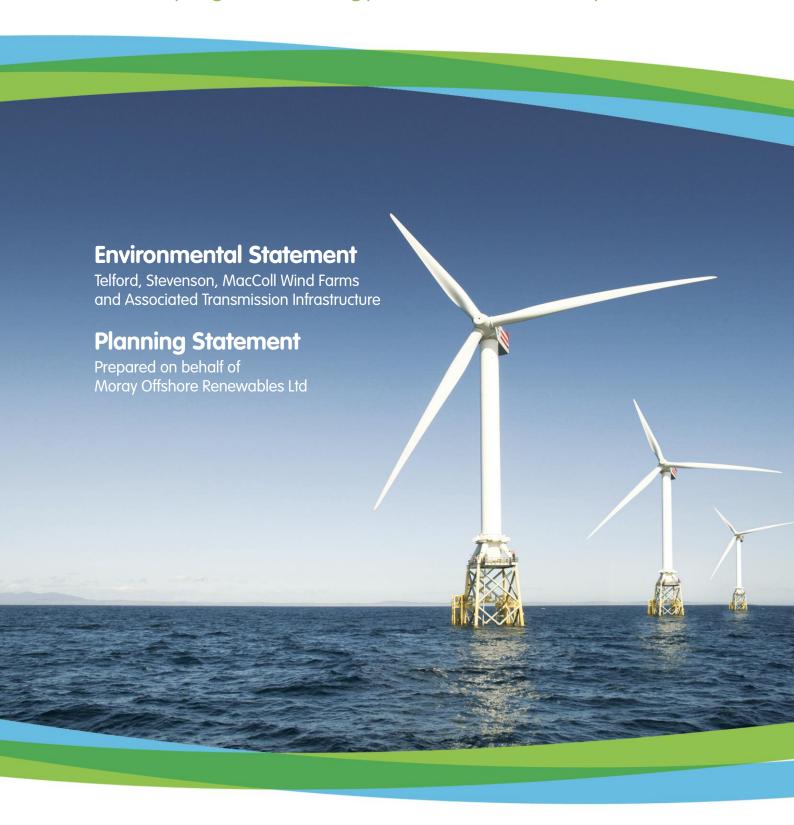
moray offshore renewables Itd

Developing Wind Energy In The Outer Moray Firth







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1 Introduction

1.1 Background

- 1.1.1 Jones Lang LaSalle (JLL) has been commissioned by Moray Offshore Renewables Ltd (MORL) to prepare this Planning Statement in support of the Telford, Stevenson and MacColl Offshore Wind Farms ('three proposed wind farms') and the associated offshore transmission infrastructure (OfTI) (hereafter referred to as the 'proposed development'). This Planning Statement is in support of the applications for consent submitted under Section 36 of the Electricity Act 1989 (as amended) and the applications for Marine Licences under the Marine and Coastal Access Act 2009 and the Marine (Scotland) Act 2010. Consents and licences under other legislative regimes are also required for the proposed development.
- **1.1.2** An Environmental Statement (ES) has been submitted in support of the proposed development, which is to construct and operate three wind farms within the Moray Firth and the associated OfTI. Figure 1.1-2 in Volume 6 a of the ES illustrates the wind farm development areas subject to the current applications that fall within the relevant Crown Licence Areas.
- **1.1.3** This Planning Statement provides an assessment of the proposed development against the relevant marine and renewable energy policy framework. Reference is also made to the relevant provisions of the Development Plans for Aberdeenshire, Moray and Highland Councils as well as to the National Planning Framework for Scotland 2.
- **1.1.4** This Planning Statement is supplementary to and separate from the ES, which provides a detailed description of the proposed development, and it outlines the relevant planning and energy policy framework. This Planning Statement should be read in conjunction with the ES.

1.2 Project Description

1.2.1 MORL holds a Zone Development Agreement with The Crown Estate for Zone 1 of Round 3, in the Moray Firth, hereafter referred to as the 'MORL Zone'. MORL has set up Special Purpose Vehicles (SPVs) to consent, construct and operate the wind farms and these SPVs hold Agreements for Lease with the Crown Estate for three separate sites within the MORL Zone: these are named Telford, Stevenson and MacColl. The anticipated capacities of the wind farm developments within these sites are set out within Table 1.1 below:

Table 1.1 Wind Farm Development Zone Capacities

	Telford	Stevenson	MacColl	Combined
Area (km²)	93	77	125	295
Maximum Capacity (MW)	500	500	500	1,500

- **1.2.2** The wind farm sites are situated on the Smith Bank within the outer Moray Firth, at a minimum of 22 km (12 nm) from the Caithness coastline. The water depths are between 38 and 57 m (21 to 31 ftm) within the site. Within the Zone, MORL aims to establish wind power generation to a maximum capacity of 1,500 MW and holds a grid connection agreement for this output. The maximum capacity within each individual wind farm site is 500 MW.
- **1.2.3** The infrastructure associated with the three proposed wind farms comprises the following:
- Turbines and associated substructures and foundations;
- Inter–array cabling;

- One offshore met mast (within one site only with the location to be confirmed) in addition to the offshore met mast that has already been consented (see Chapter 2.2.8 of the ES for further details); and
- Offshore transmission infrastructure including offshore substation platforms, converter stations and offshore transmission cabling (the OfTI).

1.2.4 Further information on the main development components is set out in detail within Chapter 2.2 of the ES and for context is summarised below:

The Wind Turbine Generators

1.2.5 The wind turbines for all three sites are expected to have a generating capacity of between 3.6 and 8 MW per turbine. Each turbine would be of the horizontal axis three bladed design. The tip heights of the turbines could range from 162 m to a maximum of 204 m and would have a minimum of 22 m between the turbine tip at its lowest point and the lowest astronomical tide. The colouring, markings, lighting and foghorn requirements for the wind turbines within the sites will be agreed with the appropriate authorities (e.g. Northern Lighthouse Board and Civil Aviation Authority) prior to commissioning. Only one turbine rating will be used within each of the wind farm sites, although different ratings may be used between the sites. The maximum number of turbines which would be installed across the three proposed wind farm sites would be 339.

Wind Turbine Foundations and Substructures

1.2.6 Two types of turbine foundations are proposed and considered within the ES: a gravity base structure and a jacket structure with pin piles. The type of foundation that would be most appropriate is dependent on turbine choice and ground conditions within each of the sites. Each has been described and assessed within the ES.

Inter-Array Cabling

1.2.7 Inter–array cabling will run between each turbine in strings, typically connecting up to 36 MW of turbines on each string (e.g. ten 3.6 MW turbines or seven 5 MW turbines). The configuration of the turbines on the strings is expected to be either a branched radial or looped arrangement.

Offshore Transmission Infrastructure

- **1.2.8** The offshore transmission infrastructure includes the following development components:
- 3 to 6 Alternating Current (AC) offshore substation platforms (maximum dimensions 100 m length, 100 m width and 70 m height) including foundations;
- Up to 2 AC to Direct Current (DC) convertor station offshore platforms;
- Inter-Platform Cabling at 220 kV; and
- High Voltage Direct Current (HVDC) export cables to connect the offshore converter stations to the onshore converter stations.

Other Development Components

- **1.2.9** The ES considers 'the Project' for assessment to be the three proposed wind farm sites (Telford, Stevenson and MacColl) together with the transmission infrastructure, comprising the OfTI and onshore transmission infrastructure (OnTI). The OnTI elements of the Project include cabling from the landfall point at Fraserburgh Beach to the onshore substation(s) in the vicinity of Peterhead Power Station.
- **1.2.10** Whilst applications for Section 36 Consent and Marine Licences for the three proposed wind farm sites and the OfTI will be submitted to Marine Scotland contemporaneously, the application for planning permission for the OnTI will be submitted to Aberdeenshire Council once the precise location and layout for the onshore substation(s) have been confirmed. The ES contains sufficient information on the OnTI to allow Scottish Ministers and Marine Scotland to make decisions on the applications that will be submitted to them taking into account the impacts of the infrastructure covered by those applications in combination with the OnTI i.e. the "whole project". Further environmental information may be submitted in support of the subsequent planning application for the OnTI.
- **1.2.11** In addition, a further planning statement will be submitted in support of the subsequent planning application for the OnTI which will sit in context with this planning statement so that the overriding policy considerations for delivery of the Project (of which the onshore infrastructure plays a vital part) are clear but also to allow a clear and more in-depth assessment of Development Plan provisions engaged by the onshore works only.

Construction Phase Safety Zones

1.2.12 In accordance with the Electricity (Offshore Generating Stations) (Safety Zones) (Application Procedures and Control of Access) Regulations 2007, it is expected that a 500 m safety zone around each renewable energy installation will be applied for under Section 95 of the Energy Act 2004 during the period of construction works for the three proposed wind farms. In order to minimise disruption to navigation and users of the sea, safety zones are expected to be established around such areas of the site to coincide with development activities actually taking place at a given time. The exact locations are to be determined at a later stage and would be promulgated through a Notice to Mariners and Consultation.

Construction and Installation Methods

1.2.13 The proposed construction and installation methods for all development components are set out in detail within Chapter 2.2 of the ES and the associated Technical Appendices.

1.3 The Environmental Impact Assessment (EIA)

- **1.3.1** The proposed development is in the early stages of design evolution. Not all development components have been fully designed at this stage in the development process and on this basis the EIA has been undertaken in accordance with the Rochdale Envelope approach.
- **1.3.2** The Rochdale Envelope approach can be summarised as follows: where project detail is unable to be fully defined at the time of an application for consent, the consent application(s) should acknowledge the need for details of a project to evolve over a number of years within clearly defined parameters. The EIA then requires to take account of the need for such design evolution, within those parameters, reflecting the likely significant effects of the Project within the ES.
- **1.3.3** MORL have ensured that the EIA is as rigorous as possible by applying methodologies to the EIA which provide quantitative assessments where possible and where the environmental information available allows this. Detailed descriptions, where relevant, of the approach to assessing the potential for environmental effects on particular environmental receptors is described in more detail within Chapter 5.

1.4 Structure of Report

1.4.1 This Planning Statement has been structured as follows:

- Chapter 2 provides a description of the relevant legislative provisions that apply to the consenting process;
- Chapter 3 provides a description and assessment of the policy support for the proposed development;
- Chapter 4 provides a review of the relevant terrestrial planning policy documents of relevance to the proposed development;
- Chapter 5 provides the policy assessment in the context of the environmental effects reported by the ES and provides overall conclusions regarding the matters considered within Chapters 2 and 3;
- Chapter 6 provides a description and assessment of the key benefits of the proposed development and provides further policy conclusions;
- Chapter 7 provides overall conclusions;
- Appendix 1 provides a list of the relevant Development Plan policies to the consideration of the proposed development; and
- Appendix 2 provides a list of the Development Plan policies of relevance to the consideration of the OnTI.

¹ The 'Rochdale Envelope' arises from two cases: R. v Rochdale MBC ex parte Milne (No. 1) and R. v Rochdale MBC ex parte Tew [1999] and R. v Rochdale MBC ex parte Milne (No. 2) [2000].

2 Statutory Considerations

2.1 Introduction

- **2.1.1** This chapter provides a description of the relevant legislative provisions that apply to the determination of the applications for Section 36 Consents and the associated Marine Licences. It is important to describe the relevant legislative provisions at the outset as it is these provisions that define the matters that the decision maker must have due regard to when reaching their decision on the applications for consent and licences.
- **2.1.2** As described within Chapter 1, this Planning Statement only considers those development components relating to the offshore generation aspects of the Project and the associated OfTI, namely the wind turbines, their foundations the inter-array cables, the offshore substations and converter stations and the offshore export cable.
- **2.1.3** It is usual for most onshore electricity generation development projects to be consented under the terms of the Town and Country Planning (Scotland) Act 1997 (as amended) or the Electricity Act 1989 (as amended) (including a grant of Deemed Planning Permission). However, for offshore electricity generation projects that are both within and outwith Scotlish Territorial Waters (STW), development consents and development licences are required under the terms of the following:
- The Electricity Act 1989 (as amended);
- The Marine (Scotland) Act 2010;
- The Marine and Coastal Access Act 2009
- The Energy Act 2004; and
- The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) (for European Protected Species Licences).
- **2.1.4** Chapter 1.2 and Technical Appendix 1.2 A of the ES set out the applicable legislative provisions and they are summarised below. The key legislative matters that require consideration when determining whether to issue the required development consents and development licences are described here.

2.2 The Electricity Act 1989 (as amended)

- **2.2.1** The Electricity Act 1989 provides the primary consent required to allow the construction and operation of the proposed offshore wind farms (the generating station(s)). Applications for consent under Section 36 of the Electricity Act have been submitted and will be assessed in accordance with Schedules 8 and 9 of the Act. Schedule 8 applies to procedural matters and Schedule 9 requires a Licence Holder when formulating relevant development proposals to generate or supply electricity to:
- "have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, building and objects of architectural, historic or archaeological interest;" and
- "do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects".
- **2.2.2** Schedule 9 also requires, without prejudice to the matters set out above, for a person authorised to generate electricity to avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters.
- **2.2.3** The Electricity Act 1989 consenting regime requires consideration to be given to the preservation of amenity, fisheries and sea lanes essential to international navigation. These matters are fully assessed through the EIA process and the results of the assessment are reported within the ES.

2.3 The Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009

- **2.3.1** The Marine (Scotland) Act 2010 (MSA) and the Marine and Coastal Access Act 2009 introduce the requirement for a Marine Licence which replaces the requirement for consent under section 5 of the Food and Environmental Protection Act 1985 and consent under section 34 of the Coast Protection Act 1949. The primary objective of the legislation is to protect the marine eco-system and human health, as well as to minimise interference and nuisance to other legitimate users of the sea.
- **2.3.2** The Scottish Ministers have responsibility under the MSA for determining whether to grant licences within the Scottish inshore region of UK waters from 0-12 nm as well as having devolved responsibility under the Marine and Coastal Access Act 2009 for licensing activities taking place within the Scottish offshore region (12-200 nm) (which includes the area of the three proposed wind farm sites). The OfTI is located partly within the Scottish offshore region and partly within the Scottish inshore region.
- **2.3.3** Section 58 of the Marine and Coastal Access Act 2009 requires that:

"A public authority must take any authorisation or enforcement decision in accordance with the appropriate marine policy documents, unless relevant considerations indicate otherwise.

If a public authority takes an authorisation or enforcement decision otherwise than in accordance with the appropriate marine policy documents, the public authority must state its reasons."

- **2.3.4** The same requirement is contained in Section 15 of the MSA.
- **2.3.5** Section 69 of the Marine and Coastal Access Act 2009 and Section 27 of the MSA state the matters to be considered in determining licence applications, and these include:
- The need to protect the environment;
- The need to protect human health;
- The need to prevent interference with legitimate users of the sea; and
- To have regard to any representations received from any person having an interest in the outcome of the application.

2.4 The Energy Act 2004

- **2.4.1** The Energy Act 2004 introduced provision for safety zones to be declared around offshore renewable energy installations, both during construction and operation. It is a criminal offence for a vessel to enter a safety zone unless it is a permitted vessel or it is acting in an emergency situation. Safety zones are intended to secure the safety of the renewable energy installation, or other installations. The Secretary of State must consult the Scottish Ministers where the safety zone requested relates to Scottish waters.
- **2.4.2** The Energy Act 2004 also introduced a decommissioning regime for offshore wind and marine energy installations. Decommissioning offshore renewable energy installations in Scotland is administered by DECC in consultation with the Scottish Ministers. A preliminary decommissioning plan is presented at Appendix 1.3E of the ES, which satisfies this requirement for the purposes of gaining the required consents and licence authorisations.

2.5 The Habitats and Birds Directives

- 2.5.1 Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive') is transposed into UK law by the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended) (together the 'Habitats Regulations'). The Habitats Regulations require a Habitats Regulations Appraisal (HRA) to be conducted by the competent authority before a plan or project that is likely to have significant effects on designated or candidate Special Protection Areas or Special Areas of Conservation can be given consent.
- **2.5.2** Directive 2009/147/EC on the conservation of wild birds (the 'Birds Directive') aims to maintain the populations of wild bird species across their natural range and allows for the identification and classification of Special Protection Areas for rare and vulnerable species listed in Annex I as well as for all regularly occurring migratory birds. The Birds Directive is transposed into UK law by the Habitats Regulations, the Wildlife and Countryside Act 1981 and the Nature Conservation (Scotland) Act 2004.

2.6 The Town and Country Planning (Scotland) Act 1997 (as amended)

The Town and Country Planning (Scotland) Act 1997 2.6.1 (as amended) (the 'Planning Act') applies to all development above the mean low water springs (the lowest level that tides reach on average over a tidal period). Accordingly, the Planning Act would only formally apply to the consideration of the consent applications for the OnTI. However, it is quite possible for environmental impacts associated with the offshore aspects of the proposed development to be experienced onshore and, accordingly, the terms of the relevant statutory Development Plans for Aberdeenshire, Moray and The Highland Councils are considered to have some relevance, albeit limited. The relevant policies from the statutory Development Plans are set out within Appendix 1 of this Planning Statement, and conclusions regarding general accordance are set out in Chapter 4.

2.7 The UK Marine Policy Statement

2.7.1 The UK Marine Policy Statement (MPS) was published in March 2011 and is the only marine policy document with a statutory footing at the current time. It is an 'appropriate marine policy document' under the Marine and Coastal Access Act 2009 (see Sections 58 and 59) and an 'appropriate marine plan' under Section 15 of the MSA. The relevant aspects of the MPS are set out within Chapter 3.

3 The Relevant Policy Framework

3.1 Introduction

- **3.1.1** This section sets out the relevant policy framework that applies to the consideration of the applications for Section 36 Consents and the associated Marine Licences. It is explained how the proposed development helps to achieve international, Scottish Government and UK Government climate change and renewable energy policy and targets. This section also describes the relevant requirements of UK and Scottish marine policy, which in terms of marine renewables, is related to the wider renewable energy policy framework at the EU, UK and particularly Scottish levels.
- **3.1.2** Scottish renewables, climate change and marine policies are considered to be the most relevant aspects of the relevant policy framework with which to consider the proposed development against. Additional policy considerations are referred to in Chapter 4, such as the relevant Development Plans and the National Planning Framework 2. Such policies require to be read in the context of EU and UK renewables, climate change and marine policies.
- **3.1.3** The renewables, climate change and marine policy framework form very relevant material considerations that deserve significant weight in the determination of the applications for Section 36 Consents and the associated Marine Licences. The relevant policy provisions are set out below.

3.2 Renewable Energy and Climate Change Policy

European Energy Policy

- **3.2.1** In January 2008 the European Commission published a '20-20-20' targets package. This included proposals for:
- A reduction in the EU's greenhouse gas emissions of at least 20 % below 1990 levels;
- Increasing the proportion of final EU energy consumption from renewable sources to 20 %; and
- A 20 % reduction in primary energy use compared with projected levels, to be achieved by improving energy efficiency.

- **3.2.2** Targets are to be achieved by 2020, as set out in Directive 2009/28/EC on the promotion of the use of energy from renewable sources (the 'Renewable Energy Directive').
- **3.2.3** The 20 % is split between Member States. For the UK, the Renewable Energy Directive requires a 16 % reduction in UK greenhouse gas emissions by 2020 and for 15 % of all energy consumed in the UK to come from renewable sources by 2020.

Scottish Government Policy and Renewable Energy Generation Targets

- **3.2.4** The Scottish Government is leading the way in renewable energy. It has set ambitious climate change and renewable energy targets and has placed renewable energy and climate change high on its political agenda. The Scottish Government is driving the delivery of offshore wind in Scottish Territorial Waters (STW) and Offshore Waters through its energy, economic and marine policies and has identified that offshore wind will be vital in meeting the ambitious targets set.
- **3.2.5** Over the past few years there has been a significant number of Scottish Government policy documents (as well as statutes) published on the topic of climate change and renewable energy. These are very relevant considerations to the determination of the proposed development as they respond to the EU and UK climate change policy position through, among other matters, providing significant support for renewable energy development, both off and onshore. In this section the following are referred to, with key policy objectives and targets highlighted:
- The Climate Change (Scotland) Act 2009;
- The Scottish Renewables Action Plan (2009);
- A Low Carbon Economic Strategy for Scotland: Scotland – a Low Carbon Society (2010);
- 2020 Routemap for Renewable Energy in Scotland (2011);
- The Scottish Government Economic Strategy (2011); and
- Draft Electricity Generation Policy Statement (2012).

The Climate Change (Scotland) Act 2009

- **3.2.6** The Climate Change (Scotland) Act 2009 received Royal Assent on 4 August 2009. Part 1 of the Act sets the statutory framework for greenhouse gas emission reductions in Scotland by setting an interim (world leading) 42 % reduction target for 2020 and an 80 % reduction target for 2050, from the baseline, which for CO_2 is based on 1990 emission levels. Part 1 of the Act also requires the Scottish Ministers to set annual targets in secondary legislation, for Scottish emissions from 2010 to 2050 to ensure that the 2050 target is attained.
- **3.2.7** Part 3 of the Act places duties on the Scottish Ministers requiring them to report regularly to the Scottish Parliament on Scotland's emissions and on the progress being made towards meeting the emissions reduction targets as set out in the Act.

The Scottish Renewables Action Plan (2009)

- **3.2.8** The Scottish Government published the 'Renewables Action Plan' (RAP) in June 2009. This identifies what needs to happen in the renewables sector in order to achieve Scottish Government objectives.
- **3.2.9** The RAP refers to the imperative for action to address climate change (demonstrated by Scotland's world leading carbon reduction target of 42 %). It makes reference to the Scotlish Government's commitment to achieve a headline target of 20 % of total Scotlish energy use coming from renewable sources by 2020. The RAP sets out the framework for action in the specific area of renewable energy.
- **3.2.10** Key objectives are summarised in the Executive Summary as follows:
- To establish Scotland as a UK and EU leader in the field;
- To ensure maximum returns for the Scottish domestic economy; and
- To meet targets for energy from renewables, and for emissions reductions, to 2020 and beyond.

- **3.2.11** The RAP advises that "Ithe Scottish Government is continuing to engage very closely with the UK Government on the shape and scope of renewable energy legislation and the financial incentives that they create." The RAP refers to the Renewables Obligation (RO) mechanism and states that the Scottish Government is working with "....UK colleagues on the further changes to the RO required to align it with the demands of the EU 20 % target" (page 17).
- **3.2.12** Section 4 of the RAP highlights that each technology will have its own part to play in helping Scotland meet its energy targets, "and ministers are committed to a diverse renewables mix to maximise the scope to match supply with demand, and to enhance security of supply" (page 20).
- **3.2.13** The RAP notes specifically for offshore wind that it is expected "Itlo make a significant contribution to 2020 renewables targets and beyond. To maximise economic benefits to the Scottish economy, and enable a young industry to establish, whilst working in harmony with the marine environment" (page 82).
- **3.2.14** The RAP also sets out the following ambitions for the offshore wind industry:
- "to drive the success of the Scottish offshore wind industry, and facilitate the timely development and installation of offshore wind projects within Scottish Territorial Waters and Round 3 sites adjacent to Scottish Territorial Waters;" and
- "to build Scotland's position as a key base for the offshore wind, innovation, manufacturing and installation, leveraging its oil and gas experience."

A Low Carbon Economic Strategy for Scotland: Scotland – a Low Carbon Society

3.2.15 The Scottish Government published this policy document in November 2010. In the foreword, John Swinney MSP, Cabinet Secretary for Finance and Sustainable Growth, stated:

"This low carbon economic strategy builds on the responses from Scottish business, industry and research base... [i]t provides a Scottish focus, alongside UK Government initiatives, on what action is required to transform Scotland's industries and infrastructure, into exemplars to the world of what can be achieved in the pursuit of a low carbon economy".

- **3.2.16** On page 6 of the report, the Scottish Government states that the aspiration is that within less than 10 years, 80 % (now 100 %) of electricity will be generated from renewables. In addition, the Scottish Government has developed an ambitious set of targets which include the decarbonisation of electricity generation by 2030.
- **3.2.17** The Low Carbon Economic Strategy is an integral part of the Scottish Government's overall Economic Strategy and seeks to establish strong policy direction around Scotland's key low carbon economic opportunities. On page 10 of the document, it states that "Scotland has the natural resources to become the green energy power house of Europe".

2020 Routemap for Renewable Energy in Scotland

- **3.2.18** The Scottish Government published the 2020 Routemap for Renewable Energy in Scotland in July 2011 (the 'Routemap') at the same time that the UK Government published the UK Renewable Energy Roadmap (referred to below).
- **3.2.19** The Executive Summary of the Routemap states that it is "an update and extension to the Scottish Renewables Action Plan 2009... This updated and expanded Routemap reflects the challenge of our new target to meet an equivalent of 100 % demand for electricity from renewable energy by 2020".
- **3.2.20** The Routemap is therefore an important Scottish Government policy document. The Executive Summary concludes by stating that:
- "Across all scales of renewable generation, from householder to community to large-scale commercial schemes, the Scottish Government is working to make Scotland the renewables powerhouse of Europe. The benefits are not only in terms of energy generation and future security of supply, but can underpin our economic recovery over the next decade and beyond.

This Routemap for Renewable Energy in Scotland sets out how we can meet our challenging targets in harmony with the local environment and make a wider contribution to emission reductions through the displacement of fossil fuel generation".

3.2.21 Chapter 1 of the Routemap is entitled 'Scotland's Renewables Ambition and Paths to Delivery' and it states that the new renewables target equates to roughly 16 GW of installed capacity.

- **3.2.22** The Routemap also provides an increase in the Scottish Government's overall renewable energy target to 30 % of overall energy demand from renewables by 2020.
- **3.2.23** The Routemap specifically recognises the 'scale of the challenge' that requires to be addressed to meet the revised 2020 targets. It is noted that meeting the challenge, "will be heavily dependent on regulatory processes which we will seek to influence but over which currently we do not have control" (page 19).
- **3.2.24** The Routemap provides a 'synopsis of the main challenges' that require to be addressed to meet the 2020 renewables targets, one of which is 'consents and planning'. With respect to consents and planning, the Routemap identifies that a "further increase in consenting / deployment rates [is] required especially for offshore wind" (page 19).
- **3.2.25** The Routemap also illustrates that the different renewables deployment trajectories considered will not meet the 2020 target of 100 % equivalent of Scottish electricity consumption being met from renewable sources by 2020 (see 'Projections of Renewable Electricity Installed Capacity Based on Historical Data' on page 6 of the document)
- **3.2.26** Importantly, the Routemap states that "Ithe successful delivery of the capacity required to deliver the equivalent of 100 % of Scottish electricity consumption will demand a significant and sustained improvement over the deployment levels seen historically" (page 26).
- **3.2.27** Chapter 2 of the Routemap is entitled 'Crosscutting Challenges' and notes that there are a number of crosscutting challenges that require to be faced by all sectors that make up the renewables industry if the 2020 targets are to be realised. One of the 'Crosscutting Challenges' identified is 'Planning and Consents'.
- **3.2.28** The Routemap states that in order to meet the 2020 target of the equivalent of 100 % of Scottish electricity consumption from renewables "a further increase in consenting and deployment rates will be required...This will be achieved by driving excellence in planning and consenting processes" (page 40).

- **3.2.29** Section 3.1 of the Routemap provides a link to the sectoral routemap for the offshore wind energy industry and notes "[w]ith 25 % of Europe's offshore wind potential, the manufacturing, supply chain, job creation and training opportunities present Scotland with huge scope for sustainable economic growth" (page 62).
- **3.2.30** The Routemap provides conclusions within Chapter 4 and states that:

"This Routemap sets out a comprehensive path of actions to deliver on Scotland's ambition to be the green powerhouse of Europe. By setting Europe's most ambitious target for renewable electricity and putting in place the measures required to deliver it we are creating a competitive advantage for Scotland which will secure a prosperous and sustainable low carbon economy for the future" (Page 117).

Scottish Government Economic Policy

- **3.2.31** An important material consideration is the Scottish Government's Economic Strategy which was published in September 2011. The Foreword states that the Government Economic Strategy sets out the measures that are to be taken to accelerate Scotland's recovery and support jobs. It states that a new Strategic Priority, 'Transition to a low carbon economy', has been established. The opportunity to reindustrialise the nation and create thousands of new jobs by 2020 is highlighted. The Foreword states that the Government is "determined to deliver on this ambition". It regards that "this sector, above all others, will provide a focus on new private sector capital investment in Scotland".
- **3.2.32** The strategy for the transition to a low carbon economy is set out in detail at page 51. It states that the transition will be central to maximising Scotland's sustainable economic growth rate particularly in the long term. It adds "we will do this through our shift towards renewable energy.... Ithis is vital to deliver our ambitious sustainability target which is focused on substantially reducing our greenhouse gas emissions".
- **3.2.33** It states on page 52 that the transition to a low carbon economy will create opportunities for all of Scotland with strong prospects for rural Scotland, particularly in the renewable energy sector.
- **3.2.34** At page 53 of the document it states that the Scottish Government has committed to four transformational changes one of which is to decarbonise electricity generation by 2030.

- **3.2.35** In terms of jobs in the low carbon sector these are estimated to grow by 4 % a year to 2020, rising from 70,000 to 130,000, over 5 % of the Scottish work force.
- **3.2.36** The document states that in the context of the Government Economic Strategy, there are three overarching themes that are considered as priorities in delivering low carbon growth, namely:
- "Making Scotland a leading low-carbon investment destination;
- Maximising the social and economic opportunities of energy and resource efficiency; and
- Encouraging consumer and business demand for low carbon products and services" (page 54).
- **3.2.37** It is quite clear, therefore, that the Government views renewable energy as key to the delivery of sustainable economic growth and key to accelerating Scotland's economic recovery, including job creation.

Draft Electricity Generation Policy Statement 2012, Scotland - A Low Carbon Society

- **3.2.38** The Scottish Government published a Draft Electricity Generation Policy Statement (EGPS) for informal consultation in early 2012. The consultation period ran until 7th May 2012. It states at paragraph 1 of the Executive Summary that electricity generation and the economic and environmental benefits which could arise from a shift from fossil fuel generation to a portfolio comprising renewable and cleaner thermal generation are matters of considerable importance to the Scottish Government.
- **3.2.39** The EGPS is the most recent policy statement issued by the Scottish Government covering renewable energy. It examines the way Scotland generates electricity and considers the changes necessary to meet the various targets set by the Scottish Government.
- **3.2.40** Paragraph 2 states that the report is built upon a sustainable, low carbon vision of Scotland's energy future and at paragraph 14 it states that "we want to see ... a rapid expansion of renewable electricity across Scotland". The report takes account of the changing policy context in Scotland, the UK and the EU since the National Planning Framework for Scotland 2 was published in June 2009.

- **3.2.41** Paragraph 8 states that the report will assist the Scottish Government to comply with further statutory requirements under the Climate Change (Scotland) Act 2009. It also reiterates that the Government is committed to securing the transition to a low carbon economy, which is one of the six 'strategic priorities' laid out in the refreshed Government Economic Strategy.
- **3.2.42** The report summarises the Scottish Government's targets and these are set out as inter alia:
- Delivering the equivalent of at least 100 % of gross electricity consumption from renewables by 2020 as part of a wider, balanced electricity mix; and
- Seeking increased interconnection and transmission upgrades capable of supporting projected growth and renewable capacity.
- **3.2.43** The report states that these targets underpin the Government's vision of a stable and desirable future generation mix for Scotland, built around the following key principles (paragraph 13):
- a secure source of electricity supply;
- at an affordable cost to consumers:
- which can be largely decarbonised by 2030; and
- which achieves the greatest possible economic benefit and competitive advantage for Scotland.
- **3.2.44** In term of economic benefit, the report states that it is expected that there could be, over the decade to 2020, from renewables alone, the provision of up to 40,000 jobs and $\mathfrak{L}30$ billion of investment to the Scottish economy and a transformational opportunity for local ownership and benefits.
- **3.2.45** Paragraph 15 states that the 2020 target:

"is a challenge – to the energy supply sector, to our renewables industry and innovators, and to Scotland's communities; it is both a statement of intent and a rallying call, embodying our firm belief that Scotland can and must exploit its huge renewables potential to the fullest possible extent – to help meet demand here and across Europe. It is as much about the value and importance of the journey as it is about the destination".

- **3.2.46** Paragraph 16 states that the Scottish Government estimates that the 100 % target will require around 14-16 GW of installed capacity to be deployed.
- **3.2.47** Figure 1 (page 8) in the report illustrates that, at the time of the report, the status of renewable capacity is broadly as follows:
- Installed capacity 4.4 GW;
- Under construction 1.1 GW;
- Resolution to consent 2.2 GW;
- In the planning system- 4 GW;
- In the Appeal process 0.5 GW; and
- In 'scoping' 16.6 GW.

- **3.2.48** The report explains that the UK target to produce 15 % of all energy from renewable sources and an estimated 30 % of electricity from renewable sources by 2020:
- "...will require connection to Scotland's vast energy resource and we will continue to work to connect Scotland to an ever more integrated UK and EU market" (Page 9).
- **3.2.49** The report cross refers to the 2020 Routemap for Renewable Energy in Scotland. Paragraph 29 reiterates the EU context and states that Scotland has the potential to make a "major contribution to the EU's overall renewables target".
- **3.2.50** The Routemap states that the 2020 target of delivering the equivalent of 100 % of Scottish electricity consumption will demand a significant and sustained improvement over the deployment levels seen historically. The target equates to 16 GW. The Routemap explains progress to date, and states on page 3 that in terms of current installed capacity, capacity under construction and capacity consented, the figure amounts to only 7.5 GW.

- **3.2.51** The EGPS of 2012 refers to the 2020 target as 14 to 16 GW and to an installed capacity of 4.4 GW and a consented but not built capacity of some 3.3 GW, giving a total of 7.7 GW. Since the EGPS was issued, the Viking Wind Farm in Shetland has been consented which will have a capacity of 370 MW. Allowing for other local authority consents since the EGPS was issued, the total installed and consented capacity is likely to be in the order of some 8.1 GW.
- **3.2.52** It therefore remains the case that in light of the data contained in the Scottish Government Routemap and the EGPS, there remains a substantial shortfall against the 2020 renewable electricity generation target. There also remains a significant shortfall against the UK target for 2020 in terms of electricity generation from renewable sources.

United Kingdom Policy

- **3.2.53** The UK Government retains control of the overall direction of energy policy including the attainment of UK national targets on renewable energy generation. Since devolution in 1999, some energy policy issues have been devolved to Scotland such as energy efficiency and renewable energy (including consents for generating plants covered by the Electricity Act 1989).
- **3.2.54** In light of the significant increase in renewable energy required by the Renewable Energy Directive, the UK Government published the UK Renewable Energy Strategy in July 2009 in order to implement the obligations contained within the Directive and to enable a significant increase in the contribution that renewable energy makes to energy generation in the UK. In terms of the UK policy position, the following key policy documents set out below are referred to.
- The UK Renewable Energy Strategy (2009);
- The UK Low Carbon Transition Plan (2009);
- The Annual Energy Statement 2010 and 2011;
- The National Renewable Energy Action Plan for the UK (2010);

- The Committee on Climate Change Renewable Energy Review (2011);
- The UK Renewable Energy Roadmap (2011);
- The Electricity Market Reform White Paper (2011); and
- The Carbon Plan (2011).

UK Renewable Energy Strategy (2009)

- **3.2.55** The UK Renewable Energy Strategy (UKRES) states that the UK needs to radically increase the use of renewable electricity. The document sets out the means by which the UK can meet the legally binding target of 15 % of energy consumption from renewable sources by 2020. This will mean a very substantial increase in the share of renewables in under a decade.
- **3.2.56** The UKRES contains a 'lead scenario', which suggests that more than 30 % of electricity should be generated from renewables in the UK by 2020, which would be up from approximately 5.5 % in 2009. The majority of this is expected to come from wind power, both on and offshore.
- **3.2.57** A key element of the strategy is that it sets out the EU requirement for reporting to the EU on the achievement of delivery against the trajectory set for the 2020 target.
- **3.2.58** Under the Renewable Energy Directive, the UK has interim renewable energy targets to achieve which are as follows:
- 4 % in 2011 2012;
- 5.4 % in 2013 2014;
- 7.5 % in 2015 2016; and
- 10.2 % in 2017– 2018.

- **3.2.59** The UKRES refers explicitly to maximising economic and employment opportunities in order to put the UK at the forefront of global competition in the low carbon economy. The UK Government estimates that the Strategy will deliver a range of benefits including:
- Putting the UK on a path towards decarbonising the production of energy in the UK, alongside nuclear and carbon capture and storage.
- Contributing to the security of energy supplies in the UK through reducing demand for fossil fuels by around 10 % and gas imports by between 20 and 30 % against forecast use in 2020.
- Bringing outstanding business opportunities and enabling the UK to restructure into a low carbon economy, providing around £100 billion of investment opportunities and contributing to the creation of up to 0.5 million jobs in the UK renewable energy sector.
- The strategy is expected to deliver significant environmental benefits, in particular by contributing to global action against climate change however it recognises that there will also be some pressures on the local environment and natural heritage from new infrastructure provision.
- **3.2.60** The UKRES states that it is an integral part of the UK Government's overall UK Low Carbon Transition Plan and that the Devolved Administrations have a leadership role to undertake. The policies to meet the 2020 targets will be taken forward in England, Scotland and Wales, or on a UK wide basis as appropriate and in accordance with each devolution arrangement. The document makes it clear that each of the Devolved Administrations is setting out its own plan to increase renewable energy use and that "the UK Government and the Devolved Administrations are working together to ensure that our plans are aligned".

The UK Low Carbon Transition Plan (2009)

- **3.2.61** In parallel with the UKRES, the UK Government published the 'UK Low Carbon Transition Plan White Paper' in July 2009. The plan seeks to deliver greenhouse gas emission cuts of 18 % on 2008 levels by 2020 (and over a one third reduction on 1990 levels), and emphasises that the UK will need to drive major changes to the way energy is used and supplied.
- **3.2.62** It seeks to ensure that the UK will get 40 % of electricity from low carbon sources by 2020, with policies to produce approximately 30 % of UK electricity from renewables by 2020, by substantially increasing the requirement for electricity suppliers to sell renewable electricity.
- **3.2.63** The White Paper explains that the UK Government has put in place the world's first legally binding target to cut emissions by 80 % by 2050 and it has set five year "carbon budgets" to 2022 to "keep the UK on track" and which provide a clear pathway for reducing emissions in the future (page 6). The White Paper for the first time sets out how these budgets will be met.
- **3.2.64** The White Paper explains that carbon budgets are a limit on the total quantity of greenhouse gas emissions over a five-year period. They are intended to reflect the fact that the UK's overall contribution to reducing global greenhouse gas emissions is determined by emissions into the atmosphere over time, not by meeting specific targets in specific years. The carbon budgets provide an opportunity for scrutiny by reporting each year on progress and will ensure that the policy framework for the UK is guided by an evidence base.
- **3.2.65** In terms of carbon savings to 2020, the UK Government announced the first three budgets, covering the periods 2008-12, 2013-17 and 2018-22 in April 2009. It highlighted that the carbon budgets will be challenging. The final budget period centred on 2020 requires a 34 % cut of greenhouse gas emissions on 1990 levels.
- **3.2.66** The White Paper also makes the point that the introduction of carbon budgets introduces a new imperative: they are legally binding and must be met.

Annual Energy Statement 2010 and 2011

3.2.67 In July 2010, the UK Government published an 'Annual Energy Statement' which refers to 'low carbon energy' and states:

"There are two important reasons why the UK needs to wean itself off such a high carbon energy mix: to reduce greenhouse gas emissions, and to improve the security, availability and affordability of energy through diversification" (page 8).

- **3.2.68** At page 15 of the 2010 Annual Energy Statement, it states: "This Government is committed to being the greenest Government ever, which includes a firm commitment to renewable energy".
- **3.2.69** In the 2011 Annual Energy Statement, delivered by Chris Huhne (MP) to Parliament on the 23 of November 2011, he stated;

"we will secure our energy at the lowest cost: in the short term, by promoting competition. In the medium term, by insulating our homes. And in the long term by steering us away from excessive reliance on fossil fuels and onto clean, green and secure energy.

That is my Department's ultimate goal: to deliver clean energy for the future, and tackle dangerous climate change. Our vision is of a thriving and globally competitive low-carbon economy: with cleaner energy, more efficient homes, and lower bills."

National Renewable Energy Action Plan for the UK

3.2.70 The UK Government also published the 'National Renewable Energy Action Plan for the United Kingdom' in July 2010. It states that:

"The UK needs to radically increase its use of renewable energy. The UK has been blessed with a wealth of energy resources. ... As we look forward, we need to ensure that we also make the most of our renewable resources to provide a secure basis for the UK's future energy needs" (page 4).

3.2.71 This Action Plan also makes reference to the independent UK Committee on Climate Change (CCC) and states that it will "review the renewables target and provide advice on increasing the level of ambition" (page 4).

Committee on Climate Change (CCC)

3.2.72 The CCC provided advice by letter to the Secretary of State for Energy on 9th September 2010 and with regard to the renewable energy ambition for 2020 stated:

"The envisaged contribution from renewable electricity (to account for around 30 % of total generation by 2020, compared with 6.6 % in 2009) is appropriate in the context of the need to substantially decarbonise the power sector by 2030, on the path to meeting the economy wide target to reduce 2050 emissions by 80 % relative to 1990 levels. Investment now in a broad range of renewable technologies, but predominantly onshore and offshore wind, will directly contribute to required decarbonisation... It could also provide economic opportunities for UK-based firms".

3.2.73 The letter added that meeting the 2020 renewable energy target would require a step change in the rate of progress and that:

"Our forward indicators for renewable electricity generation set out key actions that would deliver the 2020 target. A rampingup in the pace of investment is required (around 1 GW of wind generation was added to the system in 2009, compared to over 3 GW required annually by the end of the decade!".

- **3.2.74** It adds that failure to address key risks would limit the scope for investment and would imply a reduced share of renewable electricity in 2020. Such risks include the need to "reduce the planning application period for new renewable projects and increase the planning approval rate".
- **3.2.75** On the 17th May 2011 the UK Government issued a statement on the Fourth Carbon Budget, explaining that it will cut greenhouse gas emissions by 50 % by 2025.
- **3.2.76** A limit on the total amount of greenhouse gases to be emitted by the UK between 2023 and 2027 has been proposed to cut Britain's emissions by 50 % from 1990 levels highlighting the UK Government's commitment to being the greenest Government ever.
- **3.2.77** The proposal, set out by the then Energy and Climate Change Secretary Chris Huhne, was in line with advice from the independent CCC. It sets a fourth carbon budget of 1950 MtCO $_2$ e (Metric Tonne (ton) Carbon Dioxide Equivalent) for the period that will span from 2023 to 2027, putting the UK on course to cut emissions by at least 80 % by 2050.

The UK Renewable Energy Roadmap (2011)

- **3.2.78** DECC published the 'UK Renewable Energy Roadmap' in July 2011 (the 'Roadmap'), alongside the UK Government's Electricity Market Reform White Paper.
- **3.2.79** Chapter 1 explains that the UK Government's goal is to ensure that 15 % of UK energy demand is met from renewable sources by 2020. At paragraph 1.3, it explains that the ambition extends beyond 2020 and there is reference to advice from the CCC which has concluded that there is scope for the penetration of renewable energy to meet 30 % to 45 % of all energy consumed in the UK by 2030.
- **3.2.80** The Roadmap sets out an analysis of recent trends in renewables deployment and the pipeline of projects that could come forward before 2020. It addresses the barriers to be overcome and sets out a targeted programme of action which the UK Government is taking in order to increase renewables deployment.
- **3.2.81** The Roadmap sets out a delivery plan to achieve the UK's renewable energy target over the next decade, based upon potential deployment levels and current constraints. The Ministerial Foreword states that the actions set out in the Roadmap are intended to "accelerate renewable energy in the UK".
- **3.2.82** The more significant parts of the Roadmap relate to forecast costs and deployment levels. The document is endorsed by DECC, Welsh Government, Scottish Government and Northern Ireland Executive and is to be reviewed and refreshed annually.
- **3.2.83** DECC's modelling is based upon work conducted by AEA Technology which considers build rates, technology costs and policy implications for the deployment of each technology. It concludes that 15 % of projected UK energy consumption can be delivered by 2020 (234 TWh), from a mixture of renewable electricity projects, renewable heat installations and road transport biofuels.
- **3.2.84** Paragraph 2.17 states that the UK's total energy consumption from renewable energy was 3.3 % in 2010 and that there will need to be:

"more than a four-fold increase in our renewable energy consumption by 2020 if 15 % of our energy needs are to be met from renewable sources. Consumption of renewable energy will need to rise by 17 % per annum to meet that goal".

- **3.2.85** The Roadmap forecasts 29 GW of renewable electricity capacity in operation by 2020 (paragraph 2.20).
- **3.2.86** Various uncertainties in deployment by 2020 are highlighted, such as cost of technologies, the level of renewable energy deployment and future demand. Although the pipeline of new capacity is considered to be healthy (paragraph 2.20), the analysis indicates that: "we cannot be certain that all the projects in the pipeline will be consented or commissioned or that they will progress quickly enough to contribute".
- **3.2.87** In relation to offshore wind it is noted that the UK is the largest market for offshore wind energy in the world with 1.3 GW of operational capacity across 15 wind farms (which generated over 3 TWh during 2010) and with the potential for up to 18 GW to be deployed by 2020. Beyond 2020 there is a very high potential for deployment of over 40 GW by 2030.

Planning our electric future: a White Paper for secure, affordable and low carbon electricity (2011)

- **3.2.88** The Electricity Market Reform (EMR) White Paper was published in July 2011 alongside the UK Renewable Energy Roadmap. The White Paper states that, "Ithe policy proposals within this White Paper form part of a much wider DECC agenda aimed at energy decarbonisation and security of supply". The decarbonisation of electricity generation informs one of the three "key objectives" of EMR (paragraph 1.3) and it is acknowledged that such an objective is implicitly linked to the issue of climate change and the achievement of national and European renewable energy targets.
- **3.2.89** Chapter 1 of the White Paper describes the "vision" which is to be achieved by 2030:

"By 2030, we will have achieved a reduction in our greenhouse gas emissions across the whole economy in line with our carbon budgets and will be firmly on track to achieving at least an 80 per cent reduction by 2050. We have substantially decarbonised electricity supply and also get more than one third of electricity generation from renewable sources... Wind power forms a substantial part of our generation mix with cost competitive wind turbines both on and offshore".

- **3.2.90** Ensuring the future security of electricity supplies is the first of the primary objectives in the EMR White Paper. Wind power is seen as being a reliable and stable future technology. The EMR White Paper advises that wind power forms a substantial part of the "generation mix" alongside a range of advancing and currently infant renewable technologies.
- **3.2.91** The White Paper is an expression of UK Government policy and illustrates the direction of travel intended by the UK Government with priorities including decarbonisation of electricity generation and greater energy security. It should be afforded significant weight.
- **3.2.92** In May 2012 the Energy Bill was published. It contains the proposals for Electricity Market Reform outlined in the EMR White Paper and includes provisions aimed at incentivising investment in low carbon electricity generation, ensuring security of electricity supply and helping the UK to meet its targets for renewables and emissions reduction.

The Carbon Plan (2011)

3.2.93 The UK Government published the Carbon Plan 'Delivering our Low Carbon Future' in December 2011. It sets out how the UK will achieve decarbonisation within the framework of the UK Government's overall energy policy. The Carbon Plan details the Government's plans for achieving the emissions reductions committed to in the first four Carbon Budgets covering the period from 2008 to 2027. The Carbon Budgets provide legally binding limits on the amount of emissions that may be produced in successive five-year periods and are intended to drive progress towards meeting the legally binding target to reduce the UK's greenhouse gas emissions by at least 80 % below base year levels by 2050 as set out in the Climate Change Act 2008. The vision, summarised at paragraph 10 states: "if we are to cut emissions by 80 % by 2050, there will have to be major changes in how we use and generate energy.... Electricity will need to be decarbonised through renewable and nuclear power, and the use of carbon capture and storage (CCS)".

- **3.2.94** With regard to electricity, paragraph 16 sets out the three parts of the UK Government's expected generation portfolio, namely renewable power, nuclear and coal and gas fired power stations fitted with CCS. Paragraph 43 states that "the power sector accounts for some 27 % of UK total emissions by source" and that "Ibly 2050, emissions from the power sector need to be close to zero" and paragraph 44 goes on to explain that with the potential electrification of heating, transport and industrial processes it is estimated that average electricity demand may rise by between 30 % and 60 % and in such circumstances, "Iwle may need as much as double today's electricity capacity to deal with peak demand".
- **3.2.95** Paragraph 45 reiterates that while the overall direction is clear, there are major uncertainties over both the most cost effective mix of technologies and the pace of transition. It adds that "Ithe Government is committed to ensuring that the low carbon technologies with the lowest costs will win the largest market share". Therefore whilst there is some flexibility in the overall eventual mix that will constitute the future UK generation platform, wind energy as a low cost renewable technology has an important place.

3.2.96 Paragraph 46 states that:

"Over the next decade, we need to continue reducing emissions from electricity generation through increasing the use of gas instead of coal, and more generation from renewable sources. Alongside this, we will prepare for the rapid decarbonisation required in the 2020s and 2030s by supporting the demonstration and deployment of the major low carbon technologies that we will need on the way to 2050".

3.3 Renewable Energy and Climate Change Policy Conclusions

- **3.3.1** The EU, Scottish and UK Governments' renewable energy policy documents, and associated renewable energy and climate change targets all provide a powerful body of support in favour of renewable energy and appropriate development.
- **3.3.2** Such targets and policies provide significant support for the proposed development. The proposed development would aid the realisation of renewable energy and climate change policy objectives, particularly at the Scottish level, and would make a significant contribution to the respective Scottish and UK renewable energy generation and CO₂ reduction targets.
- **3.3.3** Chapter 6 'Benefits of Proposed Development' sets out in detail the CO_2 reductions that the development would deliver when compared to fossil fuel or grid mix electricity generation and the extent to which the proposed development would assist in meeting Scottish renewable energy targets.

3.4 The Marine Policy Framework

- **3.4.1** This section describes the marine policy framework that is applicable to the consideration of the proposed development. The relevant marine policies include the following:
- The UK Marine Policy Statement;
- Blue Seas Green Energy: A Sectorial Marine Plan for Offshore Wind Energy in Scottish Territorial Waters Marine Policy; and
- Scotland's National Marine Plan Pre-Consultation Draft (2011).

The UK Marine Policy Statement

3.4.2 The MPS identifies that the Marine and Costal Access Act 2009 "requires all public authorities taking authorisation or enforcement decisions that affect or might affect the UK marine area to do so in accordance with the MPS unless relevant considerations indicate otherwise."

- **3.4.3** Additionally, the Marine and Coastal Access Act 2009 requires that marine plans must be in conformity with the MPS. The MPS is therefore a very relevant document to the consideration of the proposed development.
- **3.4.4** Chapter 1 of the MPS states that the MPS and the marine plans will form a new plan led system for marine activities, with the objective of providing greater coherence in policy and planning for the marine area. It also states that the MPS and the marine planning systems will sit alongside and interact with existing planning regimes across the UK, which include town and country planning and other legislation, guidance and development plans.
- **3.4.5** Chapter 2 of the MPS (Box 1) sets out the 'high level marine objectives' for the marine environment, which are summarised as:
- achieving a sustainable marine economy;
- · ensuring a strong, healthy and just society;
- · living within environmental limits;
- promoting good governance; and
- using sound science responsibly.

- **3.4.6** Chapter 2 also sets out a number of 'high level principles' for marine decision making and those of relevance include:
- "Be based on the detailed information and advice in the relevant marine policy documents in the respective Administrations;
- Be conducted in a manner that meets requirements under UK and EU legislation and is consistent with our obligations under international law;
- Be conducted in a way that takes into account all of the relevant UK Administrations' policy objectives affecting the marine area;
- Be conducted in a manner that takes account of other relevant projects, programmes, plans and national policies and guidance;
- Be taken after appropriate liaison with terrestrial planning authorities and other regulators, and in consultation with statutory and other advisors when appropriate;
- Be streamlined where possible, making effective use of existing data;
- Be taken using a risk-based approach that allows for uncertainty, recognising the need to use sound science responsibly as set out in the high level objectives;
- Be sensitive to any potential impacts on sites of particular significance including those:
 - protected under environmental legislation or designated in relation to cultural heritage;
 - of particular social or economic significance;
- Take account of potential impacts of climate change mitigation and adaptation in individual applications to ensure that any appropriate adaptation and mitigation measures have been identified;
- Take account of the benefits that good design (including the best use of available technologies and innovation) can deliver; and

- Look to avoid and then mitigate negative impacts where possible at various stages of development, including appropriate conditions in line with legal obligations, in a manner that is proportionate to the potential impacts of the proposal under consideration. Where alternative site selection or design could mitigate negative effects whilst retaining benefits, this should be considered, where appropriate." (paragraph 2.3.2.2)
- **3.4.7** The preceding policy text to the above 'high level principles' for marine decision making provides guidance on the approach to considering cumulative impacts. It states "When considering potential benefits and adverse effects, decision makers should also take into account any multiple and cumulative impacts of proposals, in the light of other projects and activities. The level of assessment undertaken for any project should be proportionate to the scale and impact of the project as well as the sensitivity of the environment concerned..." (paragraph 2.3.2.1).
- **3.4.8** Section 2.4 of the MPS is entitled 'Considering benefits and adverse effects in marine planning'. This is a particularly important aspect of the MPS. It provides the policy guidance for decision makers relating to considering benefits and adverse effects in the planning balance. In this regard the MPS states "Ithe marine plan authority will need to assess the impacts of their proposals for the marine plan area. These may be identified as anticipated benefits... or anticipated adverse effects. These benefits and adverse effects may be economic, social and environmental in nature. The precise nature of the benefits or adverse effects will depend on a number of factors including the types of activity under consideration; the specific characteristics of the marine area affected; and compatibility with other existing or planned activities.

The marine plan authority will need to consider the potential cumulative impact of activities and, using best available techniques, whether for example:

- The cumulative impact of activities, either by themselves over time or in conjunction with others, outweigh the benefits;
- A series of low impact activities would have a significant cumulative impact which outweighs the benefit;
- An activity may preclude the use of the same area / resource for another potentially beneficial activity" (paragraphs 2.4.1 – 2.4.3).

- **3.4.9** Section 2.5 of the MPS describes the economic, social and environmental considerations that decision makers must take into account in reaching consenting decisions. Section 2.6 describes the detailed considerations and the topic areas to be considered within individual marine plans which are as follows:
- · Marine ecology and biodiversity;
- Air quality;
- Noise;
- · Ecological and chemical water quality and resources;
- Seascape;
- · Historic environment;
- · Climate change adaption and mitigation; and
- · Coastal change and flooding.
- **3.4.10** Section 3.3 of the MPS is entitled 'Energy production and infrastructure development'. It advises that when decision makers are determining applications for energy infrastructure, the following should be taken into account:
- "The national level of need for energy infrastructure, as set out in the Overarching National Policy Statement for Energy (EN-1) which applies in England and Wales, the National Planning Framework which applies in Scotland, and the Strategic Energy Framework in Northern Ireland; [...]
- The positive wider environmental, societal and economic benefits of low carbon electricity generation and carbon capture and storage as key technologies for reducing carbon dioxide emissions;
- That the physical resources and features that form oil and gas fields or suitable sites for gas or carbon dioxide storage occur in relatively few locations and need first of all to be explored for and can then only be exploited where they are found. Similarly, renewable energy resources can only be developed where the resource exists and where economically feasible;

- The potential impact of inward investment in offshore wind, wave, tidal stream and tidal range energy related manufacturing and deployment activity; as well as the impact of associated employment opportunities on the regeneration of local and national economies. All of these activities support the objective of developing the UK's low carbon manufacturing capability;
- The UK's programme to support the development and deployment of Carbon Capture and Storage (CCS) and in particular the need for suitable locations that provide for the permanent storage of carbon dioxide."
- **3.4.11** At paragraph 3.3.19 the MPS identifies that "Ithe UK has some of the best wind resources in the world and offshore wind will play an important and growing part in meeting our renewable energy and carbon emission targets and improving energy security by 2020, and afterwards towards 2050".
- **3.4.12** The MPS concludes by noting that it "provides the framework for marine planning and taking decisions affecting the UK marine area. It outlines the UK Administrations' vision for the UK marine area, general principles for decision making and the high level approach to marine planning that will contribute to delivering this vision and so achievement of sustainable development. It sets out the environmental, social and economic considerations that need to be taken into account."
- **3.4.13** The MPS is a policy document of a strategic nature with the more detailed and area specific marine policies to emerge through the national and regional marine plans. However, it is the only marine policy document with a statutory footing at the current time and accordingly its strategic policy requirements and objectives deserve significant weight to be attributed to them in decision making.

Blue Seas – Green Energy: A Sectorial Marine Plan for Offshore Wind Energy in Scottish Territorial Waters Marine Policy

- **3.4.14** The Blue Seas Green Energy document (BSGE) is identified as 'the strategic planning document for the development of offshore wind energy in Scottish Territorial Waters' (paragraph 1.1). It provides proposals for development at the regional level up to 2020, 2030 and into the longer term.
- **3.4.15** The BSGE also provides a number of strategic aims, which it notes are applicable across its geographical scope. The geographic scope of the document is within the area comprising Scottish Territorial Waters (STW) (from 0 to 12 nm offshore). It is therefore mostly relevant to the OfTI. The strategic aims set out in the document are to:
- "Maximise the contribution the offshore wind energy makes to renewable energy generation in Scotland;
- Maximise opportunities for economic development, investment and employment;
- Minimise adverse effects on people, other economic sectors and the environment; and
- Deliver offshore wind while complementing other forms of marine energy generation."
- **3.4.16** The document also notes that the plan's purpose is to deliver the Scottish Ministers' policies for green energy, with the objective of aiding the achievement of the Scottish Government carbon reduction targets, which are 42 % by 2020 and 80 % by 2050 from 1990 levels.
- **3.4.17** In terms of benefits, other than meeting carbon reduction targets, the document notes that the large scale development of offshore wind farms "represents one of the biggest opportunities for sustainable economic growth in Scotland for a generation" (paragraph 1.1.6). It is estimated that the development of offshore wind farms within STW, as well as Scotlish offshore waters, could generate investment in Scotland of approximately £7.1bn over the next decade as well as creating upwards of 28,000 jobs by 2020. It also notes that Scotland is particularly well placed to capture a large portion of the UK renewables supply chain market, which could be worth an additional £100bn of investment to the Scotlish economy.

- In terms of energy security, the document notes that the proposed development of offshore wind farms will also improve energy security through the potential to deliver around 5 GW of offshore wind energy within STW as well as the potential to generate 4.8 GW of electricity for two of the Round 3 sites in Scottish offshore waters before 2020. It is also noted that the pursuit of renewable energy in STW should be balanced with the health and diversity of the marine environment as well as the ability of people to enjoy and profit from that marine environment. In terms of the challenges in delivering marine energy projects, BSGE notes that development requires to be both sustainable as well as requiring to accommodate the views of the public and the community. The BSGE also identifies that from an economic perspective Scotland requires to compete with the rest of Europe as well as globally to maximise its share of the renewable energy market.
- **3.4.19** The BSGE describes the key legislative and regulatory drivers applicable to the consideration and design evolution of marine renewable developments (legislative and regulatory drivers have been set out within Chapter 2).
- **3.4.20** It sets out the process that has been followed in developing and identifying marine renewables options, setting out those that could be recognised in both the short and medium term. This aspect of the plan is of limited relevance as the proposed development of options looks beyond those sites already licensed through the Round 3 Crown licensing process.
- As well as providing generic policy advice for the development of the marine environment the BSGE also provides specific geographic advice for the development of specific areas of Scotland's marine environment. Specific to the Moray Firth, the Executive Summary of the BSGE states: "This region has favourable conditions and significant potential for the development of offshore wind both within Scottish Territorial Waters and beyond into Scottish Offshore Waters. The significant strategic issues to be resolved relate to fishing and the environment, with potential adverse effects on bottlenose dolphins also a significant issue. Shipping appears to be less significant. Evidence at this stage suggests these issues can be addressed through appropriate mitigation measures at the project level. There is 1 short term site within Scottish Territorial Waters which appears to be suitable for development by 2020. There is also a large Round 3 offshore wind development site just outside Scottish Territorial Waters which is adjacent to the Beatrice short term site. The cumulative impacts of these developments will require further consideration."

- **3.4.22** MORL has undertaken detailed environmental surveys to address the 'strategic issues' relating to the Moray Firth, referred to above, which are described in detail throughout the ES and within Chapter 5 of this Planning Statement.
- **3.4.23** The Sectoral Marine Plan refers to the 'key actions' that require to be taken forward in planning and developing the Moray Firth marine area and it states that "Further analysis of cumulative and in-combination effects to include the Round 3 site should be undertaken to inform selection for the areas of search in the medium term. This will be addressed within the Plan review process" (page 34).
- **3.4.24** MORL have undertaken a detailed cumulative analysis, mainly with Beatrice Offshore Wind farm (BOWL), which is reported throughout the ES and is referred to within Chapter 5 of this Planning Statement.

Scotland's National Marine Plan Pre-Consultation Draft (2011)

- **3.4.25** Within the Scottish offshore region (12 200 nm offshore) section 58 of the Marine and Costal Access Act 2009 and section 15 of the Marine (Scotland) Act 2010 requires 'public authorities' to take any authorisation or decision in accordance with the appropriate marine plans unless relevant considerations indicate otherwise. This is set out in Section 2.3 of this Planning Statement.
- **3.4.26** The pre-consultation draft of Scotland's National Marine Plan (SNMP) is a draft and accordingly is not yet an approved policy document. Accordingly, the SNMP is not considered to have any statutory footing at the current time; although, significant weight should be given to this preconsultation draft in determining the applications for consents and licences. This, along with The UK Marine Policy Statement and 'Blue Seas Green Energy', are the most relevant marine policy documents to consider offshore renewables development against.
- **3.4.27** Section 5 of the Marine (Scotland) Act 2010 requires the Scotlish Ministers to prepare and adopt a national marine Plan. The Section also makes provision for the preparation and adoption of Regional Marine Plans. The draft SNMP applies to both inshore water (out to 12 nm) and offshore waters (12 200 nm). The plan, once adopted, would capture all the offshore development proposals within offshore and territorial waters.

- **3.4.28** The plan notes that it will "sit alongside and interact with existing planning regimes" and that "integration of marine and terrestrial planning will be achieved through consistency between marine and terrestrial policy documents and guidance" (page 11).
- **3.4.29** Chapter 5 of the plan is entitled 'Assessment of Scottish Marine Area and Significant Pressures' and provides strategic policy advice on how to balance the effects of human activities against environmental sensitivities within the marine area. Renewable energy activity within the marine environment is referred to as a 'pressure' and offshore wind is specifically referred to in this regard. Paragraph 5.8 provides advice on how to consider effects arising from such pressures and states:

"In the assessment of the condition of Scotland's seas, a pressure is a human activity which could lead to an impact i.e. a change in the condition or state of an ecosystem component. Scotland's extensive marine environment is subject to a wide range of pressures. While recognising there may be cumulative effects, a large number of individual pressures are too small a scale to be considered at the national level. However, some may have local impacts that could threaten rarer species and habitats.

There are two significant pressures on the Scottish marine area which are widespread:

- Human activity contributing to climate change;
- Fishing, which impacts on the seabed and species."
- **3.4.30** Chapter 7 of the SNMP sets out the Scottish Government's key objectives for the marine environment at pages 21 -23. The objectives are summarised as follows:
- Clean and safe seas;

- Healthy and biologically diverse seas;
- Productive seas, contributing to the needs of people; and
- Better governance of the sea.

- **3.4.31** The plan notes that it is being developed to clarify the overall marine environment objectives, which will provide the basis for managing Scotland's marine environment.
- **3.4.32** Chapter 8 of the plan sets out the main climate change objectives within the Climate Change (Scotland) Act 2009. It is noted that the Act requires Scotland's greenhouse emissions to be at least 80 % lower from 1990 levels by 2050. The SNMP also notes that the Act requires Scotlish Ministers to reduce greenhouse gas emissions year on year, in every year from 2010 to 2050, to increase the rate of reduction from 2020 onwards to at least 3 % per year and to specify annual targets for each year to 2022.
- **3.4.33** Chapter 9 of the plan sets out the Scottish Government's approach to development in the marine environment. A key statement within this section of the plan is as follows: "Ithere is a presumption in favour of development. Any development in the marine environment will be considered within the context of national priorities which provide a basis for conflict resolution" (paragraph 9.1). It is identified that the plan provides the policy framework within which the Scottish Government's aspirations for development in the marine environment can be communicated. In addition, the following development objectives are set out within the plan:
- Cultural heritage "[d]evelopment should take account of sustaining and enhancing the significance of heritage assets";
- Landscape / Seascape "[d]evelopments in the marine environment should take account of the impacts on the special qualities for which a National Scenic Area is designated";
- Air quality "[d]evelopments in the marine environment should take air quality issues into account, especially relevant air quality limits";
- Soil geomorphology, sea bed, coastal processes –
 "[d]evelopments and activities will be resilient to, and will
 not unacceptably impact upon, coastal change";
- Water quality and resource "[d]evelopments should not result in a deterioration of the ecological status of any water to which the Water Framework Directive applies";
- Nature conservation, biodiversity, flora and fauna "[dlevelopment should aim to avoid harm to marine
 ecology, biodiversity and geological conservation interests,
 including through location, mitigation and consideration of
 reasonable alternatives".

- **3.4.34** Section 2 of the plan is entitled 'Energy', which is one of the specific 'Sector Reports' set out within the plan. The section on renewables is provided at section 2.3 and sets out a number of key challenges and objectives for the marine renewables sector. The key challenges are as follows:
- "To turn Scotland's renewable energy resources into a fully developed industry contributing to the level of economic activity in Scotland and delivering climate change objectives.
- To minimise the environmental impact from the construction and operation of marine renewable and marine wind devices and facilitate the proposed development of subsea electricity grids.
- Develop and reinforce onshore and offshore grid in Scotland that can connect and transport renewable energy from the best sites of resource, in and around the coast of Scotland".
- **3.4.35** The objectives for the marine renewables sector include:
- "Renewable sources from both terrestrial and marine sites will generate electricity equivalent to 80 per cent of Scotland's gross annual electricity consumption by 2020.
- Provide 10 Gigawatts generation capacity by 2020 in place and under construction.
- To prioritise the rapid development of demonstration facilities for fixed and floating offshore wind and wave and tidal marine energy.
- Where spatial conflicts between marine renewable and other sectors occur resolution should initially be sought through discussion and agreement."
- "Projects should be sited, constructed and operated to minimise noise and collision risk to Best Available Technology Not Entailing Excessive Costs (BATNEEC) standards."
- "To ensure that decision making on renewables issues is timely."

3.4.36 The plan states that the key environmental impacts from wind renewables relate to noise from construction and operation as well collision risk for sea birds.

3.5 Marine Policy Conclusions

3.5.1 The relevant marine policy documentation provides significant support for the proposed development. The MPS provides the statutory policy framework with which to consider the proposed development against. It is found that the proposed development is consistent and supported by the MPS. Support can also be drawn from the other policy documents and a more detailed assessment of such matters is provided within Chapter 5.

4 Other Relevant Policy Considerations

4.1 Introduction

- **4.1.1** This Chapter describes those other policy considerations that are not in themselves renewables or climate change policy, but which have some relevance to the proposed development. The other relevant policy considerations include:
- The National Planning Framework for Scotland; and
- Aspects of the terrestrial Development Plans for Highland, Moray and Aberdeenshire Councils.

4.2 The National Planning Framework (NPF) for Scotland 2

- **4.2.1** The NPF 2 was published in June 2009. NPF 2 guides Scotland's land use development to 2030 and sets out strategic development priorities to support the Scotlish Government's central purpose of sustainable economic growth. The Planning etc (Scotland) Act 2006 puts this and future iterations of the NPF on a statutory footing. The document therefore carries considerable weight as a material consideration.
- **4.2.2** NPF 2 is concerned with Scotland in its wider context and addresses major challenges including climate change. NPF 2 takes forward the spatial aspects of the Scotlish Government's policy commitments on sustainable economic growth and climate change, which paragraph 5 of the document notes "will see Scotland move towards a low carbon economy".

- **4.2.3** The NPF 2 refers to sustainable development and notes that "It]he Scottish Government's commitment to sustainable development is reflected in its policies on matters such as climate change, transport, renewable energy..." (page 6).
- **4.2.4** Climate change is specifically referred to from paragraph 16 and at paragraph 18 it states that "Islubstantial reductions in greenhouse gas emissions will be necessary to minimise the impacts of climate change". Paragraph 19 notes that the "UK and Scottish Governments are taking an international lead by introducing ambitious statutory emission reduction targets through, respectively, the UK Climate Change Act and the Scottish Climate Change Bill".
- **4.2.5** Energy is specifically referred to in paragraph 25 of NPF 2. It notes that:

"tackling climate change and reducing dependence on finite fossil fuels are two of the major global challenges of our time... Addressing these challenges will demand profound changes in the way we produce, distribute and use energy over the coming decades."

4.2.6 Paragraph 26 state that the EU has set a commitment to derive 20 % of its energy use from renewable sources by 2020. Reference is also made to the Scottish Government support for this objective and Scotland's own, higher target for electricity generated from renewable sources, which is identified by NPF 2 as 50 % by 2020 (now 100 %).

- **4.2.7** NPF 2 also refers to development strategy at paragraph 53 and notes the main elements of the spatial strategy to 2030, one of which is to "realise the potential of Scotland's renewable energy resources and facilitate the generation of power and heat from all clean, low carbon sources".
- **4.2.8** In terms of offshore wind energy development, paragraph 65 notes that "development of onshore wind farms has been proceeding apace, but much of the longer-term potential is likely to lie with new technologies such as wave and tidal power, biomass and offshore wind."
- **4.2.9** Paragraph 145 also identifies that "Ithe Government is committed to establishing Scotland as a leading location for the development of renewable energy technology and an energy exporter over the long term. It is encouraging a mix of renewable energy technologies, with growing contributions from offshore wind, wave, and tidal energy, along with greater use of biomass. The aim of national planning policy is to develop Scotland's renewable energy potential whilst safeguarding the environment and communities."
- **4.2.10** Additionally Paragraph 146 states that "Ithe harnessing of renewable sources of energy is effecting a radical change in Scotland's energy economy, and the location of many of these resources means that rural areas are well placed to benefit. As wave, tidal, biomass, solar, hydrogen and offshore wind technologies continue to develop, they will become more competitive and commercially attractive, allowing them to make large contributions to Scotland's energy mix over the next 25 years."
- **4.2.11** Overall therefore, NPF 2 sets out the Scottish Government's commitment to the further development of renewable energy in Scotland (including offshore wind) and confirms the importance of this resource as a key element of achieving the spatial strategy for the country up to 2030 and indeed, as a key element to attaining their central purpose of increasing sustainable economic growth.
- **4.2.12** NPF2 offers substantial support for the proposed development of renewable energy and acknowledges the benefits that can result both nationally and to rural economies. In this respect, subject to detailed analysis of the environmental effects, the proposed development can draw significant support from the NPF 2.

4.3 The Statutory Development Plans (onshore)

- **4.3.1** The statutory Development Plans (which are not statutory policy documents to the determination of the Section 36 consents or associated marine licences for the offshore development) that are considered to have some relevance to the determination are the proposed Development Plans for the following Council areas:
- Highland;
- · Aberdeenshire; and
- Moray.

- **4.3.2** The Development Plans are considered to have some relevance due to there being the potential for impacts from the proposed development to be experienced onshore. This relates to matters such as:
- Archaeology effects on the setting of onshore receptors;
- Socio-economics effects on tourism and recreation based on the predicted visual effects;
- Natural fish effects on salmon in the fresh water rivers including the SACs;
- Landscape and visual effects effects of the wind farms on landscape, seascape and views; and
- Traffic and transport effects onshore from the wind farms construction activities.

- **4.3.3** The Development Plans for the above Council areas consist of the following:
- The Highland Council
 - The Highland Wide Local Development Plan (HwLDP) (2012); and
 - Specific sections of the Local Plans that were in force prior to the adoption of the HwLDP that are predominately relevant to settlement zonings.
- Aberdeenshire Council
 - Aberdeen City and Shire Structure Plan 2009; and
 - Aberdeenshire Local Development Plan 2012.
- Moray Council
 - · Moray Structure Plan 2007; and
 - · Moray Local Plan 2008.
- **4.3.4** The aims and objectives of the Development Plans all recognise the benefits of renewable energy development and generally seek to achieve sustainable development. Achieving sustainable development in Local Authority decisions is a statutory requirement of the Climate Change (Scotland) Act 2009. The renewable energy and coastal development related policies of the Development Plans are considered to be the most relevant policy aspects of the plans to consider as 'relevant considerations' in determining the applications for consent and licences. The relevant policies are set out, for information, within Appendix 1 of this Planning Statement.
- **4.3.5** It is found that the proposed development is consistent with the wider planning objectives of such policies and the aims of the Development Plans as a whole.
- **4.3.6** Appendix 2 sets out those Development Plan policies that would related to the assessment of the OnTI for information purposes. These are clearly differentiated from those policies that are considered to have some relevance also to the offshore development.

4.4 Conclusions

- **4.4.1** The above policy documents (The NPF 2 and the Development Plans) set out relevant terrestrial policy considerations, which as described above have some relevance to the determination of the consents and associated licence applications. It is clear from the policy documents that there is significant support for renewable energy development generally, and within the NPF2, recognition of offshore wind energy development.
- **4.4.2** As set out in Chapter 5 of this Planning Statement, taking full account of the predicted significant environmental effects of the proposed development, the proposed development is considered to wholly meet the above policy objectives. Significant support for the proposed development is achieved from the relevant policy framework.

5 Policy Assessment

5.1 Introduction

- **5.1.1** As detailed in the preceding Chapters, the relevant policy framework with which to assess the proposed development is contained within a number of UK and Scottish renewable energy and marine policy documents. The relevant aspects of these documents have been described in Chapter 3. This chapter provides a high level consideration of the key findings of the EIA to allow conclusions to be drawn on the accordance of the proposed development against the relevant policy objectives.
- **5.1.2** Drawing on the legislative requirements of the Marine and Coastal Access Act 2009 and the Marine (Scotland) Act 2010 and the way that the ES has been set out, the predicted environmental effects of the proposed development can be broadly assessed in the context of the policy requirements set out within Chapters 3 and 4 under the following headings:
- The need to protect the environment;
- The need to protect human health; and
- The need to prevent interference with legitimate users of the sea.
- **5.1.3** The extent to which the Applicant has complied with Schedule 9 of the Electricity Act 1989 is reflected through the ES as a whole, and is further considered within the conclusions section of this chapter and the overall conclusions within Chapter 7 below.
- **5.1.4** In terms of the approach to the EIA, as reported within the ES, existing marine data, where possible, has been used in undertaking the assessment which is consistent with the policy requirements set out within paragraph 2.3.2.2 of the MPS (see paragraph 3.4.6 of this Statement). Where existing data has been found insufficient to form the baseline for the EIA, such data has been updated through further desk based analysis or specific onsite surveys.

5.2 Residual Environmental Effects

- **5.2.1** As described throughout the ES, MORL have approached the EIA of the proposed development in a robust manner, undertaking significant consultation with stakeholders regarding, amongst other matters, the methodologies for considering likely significant effects upon environmental receptors. Such methodologies have been amended following consultation and ongoing dialogue with stakeholders continues on a number of fronts. This process is described within Chapter 1.4 of Volume 2 of the ES. In addition, each chapter in Section 2 of the ES sets out the consultation responses received from key stakeholders and identifies how and where MORL has responded to these comments within the ES.
- **5.2.2** A number of potential significant effects have been reduced to non-significant in EIA terms through MORL gaining a detailed understanding of environmental receptors through the EIA and then applying appropriate mitigation. The ES reports limited residual significant adverse environmental effects which have been assessed based on realistic worst case scenarios. It is relevant to note, and referred to further within this chapter, that while residual significant adverse effects are reported these effects can be limited in duration, limited to particular geographic areas or limited to a certain receptor that has been assessed as part of a group of receptors. Where effects are positive, this is specifically reported.

5.3 The Need to Protect the Environment

5.3.1 The need to protect the environment has been a key objective of the project design and EIA process. This topic matter extends to ecological, and coastal processes. A summary of the environmental effects reported within the ES is set out in Table 5.1 below, followed by a summary and assessment section setting out the accordance of the proposed development with the key policy objectives set out within Chapters 3 and 4.

Table 5.1 Need to Protect the Environment – Summary of key ES Findings

Receptor Group	Likely Significant Effects		Significant Cumulative	Description of Effects
•	Wind Farms	OfTI	Effects	
Hydrodynamics	No	No	No	Likely significant effects have been assessed in relation to: the hydrodynamics of the Smith Bank (within which the sites are located); sites designated for conservation purposes; and sites used for recreational surfing. No significant effects are predicted.
Sedimentary and Costal Processes	No	No	No	No significant effects are predicted, although there would be a minor increase in suspended sediment concentrations and accumulation as a result of the installation activities during the construction and decommissioning stages of the proposed development. These effects are however temporary and localised and in themselves are not significant in EIA terms.
Benthic Ecology	No	No	No	No effects identified in relation to the three proposed wind farms are of greater magnitude than being of minor adverse significance, following the implementation of appropriate mitigation. The mitigation measures include the provision and adherence to an Environmental Management Plan that will limit the risk of accidental fuel, oil and chemical spillages or similar releases occurring from construction vessels and the proposed development components.
				In relation to the OfTI, the potential effects have been identified as being of no greater than minor adverse significance and those predicted residual effects are subject to the same mitigation as for the three proposed wind farms. In addition, the implementation of a micrositing protocol around sensitive Annex I S. Sabellaria spinulosa reef has been identified as a relevant mitigation measure.
Fish and Shellfish Ecology	No	No	No	The likely effects of the construction, and decommissioning phases on fish and shellfish species have been assessed to be of minor significance. An exception to this is construction noise, which has been identified as having potential to result in significant effects (above minor) on cod, herring, salmon and sea trout. The monitoring and mitigation approach described in the summary and assessment section below reduces the residual effect of construction noise to minor (not significant).
				The likely effects of the operation of the wind farms and OfTI, including the effects from electromagnetic fields from the AC and DC cables, have been assessed as minor.
				See summary and assessment below for further details.
Marine Mammals	No long term effects	No long term effects	No long term effects	Significant short and medium term effects caused by increased underwater noise were identified during construction activities for all species studied except for bottlenose dolphins for which no significant effects were predicted. The only exception to this is in relation to one of the highly conservative cumulative scenarios which modelled eight simultaneous piling events in the Moray Firth which identified short term likely significant cumulative effects for bottlenose dolphins.
				No long term effects were found as the populations would recover following cessation of piling. Soft start piling will be used to minimise the risk of injury to marine mammals during construction.
				Accordingly, no significant effects are predicted on either the Moray Firth or Dornoch Firth and Morrich More SAC's.
				See summary and assessment below for further details.

Receptor Group	Likely Significa	nt Effects	Significant Cumulative	Description of Effects
	Wind Farms	OfTI	Effects	
Ornithology	No	No	Yes	When considered cumulatively the ES predicts significant adverse residual effects on three bird species (gannet, great black-backed gull and herring gull) during operation with other projects in the vicinity of the development. As a consequence significant cumulative effects arising from two key species are predicted on the integrity of one SPA (East Caithness Cliffs), but outputs of the assessments highlight that MORL is not the major contributor for the resulting significant cumulative effects on its designated species.
				See summary and assessment below for further details.
Intertidal Ecology	N/A	No	No	All effects assessed relate to the installation and operation of the export cable at its landfall location. This includes direct and indirect habitat disturbance and EMF and heat emissions from the operational export cable. All effects are considered not significant.
Archaeology and Visual Receptors	No	No	No	The seabed within the wind farm sites is home to several ship wrecks in addition to a number of features of archaeological potential; and there is potential for the discovery of previous unrecorded archaeological sites. Known and potential archaeological sites will be avoided during construction and a protocol for archaeological discoveries will be adopted in order to mitigate against effects upon previously unrecorded sites. The ES predicts all post mitigation effects to be of negligible significance, as are the potential setting impacts on such features. In terms of the OfTI, all post mitigation effects are also of negligible significance.

Summary and Assessment of the Need to Protect the Environment

5.3.2 In terms of the effects reported within the ES that relate to the environment, the proposed development design, through the EIA process, has resulted in a development that is predicted to result in limited permanent significant adverse environmental effects. However as identified in Table 5.1 above, there are a number of receptors which require more detailed consideration.

Fish and Shellfish

5.3.3 The baseline assessment of the fish and shellfish ecology within the study area has been identified from a review of existing literature and data. From the baseline review in the ES it was clear that there was an information gap regarding accurate species population densities and distribution, as well as an understanding of exact migration routes of key species.

- **5.3.4** Key prey species such as sandeels play an important role in the North Sea food chain. They are a key component of many birds, fish (including herring, salmon, sea trout, cod and haddock) and marine mammals. MORL undertook an extensive sandeel survey within the study area to identify species, location and population density. Very limited sandeel abundances were found within the study area, with only 197 individuals in total recorded suggesting that within the three proposed wind farm sites there are not extensive areas supporting important sandeel populations.
- **5.3.5** The EIA has examined the potential for a range of effects on fish and shellfish ecology, resulting from construction operation and decommissioning, including potential impacts on Moray Firth SAC qualifying species such as salmon, sea lamprey and fresh water pearl mussel.

- **5.3.6** Construction noise has been identified as having potential to result in significant effects (above minor) on cod, herring, salmon and sea trout. The impact assessment on these species has taken a precautionary approach, where conservative assumptions have had to be applied as a result of the uncertainty surrounding currently available information on the use that these species may make of the area of the three proposed wind farms during the construction phase. In order to mitigate this uncertainty, MORL is committed to undertake additional survey work and monitoring with the objective of increasing the confidence in this impact assessment and identifying whether mitigation is required and, if so, to define feasible measures in order to reduce the significance of the likely effects.
- The MPS states that 'living within environmental 5.3.7 limits' and 'using sound science responsibly' are 'high level marine objectives'. These objectives along with the ecological considerations set out within section 2.5 of the MPS are satisfied through the approach taken to the EIA. The approach that MORL has taken to the EIA has been to undertake a detailed assessment of the environmental baseline, updating existing environmental information with site specific surveys in order to build a detailed understanding of the environmental baseline, commitment to monitoring and mitigation and the adoption of conservative worst case scenarios where information is not available thus complying with the policy objective of 'using sound science responsibly'. Through this approach the proposed development meets the policy objective of 'living within environmental limits'.

Marine Mammals

5.3.8 An assessment of the mammalian resource within the study area has been undertaken and reported within the ES. MORL has gathered a wealth of marine mammal baseline data in the outer Moray Firth. Data on species distribution and abundance has been obtained following two years of boatbased survey commissioned by MORL. MORL has also funded ongoing passive acoustic monitoring in the Moray Firth and data from this source provides information on marine mammal spatial and temporal variation across the Firth. In addition, MORL has commissioned an analysis of seal telemetry data and aerial survey data, and undertaken habitat association modelling to better understand spatial variations in marine mammal distribution in the Firth. The EIA assesses the significance of a range of effects on marine mammals resulting from the three proposed wind farms and OfTI, though focusing on the most significant of these - the effects of underwater piling noise.

- **5.3.9** Modelling of the underwater noise impacts associated with wind farm construction was then undertaken for a range of construction scenarios. A new framework for the assessment of the effects of noise upon marine mammals was developed by a range of experts on behalf of MORL which was accepted by regulators and SNCAs (JNCC and SNH) and peer reviewed by a series of national and international marine mammal experts.
- Using noise modeling results, the framework, and the marine mammal baseline data, the significance of effects upon several key marine mammal species have been assessed. An assessment was presented within the draft ES and was further developed following consultations with key stakeholders. This progression of the assessment has involved a re-run of the underwater noise modeling exercise based on refined Rochdale Envelope parameters (i.e. a smaller pile size for turbine foundations) and further and more detailed analysis of potential effects of noise on marine mammals using a specialist marine mammal movement model. Finally, likely significant effects on SAC species (bottlenose dolphin and harbour seal) were also placed in a population context, with Population Viability Analysis being undertaken. This additional work has put MORL in a position whereby the ES can state that no significant long term effects on marine mammals are predicted.
- **5.3.11** In addition, MORL intends to install a met mast on a 4.5 m monopile foundation within the Stevenson site during a period of two weeks in 2012, and will take the opportunity to participate in surveys designed to refine, remove or validate some of the conservative assumptions made in the ES.
- **5.3.12** By carrying out the additional surveys and further consultation outlined above, MORL has adopted a robust and, where possible, a quantitative rather than qualitative approach to assessment that has complied with the 'high level marine objectives' in the MPS of 'living within environmental limits' and 'using sound science responsibly' and has also satisfied the environmental considerations set out in section 2.5 of the MPS.
- **5.3.13** 'Blue Seas Green Energy' notes that potential adverse effects on bottlenose dolphins may be a significant issue in relation to offshore wind developments in the Moray Firth however following assessment, no significant short or long term effects were identified by MORL in relation to bottlenose dolphins (with the exception of significant short term cumulative effects identified in relation to one highly conservative cumulative scenario as described in Table 5.1 above).

5.3.14 'Blue Seas – Green Energy' also states that "Ithe application of appropriate mitigation measures is key to the sustainable development of Offshore Wind" and it goes on to say, in relation to nature conservation that specific impacts on species and habitats should be reduced through "selection and use of appropriate construction (e.g. timing to avoid key seasons; selection of low noise and minimal vibration installation technologies; utilisation of 'soft start' practices for plant and vessels to minimise disturbance and allow mobile species to move away from areas of disturbance)". As mentioned above in Table 5.1, soft start piling will be used to minimise the risk of injury to marine mammals during construction which is in accordance with marine policy.

Ornithology

- **5.3.15** The ornithological resource within the study area has been characterised through a combination of desk study assessments and onsite surveys which have included boat based surveys, aerial migration and sea bird tracking surveys. The ES identifies that the likely significant effects on the ornithological resource, resulting from the construction, operation and decommissioning of the proposed development relates to:
- Disturbance caused by increased vessel traffic, particularly during construction and decommissioning;
- Displacement caused by the presence of the wind turbines;
- · Collision with the turbines whilst in flight; and
- Barrier effects caused by the turbines resulting in changes to flight routes.
- **5.3.16** The ES predicts no significant adverse environmental effects on bird species when considered in isolation from other developments.
- **5.3.17** When considered cumulatively with other projects in the vicinity of the proposed development, the ES predicts significant effects on three bird species (gannet, great blackbacked gull and herring gull) during the operational phase of the wind farms. MORL has undertaken robust assessments of the potential impact on bird species using boat based, migration, aerial and bird tagging surveys. A detailed review of displacement and collision risk from offshore wind farms was undertaken for key species based on information from UK and other European sites and population viability analyses (PVA) were undertaken for all key species (for the proposed development and when considered cumulatively with other

- projects). The PVA methodology followed the advice given by the SNCAs during a comprehensive consultation process undertaken by MORL. Significant cumulative effects are predicted on the integrity of one SPA (East Caithness Cliffs) in relation to two key species, but outputs of the assessments highlight that MORL is not the major contributor for the resulting significant effects on its designated species.
- **5.3.18** Again, by undertaking an extensive quantitative assessment MORL have satisfied the 'high level marine objectives' in the MPS of 'living within environmental limits' and 'using sound science responsibly' and the environmental considerations set out in section 2.5.
- **5.3.19** Additionally, the MPS provides specific advice regarding the relevant considerations that apply to assessing cumulative effects with other projects. In this regard the level of environmental assessment that MORL has undertaken satisfies parts 2.3.2 and 2.4 of the MPS. The cumulative requirements of the assessment undertaken by MORL are also considered to satisfy the requirements of Scotland's National Marine Plan Pre-Consultation Draft, referred to in Chapter 3.
- **5.3.20** 'Blue Seas Green Energy' (BSGE) states that "[t]/here is a need to ensure that cumulative and in-combination effects are fully recognised and taken into account at the regional and project level" and that "developer-led work should contribute to addressing these issues in a suitable and effective manner". By carrying out additional assessments and analyses MORL are taking a developer-led approach in line with policy. The submission of the applications for Section 36 Consent and Marine Licences in relation to the proposed development shortly after BOWL has submitted its applications ensures that all of the available environmental information is available to Marine Scotland in relation to offshore wind developments likely to come forward in the short term within the Moray Firth which assists in the full recognition of the potential cumulative effects at a regional level as required by the BSGE.

5.4 The Need to Protect Human Health

5.4.1 The need to protect human health relates to matters that could affect the health of construction and operational workers and that of onshore residents. In addition to that, while not directly related to health but more to amenity considerations, potential impacts on residents onshore relating to landscape and visual matters as well as transportation matters are also considered within this section.

Table 5.2 Need to Protect Human Health - Key Findings of the ES

Significant Cumulative	Description of Effects
Effects	
No	There is the potential for unexploded ordnance (UXO) from the second world war, or from more modern military testing, to be encountered during the construction process. This would present a major risk to site users and to address this, the ES commits to the Applicant undertaking a preconstruction UXO survey and a UXO safety plan. The residual effect reported is not significant in EIA terms.
	See summary and assessment below for further details.
Yes (relating to visual impacts from some viewpoints only)	It has been identified that the effect of the proposed development will not be significant on any Coastal Character Areas. The ES identifies that two national seascape units are located within the study area. The physical characteristics of these areas will not change as a result of the proposed development and the coastal character areas will continue to provide their defining characteristics within the seascape unit. However, the assessment of key viewpoints has identified significant visual effects, mostly located in the closest section of Caithness to the proposed development, between Wick and Dunbeath. The viewpoints that have been identified to experience significant effects are located at distances of between 22-34 km from the wind farm sites. In terms of the OfTI, the effect on the seascape, landscape and visual receptors is assessed as being not significant in EIA terms. Limited significant effects are also predicted cumulatively with BOWL. The assessments have assumed clear weather and optimum viewing conditions. This means that effects that are assessed to be significant may not be significant under different, less clear circumstances. See summary and assessment below for further details.

Socio-Economic,	Likely Significant Effects		Significant Cumulative	Description of Effects	
Socio-Economic,	Wind Farms	OfTI	Effects		
Recreation and	Yes (positive)	Yes (positive)	Yes (positive)	The socio-economic effects that have been assessed as part of the EIA include:	
Tourism	1			 The amount of employment and the gross value added to the economy that would be supported as a result of the construction, operation and decommissioning processes; 	
				 The effect on the levels of leisure and business tourism in the study area; and 	
				 The effect on the levels of other recreational activities including surfing, sea kayaking and walking. 	
				The ES identifies significant positive effects arising from the employment associated with the proposed development as well as the gross value added to the economy.	
				The potential effects on visitors coming to the area to watch the marine wildlife has also been assessed, and while there may be short term species displacement during construction, it is not considered that this effect will be significant in EIA terms. In addition, walkers may be deterred from walking in areas where significant visual effects have been reported. It is not considered that this effect will be significant in EIA terms.	
				In terms of cumulative effects, it is also relevant that the proposed development is reported within the ES as having <i>positive</i> significant socioeconomic effect in combination with BOWL.	
				See summary and assessment below for further details.	
Onshore Noise	No	No	No	Due to the distance of the proposed development from the coast line and onshore noise receptors, being in excess of 12 nm, there have been no adverse effects predicted with regards to noise resulting from the proposed wind farms. No operational noise effects are predicted from the OfTI or OnTI.	

Summary and Assessment of the Need to Protect Human Health

- **5.4.2** In terms of the effects reported within the ES that relate to the need to protect human health, it is only the potential effects of unexploded ordnance that relate to this matter. There are no significant effects predicted. Drawing on the relevant policy aspects set out within Chapter 3, i.e. those relating to human health matters, the proposed development is found to satisfy these requirements.
- **5.4.3** The effect of the three proposed wind farm sites is assessed as not significant on landscape / seascape character. The viewpoint assessment has identified significant effects on seven viewpoints located in the closest section of Caithness between Wick and Dunbeath. These viewpoints are located at distances of 22 to 34 km from the three proposed wind farm sites. In good visibility conditions, the threshold at which significant effects diminish is assessed in the region of 30 to 35 km, depending on the specific characteristics of the view. The effects of the three proposed wind farms sites is assessed as not significant on landscape designations within the 50 km study area, including Gardens and Designed Landscapes and proposed Special Landscape Areas all of which are located over 34 km from the wind farm sites.
- **5.4.4** Accordingly, in terms of seascape, landscape and visual impacts, for any commercial scale offshore wind farm with visibility from onshore locations, it is inevitable that there will be significant visual effects. The effects predicted within the ES are found to be consistent with the wider environmental objectives set out within the relevant policy documents, including relevant aspects of the statutory Development Plans.
- 5.4.5 In terms of socio-economics and tourism matters, the predicted benefits of the proposed development should be afforded significant weight, particularly in the context of the landscape and visual impacts of the proposed development resulting in only minor effects on the tourism and recreational resource, which is non-significant in EIA terms. The socioeconomic benefits of the proposed development, when considered in the context of the wider EIA, would further a number of the policy priorities set out above, for example, section 3.3 of the MPS states that when examining and determining applications for energy infrastructure decision makers should take into account "[t]he potential impact of inward investment in offshore wind, wave, tidal stream and tidal range energy related manufacturing and deployment activity; as well as the impact of associated employment opportunities on the regeneration of local and national economies" and goes on to say that these activities "support the objective of developing the UK's low carbon manufacturing capability". In addition, the MPS 'high level marine objective' of 'achieving a sustainable marine economy' will be satisfied. Significant support can also be drawn from the other marine policy documents, the wider UK and Scottish renewable energy policy framework, the NPF 2 and the statutory Development Plans.

5.5 The Need to Prevent Interference with Legitimate Users of the Sea

5.5.1 A summary of the effects on maritime users reported within the ES is set out in Table 5.3 below, followed by a summary and assessment section setting out the accordance of the proposed development with the key policy objectives set out within Chapters 3 and 4.

Table 5.3 Need to Prevent Interference with Legitimate
Users of the Sea – Key findings of the ES

Receptor Group	Likely Significant Effects		Significant Cumulative	Description of Effects
	Wind Farms	OfTI	Effects	Ellecis
Commercial Fisheries	Yes	No	No	The construction process for the wind farms will result in restricted access to fishing grounds within the wind farm sites. It is likely that temporary safety zones will be applied for to restrict the access of non-permitted vessels to parts of the proposed development site during construction. The ES also identifies that the extent to which access could be regained by fishing vessels post construction will very much be dependent on the final design of the wind farms and resulting changes to normal fishing practices.
				An effect of moderate adverse significance has been predicted by the E in relation to the wind farms on the basis that either complete loss or restricted access to fishing grounds during the operational phase of the proposed development would occur. However, the ES also notes that MORL will continue on-going dialogue with commercial operators in order to assist and define the protocol for engagement with the affected fisheries during the construction and operational phases of the proposed development.
				Accordingly, while significant effects are predicted on commercial fisheries from the wind farms, MORL are continuing to undertake relevant research and engagement with stakeholders to further reduce the potential significant adverse effects as reported in the ES.
				Implementation of the construction management programme during the construction of the OfTI will reduce potential conflict with fishing vessels and the effects of construction of the OfTI are therefore considered to be minor.
				See summary and assessment below for further details.
Shipping and Navigation	No	No	No	The effects on commercial shipping, recreational and fishing vessels has been assessed as well as potential impacts upon Search and Rescue issues. The proposed developments are in a relatively quiet area for shipping and navigation interests and, with standard mitigation in place, no significant effects are predicted.

Receptor Group	Likely Significant Effects		Significant Cumulative	Description of Effects
	Wind Farms	OfTI	Effects	
Military and Civil Aviation	No	No	No	The ES reports that significant adverse effects have been identified from the operational wind farms on the Allanshill, Lossiemouth and Buchan Radars as well as potential effects to the off shore helicopter routes and their minimum safe flying altitudes.
				A number of mitigation options are currently being investigated by MORL in order to address the potential for significant adverse effects. The ES commits to fully integrating identified technical solutions prior to construction, to ensure no significant residual effects from the proposed development. On this basis, it can be assumed that the final residual effects will not be significant in EIA terms.
				In terms of the OfTI, there will be no significant operational effects arising and appropriate mitigation will be employed during the construction process such as notifying the relevant aviation bodies regarding the location, movement and maximum height of construction infrastructure.
				See summary and assessment below for further details.
Other Human Activities	No (Excluding oil exploration activities)	No	No	The ES has assessed the potential effects on companies and individuals that have existing and potential interests that either overlap or are in close proximity to the proposed development including existing and proposed off shore wind farm projects; abandoned oil exploration wells oil and gas exploration licences; and practice and exercise areas.
				No significant effects are reported with the exception of the potential impact on future oil exploration activities within licensed areas that overlap with the wind farm site. MORL has undertaken discussion with the oil operators and it has been established that the operator's exploration plans for the area in question remain unknown.
				On the basis of a precautionary approach the potential effects on oil exploration licences have been identified as being of moderate adverse significance. Significant cumulative effects are also predicted with BOWL However, MORL has committed in the ES to on-going consultation with oil and gas licence holders aiming for co-existence where achievable.
				See summary and assessment below for further details.
Traffic and Transport	N/A	No	N/A	The likely significant effects on traffic and transport arising from the construction and operation of the wind farms has not been considered within the ES due to the uncertainty as to which port will be utilised during construction. It is likely that this will be assessed by the port operator once a port is selected.
				In terms of the transmission infrastructure, it is identified that with standard mitigation in place, no significant effects on traffic and transport routes should arise. Mitigation includes utilising approved access routes, a Traffic Management Plan as well as undertaking a condition survey of the road network.

Summary and Assessment of the Need to Prevent Interference with Legitimate Users of the Sea

- **5.5.2** In terms of the effects reported within the ES that relate to the need to prevent interference with legitimate users of the sea, the likely significant effects on a number of maritime users has been considered. As identified in Table 5.3 above, there are a number of receptors which require more detailed consideration.
- **5.5.3** With regard to the effects predicted, it is relevant to note the approach to the EIA in terms of the Rochdale Envelope in that the Project parameters for the EIA are set out as a realistic 'worst case' scenario for EIA purposes.

Commercial Fisheries

- **5.5.4** As mentioned in Table 5.3, MORL has undertaken a significant programme of early engagement with the fishing industry, including the preparation of and consultation on a Draft ES, and is committed to continuing to explore and develop mitigation options. MORL will continue to consult with the fishing industry in order to assist and define the protocol for engagement with the affected fisheries during the construction and operational phases of the proposed development. In addition, in response to concerns raised by the commercial fishing industry, MORL has removed from its Rochdale Envelope floating offshore platforms. This is wholly consistent with the advice set out within Scotland's National Marine Plan Pre-Consultation Draft, which advises that potential conflict between different users of the sea should be resolved through dialogue.
- **5.5.5** MORL is proposing to undertake fishing trials in 2012 using modified scallop dredge gear with a view to progressing enhancements to traditional scallop fishing practices that may be of benefit to both the developer and the scallop fleet. This is supported specifically by section 5 of Scotland's National Marine Plan Pre-Consultation Draft plan referred to in Chapter 3 above. In addition, it satisfies the 'high level marine objectives' in the MPS of 'living within environmental limits' and 'using sound science responsibly'.

- **5.5.6** Paragraph 8.1.2.6 of the ES states, with respect to engagement with the fishing industry that "MORL will continue to facilitate on-going dialogue throughout the preconstruction, construction and operational phases of the development, which will continue to discuss the mitigation options under investigation, as well as defining the protocol for engagement during the construction and operation phases."
- **5.5.7** Accordingly, while significant effects are predicted on commercial fisheries, MORL has committed to undertake relevant research and continued liaison with relevant stakeholders to further reduce the potential significant adverse effects as reported in the ES.

Military and civil aviation

- **5.5.8** A number of military and civil aviation receptors have been identified adjacent to the study area. For example, Allanshill Primary Surveillance Radar, Buchan Air Defence Radar, the MoD Lossiemouth Radar, and the Highlands and Islands Airports Limited (HIAL) radar at Wick Airport. In addition, the main helicopter routes transiting from Aberdeen to the Atlantic offshore oil installations, as well as the helicopter approach procedures to offshore platforms, in terms of the minimum safe altitude requirements, are also relevant.
- **5.5.9** As mentioned in Table 5.3 above, significant adverse effects have been identified from the operational wind farm on the Allanshill, Lossiemouth and Buchan Radars as well as potential effects to the offshore helicopter routes and their minimum safe flying altitudes however a number of mitigation options are currently being investigated by MORL in order to address the potential for significant adverse effects.
- **5.5.10** MORL has committed to resolving the radar constraints established with the above radar installations and operators, thus reducing the effect to non-significant in EIA terms prior to construction commencing. Various mitigation options are being investigated in consultation with relevant stakeholders. Integration of technical solutions will be agreed and implemented prior to construction, ensuring no residual effects from the wind farms.

Oil Exploration Licences

- **5.5.11** MORL has committed to continuing liaison with the relevant stakeholders to agree relevant procedures and mitigation as the Project develops. The resultant effects on such interests may therefore be of lesser significance than currently reported.
- **5.5.12** In terms of the consistency of the above with the relevant policy and legislative framework, there is little more that MORL can undertake at this stage to protect the interests of legitimate users of the sea. The residual effects reported, while significant in EIA terms, are not considered to outweigh the significant support generally for environmentally acceptable renewable energy development set out within the relevant policy documentation.

5.6 Other Considerations

- **5.6.1** In addition to the need to protect the environment, the need to protect human health and the need to prevent interference with legitimate sea users, the Marine and Coastal Access Act 2009 and the Marine (Scotland) Act 2010 both require the decision maker to have regard to any representations which it received from any person having an interest in the outcome of the application.
- **5.6.2** The approach that MORL has taken to the EIA has included extensive consultations with the public and with stakeholders. In addition, and unique amongst the Scottish Offshore Wind industry to date, MORL prepared a Draft ES and allowed key stakeholders to examine, discuss and seek to resolve potential issues before the publication of a final ES. The Draft ES was provided to a limited list of key stakeholders including Marine Scotland, Statutory Nature Conservation Agencies, NGO's and industry representation groups and associations. This exercise ensured that methodologies met the expectations of stakeholders and allowed a number of issues and concerns to be addressed prior to consent application thus ensuring a high quality ES.
- **5.6.3** Furthermore, this approach satisfies the high level marine objective' in the MPS of 'promoting good governance' as it encourages stakeholders to provide input that will filter through to the decision maker.

5.7 Overall Summary and Conclusions

- **5.7.1** From consideration of the above matters, the residual significant environmental effects reported within the ES are very limited. When considered in the context of the relevant policy and legislative considerations, it is clear that the proposed development, on the whole, meets the relevant policy requirements. Those relevant requirements relating to, in the main part, increasing renewable energy capacity, minimising conflicts with other users of the marine environment, minimising effects on human health and minimising wider environmental harm.
- 5.7.2 In terms of the residual significant adverse effects reported within the ES, operational significant adverse effects are reported on other users of the marine environment such as fishing, gas and oil interests. Additionally, significant adverse effects are reported on marine mammals (short and medium term only) and on the landscape and visual resource. When MORL is considered cumulatively with BOWL and other relevant projects, significant adverse effects are predicted on three bird species, marine mammals (short and medium term only), landscape and visual matters and with respect to oil and gas interests. In terms of the consideration given to the cumulative effects predicted, the approach MORL has taken to the EIA process is a relevant consideration. The approach taken by MORL to the EIA includes: extensive consultation with the public and stakeholders; the preparation of and consultation on a Draft ES; continuing dialogue with relevant stakeholders to agree procedures and mitigation and commitments to continue dialogue as the Project develops; and undertaking innovative surveys and studies to overcome gaps in data. This detailed approach is supported by the relevant policy framework (set out in Chapter 3) and a good deal of certainty can be taken from MORL's approach to undertaking the EIA in decision making.

- **5.7.3** Despite the ES reporting residual significant adverse effects, it has to be noted that the ES considers worst case scenario based on the Rochdale Envelope principles. It is also relevant to note that the residual significant effects reported are relatively few in extent, when considered in relation to the capacity of the proposed development. The capacity of the development itself meets a number of the renewable energy policy objectives set out within Chapter 3. Additionally, the residual significant adverse effects predicted require to be considered in the context of section 2.4 of the MPS in particular, which provides high level advice on considering the benefits of a development against the reported adverse effects.
- **5.7.4** Significant policy support for the proposed development is also achieved with regard to matters relating to a sustainable marine economy, wider socio-economic benefits and the contribution the proposed development would make towards renewable electricity generation and addressing climate change objectives. The main benefits of the proposed development are described within Chapter 6 and further conclusions relating to the policy support that can be derived in this context are also set out.

6 Benefits of the Proposed Development

6.1 Introduction

6.1.1 This Chapter describes the benefits of the proposed development, which principally relate to renewable electricity generation, climate change and socioeconomics. The conclusions within this Chapter also make reference to the support that can be drawn from relevant climate change and renewable energy policy objectives that have been set out within Chapter 3.

6.2 Renewable Electricity Generation

- **6.2.1** The total capacity of the proposed development to be installed amounts to 1.5 GW, which is made up of a 500 MW capacity for each of the three wind farm sites. This is a significant capacity and will form one of the UK's largest offshore wind farms once complete.
- **6.2.2** The UK Renewable Energy Roadmap, as referred to above, notes that at the current time the UK has approximately 1.3 GW of installed capacity across 15 offshore wind farm sites. The total capacity of the proposed development would exceed, in itself, the current total installed offshore wind capacity within UK waters.
- **6.2.3** In terms of the contribution towards renewable energy and climate change targets, as noted above in Chapter 3, the current shortfall to the 2020 target is in the order of 8.1 GW. With an installed capacity of 1.5 GW, the proposed development would contribute in the order of 18.5 % of the renewables capacity required to meet the 2020 target.
- Additionally, the 'Draft Electricity Generation Policy 6.2.4 Statement' provides the Scottish Government's policy on decarbonising electricity generation within Scotland by 2030. As part of the EIA, an electricity carbon savings assessment has been undertaken. Utilising DECC's capacity factor of 30.79 % for offshore wind farms (which is highly conservative based on MORL's initial analysis of the capacity factor for the sites) the assessment identifies that the proposed development as a whole is likely to generate in the region of 445,806 MW hours of electricity per annum. Using this capacity factor, the number of households that the proposed development would provide electricity for, based on the average Scottish domestic electricity usage assumption, would equate to 838,683. Using the UK usage assumption, this figure would extend to 925,814 households. This is a significant number of households when considered in the context of the number of domestic meter point numbers registered within Scotland, which is in the order of 2,741,839.

6.3 Climate Change Benefits

- 6.3.1 The electricity generation and carbon savings analysis within the ES also considers equivalent fossil fuel use, where the carbon savings of the proposed development are calculated on a comparative basis with the CO₂ savings that would arise from the displacement of energy generated from fossil fuels. Undertaking this calculation requires a comparison with 'tons of equivalent oil' (TOE), which for the proposed development (using the 30.79 % capacity factor) will realise approximately 971,803 TOE per annum. Placing this figure in a relative context, in 2010 the UK used 25.56m TOE of coal to generate 107,694 GW of electricity. The proposed development could therefore replace the equivalent of 3.8 % of the UK's annual coal usage per annum, should fossil fuel energy generation be displaced by the proposed development.
- **6.3.2** In terms of the CO_2 savings that the proposed development could deliver, when compared to fossil fuel energy generation the average capacity factor (30.79 %) requires to be used. Assuming the potential annual electricity generation of the proposed development would be 445,806 MW hours per annum, the proposed development would result in CO_2 savings of 3,677,638 tons per annum when compared to coal fired electricity generation. When compared to gas fired electricity generation, the potential CO_2 savings of the proposed development would be in the order of 1,618,322 tons of CO_2 per annum.
- **6.3.3** On the basis that the proposed development is likely to operate for a period of 25 years, and on the basis of the 30.79 % capacity factor, the whole life CO_2 savings when compared to coal powered electricity generation would be in the region of 91,940,950 tons of CO_2 . When compared to gas powered electricity generation, the savings would be in the region of 40,458,050 tons of CO_2 .
- **6.3.4** Considering the CO_2 savings that the proposed development could deliver in context, the annual CO_2 emissions for Scotland in 2009 were 46.938m tons of CO_2 . Accordingly, the annual CO_2 emission savings from the proposed development could account for approximately 4.4 % of the total Scottish CO_2 emissions, based on 2009 levels. The 2009 CO_2 calculation for Scotland includes all transport, industrial and commercial and agricultural CO_2 emissions. When compared to the annual CO_2 emissions relative to domestic electricity usage, the proposed development could account for approximately 26.7 % of the total domestic CO_2 emissions based on 2009 levels.

6.3.5 The carbon saving benefits that the proposed development will deliver constitute a significant benefit that deserves significant weight in the determination of the consents and associated licence applications. The carbon savings that the proposed development will deliver are very much supported by the MPS (including meeting the high level objective 'ensuring a strong, healthy and just society') and other relevant statements of marine policy as well as by wider EU, UK and Scottish climate change objectives and renewable energy targets.

6.4 Socio-economic Considerations

- **6.4.1** The proposed development is both a significant and major construction project for Scotland that will result in a number of positive socioeconomic benefits for the Aberdeen, Aberdeenshire and Moray economies, as well as benefiting the wider Scotlish economy as a whole. The socioeconomic benefits associated with the proposed development relate to the construction, operation and decommissioning phases of the proposed development. Socioeconomic benefits associated with the three proposed wind farms are reported within Chapter 8.6 of Volume 3 of the ES 'Socioeconomics, Tourism and Recreation'.
- **6.4.2** In accordance with the 'Rochdale Envelope' principles, the socioeconomic assessment has been undertaken on the basis of the following assumptions for the offshore wind farms. The OfTI is considered separately below:

The Offshore Wind Farms

- **6.4.3** Employment / GVA Calculations Using Minimum Predicted Project Expenditure to deliver 1.5GW:
- 216 x 7 MW wind turbines; and
- 315 km of inter-array cables.
- **6.4.4** Tourism / Recreation Assessment:
- Maximum predicted seascape, landscape and visual effects: 216 x 7 MW turbines; and
- Maximum number of substructures for recreation activities: 339 turbines.

6.4.5 In terms of the employment and gross value added (GVA) to the economy that the proposed development will generate, this has been analysed within the ES on the basis of the construction, operation, and decommissioning processes. The employment and GVA effects reported within the ES are summarised below:

Construction

- Peak employment of 254 1,601 jobs within the study area;
- Peak employment of 978 2,641 jobs within Scotland; and
- GVA of £245 to £705 million at 2011 prices.

Operation

- Peak year employment of 166 267 jobs within study area;
- Peak year employment of 245 400 jobs within Scotland; and
- GVA of £427 £1,076 million at 2011 prices.

Decommissioning

- Peak employment of 42 255 jobs within study area;
- Peak employment of 94 464 jobs within Scotland; and
- GVA of £14 £68 million at 2011 prices.

All Development phases:

- Peak year employment 462 2123 jobs within study area;
- Peak year employment 1317 3505 jobs within Scotland;
- GVA of £686 to £1848b at 2011 prices.
- **6.4.6** The employment and GVA for these development stages are reported within the ES as being a major positive (significant) environmental effect. This is a significant benefit of the Project, particularly when the maximum GVA of £1,848 equates to approximately 1.5 % of Scotland's Gross Domestic Product for 2011².

² Scottish Government web based statistics calculate GDP for 2011 at £124 Billion.
http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy

The Transmission Infrastructure

- **6.4.7** The socio-economic assessment of the OfTI is reported within Chapter 11.6 of Volume 4 of the ES. It should be noted that the socio-economic assessment reported within Volume 4 of the ES has been undertaken on the basis of all transmission infrastructure, rather than separating the infrastructure that is located offshore with that infrastructure located onshore for the purposes of the assessment. Accordingly, the socio-economic figures reported here also apply to the whole project including the onshore transmission infrastructure.
- **6.4.8** The proposed development assumptions relevant to the socio-economic assessment, in the context of the Rochdale envelope principles, are set out within Table 11.6–2 of Volume 4 of the ES. The socio-economic assessment also notes that it is difficult to separate the maintenance and decommissioning effects from the socio-economic assessment of the wind farms and simply notes that, for operation and decommissioning, the employment and GVA effects would be minor and negligible respectively. The effects reported for the construction process are identified as being 'major positive' and those for GVA are also identified as 'major positive', both of which are significant positive environmental effects. The construction effects predicted are as follows:
- Employment of 303 320 jobs within the study area;
- Employment of 495 590 jobs within Scotland; and
- GVA of £245 £705 million at 2011 prices.

- **6.4.9** MORL recognise that the Project will bring a significant new market for jobs and services to Scotland and the UK, and therefore took the decision to develop a strategy to allow Government to take advantage of that new market by translating its opportunities into jobs and economic growth.
- **6.4.10** Marine Scotland led a series of meetings with MORL, the Scottish Government Energy Division, Highlands and Islands Enterprise (HIE) and Scottish Enterprise (SE) to develop a 'pilot' scheme to enable HIE and SE to access appropriate parts of the Project's procurement process (which is currently in early stages), which involves requesting information from companies able to supply the market.
- **6.4.11** The pilot involves the early sharing of information between MORL, HIE and SE to allow the agencies the opportunity to offer their support in an early, appropriate and focused way to strengthen and develop the supply chain, maximising opportunities for local economic development.

- **6.4.12** The pilot will take the form of frequent and regular engagement between MORL, HIE and SE. Although in its early stages, the intention is to allow partnerships working between the public and private sector to facilitate the optimisation of support to the supply chain. The information provided by MORL is intended to allow the agencies, which translate new markets into growth and prosperity, to optimise their efficiency, effectiveness and success with due respect to commercial confidentiality and commercial sensitivity.
- **6.4.13** Section 3.3 of the MPS states that when examining and determining applications for energy infrastructure decision makers should take into account "[t]] he potential impact of inward investment in offshore wind, wave, tidal stream and tidal range energy related manufacturing and deployment activity; as well as the impact of associated employment opportunities on the regeneration of local and national economies" and goes on to say that these activities "support the objective of developing the UK's low carbon manufacturing capability".
- **6.4.14** The effects reported on tourism and recreation matters regarding the construction and operational phases of the proposed development are reported as being 'negligible' and 'minor' adverse respectively, which are effects that are not significant in EIA terms. All tourism and recreation effects during operation are reported as 'minor' and during decommissioning, tourism effects are reported as 'negligible'. Recreation effects are reported as 'minor', which is not significant in EIA terms.
- **6.4.15** In conclusion, the socio-economic effects of the proposed development in terms of employment generation and GVA are all 'major' significant positive effects. Additionally, all adverse socio-economic effects on the tourism and recreation resource in most instances are 'negligible' and do not have a higher magnitude than 'minor'. Therefore, on balance, the socio-economic impacts of the proposed development can be considered significantly positive.

6.5 Conclusions

6.5.1 Drawing on the significant positive climate change and socio-economic effects of the proposed development, significant support for the proposed development can be drawn from the relevant legislation, the MPS, NPF 2, the Development Plans and the MPS. The benefits of the proposed development will significantly further a number of UK and Scottish Government's economic, marine and climate change policy objectives. This deserves significant weight in the determination of the applications for consent and the associated marine licences.

7 Conclusions

7.1 Introduction

7.1.1 This chapter of the Planning Statement provides overall conclusions on the general accordance of the proposed development with the relevant legislative and policy considerations. As explained in Chapter 2, there are a number of legislative considerations to which the decision maker must have regard to in determining the Applications for Section 36 Consents and the associated Marine Licences. There is also a significant suite of renewables and marine related policy documents, which are also material to the determination, particularly the MPS, which has a statutory footing.

7.2 Meeting Policy Needs

7.2.1 As set out above, the EU, Scottish and UK Government renewable energy policy documents, and associated renewable energy and climate change targets all provide a powerful body of support in favour of renewable energy and appropriate development. Such targets and policies provide the basis of the need case for the proposed development. On the basis that all three wind farm sites are consented and fully commissioned prior to 2020, the contribution towards the current 2020 target shortfall would be in the order of 18.5 %, which is a material consideration to which significant weight should be given.

7.3 Benefits

7.3.1 As set out and assessed within Chapter 6, the proposed development would result in significant benefits in terms of the proposed developments contribution to achieving climate change objectives and with regard to significant positive socio-economic impacts. The socio-economic and climate change benefits associated with the proposed development have been defined by the ES as positive effects of 'Major' significance. Maximum job creation would be 3,505 jobs and maximum GVA would be £1.848 Billion (approximately 1.5 % of the Scottish GDP). These are significant benefits that are fully supported and compatible with the relevant marine and renewable energy policy framework set out in Chapter 3.

7.4 Statutory Duties

7.4.1 The statutory duties incumbent upon the decision maker relate to those set out within the Electricity Act 1989, the Marine and Coastal Access Act 2009 and the Marine (Scotland) Act 2010 described within Chapter 2. With regard to the relevant marine legislation, Chapter 5 of this Planning Statement sets out how the key legislative tests have been met, as well as setting out how the predicted project effects are consistent with the relevant marine policy framework. In terms of meeting the duties set out under the terms of the Electricity Act 1989, the ES is considered to provide the justification and support for the proposed development; setting out how the proposed development is compliant with Schedule 9.

7.5 Policy Assessment

7.5.1 The relevant marine policy framework is described within Chapter 3 and the renewable energy and climate change policy case, based on the European, UK and Scottish renewable energy policy framework; is also described within Chapter 3. The Policy Assessment set out within Chapter 5, when read in the context of the needs case and marine policy framework, demonstrates that the proposed development can draw significant support from the relevant policy documents. The proposed development is found to be in accordance with the relevant policy framework and no elements of non-accordance with that framework have been identified that would justify a refusal of the Applications for Section 36 Consents or the associated Marine Licences.

7.6 Overall Conclusions

- **7.6.1** As explained in this Planning Statement there are some significant environmental effects reported within the ES, however, these are relatively few in number. MORL have carried out extensive consultation with stakeholders in this regard and have committed to continued dialogue to agree procedures and mitigation. In addition, MORL have undertaken additional surveys and studies to enhance the understanding of baseline conditions and increase certainty in the ES assessments and in relation to some receptors have committed to future studies.
- **7.6.2** When considered in the context of the relevant policy and legislative considerations, it is clear that the proposed development, on the whole, meets the relevant policy requirements of increasing renewable energy capacity, minimising conflicts with other users of the marine environment, minimising effects on human health and minimising wider environmental harm.
- **7.6.3** In addition, it has to be noted that the ES reports a worst case scenario based on the Rochdale Envelope principles. It is also relevant to note that the residual significant effects reported are relatively few in extent, when compared to the capacity of the proposed development. The capacity of the development itself meets a number of the renewable energy policy objectives set out within Chapter 3 and the proposed development provides an opportunity for early delivery which will assist in meeting the 2020 targets. Additionally, the residual significant adverse effects predicted require to be considered in the context of section 2.4 of the MPS in particular, which provides high level advice on considering the benefits of a development against the reported adverse effects.

- **7.6.4** Significant policy support for the proposed development is also achieved with regard to matters relating to a sustainable marine economy, wider socio-economic benefits and the contribution the proposed development would make towards renewable electricity generation and addressing climate change objectives.
- **7.6.5** In considering the relevant legislative requirements and the underlying aims and objectives of the relevant policy framework, it is therefore concluded that the proposed development has been designed and environmentally assessed fully in accordance with those requirements. The overall conclusion reached is that Section 36 Consents and the Marine Licences should be granted.

Appendix 1: Relevant Policies of the Statutory Development Plans to the Offshore Development

Aberdeenshire Council Development Plan

Aberdeen City and Shire Structure Plan 2009

Sustainable Development & Climate Change

Objective: "To be a city region which takes the lead in reducing the amount of carbon dioxide released into the air, adapts to the effects of climate change and limits the amount of non-renewable resources it uses."

Aberdeenshire Local Development Plan June 2012

Policy 4 Special types of rural land:

"Aberdeenshire Council will protect the special character of the greenbelt and the coastal zone.

In these areas we will have special controls on development. These include a presumption against development that would erode the special nature of these different areas.

The following types of development may be acceptable in appropriate circumstances in the greenbelt:

extensions or ancillary uses; development for the purposes of agriculture, forestry, horticulture, nature conservation, essential public infrastructure, or recreation; the restoration, conservation or extension of vernacular buildings or buildings of architectural merit; accommodation required for a worker in a primary industry; development identified as a national priority; or development identified under the policy for safeguarding of resources and areas of search as required to meet established need.

The detailed circumstances in which development in both the coastal zone and greenbelt may be acceptable is set out in the following supplementary guidance:

SG STRLtype1: Development in the coastal zone

SG STRLtype2: Greenbelt

The special types of rural land are shown on the proposals maps."

SG STRLtype1: Development in the coastal zone

"We will approve development within the defined coastal area as shown on the Main Proposals Maps, subject to other policies, if:

1) the site is within a settlement boundary identified in the plan; OR

2) outwith a settlement boundary the proposal requires a coastal location, and the social and economic benefits outweigh any adverse environmental impact; OR

3) it is demonstrated that there is no alternative site as it is the redevelopment of an existing building, or within the curtilage of an existing building.

In either of these cases the applicant must also demonstrate that:

a) it will not contribute to the coalescence of coastal developments; AND

b) it will respect the character and amenity of the surrounding area; AND

c) the site is not at risk from flooding, overtopping, landslip or erosion; AND

d) there is no adverse impact on water quality and it will not result in the pollution of coastal waters; AND

e) it will not unreasonably adversely impact on natural coastal processes or habitats.

We will approve proposals for coastal protection works, subject to other policies, if an assessment of the implications of the works shows that they work with natural processes and there will be no significant adverse impact on coastal processes or habitats, and that the proposed development will not result in increased coastal erosion or flooding elsewhere on the coastline."

Aberdeen City and Shire Structure Plan 2009

Sustainable Development & Climate Change (continued)

Aberdeenshire Local Development Plan June 2012

SG Safeguarding1: Protection and conservation of the water environment

"We will only approve new development, including aquatic engineering works, which will generate discharges or other impacts on existing water bodies, or which could affect the water quality, quantity, flow rate, ecological status, riparian habitat, protected species or flood plains of water bodies including their catchment area, subject to other policies, if:

1) it has been demonstrated that it will not prejudice the ability of water bodies to maintain good status; or, for those water bodies not currently achieving good status, that it will not cause any further deterioration in status nor prevent them from being able to achieve good ecological status in the future; AND

2) it contributes to the objectives and targets within the Local Biodiversity Action Plan relating to the freshwater environment; AND

3) when required, it includes the creation, enhancement and management of new habitats; AND

4) it has been demonstrated that both during construction and after completion:

i) it would not adversely affect water quality or flows in adjacent watercourses or areas downstream; AND

ii) adequate buffer strips have been provided adjacent to water bodies, so that they can be accessed and maintained all year round.

All aquatic engineering works must be accompanied by a technical report prepared by a suitably qualified individual. When required, the applicant must also produce a construction method statement to demonstrate compliance with criterion 4.

Where development is allowed, the applicant is encouraged to improve the ecological status of water bodies whenever possible, particularly where a water body is currently at less than good ecological status. This could be achieved through criteria 2), 3) and / or 4)(ii)."

The Proposals Map for Banff & Buchan, and Buchan are relevant considerations as they include the settlements of Fraserburgh and Rattray respectively, which have been refined as the two possible options for the critical point where the offshore transmission cable comes onshore to be connected to the Peterhead Power Station

Moray Council Development Plan

Moray Structure Plan 2007

Policy 2: Environment and Resources (Part b, d & I)

"The Moray Structure Plan Strategy will be supported by:

b) protecting the wider natural environment and local biodiversity from inappropriate development and promote opportunities for environmental enhancement and restoration where possible;

d) Restricting development within coastal areas outwith settlements to only that in which social and economic benefits outweigh environmental impact..."

I) promoting opportunities for the sensitive development of renewable energy and promoting renewable energy in new development."

Coastal areas will be safeguarded through the identification of a Coastal Protection Zone.

Moray Local Plan 2008

ER1: Renewable Energy Proposals

"Renewable energy proposals will be considered favourably where they meet the following criteria:

- a. they are compatible with policies to safeguard and enhance the built and natural environment
- b. they do not lead to the permanent loss or permanent damage to, prime agricultural land,
- c. they are compatible with tourism / recreational interest and facilities, they do not interfere with aircraft activity,
- d. they do not result in an unacceptable impact in terms of visual appearance, landscape character, noise, electro-magnetic disturbance, watercourse engineering, peat land hydrological impacts, pollution, traffic generation or damage to the local ecology, and
- e. they do not result in an unacceptable cumulative impact.

Proposals are required to provide "decommissioning arrangements" to illustrate how the site will be reinstated if and when the plant ceases to operate. This may be enforced through a section 75 agreement.

Commercial wind energy developments should be located within a Preferred Search area identified in the Wind Energy Policy Guidance and meet the above criteria."

Highland Council

Highland Wide Local Development Plan (HwLDP)

Policy 49 Coastal Development

Development proposals for the coast or for installations in nearshore waters should, in both their location and their design, show consideration to the range of existing interests ensuring best use of resources taking account of existing and planned marine activities and development. Proposals should not have an unacceptable impact on the natural, built or cultural heritage and amenity value of the area.

The Council will promote the landward site of the road for development where proposals on the coastal side would otherwise interrupt scenic views over open water: unless a coastal position is necessary, or if the effect would be a conflict with the existing settlement pattern. Where development on the coast is justified, opportunities for the proposed development or reuse of previously used land and buildings should be considered in the first instance. The site should not be at risk from coastal erosion or flooding or cause an unacceptable impact as a result of natural coastal processes which it triggers or accentuates. In relation to medium or high flood risk areas: water-based uses and sub-sea cables may be acceptable; and essential infrastructure, which cannot be located elsewhere, may be acceptable, both subject to mitigation, as appropriate. Erosion data should be consulted when determining whether natural coastal processes have potential to be an issue. Other important factors will be potential landscape impact, and effect on the setting of coastal communities. Consideration will be given to the potential for any proposal to result in coalescence

Local Plans

Local Plans in Highland have largely been superseded by the adoption of the Highland wide Local Development Plan.

The adopted Highland-wide Local Development Plan replaces the Highland Structure Plan (except within the Cairngorms National Park) and updates / supersedes the "general policies" of the existing adopted Local Plans.

In order to retain the other elements of the existing adopted Local Plans (including but not limited to; site allocations, settlement development areas not covered by the Highland wide Local Development Plan and site specific policies) a Parliamentary Order was laid before Scotlish Parliament on 16th March 2012 to enable these elements to remain in force to the extent so specified as required by Schedule 1 of The Town and Country Planning (Scotland) Act 1997 As Amended. The Order is called The Town and Country Planning (Continuation in force of Local Plans) (Highland) (Scotland) Order 2012 and came into force on 1st April 2012.

The following Local Plans (saved parts) are considered as part of the proposed development plan:

Caithness Local Plan 2002

Sutherland Local Plan 2010

Ross & Cromarty Local Plan 2007

Nairnshire Local Plan 2000

However as the remaining parts relate to settlement and settlement policies, they are of limited relevance to the proposals.

Highland Wide Local Development Plan (HwLDP)

Local Plans

Policy 49 Coastal Development (Continued)

Proposals will be assessed against the requirements of the Highland Coastal Development Strategy: Supplementary Guidance. The principal aims of the strategy are to:

- guide the sustainable development and use of Highland's coastal zone whilst safeguarding its natural and cultural heritage assets
- provide a strategic planning framework for the coast and nearshore area of Highland which takes account of national policy guidance and the need for more detailed plan coverage in appropriate areas
- complement the statutory terrestrial elements of the Highland-wide Local Development Plan, Scottish Planning Policy and the implementation of the Marine (Scotland) Act 2010. This recognises that the use of nearshore waters (particularly the more sheltered water) is relevant and often closely related to the use of the land adjacent
- provide strategic vision and guidance for development on and around the Highland coast, i.e. development in the planning sense
- provide a classification of the Highland coast relevant to development in the nearshore area."

Proposals will be assessed against the requirements of the Highland Coastal Development Strategy: Supplementary Guidance. The principal aims of the strategy are to:

- guide the sustainable development and use of Highland's coastal zone whilst safeguarding its natural and cultural heritage assets
- provide a strategic planning framework for the coast and nearshore area of Highland which takes account of national policy guidance and the need for more detailed plan coverage in appropriate areas
- complement the statutory terrestrial elements of the Highland-wide Local Development Plan, Scottish Planning Policy and the implementation of the Marine (Scotland) Act 2010. This recognises that the use of nearshore waters (particularly the more sheltered water) is relevant and often closely related to the use of the land adjacent
- provide strategic vision and guidance for development on and around the Highland coast, i.e. development in the planning sense
- provide a classification of the Highland coast relevant to development in the nearshore area."

Policy 67 Renewable Energy Developments

"Renewable energy development proposals should be well related to the source of the primary renewable resources that are needed for their operation. The Council will also consider:

- the contribution of the proposed development towards meeting renewable energy generation targets; and
- any positive or negative effects it is likely to have on the local and national economy; and will assess proposals against other policies of the proposed development plan, the Highland Renewable Energy Strategy and Planning Guidelines and have regard to any other material considerations, including proposals able to demonstrate significant benefits including by making effective use of existing and proposed infrastructure or facilities.

Highland Wide Local Development Plan (HwLDP)

Local Plans

Policy 67 Renewable Energy Developments (Continued)

Subject to balancing with these considerations and taking into account any mitigation measures to be included, the Council will support proposals where it is satisfied that they are located, sited and designed such that they will not be significantly detrimental overall, either individually or cumulatively with other developments (see Glossary), having regard in particular to any significant effects on the following:

- natural, built and cultural heritage features;
- species and habitats;
- visual impact and impact on the landscape character of the surrounding area (the design and location of the proposal should reflect the scale and character of
- the landscape and seek to minimise landscape and visual impact, subject to any other considerations);
- amenity at sensitive locations, including residential properties, work places and recognised visitor sites (in or out with a settlement boundary);
- the safety and amenity of any regularly occupied buildings and the grounds that they occupy- having regard to visual intrusion or the likely effect of noise generation and, in the case of wind energy proposals, ice throw in winter conditions, shadow flicker or shadow throw;
- ground water, surface water (including water supply), aquatic ecosystems and fisheries;
- the safe use of airport, defence or emergency service operations, including flight activity, navigation and surveillance systems and associated infrastructure, or on aircraft flight paths or MoD low-flying areas:
- other communications installations or the quality of radio or TV reception;
- the amenity of users of any Core Path or other established public access for walking, cycling or horse riding;
- tourism and recreation interests;
- land and water based traffic and transport interests.

Proposals for the extension of existing renewable energy facilities will be assessed against the same criteria and material considerations as apply to proposals for new facilities.

Highland Wide Local Development Plan (HwLDP)

Local Plans

Policy 67 Renewable Energy Developments (Continued)

Proposals for the extension of existing renewable energy facilities will be assessed against the same criteria and material considerations as apply to proposals for new facilities.

In all cases, if consent is granted, the Council will approve appropriate conditions (along with a legal agreement / obligation under section 75 of the Town and Country Planning (Scotland) Act 1997, as amended, where necessary), relating to the removal of the proposed development and associated equipment and to the restoration of the site, whenever the consent expires, other than in circumstances where fresh consent has been secured to extend the life of the project, or the project ceases to operate for a specific period.

The Onshore Wind Energy Supplementary Guidance will replace parts of the Highland Renewable Energy Strategy. It will identify: areas to be afforded protection from wind farms; other areas with constraints; and broad areas of search for wind farms. It will set out criteria for the consideration of proposals. It will ensure that developers are aware of the key constraints to such development and encourage them to take those constraints into account at the outset of the preparation of proposals. It will seek to steer proposals, especially those for larger wind farms, away from the most constrained areas and ideally towards the least constrained areas and areas of particular opportunity. It will also set out criteria which will apply to the consideration of proposals irrespective of size and where they are located, enabling proposals to be considered on their merits. It will seek submission as part of the planning application of key information required for the assessment of proposals and provide certainty for all concerned about how applications will be considered by the Council."

Policy 69 Electricity Transmission Infrastructure

"Proposals for overground, underground or sub-sea electricity transmission infrastructure (including lines and cables, pylons / poles and vaults, transformers, switches and other plant) will be considered having regard to their level of strategic significance in transmitting electricity from areas of generation to areas of consumption. Subject to balancing with this consideration, and taking into account any proposed mitigation measures, the Council will support proposals which are assessed as not having an unacceptable significant impact on the environment, including natural, built and cultural heritage features. In locations that are sensitive, mitigation may help to address concerns and should be considered as part of the preparation of proposals. This may include, where appropriate, underground or sub-sea alternatives to overground route proposals. Where new infrastructure provision will result in existing infrastructure becoming redundant, the Council will seek the removal of the redundant infrastructure as a requirement of the proposed development."

Appendix 2 - Development Plan Policies of Relevance to the OnTl

Aberdeenshire Council Development Plan

Aberdeen City and Shire Structure Plan 2009

Aberdeenshire Local Development Plan June 2012

Economic Growth

Objective: To provide opportunities which encourage economic development and create new employment in a range of areas that are both appropriate for and attractive to the needs of different industries, while at the same time improving the essential strategic infrastructure necessary to allow the economy to grow over the long term.

Policy 3 Development in the Countryside

"Aberdeenshire Council will support development in the countryside where it meets the needs of a rural community by contributing to its overall social and economic wellbeing, and by promoting vigorous and prosperous rural settlements.

We will balance this with the need to promote a sustainable settlement pattern and to protect our rural environment from the impact of longer distance travel to use services, especially commuting.

As a result, we will manage development in a way that recognises the special character of different types of rural area. We will generally exercise greater control of development in the Aberdeen Housing Market Area, and promote small-scale development, especially business development, in the Rural Housing Market Area. In doing so, we will support a wide range of economic development that helps to improve the rural economy.

We will publish the way we do this separately in the following supplementary guidance.

SG Rural Development1: Housing and business development in the countryside

SG Rural Development2: Wind farms and medium to large wind turbines

SG Rural Development3: Other renewable energy developments

SG Rural Development4: Minerals"

Sustainable Development & Climate Change

Objective: "To be a city region which takes the lead in reducing the amount of carbon dioxide released into the air, adapts to the effects of climate change and limits the amount of non-renewable resources it uses."

Policy 4 Special types of rural land:

"Aberdeenshire Council will protect the special character of the greenbelt and the coastal zone."

In these areas we will have special controls on development. These include a presumption against development that would erode the special nature of these different areas.

The following types of development may be acceptable in appropriate circumstances in the greenbelt:

extensions or ancillary uses; development for the purposes of agriculture, forestry, horticulture, nature conservation, essential public infrastructure, or recreation; the restoration, conservation or extension of vernacular buildings or buildings of architectural merit; accommodation required for a worker in a primary industry; development identified as a national priority; or development identified under the policy for safeguarding of resources and areas of search as required to meet established need.

The detailed circumstances in which development in both the coastal zone and greenbelt may be acceptable is set out in the following supplementary guidance:

SG STRLtype1: Development in the coastal zone

SG STRLtype2: Greenbelt

The special types of rural land are shown on the proposals maps."

Quality of the Environment

Objective: To make sure new development maintains and improves the region's important built, natural and cultural assets.

Policy 8 Layout, siting and design of new development

"Aberdeenshire Council will support new development on sites we have allocated within this plan, where they conform with a previously agreed development framework and / or masterplan (whichever is appropriate) for the site. We will assess all development, whether on sites we have allocated or elsewhere, using a process that includes appropriate public consultation and appropriate standards for design, open space, accessibility, safety, sustainability, and the provision of associated services.

The way we will do this is set out in the following supplementary guidance.

SG LSD1: Masterplanning

SG LSD2: Layout, siting and design of new development

SG LSD3: House extensions

SG LSD4: Infill development

SG LSD5: Public open space

SG LSD6: Public access

SG LSD7: Community facilities

SG LSD8: Flooding and erosion

SG LSD9: Hazardous development

SG LSD10: Contaminated land

SG LSD11: Carbon neutrality in new development

Aberdeen City and Shire Structure Plan 2009

Aberdeenshire Local Development Plan June 2012

Quality of the Environment (Continued)

Policy 8 Layout, siting and design of new development (Continued)

All new buildings are required to produce ever-lower proportions of greenhouse gases through their siting, layout and design, and the installation of appropriate technologies. Supplementary guidance will provide a standard to achieve the council's target of carbon neutrality by 2016; a process to enable savings to be demonstrated; a specified and rising proportion of greenhouse gases to be avoided through the installation and operation of low and zero-carbon generating technologies for all new buildings; and any exceptions.

In furtherance of SG LSD1, we may produce additional design guidance or planning advice for specific sites, to provide a basis for putting the masterplans into practice. We may also use section 75 obligations or conditions, as appropriate, to secure the results of applying this policy on a continuing basis."

Policy 11 Natural Heritage

"Aberdeenshire Council will improve and protect designated nature conservation sites and the wider biodiversity and geodiversity of the area.

Where there is uncertainty over the impacts of a proposed development, we will adopt an approach based on the precautionary principle.

We will also consider cumulative impacts of development on the natural environment and will only accept harm to the environment where there is an overriding public interest. The way we will do this is set out in the following supplementary guidance.

SG Natural Environment1: Protection of nature conservation sites SG Natural Environment2: Protection of the wider biodiversity and geodiversity"

Policy 12 Landscape Conservation

"Aberdeenshire Council will plan for and promote the improvement and protection of all landscapes in Aberdeenshire by recognising and using landscape character areas. All the landscapes of Aberdeenshire are valuable assets and vulnerable resources, which are facing various pressures of change. We will use the Landscape Character Area framework as a basis for our future planning and management policy.

We will also take into consideration particular opportunities, sensitivities and vulnerabilities of different landscapes, and make sure that the implications of development on these are managed in an appropriate and sensitive way.

The way we will do this is set out in the following supplementary guidance.

SG Landscape1: Landscape character SG Landscape2: Valued views"

Policy 13 Protecting, improving and conserving the historic environment

"Aberdeenshire Council supports the protection, improvement and conservation of the historic environment. There will be a presumption against development that would have a negative effect on the quality of these historic assets. Different parts of the historic environment require to be subject to specific guidance and controls to make sure that we maintain and improve their value.

The way we will do this is published separately in the following supplementary guidance.

SG Historic Environment1: Listed buildings

SG Historic Environment2: Conservation areas

SG Historic Environment3: Historic gardens and designed landscapes

SG Historic Environment4: Archaeological sites and monuments"

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