecology). Minor, not significant effects are predicted on spawning herring, their larvae and eggs.
	Cod * The Moray Firth has a genetically distinct population of Cod. Little is known of the precise location of spawning grounds within the Firth but it is known that cod vocalize in spawning aggregations (key period is between Feb-Mar). The frequency range of these vocalisations is between 30-250 Hz and can travel 200-500m from the source. Additional cod spawning surveys recently undertaken by the developers in the Moray Firth should be used to inform this process.	MORL undertook cod spawning surveys in spring, 2013, and these have informed the assessment of potential effects on cod (Chapter 4.2, Fish and Shellfish Ecology).
	(ii) Commercial Fisheries * There are substantial locally important shellfish fisheries for brown crab and lobster. These predominantly consist of small vessels (<15m in length) that do not have VMS aboard. However, ScotMap project should be used as primary source of information on the potential overlap of the spatial distribution of smaller vessels with the proposed site. In general, these vessels work mainly between 0-6 nm from the shore. There is a very active small boat fleet working in the area mainly potting, but also an active summer Handline fishery for mackerel. Please visit for more information and access to spatial layers: http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/ScotMap	ScotMap data was included in Technical Appendix 5.1 A (Commercial Fisheries) to aid in establishing a coherent baseline upon which a robust assessment of potential effects can be made. Creelers and mackerel hand-line fisheries have both been assessed within Chapter 5.1 (Commercial Fisheries).

Organisation	Summary of Response	MORL Approach
Marine Scotland Science (MSS) **(continued)**	* VMS vessel fishery data indicates the key target species as Nephrops, (mainly in the eastern part of the Firth), scallops (both closer to the shore and within the development) and some demersal whitefish species (further offshore). There is an increasing importance of squid in the Moray Firth as there are fewer restrictions on vessels targeting this species. As a result more vessels have been moving to target squid seasonally to alleviate pressure on other stocks and save days at sea for other TAC species.	The commercial fisheries for *Nephrops,* scallops, demersal whitefish and squid have all be assessed separately for relevant effects.
	* It would be worth ensuring good contact is made and consultation maintained with fisheries representatives in the area. This is especially important for the non-VMS vessels which are not represented by the VMS data plots. Points of contact other than the SFF, may include local fishery offices and the inshore fisheries group coordinator for the Moray Firth.	Contact has been made and is ongoing with all relevant fisheries stakeholders including fisheries offices and directly with fishermen. See Technical Report 5.2 A: Commercial Fisheries for a list of consultees. In addition meetings have taken place with District Salmon Fisheries Boards within the Moray Firth including in particular the Spey and Deveron District Salmon Fisheries Boards (see Chapters 4.2 Fish and Shellfish Ecology and Terrestrial Ecology).
	(iii) Liaising with the Fishing Industry It is acknowledged that the developers have already seek to liaise with the fishing industry through Moray Firth Offshore Wind Developers Group ("MFOWDG"). Additionally, please consider appointing a Company Fishing Liaison Officer to act as the primary point of contact for the fishing industry. In addition, it is advised to establish Fishing Industry representative(s) to act as a single onshore trusted contact point within the fishing community. The developer may consider a dedicated International Maritime Mobile VHF working channel for the exchange of relevant information between contractors afloat and other vessels in the area during construction and maintenance.	FIRs have been appointed through the SFF. Brown and May currently act as the Fisheries Liaison Officer for MORL.

Organisation	Summary of Response	MORL Approach
Marine Scotland Science (MSS) **(continued)**	* All the above recommendation will facilitate efficient dissemination of information from the developer to the fishing community and vice versa, in a timely and all-inclusive manner. The developer may consider developing a Fisheries Liaison Plan which will include mitigation and coexistence plan. Please see more at the guidance produced by COWRIE on options for the mitigation of impacts of offshore wind farms on fishing activities. MSS would expect to see a specific chapter in the stakeholder section where potential concerns of the fishing community raised during consultation have been addressed.	Mitigation has been proposed in this ES and the original ES. MORL have also committed to partaking in the Moray Offshore Commercial Fisheries Working Group which will discuss mitigation methods relevant to commercial fisheries interests. Further MORL has submitted to MS-LOT a draft Commercial Fisheries Mitigation Strategy which was agreed with the SFF as part of the post-application consultation for the wind farms and original OfTI applications.
	(iv) Section specific comments *Section 2* * Section 2.2.1, p. 20, §7: It is stated that 2 landfall location (Inverboyndie and Sandend) are considered the preferred options with minimal impact on the environment and the shortest overall cable route. This should change to "… relatively lower environmental impact when compared to the rest of the options".	Noted. It is confirmed that Inverboyndie has been selected as the export cable landfall location.
	* Section 2.3.2, p. 28, §1: Proposed Transmission Cable Infrastructure comprise up to four submarine HVAC export cables in up to four separate trenches separated by four times the water depth apart. The overall footprint of the export cable might cause significant interactions with the fisheries in the area (see overall comments comments) especially during construction. Early engagement with the fishing industry is advised. Additional details (duration, installation methodology, local requirements of additional cable protection etc,) on the export cables installation plan should be made available and the plan should be consulted within MFOWDG – Commercial Fisheries Group to avoid cumulative impacts on fisheries from surrounding developments.	Noted. Engagement with the Commercial Fisheries has taken place and will be ongoing.

Organisation	Summary of Response	MORL Approach
Marine Scotland Science (MSS) **(continued)**	* Section 2.3.3, p. 28, §1: The proposed target burial depth is 1 metre. In cases where this burial depth cannot be achieved, additional protection has been suggested. Potential options include rock placement or concrete mattressing. SFF has advised rock placement to be a favourable option in the past. However, this is less effective and increased gear interaction potential with the high intensity Scallop dredging in the Moray Firth.	Cable protection methods, where target burial depth cannot be achieved, have been included as mitigation methods within Chapter 5.1: Commercial Fisheries. The type of protection will be discussed with the authorities and stakeholders once the extent and location of protection is known.
	Section 5 * Section 5.2.3, p.81, Table 5-1: Green colour has been used for unknown intensity of spawning/ nursery grounds. You might want to consider replacing this colour as one might assume it suggests a positive interaction instead of spatial overlap.	Noted
	* Section 5.2.3, p.81, §2: Authors referred to sandeel surveys within the western development area and eastern development area. A map of the locations and sandeel counts of the sampling stations is advised.	Noted. Chapter 4.2 Fish and Shellfish Ecology assesses the effects on sandeels. Figure 4.3-13 and Technical Appendix 4.3 C Sandeel Survey in the MORL ES (2012) provide further details.
	* Section 5.3.1, p.115, §1: Additional sources to provide information on the existing human environment may include local Inshore Fisheries Group.	The local Inshore Fisheries Group was consulted for the original ES and consent application. For the modified OfTI, consultations were held with the fishermen themselves, and MORL has discussed the proposals with the North & Moray Firth Inshore Fisheries Group.

Organisation	Summary of Response	MORL Approach
Marine Scotland Science (MSS) **(continued)**	* Section 5.3.2, p.115, §1: Fisheries baseline assessment was based on relatively old data (2000-2009) on a course scale (ICES rectangle). MSS commercial fishing landings distribution maps relate to data from 2007-2011. MS may provide more up to date datasets in a greater scale for a more informed baseline assessment.	Maps provided by MSS have been used to prepare the commercial fisheries baseline and are presented in Technical Appendix 5.1 A: Commercial Fisheries.
	* Section 5.3.2, p.115, §2: Although developers have identified ScotMap project as a potential data source in Section 5.3.1., baseline assessment of vessels under 15 m is very limited. Overlapping the development (including export cabling) with ScotMap layers is advised.	ScotMap data was included in Technical Appendix 5.1 A (Commercial Fisheries) to aid in establishing a coherent baseline upon which a robust assessment of potential effects can be made.
	* Section 5.3.2, p.115, §3: Sentence "As a result of vessels under 15 m not currently being required to be monitored, the activity of this fleet may not be represented" should be replaced with "… is not represented".	Amended wording has been used in the Technical Appendix 5.1 A: Commercial Fisheries, section 3.4.1.
	* Section 5.3.2, p.115, §4: Please provide a table with landings breakdowns for both ICES rectangles.	Figures 5.7-5.10 and Tables 3 and 4 within Technical Appendix 5.1 A: Commercial Fisheries show the landing breakdowns for the two ICES rectangles.
	* Section 5.3.2, p.114, Effects Description Table: Displacement of fishing activities during construction should also be scoped in and discussed in the site-specific impact assessment methodology as part of the general effect of "Interference with fisheries activities".	Displacement of fishing activities has been considered as a separate effect within both the EIA and CIA for commercial fisheries (Chapter 5.1).

Organisation	Summary of Response	MORL Approach
Marine Scotland Science (MSS) **(continued)**	* Section 5.3.2, p.118, §5: Proposed potential mitigation measures include cable burial where possible, additional cable protection measures where burial is not possible, consultation with the industry and ensuring integrity of the offshore export cable and fishing activities post-installation. You may consider co-existence options with the fishing sector e.g. fishing vessels could provide guard vessel services, or service boats for periodic overhauls (visual inspection and surveillance purposes).	Whilst not assessed within this ES, MORL is in ongoing discussions with the fishing industry, primarily through the SFF, regarding opportunities for the industry in the construction and operation phases of the project. This is addressed in the Draft Commercial Fisheries Mitigation Strategy submitted to MS-LOT as outlined previously. This is also addressed in the Moray Firth Commercial Fisheries Working Group.
	(v) Additional guidance references and data sources * Section 5.3.2, p.118, §1: Check The Fishing Liaison with Offshore Wind and Wet Renewables Group ("FLOWW") website for a copy of "FLOWW Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Liaison" - http://www.thecrownestate.co.uk/energy-infrastructure/offshore-wind-energy/working-with-us/floww/ * Subsea Cables UK guidance on overlaps with fishing - http://www.subseacablesuk.org.uk/guidelines/ * Additional guidance Seafish's Best Practice Guidance for Fishing Industry Financial and Economic Impact Assessments provides methods for calculating financial impacts as a result of areas closed or restricted for fishing: * http://www.seafish.org/media/634910/ukfen%20ia%20best%20practice%20guidance.pdf * The KIS-ORCA interactive map of OREIs and subsea cables: http://www.kis-orca.eu/map * Visit MS Interactive website to get access to spatial data held by MS – http://www.scotland.gov.uk/Topics/marine/science/MSInteractive	These have been noted and listed in section 5.1.1.17 of Chapter 5.1: Commercial Fisheries where they have been used.
	2. Freshwater Fish Planning * There are currently no aquaculture sites registered with MSS located in the vicinity of the development proposed by Moray Offshore Renewables Ltd. (see map below).	No action required.

Organisation	Summary of Response	MORL Approach
Marine Scotland Science (MSS) **(continued)**	* The nearest aquaculture site is situated ~24 km west of the proposed development. It is a wild mussel site, currently active and operated by Highland Council.	No action required.
	3. Diadromous Fish and Associated Fisheries * This is an application for a modified offshore transmission infrastructure for a wind farm which has been consented. The modification is to allow a different export cable route and landfall but the issues to consider and the general principles of risk assessment remain the same, as were considered in connection with the previous application. MSS would therefore hope that the new EIA can as far as possible use information that was submitted previously, updated where necessary.	Effects on fish are assessed in Chapter 4.2 (Fish and Shellfish Ecology). The assessment uses information from the previous assessment and also incorporates up-to-date data and scientific knowledge.
	* The main change requiring consideration in relation to diadromous fish and associated fisheries is that the landfall is now likely to be in Boyndie Bay which lies immediately to the west of the mouth of the River Deveron, an important salmon and sea trout river, or Sandend Bay, further to the west, rather than at Fraserburgh beach. As at the previously proposed landfall site, large numbers of salmon and sea trout will be expected to be present at times at these new potential landfall locations too, and suitable precautions will need considered as previously. Any salmon and sea trout net fisheries close to the new proposed landfalls will also need identified and consulted with. Boyndie Bay is in the Deveron Salmon District and Sandend Bay in the Spey Salmon District so the Deveron and Spey District Salmon Fishery Boards will need to be consulted.	Effects on the River Deveron are assessed in Chapter 4.2 (Fish and Shellfish Ecology) and Chapter 4.6 (Terrestrial Ecology). There are no salmon net fisheries in the immediate area, but net fisheries in the wider vicinity have been identified. Consultation has been undertaken with the Deveron and Spey District Salmon Fishery Boards and the Deveron, Bogie and Isla Rivers Charitable Trust (see Table 4.6-1).
	4. Benthos *Page 75, Impact Assessment Methodology* * None of the proposed assessment methods along cable routes seem to include grab sampling. This should be undertaken to assess the populations of infaunal species such as *Arctica islandica* and *Maera loveni*. Given that the cable corridor might be up to 1.6 km wide MSS suggest that grab sampling should be considered.	Sediment grab sampling was undertaken in line with MSS's recommendations (see Technical Appendix 4.1A Subtidal Ecology Characterisation, section 2 for survey details).

Organisation	Summary of Response	MORL Approach
Marine Scotland Science (MSS) **(continued)**	*Page 95- Intertidal Benthic Ecology* * There is no mention of assessing the infaunal populations of soft sediments (beaches) – core or quadrat sampling perhaps. Also, it would be useful to monitor possible changes in beach dynamics caused by cable laying activities – beach profiles and PSA for example. Are there any algal or marine plant beds in the vicinity of the cable landfalls?	Intertidal surveys were carried out using JNCC procedural guidelines 3-1 (modified phase 1 habitat mapping). In addition dig overs were carried out from which subtract conditions were noted and key species identified as agreed with MSS (see Technical Appendix 4.5 A Intertidal Ecology Characterisation and Chapter 4.5 Intertidal Ecology for more details).
	5. Marine Planning and Analysis * The socio-economic aspects of this scoping report are largely satisfactory. In summary, MSS would expect the EIA to include the gross and net employment impacts, and the gross and net GVA impacts. Both of these should be presented separately for the construction, Operation and Maintenance and Decommissioning phases. They should also be reported at a range of appropriate geographic scales. To assist with that, it would be helpful to see a clear definition of the labour market catchment area. Background info on the industry structure and employment structure would be useful. Clear consideration and use of the concepts of additionality, displacement and leakage should also be demonstrated. The same would be required regarding economic multipliers.	Results of the economic assessments are presented as the gross employment and GVA supported by the investment. Displacement, leakage and multipliers are discussed in the Economic Impact Assessment Section 5.5.2 of Chapter 5.5 Socio-Economics. Data on the labour market structure is included in the baseline information 5.5.1 of Chapter 5.5.
Local Authority	**1. Highland Council** * The HC made no comments on the scoping report for the Modified transmission Infrastructure.	No action required.
	2. Aberdeenshire Council * AC are generally content with the scope of the assessment, the environmental effects identified and the significant effects to be scoped in. Overall, it appears to cover the main environmental impacts and proposed accepted methodology.	No action required.

Organisation	Summary of Response	MORL Approach
Local Authority (continued)	* The AC Natural heritage Team raised no issues in terms of their particular area of interest, considering that the scoping report is comprehensive and acceptable.	No action required.
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH)	* There are a number of cables being proposed in the Moray Firth, including the Caithness / Moray subsea cable link, export cables for the Beatrice Offshore Wind Farm as well as these export cable(s) for the MORL Round 3 wind farms. The SNCBs continue to recommend liaison between the various parties involved, to try and take a more strategic approach to planning this work, including cable-laying and associated construction activity.	Liaison with BOWL takes place on a regular basis through the Moray Firth Offshore Wind Developers Group led by The Crown Estate and joint participation in the Moray Firth Commercial Fisheries Working Group. MORL meets with SHE-T on a monthly basis and is provided updates on the Caithness/Moray subsea cable link (referred to in this ES as "SHE-T Offshore HVDC reinforcement") as appropriate.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	**1. Technical Information on Offshore Export Cable** * For the updated transmission works, the applicant confirms that an AC connection will be used (see section 2.3.2 of the scoping report). Four offshore export cables will be installed with a distance between them of four times the water depth (section 2.3.3). The SNCBs would welcome a detailed description of the route options (including proposed landfall) and construction phasing for these cables in order to reduce any potential impacts on sensitive habitats and species. This includes confirmed information on the following technical aspects, to be submitted in any ES supporting the marine licence application for the works: (1) Method of cable-laying and burial (jetting or ploughing?). (2) Installation method for cable landfall (trenching or directional drill?). (3) Footprint of the area affected by the operations (i.e. cable laying and cable protection). (4) Method and quantity of cable protection, if required (such as rock armouring or concrete mattresses). (5) Duration, rate and timings of cable-laying. (6) Direction of cable-laying (offshore in or inshore out?). (7) Number and types of vessels (including propulsion systems) to be used in cable-laying operations. (8) Estimation of electromagnetic fields ("EMF") potentially arising from cables both at exterior of cables and at surface of seabed above buried cables. (9) Estimation of noise emissions from cable-laying works. (10) Anticipated lifespan of the export cables in this location. * The SNCBs recommend that this technical information is included in any application for the offshore transmission works (in preference to use of a design envelope). The SNCBs would also welcome confirmed details on the location, design and installation methods for the offshore substation platform(s) – up to two are proposed.	Chapter 2.2 (Project Description) of this ES provides detail on the installation methods and timescales for the OfTI. Potential effects of EMF are included in the benthic, fish and shellfish and marine mammal assessments (Chapters 4.1 – 4.3). Due to the timescales of the project, a design envelope (Rochdale Envelope) approach has been used, but has been narrowed as far as possible at this stage and all assessments assess a worst-case scenario. As such, detailed information will only be available after detailed design has taken place much closer to construction. Detailed information will be addressed in the Construction Method Statement/ Vessel Management Plan/ Environmental Management Plan/ Cable Plan (as appropriate) which will be submitted to MS-LOT for approval prior to construction.
	2. Hydrodynamic Processes and Coastal Geomorphology * The SNCBs refer to sections 5.1.2 and 5.1.6 of the scoping report addressing 'Physical Environment (Offshore)' and 'Physical Environment (Onshore)' respectively. The SNCBs agree with the aspects 'scoped in' and 'scoped out' for the offshore assessment as set out on pages 45-47 of the scoping report.	Impacts have been assessed as per the "scoped in" list.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	* The SNCBs consider it appropriate to focus attention on the two geological Sites of Special Scientific Interest ("SSSI") in the area – Cullen to Stake Ness Coast SSSI and Whitehills to Melrose Coast SSSI – adjacent to each of the potential landfall options at Sandend Bay and Boyndie Bay (p.55). The SNCBs advise that employing an experienced coastal geomorphologist will help in assessing the suitability of landfall options and in advising on detailed routing / micro-siting. The SNCBs would also welcome further discussion on these geological interests to help inform the development of cable routes and cable laying options.	The two geological sites have been included in the hydrodynamics, sedimentary and coastal processes impact assessments (Chapter 3.1) and in the onshore hydrology, geology and contaminated land assessments (Chapter 3.2). No significant effects are predicted on these sites. ABPmer have been appointed to assist with this work. MORL will consult with the SNCBs as part of the development of the Cable Plan which will be submitted for MS-LOT's approval prior to construction once detailed routing/ micrositing and cable options are known.
	3. Benthic Ecology The SNCBs refer to section 5.2.2 in the scoping report on 'Benthic Ecology' and agree with the scope of impacts to be considered (pp.75 – 77): * Smothering effects / suspended sediment: the applicant should consider the potential for benthic species to be smothered by sediment released from cable-laying, trench-digging and/or installation of the substation platforms. The potential for any buried contaminants to be released from such work should also be considered.	Smothering effects (from temporary increased suspended sediment concentration and sediment deposition associated with construction activities) and risk of seedbed contamination are considered in Chapter 4.1 Benthic Ecology, section 4.1.2. No significant effects have been predicted.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	* Habitat loss: the applicant should consider loss of habitat once the technical aspects and proposed working methods have been confirmed (see section 1 above), and in the context of the biotopes recorded along the length of the cable route and at the proposed locations for offshore substation platforms.	Permanent habitat loss of key receptors (sand and gravel sediment habitats and communities and burrowed mud PMF habitat) has been considered in section 4.1.2 of Chapter 4.1 Benthic Ecology. No significant effects have been predicted.
	* If a design envelope is being used for the application, then habitat loss will need to be estimated, using a worst case scenario, for each option being considered, so that comparisons can be made.	Habitat loss has been considered using the worst case scenario of relevant Rochdale Envelope parameters (OSP footprint and cable route length) as described in Table 4.1-6 of Chapter 4.1 Benthic Ecology.
	* Habitat change: the applicant needs to consider any reef effects or changes in benthic communities arising from any scour protection used for the export cable or the offshore substation foundation(s).	Habitat and associated community change (operational effects) has been considered in section 4.1.2 of Chapter 4.1 Benthic Ecology.
	* Electromagnetic effects: the applicant will also need to consider the potential impacts on benthic communities from any thermal load or EMF arising from the cables during operation.	EMF effects (from the installation of cables on the seedbed) on electro-magnetic sensitive and migratory invertebrates has been considered in section 4.1.2 of Chapter 4.1 Benthic Ecology.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	* It is also important to consider the indirect effects on other receptors (marine mammals and seabirds) if their prey species could be impacted by the offshore cable works.	Benthic ecology has been considered a key discipline within the assessment of indirect effects on Fish and Shellfish Ecology(Chapter 4.2), Marine Mammals (Chapter 4.3) and Marine Ornithology (Chapter 4.4). Inter-linkages between EIA disciplines have also been discussed in Chapter 1.3 Environmental Impact Assessment.
	* The scoping report provides a preliminary appraisal of available information on the baseline environment including consideration of Annex 1 habitats and Priority Marine Features. BAP habitats and species, and the OSPAR list of threatened species and habitats, should also be considered in the assessment.	Annex 1 habitats, priority marine features (PMF), BAP habitats and the OSPAR of threatened species have been considered within the benthic impact assessment (see Technical Appendix 4.1 A Subtidal Ecology Characterisation, section 3.2 for details of features of conservation interest).
	* The SNCBs advise that benthic survey work will be required for the offshore cable as the majority of the new cable search area has not previously been surveyed. The SNCBs welcome the initial proposals for this work – including Drop Down Video ("DDV") and 0.1 m^2 stainless steel Day or Hamon grab samples (pp.78 & 79) – and the SNCBs look forward to being consulted on the detailed methods. There is the potential for Annex I habitat rocky reef to occur within the cable search area as it approaches shore. Early analysis of benthic survey data may help to refine proposals or indicate if further detailed surveys are required.	DDV and grab sampling using a 0.1 m^2 Day Grab were used to survey the seabed benthic features as agreed with MSS (see Technical Appendix 4.1 A Subtidal Ecology Characterisation, section 2 for survey design details). No Annex 1 habitats were identified within the modified offshore export cable route.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	* The SNCBs presume that location of the substation(s) can be informed by the geophysical, geotechnical and benthic survey work already completed, or planned, for the MORL Eastern Development Area.	Geophysical and geotechnical data, as well as results from the benthic surveys carried out in 2010 to inform the now consented Telford, Stevenson, and MacColl Wind Farms has been used to inform the impact assessment of the modified OfTI Chapter 4.1 Benthic Ecology). Additional surveys are being carried out in 2014 to assist in the design of the three MORL consented wind farms and associated transmission infrastructure (including the location of the OSPs). No significant effects are assessed in relation to the OSPs and this ES assesses siting of the OSPs within the three consented wind farms.
	4. Fish and Shellfish * The SNCBs refer to section 5.2.3 in the scoping report on 'Fish & Shellfish Ecology'. MS can advise whether the proposed benthic survey work and studies are sufficient to provide supplementary data on fish and shellfish, particularly herring and sandeels, and whether any targeted surveys are required for these interests.	Prior to being undertaken the scope of the benthic surveys was agreed with MSS. Results from the benthic studies (particularly particle size distribution) are included in the assessments within the Fish and Shellfish Ecology chapter (Chapter 4.2).

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	* The SNCBs note that table 5.2 (p.84) includes the Special Area of Conservation ("SAC") rivers that may need consideration, of which the closest – the River Spey SAC – is probably the most relevant. The SNCBs note that the following impacts will need consideration in respect of the qualifying interests of the listed SACs, as well as in relation to marine fish and shellfish:	Chapter 3.1 (Hydrodynamics, Sedimentary and Coastal Processes) modelled suspended sediment concentrations associated with the modified OfTI. Results from this assessment were included in the Benthic Ecology, Fish and Shellfish Ecology impact assessments (Chapters 4.1 and 4.2). Potential effects on SACs are included in a Habitats Regulations Appraisal within each chapter and summarised where relevant in Chapter 6.1.
	* Smothering effects / suspended sediment: the applicant should consider potential smothering from sediment release in respect of less mobile fish and shellfish species as well as for the eggs of species which spawn in the area. Clarification on the location and footprint of the export cables route and the timing / seasonality of operations can help in the assessment of these potential effects.	Chapter 3.1 (Hydrodynamics, Sedimentary and Coastal Processes) modelled suspended sediment concentrations associated with the modified OfTI. Results from this assessment were included in the Benthic Ecology, Fish and Shellfish Ecology impact assessments (Chapters 4.1 and 4.2). Potential effects on SACs are included in a Habitats Regulations Appraisal within each chapter and summarised in Chapter 6.1. MORL has provided further information in terms of Chapter 2.2 Project Description and Figure 1.1-4.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	* The potential for any buried contaminants to be released from suspended sediment should also be considered.	Sediment contaminants have been analysed as part of site specific benthic surveys (see Chapter 4.1 and Technical Appendix 4.1 A Subtidal Ecology Characterisation for survey details) and the implications from temporary increased sediment concentration and sediment deposition have been considered within section 4.1.2 of Chapter 4.1 Benthic Ecology). No significant effects are predicted.
	* Habitat loss: benthic interests are discussed above, however, the applicant should also consider the extent of habitat loss in respect of marine fish and shellfish.	Potential habitat loss for fish and shellfish is assessed in Chapter 4.2, Fish and Shellfish Ecology. No significant effects are predicted.
	* Habitat change: the applicant needs to consider any reef effects or creation of habitat arising from any scour protection used for the export cable or Offshore Substation Platforms ("OSP(s)).	Effects of scour protection are included in the Fish and Shellfish Ecology chapter (Chapter 4.2). No significant effects are predicted.
	* Electromagnetic effects: the response of fish and shellfish to EMF is poorly understood and will need consideration. It would be helpful if the applicant could estimate EMF for the chosen AC cable type and make a comparison between: (i) EMF emitted without any mitigation; and (ii) any residual EMF emitted after adoption of mitigation methods.	Effects of EMF, including EMF levels with and without migitation, are assessed in Chapter 4.2, Fish and Shellfish Ecology. No significant effects are predicted.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	* In particular, the SNCBs seek to understand whether cable burial limits the strength, or reach, of EMF effects and whether more advanced cable casing might limit such effects.	The assessment assumed only cable burial or protection as mitigation, and this sufficiently mitigates any significant effect from EMF. Generally speaking, EMF is only detectable within very close proximity to the cables. A full assessment is included in Chapter 4.2, Fish and Shellfish Ecology. No significant effects are predicted.
	5. Marine Mammals * The SNCBs refer to section 5.2.4 in the scoping report on 'Marine Mammals' and section 5.1.5 on 'Underwater noise'. The SNCBs agree that there is extensive information available on marine mammals in the Moray Firth. The SNCBs highlight that the south coast of the Moray Firth is particularly important for bottlenose dolphin (most are recorded within 3 km of the coast), and it is also an area of search for a potential Marine Protected Area ("MPA") in respect of minke whale. In addition to the data sources listed in the scoping report, the SNCBs recommend contacting the Cetacean Research and Rescue Unit who have done a lot of work on minke whale in the area as well as Whale & Dolphin Conservation who collate sightings for Spey Bay.	The baseline information presented in section 4.3.1 of Chapter 4.3 Marine Mammals includes information on the species abundance and distribution of marine mammals within the Moray Firth. MORL are aware of the area of search for a potential MPA in respect of minke whale. Minke whale has been assessed as a key species within the assessment. No significant long term effects are predicted.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	* Table 5-3 (p.90) sets out the range of marine mammals recorded in the Moray Firth. As correctly identified in the scoping report, bottlenose dolphin are a qualifying interest of the Moray Firth SAC and harbour seal are a qualifying interest of the Dornoch Firth and Morrich More SAC. Further advice in respect of the legislative process and Habitats Regulations Appraisal ("HRA") applying to these SAC interests can be found in the SNCBs scoping advice on the MORL Round 3 wind farms (letter dated 28 October 2010 – Annex E).	The assessment presented within Chapter 4.3 Marine Mammals took into account the two Moray Firth SACs designated for marine mammals. Information to support an HRA has also been presented (see Habitats Regulations Appraisal section within Chapter 4.3 and Chapter 6 Habitats Regulations Appraisal).
	* Each of the cetaceans listed in Table 5-3 is a European Protected Species ("EPS") and the SNCBs scoping advice on the MORL wind farms also provides advice in this regard (see Annex C).	MORL acknowledges that all cetaceans are European Protected Species. An EPS Assessment has been included within the MORL ES, 2012 (Technical Appendix 7.3 H) which is referred to within the assessment of the modified OfTI (section 4.3.2.9).
	The SNCBs agree with the scope of impacts to be considered for marine mammals as discussed in the tables on page 92 and 93: * Disturbance / displacement as a result of construction / operational noise: particularly relevant for the installation of the OSP(s), depending on foundation type, and the placement of scour protection if needed for the OSP(s) or along the cable route. As discussed above, the southern Moray coast is important for marine mammals, so particular care will be needed for working in these coastal waters. The SNCBs recommend that directional drilling ("HDD") is considered for the cable landfall and connection to the offshore export cables.	Disturbance/displacement has been considered one of the key effects on marine mammals during construction. Details on the impact assessment methodologies and results are presented within sections 4.3.2 and 4.3.3 (impact assessment for the modified OfTI and cumulative impact assessment respectively) of Chapter 4.3 Marine Mammals. HDD is one of the options considered for the cable landfall.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	* Collision risk, including potential corkscrew injury from ducted propellers: this issue is under current investigation by SMRU, in a research programme funded by MS. The SNCBs would welcome further discussion of this matter at an appropriate point, and probably best co-ordinated by MS via the proposed regional advisory group for wind farm development in the Moray Firth (condition 27 on the MORL S36 consents).	Collision risk (including the risk of corkscrew injury from ducted propellers) has been considered within sections 4.3.2 and 4.3.3 (impact assessment for the modified OfTI and cumulative impact assessment respectively) of Chapter 4.3 Marine Mammals. No significant effects are predicted.
	* Indirect effects resulting from impacts on prey species: this issue can be informed by the results from benthic survey work. The SNCBs are satisfied that this aspect can be considered via desk-based appraisal as proposed in the scoping report.	The results from the Benthic Ecology (Chapter 4.1) and the Fish and Shellfish ecology (Chapter 4.2) have been taken into account in the assessment of effects on marine mammal prey species. Indirect effects resulting from impacts on prey species are within sections 4.3.2 and 4.3.3 (impact assessment for the modified OfTI and cumulative impact assessment respectively) of Chapter 4.3 Marine Mammals.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	* The SNCBs also highlight the likelihood that cumulative impacts on marine mammals will need to be addressed for these proposed transmission works. There is a range of development consented, or proposed, that may impact on marine mammals in the Moray Firth including the MORL and BOWL offshore wind farms, their associated transmission works, the Caithness / Moray subsea cable link and a range of harbour developments including the three National Renewables Infrastructure Projects ("NRIPs") in the Moray Firth – Ardersier, Invergordon and Nigg – as well as other development proposals further afield.	The cumulative impact assessment on marine mammals has been undertaken taking into account a number of projects / proposals as advised by Marine Scotland and JNCC/SNH, including the MORL and BOWL consented wind farms, offshore cables and harbour developments. See section 4.13 of Chapter 4.3 Marine Mammals for details on methodologies and results of the assessment. No significant effects are predicted.
	* The SNCBs would welcome further discussion of possible cumulative impacts at the appropriate time, probably best co-ordinated by MS via the proposed regional advisory group.	Noted. MS to coordinate discussion.
	6. Ornithology * The SNCBs refer to section 5.2.7 in the scoping report on 'Ornithology (Offshore)'. The SNCBs note the potential for significant waterbird and wader interest along this coastline and in proximity to the cable landfall options. The JNCC have undertaken survey work as part of the process to identify new marine Special Protection Areas ("SPAs"), and the coastal waters of the Moray Firth are an area of search for a possible inshore SPA for non-breeding aggregations of marine waterbirds (ducks, grebes and divers). The SNCBs recommend further discussion with the JNCC's Seabirds at Sea team to check for available survey data.	The baseline information presented within section 4.4.1 of Chapter 4.4 Marine Ornithology describes the baseline conditions within the modified OfTI area taking into account both JNCC (ESAS) and BTO survey (WeBS) data.
	* The SNCBs also recommend contacting the British Trust for Ornithology ("BTO") to obtain the WeBS count data for this stretch of coastline. Depending on review of all available information, this may be sufficient to inform assessment and mitigation methods for waterbirds and waders in respect of the cable works. However, it is possible that further inter-tidal survey may be required or helpful for impact assessment.	The baseline information presented within section 4.4.1 of Chapter 4.4 Marine Ornithology describes the baseline conditions within the modified OfTI area taking into account both JNCC (ESAS) and BTO survey (WeBS) data.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	* The SNCBs advise that potential disturbance to waterbirds and waders is the key ornithological impact to address. The SNCBs do not identify any requirement for boat-based or aerial survey work in respect of seabird species along the cable route, although review of the data that MORL have already collected for the wind farms may be informative.	A range of waterbirds and waders were considered within the assessment of effects on marine ornithology (see section 4.4.1 for a description of the baseline taking into account MORL's boat-based and aerial surveys as well as a desk-study review of ornithological interests).
	* The SNCBs consider that desk-based appraisal is sufficient to consider potential disturbance or indirect impacts on seabird species arising from the export cable works. Consideration of any indirect impacts on seabirds from potential impacts to their prey species can be informed by the results from benthic survey work.	As advised by JNCC/SNH the assessment of effects on marine ornithology has been undertaken based on a desk-study of ornithological interests in the modified OfTI area (see section 4.4.1 baseline information of Chapter 4.4 Marine Ornithology for details). Indirect effects on prey species have been considered in section 4.4.2 and 4.4.3 of Chapter 4.3 (OfTI impact assessment and cumulative impact assessment respectively).
	* The SNCBs would also welcome further discussion of offshore substation lighting requirements in respect of seabirds. This could be undertaken as part of the discussions to discharge conditions on the Section 36 / marine licence for each wind farm (in particular condition 19 relating to lighting and marking plans).	Lighting requirements have not been finalised at the time of this application. Lighting requirements will be in accordance with standard guidelines and agreed with the appropriate stakeholders including NLB, MCA and the CAA.

Organisation	Summary of Response	MORL Approach
Joint Nature Conservation Committee (JNCC) and Scottish Natural Heritage (SNH) **(continued)**	**7. Landscape, Seascape and Visual Impact Assessment** * The SNCBs refer to section 5.3.8 of the scoping report: 'Seascape, Landscape and Visual Receptors'. As indicated, there was a comprehensive seascape, landscape and visual impact assessment ("SLVIA") provided in the ES supporting the Section 36 and marine licence applications for the MORL Round 3 wind farms.	No action required.
	* The SNCBs would however, welcome some further consideration of the offshore substations as part of the assessment for the revised transmission works. This work can use the baseline character assessment and other information in the submitted wind farm ES to consider any additional, or different, SLVIA impacts from those previously assessed in respect of the proposed offshore substations in combination with the (consented) wind turbines.	Further consideration of the OfTI, including the offshore substations, is included in the SLVIA assessment (Chapter 5.3).
British Telecom (Radio Network Protection Team)	* BT Radio Network Protection do not have any comments to make "Nil Return"	No action required.
Health and Safety Executive (HSE)	* HSE is the national independent watchdog for work-related health, safety and illness. They have a dedicated team that regulates occupational health and safety standards for the offshore renewable energies industry. You are advised to contact this team to discuss how you will manage health and safety during the planning, construction and operation of your offshore renewable project.	Noted
Highlands and Islands Airports Ltd.	* This development falls outside the safeguarded areas for Inverness Airport, therefore HIAL do not object to Transmission Infrastructure.	Noted
Historic Scotland (HS)	* HS comments concentrate on our statutory remit for scheduled monuments and their setting, category A listed buildings and their setting and gardens and designed landscapes and battlefields appearing in their respective Inventories. This response covers the scoping for both the offshore and onshore elements of the proposal.	Noted
	General Comments * HS welcome the preparatory work carried out in relation to identifying the scope of the assessment as it relates to the historic environment. HS is also content to agree with the proposed assessment methodology outlined within the report. HS therefore only have a small number of comments to offer at this stage. Given the relatively wide corridor, HS would be happy to discuss any issues arising for the historic environment as the proposals become more detailed and the assessment progresses. However, at this stage HS would ask that the historic environment baseline informs decision making relating to the preferred route and seeks to avoid these assets.	MORL will continue discussions with HS as information on the detailed design of the modified TI as it becomes available.

Organisation	Summary of Response	MORL Approach
Historic Scotland (continued)	Offshore Environment * HS welcome the consideration given to the potential effects for the historic environment as a result of the offshore cable laying. The acknowledgment of the need to avoid features of historic interest is welcomed and in light of this HS particularly welcome the reference to best practice guidance relating to works taking place in the marine historic environment. In relation to Historic Marine Protected Areas (HMPA) HS can confirm that on 1 November 2013, section 1 of the Protection of Wrecks Act 1973 was repealed in Scotland. Historic shipwreck sites previously designated under this legislation have now been designated as Historic MPAs under the Marine (Scotland) Act 2010.	Measures to mitigate potential effects on archaeology and cultural heritage (including the use of exclusion zones around sites of known or potential archaeological interest) have been detailed in sections 5.4.2.68 to 5.4.2.80 of Chapter 5.4 Archaeology and Cultural Heritage. The guidance and legislation considered in the assessment has been presented within the Legislative and Planning Framework section 5.4.1.23 of Chapter 5.4.
	Onshore Environment * HS can confirm the findings of the initial baseline survey regarding designated sites within the onshore cable corridor and substation search areas. When considering options and working towards a detailed route for the transmission cable every effort should be made to avoid direct impacts on these sites. The consideration of any impacts on the setting of such sites is also to be welcomed, particularly in reference to the proposed substation.	Measures to mitigate potential effects on archaeology and cultural heritage (including avoidance of cultural heritage assets along the onshore export cable route corridor and use of screening for potential effects on setting from the onshore substations) have been detailed in sections 5.4.2.68 to 5.4.2.80 of Chapter 5.4 Archaeology and Cultural Heritage.

Organisation	Summary of Response	MORL Approach
Historic Scotland (continued)	Figure 5.20 Scheduled Monument Records * To note that SMR refers to Sites and Monuments Record as opposed to the reported Scheduled Monuments Record. It should therefore be noted that the majority of the sites identified in this figure are not scheduled monuments.	Noted. The description of the archaeological and cultural heritage environment around the modified onshore export cable route corridor and area of the substations is presented within Technical Appendix 5.4 A Baseline Review of the Offshore and Onshore Archaeology. A summary is also presented within section 5.4.1 of Chapter 5.4 Archaeology and Cultural Heritage.
	Site Specific Survey Methodology * HS welcome the guidance and legislation that will be referred to when carrying out the assessment or bringing forward mitigation. As a point of detail Scottish Planning Policy 23: Planning and the Historic Environment has been superseded by the consolidated Scottish Planning Policy.	Noted. The guidance and legislation considered in the Archaeology and Cultural Heritage assessment has been presented within the Legislative and Planning Framework section 5.4.1.23 of Chapter 5.4.
Moray Firth and North Coast Inshore Fisheries Group	* IFG would wish to make an observation in regard to EIA. The EIA on fishing is basically non- existent. MORL have collated no evidence on the majority of fish and especially shellfish to make any reasonable assumption on the impacts from the development.	Noted. A baseline information and environmental impact assessment is presented in Chapter 4.2 Fish and Shellfish Ecology.
Moray Firth Partnership	* MFP advised they will not be submitting a detailed response to this preliminary consultation. MFP copied the details to the East Coast, Moray Firth and North Coast Inshore Fisheries Groups, and have encouraged the IFG members to respond directly as appropriate.	Noted
NERL Safeguarding ("NATS")	* NATS anticipates no impact from the Modified Transmission Infrastructure for the Moray Firth wind farms. As such NATS has no comments to make on the Scoping Report.	Noted
Northern Lighthouse Board (NLB)	* With regard to the proposed consultation and the scope of assessment, NLB would only comment on that part relating to Shipping and Navigational Safety.	No action required.

Organisation	Summary of Response	MORL Approach
Northern Lighthouse Board (NLB) **(continued)**	* NLB would advise that the following should be considered as an initial response to the scoping document regarding input to the EIA which will accompany any necessary marine licence application for the modified transmission infrastructure, and that any formal recommendations for any lighting and marking will be given through the Marine Licensing process.	Noted
	* NLB would anticipate that a 'Method Statement' would form part of the application, and that this would include details of any offshore sub-station structures, cable laying and landfall works. A NRA will also be required as part of the application, to ensure that hazards posed to the marine user are minimised.	Details of the infrastructure and installation methods are included in Chapter 2.2 (Project Description). The NRA undertaken as part of the MORL ES (MORL, 2012) is included in the Shipping and Navigation Assessment (Chapter 5.2).
	* NLB are happy to offer any further assistance, or if any of the above may require clarification.	Noted
RSPB Scotland	* The focus of the RSPB Scotland response is that of potential ornithological impacts arising from the proposed development, both on and offshore. RSPB Scotland support the assessment of potential cumulative effects, particularly given the extent of activities that could occur across similar timescales within the Moray Firth over the next few years. RSPB Scotland also highlight below a number of issues that RSPB Scotland recommend require further consideration and reporting as part of the environmental impact assessment.	Noted
	Onshore * Any potential impacts on breeding/ wintering birds can be avoided by carrying out cable-laying works out with these periods. A more detailed bird survey of particular sections may be required once the route has been selected, if any protected species are found.	Breeding and wintering bird surveys have been undertaken, and are detailed in Technical Appendix 4.6 A (Terrestrial Ecology). Potential effects on breeding and wintering birds are assessed in Chapter 4.6 (Terrestrial Ecology). No significant effects are predicted.

Organisation	Summary of Response	MORL Approach
RSPB Scotland **(continued)**	* In Section 5.2.6 Terrestrial Ecology the map in Figure 5-14 or the text in paragraph 5.2.6 does not include any reference to Aberdeenshire Council's Local Nature Conservation Sites (former SINS sites). Inclusion of these designations is recommended.	The full assessment methodology was agreed with SNH at a meeting in Aberdeen in May 2014. Full details can be found in Chapter 4.6 (Terrestrial Ecology), Table 4.6-1.
	Offshore * In Section 5.2.7 the offshore search area and landfall points transect a favoured area for White-billed diver (*Gavia adamsii*), a globally 'Near Threatened Species' under IUCN, and seaduck, classed as 'Vulnerable' under IUCN. Consideration should be made towards any potential implications of the proposal on this species, which could require further data collection and / or survey work.	White-billed diver has been considered in the baseline characteristics (section 4.4.1) and OfTI impact assessment and cumulative impact assessment (section 4.4.2 and 4.4.3 respectively) of Chapter 4.4 Marine Ornithology.
	* The White-billed diver spring range is concentrated in the area just offshore (from shore to 2km out) from Portsoy, but they can be scattered between Portsoy and Sandend. They appear regularly, arriving around early March and remain through to May. Local interest in recent years has led to the collection of records, including GPS information, although it remains unclear why the birds favour this area. White-billed diver are not included in the species list of the scoping report, however consideration should be made of any potential implications of the proposal on this species, which may include a requirement for further data collection and / or survey work.	White-billed diver has been considered in the baseline characteristics (section 4.4.1) and OfTI impact assessment and cumulative impact assessment (Section 4.4.2 and 4.4.3 respectively) of Chapter 4.4 Marine Ornithology. It should be noted that following refinement of the offshore export cable route corridor that the export cable landfall is proposed at Inverboyndie (see Figure 1.1-4).
Royal Yachting Association (RYA) Scotland	* RYA Scotland do not envisage any adverse impact of the modified transmission scheme on recreational boating. During the construction phase, recreational sailors will best be alerted by notices at neighboring harbours and marinas, particularly the Caledonian Canal, Whitehills and Peterhead. Cable landfalls rarely pose a problem for anchoring by recreational craft and RYA Scotland will be happy to advise further if required once the exact landfall site has been chosen. Information on harbours in the this area can, in any case, be found in The Clyde Cruising Club Sailing Directions and Anchorages – Part 5, North East Scotland and Orkney Islands.	Noted

Organisation	Summary of Response	MORL Approach
Royal Yachting Association (RYA) Scotland **(continued)**	* For completeness, RYA Scotland should note that the recreational sailing routes marked on Fig. 5-17 have been taken from The UK Coastal Atlas of Recreational Boating, 2nd edition, published by the RYA in 2008, to which reference should be made. The routes marked were based on expert opinion and are typical routes effectively marking the mid-point of a corridor. There have been no updates in this area since the date of publication although there has been an increase in traffic. The Pentland Firth and Orkney Waters Shipping Study commissioned by MS showed that although only a minority of recreational craft transmit an AIS signal, their courses were representative of recreational craft in general, except perhaps in areas close inshore. The same study showed the seasonal pattern of movements of recreational craft. In the present case, RYA Scotland see no need for the collection of additional data on the movement of recreational craft.	Noted
Scottish Fishermen's Federation (SFF)	* The SFF responds on behalf of its nine constituent member associations: Anglo Scottish Fisherman's Association, Clyde Fisherman's Association, Fishing Vessel Agents & Owners Association (Scotland), Mallaig & North West fisherman's Association, Orkney Fisheries Association, Scallop Association, Shetland Fisherman's Association, Scottish Pelagic Fisherman's Association and the Scottish Whitefish Producers Association.	Noted
	* The SFF note that the proposal allows for up to 4 transmission cables. The SFF would expect these to be buried as far as possible at a depth to ensure minimum risk from snagging or changes in seabed as a result of tidal movement. Where this is not technically possible, consultation on the alternatives and mitigation proposals must be decided and agreed through the Moray Firth Commercial Fisheries Working Group which must include those potentially affected by the cable route.	MORL has committed to a target burial depth for cables of 1 m and where this is not possible, cable protection measures will be discussed with stakeholders and used in this ES, the MORL ES (2012) and the draft MORL Commercial Fisheries Mitigation Strategy submitted to MS-LOT as discussed above. The potential effects of the cable to commercial fishing activity along with the appropriate mitigation methods (including cable burial and discussion through the Moray Firth Commercial Fisheries Working Group) are described in Chapter 5.1 – section 5.1.2.

Organisation	Summary of Response	MORL Approach
Scottish Fishermen's Federation **(continued)**	* The SFF are content with the definition given in Chapter 3, page 35 on the cumulative and in combination impacts, and expect to see these clearly illustrated along with any necessary mitigation.	The cumulative and in combination effects to commercial fishing activity are described in Chapter 5.1 – section 5.1.3.
	* The SFF are content with the baseline fisheries given in Chapter 5.3.2 and vessel activity in 5.3.3. If that knowledge is properly applied to the cable route as far as scallop activity to the North and South, Nephrops & demersal en route, squid and static gear to the South, the SFF are confident that any negative impacts on fishing will become clear and that appropriate mitigation measures will be developed.	The commercial fisheries baseline is provided in Technical Appendix 5.1 A: Commercial Fisheries and summarised in Chapter 5.1, section 5.1.1. All species and gears listed in the consultation response have been assessed.
Whale and Dolphin Conservation (WDC)	* Overall WDC were happy with what had been 'scoped in' for marine mammals.	Noted
	* For the 'cumulative impacts', developments outside of the Moray Firth should also be considered. For example, Aberdeen Harbour Extension and the three offshore wind farm developments in the Firth of Forth (Neart na Gaoithe, Inch Cape and Seagreen) should all be included because they are all within the Management Unit and known range of the Moray Firth SAC bottlenose dolphin population.	The three offshore wind farm developments in the Firth of Forth, Aberdeen Harbour along with other projects/proposals have been considered in the assessment of cumulative effects on marine mammals (as detailed within Section 4.3.3 of Chapter 4.3 Marine Mammals).
	* The risk of corkscrew injuries ("CSI") should be included in the EIA. It is not clear from the Scoping Report if CSI will be included in the section 'increased collision risk' or not.	Collision risk from increased vessel movement, including risk from corkscrew injury from ducted propellers has been considered within section 4.3.2 and 4.3.3 (impact assessment for the OfTI and cumulative impact assessment) of Chapter 4.3 Marine Mammals.

Organisation	Summary of Response	MORL Approach
Whale and Dolphin Conservation (WDC) **(continued)**	* WDC are happy to discuss any questions regarding these comments and look forward to receiving the EIA in the near future.	Noted

Annex 2 to Chapter 1.3

Table 1 Relevant to Aberdeenshire Council- Summary of Modified TI Scoping Opinions Received and Approach Taken to Issues Raised

Organisation	Summary of Response	MORL Approach
Historic Scotland (HS)	* There is general agreement with methodology involved however a few minor points were raised. Figure 5.20 refers to SMR as Scheduled Monuments Record as opposed to Sites and Monuments Record. It should be noted therefore that the majority of the sites recorded and not scheduled monuments. It should also be noted that Scottish Planning Policy 23: Planning and the Historic Environment has been superseded by the consolidated Scottish Planning Policy.	Noted. The description of the archaeological and cultural heritage environment around the modified onshore export cable route corridor and area of the substations is presented within Technical Appendix 5.4 A Baseline Review of the Offshore and Onshore Archaeology. A summary is also presented within section 5.4.1 of Chapter 5.4 Archaeology and Cultural Heritage. The guidance and legislation considered in the Archaeology and Cultural Heritage Chapter has been presented within the Legislative and Planning Framework section 5.4.1.23 of Chapter 5.4.
Scottish Environment Protection Agency (SEPA)	* While all of the issues below should be addressed in the Environmental Statement (ES), there may be opportunities for several of these to be scoped out of detailed consideration. The justification for this approach in relation to specific issues should be set out within the ES. We would welcome the opportunity to comment on the draft ES. Please note that SEPA can process files only of a maximum size of 25MB and therefore, when the ES is submitted, it should be divided into appropriately sized and named sections.	Noted. (There was no draft ES for the modified TI).
	1. Disruption to Wetlands Including Peatlands 1.1 SEPA note from page 37 of the Scoping Report that you state that there is no evidence of peat. We are also unable to find any reference to wetlands as a whole within the report. We would ask that you specifically address any disruption to wetlands within the finalised Environmental Report.	Potential effects on wetlands are assessed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land.

Organisation	Summary of Response	MORL Approach
Scottish Environment Protection Agency (SEPA) **(continued)**	1.2 If there are wetlands or peatland systems present, the ES or planning submission should demonstrate how the layout and design of the proposal, including any associated borrow pits, hard standing and roads, avoid impact on such areas.	Potential effects on wetlands are assessed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land.
	1.3 A Phase 1 habitat survey should be carried out for the whole site and the guidance A Functional Wetland Typology for Scotland should be used to help identify all wetland areas. National Vegetation Classification should be completed for any wetlands identified. Results of these findings should be submitted, including a map with all the proposed infrastructure overlain on the vegetation maps to clearly show which areas will be impacted and avoided.	A Phase 1 Habitat Survey was undertaken as part of the terrestrial ecology surveys and is detailed in Chapter 4.6 (Terrestrial Ecology), with associated figures showing the proposed infrastructure. Note that, at this stage, the onshore cable route is a 500 m wide corridor within which the cables will be located and will comprise a maximum working width of 60 m.
	1.4 Groundwater dependent terrestrial ecosystems, which are types of wetland, are specifically protected under the Water Framework Directive. The results of the National Vegetation Classification survey and Appendix 2 (which is also applicable to other types of developments) of our Planning guidance on windfarm developments should be used to identify if wetlands are groundwater dependent terrestrial ecosystems.	Potential effects on wetlands are assessed in Section 4.6.2 of Chapter 4.6 Terrestrial Ecology and Chapter 3.2 Hydrology, Geology and Contaminated Land.
	1.5 The route of roads, tracks or trenches within 100 m of groundwater dependent terrestrial ecosystems (identified in Appendix 2) should be reconsidered. Similarly, the locations of borrow pits or foundations within 250 m of such ecosystems should be reconsidered. If infrastructure cannot be relocated outwith the buffer zones of these ecosystems then the likely impact on them will require further assessment. This assessment should be carried out if these ecosystems occur within or outwith the site boundary so that the full impacts on the proposals are assessed. The results of this assessment and necessary mitigation measures should be included in the ES.	Groundwater is assessed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land. Note that, at this stage, the onshore cable route is a 500 m wide corridor within which the cables will be located and will comprise a maximum working width of 60 m.

Organisation	Summary of Response	MORL Approach
Scottish Environment Protection Agency (SEPA) **(continued)**	1.6 For areas where avoidance is impossible, details of how impacts upon wetlands including peatlands are minimised and mitigated should be provided within the ES or planning submission. In particular impacts that should be considered include those from drainage, pollution and waste management. This should include preventative/mitigation measures to avoid significant drying or oxidation of peat through, for example, the construction of access tracks, dewatering, excavations, drainage channels, cable trenches, or the storage and re-use of excavated peat. Detailed information on waste management is required as detailed below. Any mitigation proposals should also be detailed within the Construction Environmental Management Document, as detailed below.	Effects upon wetlands including peatlands is assessed and mitigation discussed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land. Note that, at this stage, the onshore cable route is a 500 m wide corridor within which the cables will be located and will comprise a maximum working width of 60 m.
	2.1 Disturbance and Re-Use of Excavated Peat 2.1 Where the proposed infrastructure will impact upon peatlands, it is now best practice for developers to produce a Peat Management Plan within the Environmental Statement which sets out the principles as to how any surplus peat will be managed within the site. It is important this is done prior to the application gaining consent to ensure all opportunities to minimise peat disturbance are considered within the site design and that acceptable proposals to re-use the surplus peat can be accommodated within the site layout without significant environmental impact.	No peat bog wetlands were identified within the route of the OnTI. If required, a Peat Management Plan will be developed once the detailed cable route is finalised (at the time of application for full planning permission). Mitigation measures to be included are detailed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land.
	2.2 We would expect all these proposals to be in accordance with Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and Minimisation of Waste and our Regulatory Position Statement – Developments on Peat. Any proposals for road shoulders should follow the best practice guidance detailed in Pages 14 and 15 of the Scottish Renewables Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and Minimisation of Waste, Page 27 of the Scottish Natural Heritage (SNH) and Forestry Commission (FCS) Floating Roads on Peat guidance and Pages 38 and 39 of SEPA, SNH and Scottish Renewables and FCS guidance Good practice during windfarm construction. Please note that only fibrous peat is likely to be suitable for battering road verges. Any landscaping or road batters should be limited to the areas of ground already disturbed.	No peat bog wetlands were identified within the route of the OnTI. Mitigation measures to be included are detailed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land.

Organisation	Summary of Response	MORL Approach
Scottish Environment Protection Agency (SEPA) **(continued)**	**3.1 Existing Groundwater Abstractions** 3.1 We note on page 64 of the Scoping Report that an extensive desk study will be undertaken to establish the baseline hydrological conditions within the cable corridor search area, at the substations and landfall point once selected, which is very much welcomed.	This is detailed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land.
	3.2 As you may already know, roads, foundations and other construction works associated with large scale developments can disrupt groundwater flow and impact on groundwater abstractions. To address this risk a list of groundwater abstractions both within and outwith the site boundary, within a radius of i)100 m from roads, tracks and trenches and ii) 250 m from borrow pits and foundations) should be provided.	Groundwater abstractions were identified and potential impacts on these assessed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land.
	3.3 If groundwater abstractions are identified within the 100 m radius of roads, tracks and trenches or 250 m radius from borrow pits and foundations, then either the applicant should ensure that the route or location of engineering operations avoid this buffer area or further information and investigations will be required to show that impacts on abstractions are acceptable. Further details can be found in Appendix 2 (which is also applicable to other types of developments) of our Planning guidance on windfarm developments.	Groundwater abstractions were identified and potential impacts on these assessed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land.
	4. Engineering Activities in the Water Environment 4.1 In order to meet the objectives of the Water Framework Directive of preventing any deterioration and improving the water environment, developments should be designed to avoid engineering activities in the water environment wherever possible. The water environment includes burns, rivers, lochs, wetlands, groundwater and reservoirs. We require it to be demonstrated that every effort has been made to leave the water environment in its natural state. Engineering activities such as culverts, bridges, watercourse diversions, bank modifications or dams should be avoided unless there is no practicable alternative. Paragraph 211 of SPP deters unnecessary culverting. Where a watercourse crossing cannot be avoided, bridging solutions or bottomless or arched culverts which do not affect the bed and banks of the watercourse should be used. Further guidance on the design and implementation of crossings can be found in our Construction of River Crossings Good Practice Guide. Other best practice guidance is also available within the water engineering section of our website.	Effects on watercourses are assessed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land.

Organisation	Summary of Response	MORL Approach
Scottish Environment Protection Agency (SEPA) **(continued)**	4.2 If the engineering works proposed are likely to result in increased flood risk to people or property then a flood risk assessment should be submitted in support of the planning application and we should be consulted as detailed below.	Flood risk has been assessed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land. Note that, at this stage, the onshore cable route is a 500 m wide corridor within which the cables will be located and will comprise a maximum working width of 60 m.
	4.3 A site survey of existing water features and a map of the location of all proposed engineering activities in the water environment should be included in the ES or planning submission. A systematic table detailing the justification for the activity and how any adverse impact will be mitigated should also be included. The table should be accompanied by a photograph of each affected water body along with its dimensions. Justification for the location of any proposed activity is a key issue for us to assess at the planning stage.	Water features along the route of the modified OnTI have been assessed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land. Note that, at this stage, the onshore cable route is a 500 m wide corridor within which the cables will be located and will comprise a maximum working width of 60 m. Specific water crossings etc will be assessed in the application for full planning permission.
	4.4 Where developments cover a large area, there will usually be opportunities to incorporate improvements in the water environment required by the Water Framework Directive within and/or immediately adjacent to the site either as part of mitigation measures for proposed works or as compensation for environmental impact. We encourage applicants to seek such opportunities to avoid or offset environmental impacts. Improvements which might be considered could include the removal of redundant weirs, the creation of buffer strips and provision of fencing along watercourses. Fencing off watercourses and creating buffer strips both helps reduce the risk of diffuse water pollution and affords protection to the riparian habitat.	Mitigation options along the route of the modified OnTI have been included in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land. Note that, at this stage, the onshore cable route is a 500 m wide corridor within which the cables will be located and will comprise a maximum working width of 60 m. Specific water crossings etc will be assessed in the application for full planning permission.

Organisation	Summary of Response	MORL Approach
Scottish Environment Protection Agency (SEPA) **(continued)**	**5. Water Abstraction** 5.1 Where water abstraction is proposed we request that the ES, or planning submission, details if a public or private source will be used. If a private source is to be used the information below should be included. Whilst we regulate water abstractions under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended), the following information is required at the planning stage to advise on the acceptability of the abstraction at this location: Source e.g. groundwater or surface water; * Location e.g. grid reference and description of site; * Volume e.g. quantity of water to be extracted; * Timing of abstraction e.g. will there be a continuous abstraction; * Nature of abstraction e.g. sump or impoundment; * Proposed operating regime e.g. details of abstraction including any existing water features; and * Impacts of the proposed abstraction upon the surrounding water environment.	The application does not propose any abstractions of water.
	5.2 If other development projects are present or proposed within the same water catchment then we advise that the applicant considers whether the cumulative impact upon the water environment needs to be assessed. The ES or planning submission should also contain a justification for the approach taken.	Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land includes a Cumulative Impact Assessment within Section 3.2.3.
	6.Pollution Prevention and Environmental Management 6.1 One of our key interests in relation to major developments is pollution prevention measures during the periods of construction, operation, maintenance, demolition and restoration. The construction phase includes construction of access roads, borrow pits and any other site infrastructure.	Pollution prevention is detailed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land and mitigation measures identified take into account SEPA best practice and regulatory advice.

Organisation	Summary of Response	MORL Approach
Scottish Environment Protection Agency (SEPA) **(continued)**	6.2 We advise that the applicant should, through the EIA process or planning submission, systematically identify all aspects of site work that might impact upon the environment, potential pollution risks associated with the proposals and identify the principles of preventative measures and mitigation. This will establish a robust environmental management process for the development. A draft Schedule of Mitigation should be produced as part of this process. This should cover all the environmental sensitivities, pollution prevention and mitigation measures identified to avoid or minimise environmental effects. Details of the specific issues that we expect to be addressed are available on the Pollution Prevention and Environmental Management section of our website.	Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land identifies all aspects of site work that might affect the environment and, where appropriate, mitigation options to address these.
	6.3 A Construction Environmental Management Document is a key management tool to implement the Schedule of Mitigation. We recommend that the principles of this document are set out in the ES outlining how the draft Schedule of Mitigation will be implemented. This document should form the basis of more detailed site specific Construction Environmental Management Plans which, along with detailed method statements, may be required by planning condition or, in certain cases, through environmental regulation. This approach provides a useful link between the principles of development which need to be outlined at the early stages of the project and the method statements which are usually produced following award of contract (just before development commences).	Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land outlines mitigation and the principles of a Construction Environmental Management Plan will be developed as part of the application for full planning permission.
	6.4 We would refer you to best practice advice prepared by SNH, SEPA and the windfarm industry Good Practice During Windfarm Construction. Additionally, the Highland Council (in conjunction with industry and other key agencies) has developed a guidance note Construction Environmental Management Process for Large Scale Projects.	Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land refers to various best practice documents.
	7. Borrow Pits 7.1 Detailed investigations in relation to the need for and impact of such facilities should be contained in the ES or planning submission. We note from the Scoping Report that there is currently no reference to borrow pits. Where borrow pits are proposed, information should be provided regarding their location, size and nature. In particular, details of the proposed depth of the excavation compared to the actual topography and water table should be submitted. In addition details of the proposed restoration profile, proposed drainage and settlement traps, turf and overburden removal and storage for reinstatement should be submitted.	Borrow pits are not required as part of this development. Should they be required once detailed plans are developed, this will be included in the application for full planning permission.

Organisation	Summary of Response	MORL Approach
Scottish Environment Protection Agency (SEPA) **(continued)**	7.2 The impact of such facilities (including dust, blasting and impact on water) should be appraised as part of the overall impact of the scheme. Information should cover, in relation to water; at least the information set out in Planning Advice Note PAN 50 Controlling the Environmental Effects of Surface Mineral Workings (Paragraph 53). In relation to groundwater, information (Paragraph 52 of PAN 50) only needs to be provided where there is an abstraction or groundwater dependent terrestrial ecosystem within 250 m of the borrow pit. Additional information on groundwater is provided above.	Borrow pits are not required as part of this development. Should they be required once detailed plans are developed, this will be included in the application for full planning permission.
	8. Flood Risk 8.1 The cable routes and substation sites should be assessed for flood risk from all sources in line with Scottish Planning Policy (Paragraphs 196-211). Our Indicative River & Coastal Flood Map (Scotland) is available to view online and further information and advice can be sought from your local authority technical or engineering services department and from our website.	Flood risk is assessed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land.
	8.2 If a flood risk is identified then a Flood Risk Assessment should be carried out following the guidance set out in our "Technical flood risk guidance for stakeholders" and (if relevant) "Technical Guidance Revision Note 1 -the Estimation of Coastal Sea Levels" both of which can be found on the planning and flood risk section of our website.	Flood risk is assessed in Chapter 3.2, Hydrology, Hydrogeology and Contaminated Land. No significant flood risks were identified.
	9. Regulatory advice for the applicant 9.1 Details of regulatory requirements and good practice advice for the applicant can be found on our website at www.sepa.org.uk/planning.aspx. If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the operations team in your local SEPA office (details of which can be found on our website).	Noted.
Scottish Natural Heritage (SNH)	**Terrestrial Ecology** * Adequate detail of the cable laying technique(s) should be provided, including timing, rate and duration of work so that the potential impacts to sensitive species and habitats during the construction phase can be assessed.	Chapter 2.2 (Project Description) details the proposals' Rochdale Envelope, including cable laying techniques. Table 4.6-4 sets out the parameters assessed in Chapter 4.6 Terrestrial Ecology.

Organisation	Summary of Response	MORL Approach
Scottish Natural Heritage (SNH) **(continued)**	**Desk-Based Assessment** * In addition to the sources mentioned in Section 5.2.6, the following organisations, individuals and databases should be contacted: * RSPB Scotland; County Bird Recorder; The BTO in relation to the Wetland Bird Surveys; The North Sea Bird Club; The local Raptor Study Group; Saving Scotland's Red Squirrels; Direct Salmon Fishery Boards; and Aberdeenshire Council Planning Authority.	Details of all groups contacted are included in Chapter 4.6 (Terrestrial Ecology).
	Sites of Special Scientific Interest for Coastal Geomorphology and Geology * Consideration will need to be given to the geological interests of Cullen to Stake Ness Coast SSSI and Whitehills to Melrose Coast SSSI (page 55), which are adjacent to both of the potential landfall sites of Sandend Bay & Boyndie Bay. Although the precise location and route of the cables have yet to be developed, further discussions would be welcomed about the designated interests, which generally occur on and adjacent to the rocky foreshore, to further inform the development cable routes and laying options.	The two geological sites have been included in the hydrodynamics, sedimentary and coastal processes impact assessments. Landfall will not be routed through the SSSIs. Any potential effects on the SSSIs are assessed in Chapter 3.2 (Hydrology, Hydrogeology and Contaminated Land).
	* The scoping report does not indicate whether impacts to the geological interest along this coast can be avoided or what mitigation is proposed – all of which will need to be addressed in the EIA.	Impacts on geological interest features are addressed in Chapter 3.1.
	* It is advised that employing an experienced coastal geomorphologist should help in the assessment of the suitability of potential landfall options and detailed routing / micro-siting options, particularly if geological SSSI interests may be affected.	ABPmer have been appointed to assist with this work.

Organisation	Summary of Response	MORL Approach
Scottish Natural Heritage (SNH) **(continued)**	* The potential effects of sea level rise (amongst other climate change variables) should be considered within the planning of this development (known as 'future-proofing'), particularly in respect of the cable landfall. * The aspects scoped in' and 'scoped out' as set out in the applicant's report on pages 60 – 62 of the scoping report are agreed. Aspects to be scoped in, include: * Damage to geological features/designated sites namely: **Cullen to Stakeness Coast SSSI & Whitelhills to Melrose Coast SSSI** * alteration/modification of the hydrological/hydrogeological regime of the region and associated receptors. * disturbance of contaminated materials / soil gases and the subsequent generation of * potentially contaminated waste materials and effect upon construction materials and workers. * construction phase activities affecting the Water Environment (e.g. spillages, use of chemicals, sedimentation).	All infrastructure at the landfall point will be underground, with the jointing pit well clear of Mean High Water Springs and so future-proofing is not required. Impacts on geological interest features (associated with hydrodynamics, sedimentary and coastal processes) are addressed in Chapter 3.1 for offshore aspects and in Chapter 3.2 (Hydrology, Hydrogeology and Contaminated Land) for onshore aspects.
	Ornithology * The 10 km cable corridor buffer includes Troup Pennan and Lions Heads SPA and its component Gamrie and Pennan Coast SSSI. The route specified is not expected to impinge on any designated ornithological sites.	The refined route does not now impinge on these sites. Impacts are assessed in Chapter 4.6 (Terrestrial Ecology).
	* Recent studies of the Loch of Strathberg SPA suggest that few geese forage beyond 10 km of the site boundary, and the works are scheduled outwith the period of goose occurrence at Strathberg. SNH are satisfied that the proposals are unlikely to have any significant effects on the site in this case.	Noted
	* The bird survey methods appear broadly acceptable. If construction works are rescheduled, a program of winter walkover surveys should again be considered.	Noted
	* The CBC methodology for breeding birds is acceptable. Sensitive breeding bird records should be provided in a confidential appendix in line with SNH guidance.	Noted
	* SNH recommend that an additional breeding bird survey should be carried out immediately prior to construction to identify nesting attempts (particularly those of Schedule 1 species) as there is a significant lag time between surveys and construction.	Noted

Organisation	Summary of Response	MORL Approach
Scottish Natural Heritage (SNH) **(continued)**	* SNH recommend that a late summer / autumn construction schedule will avoid most, if not all, of the breeding bird sensitivities.	Potential effects are fully assessed in Chapter 4.6 (Terrestrial Ecology).
	* As the scheduling of construction works for spring and summer brings the likelihood of disturbance to breeding birds, mitigation measures will be required by means of a Breeding Bird Protection Plan or similar.	Potential effects are fully assessed in Chapter 4.6 (Terrestrial Ecology).
	* Waders are scoped out in the offshore paragraphs (Section 5.2.7), but should be included in surveys to the extent that they may use the landfall points for feeding and for nesting.	Potential effects, including the results of the coastal bird survey, are fully assessed in Chapter 4.6 (Terrestrial Ecology).
	Freshwater * The EIA will need to consider the potential impacts of noise and vibration upon salmonids and other fish where directional drilling is proposed.	Potential effects on salmon are included in Chapter 4.2 (Fish and Shellfish Ecology) and effects on watercourses are also assessed in Chapter 4.6 (Terrestrial Ecology).
	* SNH recommend consultation with the relevant District Salmon Fishery Board regarding potential impacts to salmonids and other fish species at river crossings, and in particular Redd Survey data for the areas where watercourse crossings are planned. If this data does not exist it is advised to collect this data during the spawning period later this year.	MORL has consulted with the Deveron and Spey District Salmon Fishery Boards, and potential effects are assessed in Chapter 4.2 (Fish and Shellfish Ecology) and Chapter 4.6 (Terrestrial Ecology).

Organisation	Summary of Response	MORL Approach
Scottish Natural Heritage (SNH) **(continued)**	* Noise propagation data in relation to the drilling kit will be required to adequately assess the impacts including noise and / or vibration associated with drilling works.	A general assessment of installation options has been included at this stage, in line with the Rochdale Envelope. Full assessments including noise propagation data will accompany the application for full planning permission, when the cable route and installation methods are finalised.
	* Lubricants used in directional drilling can be toxic in freshwaters therefore it is important that they are contained within the working area and during drilling under the river. It is advised to undertake a geotechnical assessment of the ground under the river in advance of works taking place. The use of boreholes can assist in estimating the depth of gravel or bedrock type that lies under the channel, and inform the depth at which drilling should take place. Ideally drilling should be through underlying rock to prevent the risk of lubricant leaching up to the riverbed surface. The exit and entry points of the drill should be set >50m from the river.	A general assessment of installation options has been included at this stage, in line with the Rochdale Envelope. Full assessments will accompany the application for full planning permission, when the cable route and installation methods are finalised.
	* Drilling work should be timed to avoid the main spawning and egg incubation periods, November-May.	A general assessment of installation options has been included at this stage, in line with the Rochdale Envelope. Full assessments will accompany the application for full planning permission, when the cable route and installation methods are finalised.

Organisation	Summary of Response	MORL Approach
Scottish Natural Heritage (SNH) **(continued)**	* The EIA should include a detailed method statement describing drilling operations, contingency plans for preventing and controlling pollution, the scale of works, consideration of the trenching needed at either end of the drilling etc. This should be supported with information from site investigation that should include information about the substrate under the riverbed, the depth under the river that drilling will take place at and the risk of pollution breaking through.	A general assessment of installation options has been included at this stage, in line with the Rochdale Envelope. Full assessments will accompany the application for full planning permission, when the cable route and installation methods are finalised.
	* SNH are satisfied that surveys for freshwater pearl mussel are not required provided adequate sediment management and pollution prevention plans are in place. Should these proposals change, and river engineering works are considered necessary then a survey may be required.	Noted
	Protected Species * In addition to identifying potential impacts on protected species along the onshore cable route and substation area, MORL should consider impacts on protected species at the landfall site and how to mitigate any impacts.	This is included in Chapter 4.5 (Intertidal Ecology) and Chapter 4.6 (Terrestrial Ecology).
	* As the time between survey work and construction work is unknown, it is important that pre-construction survey work is undertaken to ascertain any changes in the degree of wildlife activity, as this could have implications for the level of mitigation required.	Noted
	* A report summarising pre-construction survey results with a comprehensive list of mitigation techniques should be submitted for approval, leaving sufficient time for any wildlife licence applications to be processed prior to construction.	Noted
	* The ES should provide details of appropriate mitigation and state whether or not licences are likely to be required.	This is included in Chapter 4.5 (Intertidal Ecology) and Chapter 4.6 (Terrestrial Ecology).
	Natural and Semi-Natural Habitats * SNH support the proposal to undertake Phase 1 survey along the cable corridor routes and buffer with the understanding that follow-up National Vegetation Classification work for important areas may be required. We advise that this is also used to identify where protected species survey work, as discussed in the Scoping Report.	Chapter 4.6 (Terrestrial Ecology) provides detail on the Phase 1 Habitat Survey undertaken.

Organisation	Summary of Response	MORL Approach
Scottish Natural Heritage (SNH) **(continued)**	* SNH advise that any areas of carbon rich soils are identified in the EIA and recommend further liaison with SEPA on this matter.	Chapter 3.2 (Hydrolology, Hydrogeology and Contaminated Land) includes an assessment of peatland.
	Landscape and Visual Impact Assessment * SNH does not consider the development to raise any landscape concerns that would be of regional or national importance; therefore SNH defers the Landscape and Visual Impact Assessment to Aberdeenshire Council.	Noted
	In Combination and Cumulative Impacts * In addition to the types of large scale developments identified in the Scoping Report, it is recommended to consider various other cable works planned or proposed in the vicinity of the Moray Coast as proposed in Chapter 2.28 in the National Planning Framework 3 (draft), including Peterhead.	Noted. The development was not predicted to have any cumulative impacts with the Peterhead proposals.
Aberdeenshire Council Environmental Health	* The proposed methodology is satisfactory.	Noted
Aberdeenshire Council Flood Prevention Unit (FPU)	* The impact of landfall location will need to be assessed by FPU.	Noted
	* Should the cable route pass through any coastal structures then it is expected that they are reinstated to full strength.	The landfall point construction is detailed in Chapter 2.2 (Project Description). Land will be fully reinstated (see Chapter 3.2 Hydrology, Geology and Contaminated Land).
	* The landfall should be armoured for protection against erosion.	The cables will be buried at the landfall point (see Chapter 2.2).

Organisation	Summary of Response	MORL Approach
Aberdeenshire Council Flood Prevention Unit (FPU) **(continued)**	* The locations of the two onshore substations should consider flood risk. It is advised to consult SEPA's indicative 1 in 200 year flood map to get an initial indication of whether or not there may be a flood risk for the chosen location(s).	Flood risk is fully considered in Chapter 3.2 (Hydrology, Geology and Contaminated Land).
	* All structures over 300 feet will need to be charted on aviation maps. CAA would be interested in any proposed schedule of promulgation of the construction of the turbines.	There will be no onshore structures above 300 feet.
	* If the proposed routes to transport components for construction required alterations FPU would have to consider the impacts of this, from a flooding perspective.	Traffic and transport is assessed in Chapter 5.6 and associated appendices.
Aberdeenshire Council	* The search corridor for the onshore transmission cable route and the onshore substations contains 676 potentially contaminated sites. Types of sites include landfills, a gasworks, filling stations, sundry small industrial / commercial enterprises and potential infill such as former quarries and mill lades. If any contaminated sites lie on the finalised cable route or the site substation then site investigation must be carried in accordance with BS10175:2011. Site findings may dictate that remedial works are required prior to the commencement of development works.	Contaminated land is identified and assessed in Chapter 3.2 (Hydrology, Geology and Contaminated Land).
	* Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 states the information which should be included in an ES. These guidelines offer the backbone to the structure of an ES and should be used as the basis of this ES.	Noted
	* Environmental issues and likely aspects of the environment to be affected by the development are of key importance. Detailed survey work would be required to inform this ES.	Noted
	* Following analysis of the aspects of the environment likely to be significantly affected, a detailed assessment of the effects themselves would be required along with mitigation measures proposed.	Noted

Organisation	Summary of Response	MORL Approach
Aberdeenshire Council **(continued)**	* Examples of the types of issues that should be addressed in this ES, are not limited to, but include: (1) Climate change; (2) Local economic effect; (3) Landscape resource; (4) Soils and geology; (5) Visual amenity; (6) Ornithology; (7) Ecology; (8) Nature conservation; (9) European protected species; (10) Hydrology and water supplies; (11) Forestry and tree felling; (12) Transport and traffic; (13) Noise; (14) Cultural heritage and archaeology; (15) Land use; (16) Land ownership; (17) Tourism and recreation; and (18) Proposed mitigation measures.	All issues detailed are covered throughout this ES.
	* Overall, the main environmental impacts and proposed accepted methodology appear to be covered. Aberdeenshire Council are content with the scope of the assessment, the environmental effects identified and the significant effects to be scoped in.	Noted
	* Consultations were undertaken with Aberdeenshire Council's Natural Heritage Team, who raised no issues regarding their particular interest.	Noted
	Terrestrial Ecology * The range and scope of the ecological surveys is acceptable.	Noted
	* In regards to the habitat surveys, Aberdeenshire Council can provide details of any Tree Preservation Orders within the search area, if required.	Noted

Organisation	Summary of Response	MORL Approach
Aberdeenshire Council Natural Heritage **(continued)**	**Recreation / Access / Tourism** * Much of the information in the Socio-Economics Chapter may have been copied across from the EIA conducted for the Beatrice Scheme. Much of the EIA would be relevant, however the onshore and inshore interests are not relevant this far east. It would not be appropriate to use a baseline based on data covering the Highlands, as this part of Aberdeenshire has a significantly different tourism market than that of the Highlands / Inverness.	The assessment presented within Chapter 5.5 Socio-Economics provides a more detailed review of tourism assets within Aberdeenshire, although it is recognised that tourism numbers are only available at a regional level.
	* In terms of recreation it would also be more appropriate to consider facilities within the area of search as opposed to Lossiemouth Sailing Club or Kincraig Wildlife Park.	The assessment presented within Chapter 5.5 Socio-Economics provides a more detailed review of tourism assets within Aberdeenshire, although it is recognised that tourism numbers are only available at a regional level.
	* Sandend and Inverboyndie are very popular walking and surfing areas. The most significant impact is likely to be disturbance / closure during cable construction and installation, which should be addressed under the mitigation section.	The assessment presented within Chapter 5.5 Socio-Economics (section 5.5.2) recognises that Inverboyndie is well used and considers the impact of disturbance/closure. Sandend is no longer considered a potential cable landfall area and therefore not considered in the assessment.
	Background * It is noted that the project development process is yet to finalise the cable landfall site, the specific corridor for the cable link and precise substation locations, although areas of search and site options are known.	Landfall has now been selected (Inverboyndie) and is assessed in this ES.

Organisation	Summary of Response	MORL Approach
Aberdeenshire Council **(continued)**	**Landscape and Visual Impact Assessment** * In terms of a standard approach to the EIA process, for a full planning application, MORL needs to carry out a landscape and visual impact assessment which should be produced in accordance with the Guidelines for Landscape and Visual Impact Assessment (third edition).	Undertaken in Chapter 5.3 (Seascape, Landscape and Visual Assessment).
	* Sensitive receptors include local residences, transportation corridors, settlements, places of tourism, cultural, conservation and heritage interest etc. In terms of locally significant viewpoints, the Culsh Monument and New Deer should be used as a more strategic viewpoint for the LVIA process.	Included in Chapter 5.3 (Seascape, Landscape and Visual Assessment).
	* To achieve best practice, the EIA process should contribute to the site development and design process, in terms of identifying site(s) opportunities and constraints and locating and designing the development to have minimal or ideally no adverse effects on valued aspects of the development site, its landscape and setting.	At this stage, the onshore substations are assessed in an indicative location and will be fully assessed when the application for full planning permission is submitted.
	Cumulative LVIA * The LVIA assessor should review all recent publicly known planning applications and pre-application enquiries with significant visual implications for the area. The cumulative assessment can extend to around 6 km from the proposed development site; however this should be extended for significant development in the district and sensitive viewpoints such as the Culsh monument.	Included in Chapter 5.3 (Seascape, Landscape and Visual Assessment).
	Detailed Comments * All elements of the proposed development should be designed to have minimal or no impact on the valued landscape character of the local area.	Detailed design of all elements are not available at this stage, and a Rochdale Envelope approach is adopted. Final design of all elements will accompany the application for full planning permission.

Organisation	Summary of Response	MORL Approach
Aberdeenshire Council **(continued)**	* The substation buildings may be of a very large scale for the locality. To minimise possible visual impacts, buildings should be placed as low in the local landform as possible with screening. Screening should be particularly designed around sensitive local receptors such as residences, transportation corridors and local settlements to minimise potential adverse effects.	The substations have been assessed in an indicative location within the landscape in the substation area, and an indicative screening design has been included in Chapter 5.3 (Seascape, Landscape and Visual Assessment) and associated figures.
	* A key mitigating factor for the site's general environment is the quality of design of the buildings and landscape. A development with an aesthetically pleasing appearance would have a positive impact on the area and aid development assimilation in the area.	Detailed design of all elements are not available at this stage, and a Rochdale Envelope approach is adopted. Final design of all elements will accompany the application for full planning permission.
	* Screening elements of the development with predicted adverse effects can be achieved with earthworks and screen planting. All earthworks should be designed to appear organic and naturalistic. Screen planting should be based on the list of native plants appropriate to the Buchan area.	An indicative screening design has been included in Chapter 5.3 (Seascape, Landscape and Visual Assessment) and associated figures.
	* In terms of site assessment, as far as practical existing woodland planting etc. should be conserved and incorporated into the development.	An indicative screening design, including existing woodland, has been included in Chapter 5.3 (Seascape, Landscape and Visual Assessment) and associated figures.
	* Maximising landscaping would be a major factor of mitigation across a development site, and should the site's baseline conditions be suited to other habitat development (with obvious biodiversity value) then that should be incorporated into the development proposal. Maximising future conservation value of the development would be a worthy project objective.	An indicative screening design has been included in Chapter 5.3 (Seascape, Landscape and Visual Assessment) and associated figures.

Organisation	Summary of Response	MORL Approach
Aberdeenshire Council **(continued)**	* Regarding an initial planning application, MORL is advised to submit as much information as available to them at that point in the planning process. With regard to design, the locations and dimensions of all aspects of the Project should be submitted at this stage as well as information on colours and finishes.	MORL has submitted with this application as much detail as possible. The subsequent application for full planning permission will provide further detailed information on design aspects of the infrastructure.
	* Regarding landscaping, MORL needs to demonstrate their commitment to this element of the Project from the outset, indicating the location of all different elements of landscaping and related features. A landscape maintenance plan should be submitted to demonstrate MORL's medium to long term commitment to the application's environmental design.	Following analysis several woodland design concepts were considered (see Figure 5.3-28). An indicative screening design has been included in Chapter 5.3 (Seascape, Landscape and Visual Assessment) (see paragraphs 5.3.4.33 to 5.3.4.38). The indicative landscape proposal is shown on Figure 5.3.29. The maintenance plan will be developed and included with the application for full planning permission, once a screening design has been finalised. The maintenance plan can be secure by an appropriately worded condition.
	* Having reviewed Section 5.3.9 'Archaeology and Cultural Heritage' of the submitted Scoping Report, it is confirmed that an EIA will be required for the historic environment given the scale, type and location of the proposed works, and the potential that they have to impact upon archaeological remains.	Noted
	* The recommended methodology agreed in Section 5.3.9 is agreed, however on page 149 – List of 'Best Practice Guidance', Planning Advice Note 42 should be replaced with the more up-to-date Planning Advice Note 2 / 2011.	Noted