

Neart na Gaoithe Offshore Wind Farm

Onshore Works Planning Statement
November 2012



1 Introduction

- 1 This Planning Statement accompanies an application submitted to East Lothian Council (ELC) for planning permission under The Town and Country Planning (Scotland) Act 1997, as amended, ('the 1997 Act'). The application relates to the construction and operation of an electrical substation and underground cable (hereinafter referred to as 'the onshore works') to connect the proposed Neart na Gaoithe offshore wind farm (hereinafter referred to as 'the offshore works') to the grid.
- 2 The application is being made by Neart na Gaoithe Offshore Wind Ltd (NnGOWL), a wholly owned subsidiary of International Mainstream Renewable Power Limited (Mainstream).
- 3 For the purposes of this Planning Statement, the onshore works have been assessed using onshore planning policies. For the Planning Statement, the entire development has been considered for the purposes of socioeconomic assessment.
- 4 A connection to the grid has been secured at Crystal Rig II wind farm in East Lothian, approximately 7km south west of the settlement of Innerwick (refer to Figure 1: Site Location). The landfall for the proposed offshore cable is at Thorntonloch and the main components of the onshore works comprise:
 - two transition pits close to the beach where the offshore and onshore cables will be joined;
 - six individual cables (laid in two groups of three) buried within a trench for a distance of approximately 12 km from the landfall at Thorntonloch to Crystal Rig II (referred to in combination as 'the cable'); and
 - a new electrical substation adjacent to the existing Crystal Rig II substation.
- 5 In total, the development encompasses an area of 62,4375 m². All construction activities will take place within this boundary but the precise line of the cable trench will be subject to 'micro-siting' within the application boundary in response to local constraints.
- 6 The construction period for the onshore works is anticipated to last 18-24 months. Although consent for construction and operation of the offshore works (the offshore wind farm and associated offshore infrastructure) is being sought for a period of 25 years, it is anticipated that the onshore grid connection infrastructure once constructed will become part of the national transmission network.
- 7 An Environmental Statement (ES), reporting on the findings of a systematic process to identify, predict and assess potential environmental impacts of the Development – required under The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 (the 'EIA Regulations') – has also been submitted in support of the application. These findings will be referred to throughout this document with reference to compliance with the relevant planning policy framework.
- 8 The offshore components of the proposed wind farm are the subject of separate applications to Marine Scotland for consent under Section 36 of the Electricity Act 1989 and for marine licences under the Marine (Scotland) Act 2010.
- 9 When developing the onshore route, a number of alternatives were considered. These are described in the ES in greater detail.

1.1 Purpose and structure of the planning statement

- 10 This Planning Statement is intended to demonstrate how the onshore works responds to, and complies with, relevant local and national planning policy and guidance. The approach followed echoes that set out in Paragraph 25 of Scottish Planning Policy (SPP) which states that decisions should be made "*in accordance with the development plan unless material considerations indicate otherwise.*" This reflects and interprets the decision-making approach established by House of Lords judgement in 1998¹ which clarified the provisions set out in Section 25 and 37(2) of the 1997 Act. The recommended process is as follows:
 - identify any provisions of the development plan which are relevant to the decision;

¹ City of Edinburgh Council v. the Secretary of State for Scotland, 1998 SLT120



- interpret them carefully, looking at the aims and objectives of the plan as well as the detailed wording of the policies;
 - consider whether or not the proposal accords with the development plan;
 - identify and consider relevant material considerations, for and against the proposal; and
 - assess whether these considerations warrant a departure from the development plan (if required).
- 11 Paragraph 25 goes on to state that “*where a proposal is in accordance with the development plan, the principle of development should be taken as established and the process of assessment should not be used by the planning authority or key agencies to revisit that*”, thereby placing additional significance on the provisions of the plan. This Planning Statement has therefore been structured in line with this model, with chapters as follows:
- **Chapter 2:** sets out the need for the onshore works
 - **Chapter 3:** outlines the site selection and cable routeing process
 - **Chapter 4:** provides a description of the proposed onshore works
 - **Chapter 5:** sets out the relevant development plan policies, and illustrates the onshore work’s compliance with this framework
 - **Chapter 6:** examines other material considerations; and
 - **Chapter 7:** provides a conclusion.



2 The need for the onshore works

12 This chapter sets out the rationale for the onshore works, dealing only with the components that fall within the scope of the planning system². The offshore works are subject to separate legislative and consents regimes, and the need and rationale for that aspect of the project are established in Chapter 2 of the Environmental Statement (ES) supporting the offshore application.

2.1 Background to the proposed onshore works

13 In May 2008, The Crown Estate (TCE) invited developers to bid for potential offshore wind farm sites within Scottish Territorial Waters. Following the bid, TCE offered exclusivity agreements for ten sites around Scotland, with the potential to generate over 6 Gigawatts (GW) of offshore wind power. Mainstream Renewable Power Limited was awarded one of these exclusivity agreements and is has already submitted an application to Marine Scotland for consent to construct and operate an offshore wind farm in this area.

2.1.1 Relationship between onshore and offshore works

14 The onshore works are directly related to, and necessitated by, the proposed offshore wind farm. It will facilitate the distribution of up to 450MW of electricity – the equivalent of up to 335,489 households – or more than all of the households in a city the size of Edinburgh³. This will make a significant contribution to Scotland’s renewable energy capacity and to meeting the Scottish Government’s ambitious carbon reduction targets.

15 Onshore grid connections are a critical component in delivering Scotland’s significant offshore renewable energy potential, and this is reflected in current planning policy. The opportunities for grid connection are limited by the presence of suitable onshore infrastructure within a reasonable distance of the offshore development to minimise transmission losses, make the most of available grid capacity and avoid impacts on sensitive resources. The Scottish Government recognises that this is a nationally significant issue, with key policies – including Scottish Planning Policy and the recent marine plan for offshore wind energy⁴ – highlighting the need for joined-up working between the marine and Town and Country Planning sectors.

2.1.2 Legislative requirements for onshore grid connection works

2.1.2.1 Town and Country Planning

16 An application for planning permission is being made to the planning authority, East Lothian Council, under The Town and Country Planning (Scotland) Act 1997, as amended.

17 The onshore works are classed as a ‘Major Development’ for the purposes of The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009 on the basis that the area of the development boundary exceeds two hectares, as indicated in the Schedule to the Regulations. Therefore, formal Pre-Application Consultation is required under sections 35A and 35B of the 1997 Act. A Pre-Application Consultation (PAC) Report accompanies the application in compliance with section 35C of the 1997 Act. Details of the pre-application consultation process can be found in Chapter 7 of the Environmental Statement.

2.2 The Applicant

18 NnGOWL is a wholly owned subsidiary of International Mainstream Renewable Power Limited (Mainstream). Mainstream is the promoter of the Neart na Gaoithe offshore wind farm project. Mainstream was founded by Eddie O’Connor in 2008 to develop wind and solar plants around the world. The company has a global development portfolio of over 15,000 MW, consisting of both onshore (wind and solar) and offshore wind projects across four continents.

² i.e. that falls within the meaning of ‘development’ established in The Town and Country Planning (Scotland) Act 1997, as amended.

³ Calculations shown in Section 2.3 of the Environmental Statement.

⁴ Marine Scotland (2011) *Blue Seas – Green Energy: A sectoral marine plan for offshore wind energy in Scottish Territorial Waters* Edinburgh: Scottish Government



- 19 Mainstream is one of Europe's leading offshore wind developers with up to 7,600 MW over three projects in Scotland, England and Germany.
- 20 The company is developing the up to 4,000 MW Hornsea Zone off the east coast of England with its joint venture partner Siemens Projects Ventures and investor, Dong Energy. Mainstream was awarded the rights to develop the Zone by TCE in December 2009. Mainstream is also actively developing wind and solar plants onshore in the US, Canada, Chile and South Africa and is currently progressing the 1.2GW Horizont offshore wind farm off the coast of Germany.



3 The site selection and cable routing process

21 This chapter provides an overview of the process leading to the selection of a preferred cable route, dealing with:

- The offshore site allocation process, driving the area of search for onshore grid connection options;
- The external factors limiting the potential area of search for onshore grid connections;
- The options considered; and
- The reasons for selecting the preferred option.

3.1 Offshore site allocation

22 In May 2008 The Crown Estate (TCE) invited expressions of interest from those companies wishing to be considered as potential developers of offshore wind farms within Scottish Territorial Waters (STW). Prior to submitting a bid, Mainstream carried out a series of high level desk-based assessments to determine those sites in STW with the potential to be taken from development sites to fully consented and constructed wind farms. Following the tendering process, Mainstream Renewable Power Limited was awarded the exclusivity agreement for the potential offshore wind farm site in the outer Firth of Forth. The site covers an area of 105km² and is located around 30km northeast of Dunbar, and 15.5km east of Fife Ness.

23 In addition to these assessments, consultation was undertaken with the Scottish Government, Maritime and Coastguard Agency (MCA), Chamber of Shipping, Royal Society for the Protection of Birds (RSPB), Scottish Natural Heritage (SNH), Fisheries Research Service (FRS), Scottish Environment Protection Agency (SEPA), Scottish Fishermen's Federation (SFF), Montrose Port, Ministry of Defence (MoD), British Airports Authority (BAA), Civil Aviation Authority (CAA), Visit Scotland, and Fife Council.

3.2 Onshore site selection and routing decisions

3.2.1 Grid connection options

24 Options for grid connection were examined in parallel with the EIA process for the offshore component of the project. Potential for connection was identified at Arbroath (Angus) and Tealing (Fife); and at Cockenzie, Torness, Branxton and Crystal Rig II wind farm, all in East Lothian.

25 It is important to note that the onshore grid connection is offered by National Grid Electricity Transmission (NGET) depending on grid capacity and proposed connection date – and is not chosen by the developer. Following a high level study by NGET in 2009, a connection point was offered to Neart na Gaoithe Offshore Wind Limited at the Crystal Rig II onshore wind farm. This necessitated the identification of a cable landfall site in East Lothian.

3.2.2 Cable landfall

26 Following the decision on the connection location, detailed intertidal, environmental and technical surveys of potential landfall points at Skateraw and Thorntonloch and were carried out.

27 Although technically feasible, Skateraw was assessed to be more technically challenging due to exposed rock on the beach and environmentally sensitive due to the presence of a Site of Special Scientific Interest (SSSI). Thorntonloch is more suitable for cable landing due to the increased sediment cover and fewer environmental designations. As a result, Thorntonloch was taken forward and for more detailed assessment.

28 Following the selection of Thorntonloch, further work was undertaken to identify the preferred landing point on the beach. Four possible landing points were identified between Thorntonloch Caravan Park and the cliffs to the south. Proximity to the caravan park restricted consideration of additional landfall points at the northern end, whilst options further south were restricted by the encroachment of offshore rock. Each of the four landfall points are described in Table 3.1, which also provides a summary of the key issues in respect of each of these.



Landing Site Option	Area	Summary of Issues
Option A	North of Thornton Burn	Rejected on grounds of disturbance to caravan park and potential impacts on water quality and stream morphology of the Thornton Burn.
Option B	South of Thornton Burn	Preferred option due to greater distance from the caravan site, sufficient land for construction works and transition pits.
Option C	South of Thornly dwelling	Rejected on grounds of limited access and steep bank to beach. Ground conditions indicate that construction would be difficult.
Option D	Cliff top to south	Rejected on grounds of limited access and steep bank to beach. Ground conditions indicate that construction would be difficult.

Table 3.1: Summary of landfall option locations and key issues

29 Options C and D were discounted due to the technical difficulties identified in Table 3.1. Options A and B were both considered feasible; however, due to the reduced risk of disturbance to residents of the caravan site and neighbouring properties, Option B was considered to be the most appropriate landing point. Option B was also preferable in terms of reducing the potential for adverse effects on the Thornton Burn.

3.2.3 Onshore cable route

30 Following selection of the preferred landfall point, work was undertaken to identify an onshore cable route corridor which would run between the landfall point at Thorntonloch and the substation at Crystal Rig II.

31 From an early stage it was decided that a fully underground cable from landfall to grid connection would be preferable in order to avoid adverse impacts on landscape and visual amenity. No detailed overhead routeing options were therefore considered.

32 Four route corridor options were taken forward for detailed assessment, which are described in in the ES. Following this assessment process, Mainstream chose a route corridor comprising composite sections of the four assessed routes. This provided a technically feasible route which limited the potential for environmental impacts.

33 Overall, the route corridor runs in a south westerly direction from landfall at Thorntonloch and stretches for 12.3km. The route largely follows existing infrastructure, with the majority of the route running close to public roads for ease of access. From landfall, the route initially traverses lowland areas, constituted largely of agricultural land, and eventually moves onto higher ground, crossing open pastoral fields and moorland to the grid connection point, situated in an upland region within the Lammermuir Hills, adjacent to the existing Crystal Rig II 400kV substation.

3.2.3.1 Refinement of the Application Boundary and Detailed Route Assessment

34 The preferred cable route was subject to extensive design and assessment work to refine its path and identify and mitigate key impacts – forming the basis of the accompanying ES. The outcomes of this process are set out below, in the context of compliance with the relevant policy frameworks.

35 In summary, the following assessment activities were undertaken:

- **Environmental**

- Ecology (advice on sensitive habitats including blanket bog/ancient woodland along the route and how to avoid/minimise impacts on these);
- Landscape & Visual (advice on sensitive receptors and avoiding the loss of key landscape features);
- Arboriculture (advice on root protection zones/root depths to avoid damage during construction phase);
- Transport/access (seeking to minimise disruption to the road and rail networks);
- Hydrology (advising on proposed watercourse crossings and areas of flood risk);



- Agriculture and Land use (seeking to minimise disruption to land holdings).
 - **Engineering and technical**
 - Full cable route surveys;
 - Desktop geotechnical assessment;
 - Cable installation methodologies;
 - Underground services assessment;
 - Construction compound assessment;
 - Discrete route section cost benefits analysis report; and
 - Cable rating studies.
- 36 In addition, a range of consultation with key stakeholders has informed the proposed route, including:
- East Lothian Council;
 - Torness Power Station (via EDF Energy);
 - Existing infrastructure providers (Scottish Power; Network Rail; BEAR; East Lothian Council);
 - Land owners along the route; and
 - The Statutory Consultees: Scottish Natural Heritage (SNH), Scottish Environment Protection Agency (SEPA) and Historic Scotland (HS).
- 37 The final application boundary for the onshore works is shown on **Figure 1**.



4 Site description and development proposals

38 This chapter provides a brief overview of the proposed substation site, cable corridor and the nature of the proposed Development

4.1 Site description

4.1.1 Cable route

39 The cable comes ashore at Thorntonloch, a wide sandy beach backed by shallow dunes, before passing under the A1 trunk road and East Coast Main Line railway. It shadows the route of the A1 before breaking off to the southwest through open fields and passing to the west of Innerwick. It then cuts across country to the west before turning south to follow a minor road until the junction with the Crystal Rig wind farm access track, which it then follows to the substation site.

4.1.2 Substation and environs

40 The substation site is located in the northern Lammermuir Hills, around 7km southwest of Innerwick. Lying adjacent to the existing Crystal Rig II substation, the site is ringed by low, rolling hills. The surrounding landscape comprises areas of managed moorland, improved pasture and non-native conifer blocks. The character of the landscape has been substantially altered by the presence of the Crystal Rig I and II wind farms. The site is located within the Crystal Rig II wind farm and is surrounded by turbines.

4.2 The Proposed Development

41 This section of the Planning Statement outlines the nature of the physical works required to facilitate connection of the subsea cables to the grid at Crystal Rig, where a new substation will be constructed. The onshore works comprise three principal elements:

- Landfall - export cables (2 x 220kV circuits, each circuit comprising a single 3 core 220 kV cable) from the landfall (mean low water springs) to the transition pit where the connections with the onshore cables are made;
- Cable corridor - onshore cables (2 x 220 kV circuits, each circuit comprising 3 single core cables) from the transition pit to the new substation; and
- Substation - a new 220 kV / 400 kV substation, to be located adjacent to the existing substation at Crystal Rig II wind farm.

4.2.1 Landfall

42 Cable landfall will be at Thorntonloch beach, directly south of Torness Power Station. At landfall, the two offshore export cables will be brought ashore from the cable-laying vessel, through the intertidal zone, to either one or two adjacent underground concrete structures ('transition pits') located above the Mean High Water Springs (MHWS) mark – where the onshore and offshore cables will be connected. The cables, contained in suitable ducting, will be at least 1m below the ground surface and the transition pits will be capped in concrete and the overlying ground surface reinstated.

43 The exact method of installation for intertidal works will be dependent on the ground and seabed conditions along the cable route. Two potential options are being considered for installation, namely Horizontal Directional Drilling (HDD) and Open Cut Trenching (OCT).

4.2.2 Cable corridor

44 The onshore cable will transmit electricity from the proposed wind farm to the substation connection at Crystal Rig II. The cables will run underground between the transition pits at the cable landfall, and the proposed substation. The cables will be buried in a 2m wide trench.

45 Much of the cable route lies in open fields. For these sections, all construction works will be located within a 20m wide working corridor along the proposed route. An additional 10 m width has been included to allow for route micro-siting, giving a total width of 30 m for the application boundary.

46 For the vast majority of the route, the actual construction corridor will have a maximum width of 20m. Construction access points will be provided at appropriate intervals along the route, and at these points, the 30 m application boundary may widen slightly. Some wider areas are also required for large vehicle turning



and this is indicated by the application boundary. For the sections of the route installed in open field, a temporary haul road will be established adjacent to and in parallel with the cable trench and will be contained within the 20 m construction corridor. The 20 m wide corridor will accommodate the following elements:

- A trench of approximately 2 m in width;
- Heavy vehicle access for which 5 m will be required;
- Laydown of equipment and spoil for which 5 m will be required;
- Contingency space to avoid the trench collapsing under load for which 2 m is provided from the edge of the trench;
- Vehicle/pedestrian track for which 3 m will be required ; and
- A further 3 m to establish temporary fencing and to allow space for vehicle turning and car parking.

47 The majority of the cable route will be installed using open cut trenches with ‘trenchless’ methods, such as HDD, deployed where necessary to avoid impacts on sensitive assets (such as pre-existing electricity cables, water courses, the East Coast Main Line railway and woodland).

4.2.3 Substation

48 For the purposes of this document, the generic term ‘substation’ is used to refer to the entire compound enclosing the proposed elements of electrical infrastructure and control building required to facilitate connection to the electricity grid.

49 The proposed substation will be built adjacent to the existing Crystal Rig II substation, located in the northern Lammermuir Hills, between Watch Law and Bransley Hill. The size and layout of the substation is determined in part by the equipment, connections, safety clearances and access required for components. The substation layout is shown on Figure 2. The permanent substation will have dimensions of 255 x 166m, with a maximum height of 15m. The area of the substation compound is a maximum of 33,300m². It will comprise:

- The control building;
- Electrical plant and infrastructure;
- Switchgear;
- Drainage system;
- Hardstanding / surfacing;
- Oil interception and containment system⁵.

50 A palisade security fence of approximately 3m height will be erected around the perimeter of the substation site and warning signs posted. 24 hour security lighting will be in place for the duration of the construction period.

4.2.3.1 Construction compound

51 An area close to or adjacent to the substation site will be used to accommodate the substation contractor temporary works site and will include offices, stores, delivery and off-loading areas, welfare facilities, parking areas and security accommodation.

52 Similar to the substation site, this area will be prepared by removing the top ground layer and introducing a layer of stone capping. The location of the substation construction compound has not yet been determined but will fall within the footprint of the application boundary.

4.2.4 Project programme

53 The construction programme is anticipated to last between 18-24 months, with a degree of overlap between the offshore and onshore construction periods.

⁵ The transformers are oil-filled and therefore appropriate pollution interception measures are required.



5 Development plan policies

54 As outlined in Chapter 1, the policies set out in the standing development plan are central to the determination of any application for planning permission. East Lothian's development plan – produced under the pre-2006 system – currently comprises:

- **Structure Plan:** Edinburgh and Lothians Structure Plan 2015 (2004); and
- **Local Plan:** East Lothian Local Plan (2008).

55 The following sections of this Chapter discuss the policies of the standing development plan, and the ways in which the proposed Development responds to this framework.

5.1 The Development Plan

56 In line with the 1997 Act, for the purposes of this document 'development plan' refers to both the Structure Plan and Local Plan.

5.1.1 Edinburgh and Lothians Structure Plan

5.1.1.1 Status and relevance

57 The Edinburgh and Lothians Structure Plan 2015 (hereinafter referred to as 'the Structure Plan'), produced by the City of Edinburgh, East Lothian, Midlothian and West Lothian Councils in 2004 provides the strategic framework for the use and development of land in the region – as required by the 1997 Act (prior to its amendment in 2006).

58 While technically beyond its intended five-year lifespan, the Structure Plan will remain in place as the overarching regional policy framework until the adoption of the emerging Edinburgh and South East Scotland Strategic Development Plan ('SESPlan'), which is discussed further in Chapter 6. The ongoing review of the Structure Plan was abandoned in 2007 with Scottish Executive approval due to Ministers' requirement for an immediate start on preparatory work for the then newly-introduced Strategic Development Plans.

59 In this context, the Structure Plan sets the regional approach to environmental protection, delivering infrastructure development and provides the high level vision and development strategy for the region.

60 Relationship to other plans, policies and strategies

61 Section 11(5) of the 1997 Act, prior to its amendment in 2006, required Local Plans to conform to the policies set out in the relevant Structure Plan.

62 The Structure Plan therefore sets the regional policy context within which the East Lothian Local Plan 2008 nests.

5.2 East Lothian Local Plan 2008

5.2.1.1 Status and relevance

63 The East Lothian Local Plan 2008 (hereinafter 'the Local Plan'), in parallel with the Structure Plan, is the primary decision-making tool for the planning authority in considering applications for planning permission in the local authority area. It contains detailed policies on the use and development of land, and provides locally-specific interpretations of relevant Structure Plan policies and strategic priorities.

64 The Local Plan is 'in date' and is not due for replacement until at least 2013.

5.2.1.2 Relationship to other plans, policies and strategies

65 As noted above, the Local Plan was developed to reflect the policies and provisions of the Structure Plan. It also sets the context for a range of supplementary planning guidance documents, although none of these are strictly relevant to the proposed Development.

5.3 Policy and compliance analysis

66 The following sections set out the relevant policies from the development plan by broad topic area and discuss the manner in which the Development responds to their requirements.



5.3.1 Renewable energy

5.3.1.1 Policy framework and relevance

67 It should be noted that discussion of development plan renewable energy policies is confined to their strict relevance to the onshore works or electricity transmission infrastructure required for the delivery of renewable energy development proposals. These policies have no wider relevance to the proposed Development.

68 **Structure Plan Policy ENV6: Renewable Energy** makes no explicit reference to transmission infrastructure or grid connection. Given that the three principal elements of the Development comprise a landfall, cable corridor and substation, this policy is not therefore considered material to the proposed Development.

69 **Local Plan Policy NRG3: Wind Turbines** states that:

*“Subject to consistency with other plan policies, proposals for individual turbines or wind farms and associated access tracks and **transmission lines** will be supported where [LUC emphasis]:*

1. *they would not change the existing landscape character in an unacceptable way;*
2. *they would not have an unacceptable visual impact on landscape or townscape including the impact on distinctive public views, landmark buildings or natural features, or routes;*
3. *they would not have an unacceptable impact from noise at any noise sensitive property including the gardens of such properties however large; the Council will refer to guidelines in PAN45 and PAN56 or successor guidance;*
4. *there would be no demonstrable nuisance from a shadow flicker effect;*
5. *they would have no unacceptable adverse impacts on hydrogeology or hydrology;*
6. *alternative, better, sites are not available; and*
7. *there are no unacceptable cumulative impacts.*

In assessing all proposals the Council will have regard to the findings and recommendations of the Landscape Capacity Study for Wind Turbine Development in East Lothian (May 2005).”

70 It is reasonable to expect that this policy will be material to the onshore works, as it could be interpreted as applying both jointly and severally to wind turbines and transmission infrastructure.

5.3.1.2 Discussion

71 The Landscape and Visual Impact Assessment prepared as part of the EIA process, and included as Chapter 10 of the ES, indicates that the Development will have:

- A negligible effect on landscape character arising from the cable laying works;
- A moderate local impact – but a negligible overall impact – on the character of the *Lammermuirs Plateau* landscape character area as a result of the construction and operation of the proposed substation;
- A minor overall effect on the Lammermuir Hills Area of Great Landscape Value (AGLV) and Special Landscape Area (SLA); and
- No significant residual cumulative/in-combination effects on landscape character.

72 The construction phase of the project will result in more varied visual impacts, depending on the sensitivity and proximity of receptors. However, it should be noted that these impacts are all temporary and, following restoration, residual (i.e. long term, following restoration of landscape features) impacts are generally of minor or negligible significance. For more detailed discussion of landscape and visual impacts, see Section 5.3.4 below.

73 It can therefore be concluded that the proposed Development will neither result in an unacceptable change in landscape character, nor result in unacceptable changes to views or natural features. The Development can therefore be held to be in compliance with the relevant portions of Policy NRG3.



5.3.2 Natural heritage

5.3.2.1 Statutory designations

- 74 **Structure Plan Policy ENV 1 A: International Natural Heritage Designations** introduces a presumption against development that would have an adverse effect on Natura 2000 sites, their qualifying interests, and priority species and habitats as defined in Article 1 of the Habitats Directive. This is mirrored by **Local Plan Policy NH1a**.
- 75 **Structure Plan Policy ENV 1 B: National Natural Heritage Designations** and **Local Plan Policy NH1b: Sites of Special Scientific Interest** set criteria against which development affecting SSSIs should be judged.
- 76 The ecological and ornithological assessments conducted as part of the EIA process, and presented in Chapter 8 of the ES, indicates that no statutory natural heritage designations – or their qualifying interests – will be adversely affected by the Development. It can therefore be held to be in compliance with these policies, and they need not be considered further.

5.3.2.2 Non-statutory designations

- 77 The development plan also sets the framework for protection of locally designated sites and features of local importance.
- 78 **Structure Plan Policy ENV 1 D: Regional and Local Natural and Built Environment Interests** states that development affecting a range of natural heritage and built environment interest, or their settings, *“will only be permitted where it can be demonstrated that:*
- a. The objectives and overall integrity of the designated area will not be compromised; or*
 - b. The social or economic benefits to be gained from the proposed development outweigh the conservation or other interest of the site.”*
- 79 **Local Plan Policy NH3: Important Local Biodiversity Sites** requires the protection of Scottish Wildlife Trust sites, Regionally Important Geological or Geomorphological Sites and priority species and habitats listed in the East Lothian Biodiversity Action Plan. Development which harms such sites *“will only be permitted where:*
- 1. Any harm to the natural heritage interest is outweighed by the public benefits of the development; and*
 - 2. No suitable alternative sites are available.”*
- 80 **Local Plan Policy NH2: Wildlife and Geological Areas** requires that, where *“damaging development is permitted which affects any designated site of natural heritage value, wherever possible appropriate mitigating measures must be provided to enhance and safeguard the remaining interest.”*
- 81 The ecological impact assessment indicates that Thornton Burn Local Wildlife Site (LWS) will experience **minor** impacts as a result of clearance of a small number of willow trees to create a working area for the HDD rig and construction of a temporary bridge to allow vehicles to cross the watercourse. However, this work is necessary to facilitate the use of ‘trenchless’ cable installation techniques that will avoid more significant adverse impacts on the Thornton Burn channel and marginal vegetation.
- 82 The process of assessing alternative cable routes demonstrated that the preferred option minimises potential environmental effects. The trees affected represent a small proportion of the woodland habitats within the LWS and their removal will encourage growth of aquatic marginal plant communities.
- 83 Appropriate compensatory planting will be provided, in line with the **Scottish Government Policy on the Control of Woodland Removal**, and in agreement with ELC.
- 84 The Development will provide significant public benefits, in terms of facilitating the delivery of up to 450MW of low carbon electricity, while impacts on locally designated assets will be minimal, securing compliance with the policies outlined above.

5.3.2.3 Identification and assessment of biodiversity values

- 85 Both the Structure Plan and Local Plan contain policies (**ENV 1 F** and **DP12** respectively) that require developers to identify and assess the biodiversity value of their site, and the likely impact of proposed development on the identified interests. An appropriately detailed Ecological Impact Assessment (EclA) has been prepared as part of the EIA process, and is included as Chapter 8 of the ES.



86 Local **Plan Policy DP13: Biodiversity and Development Sites** requires that, for proposals where a biodiversity assessment is required, development that results in a net loss of the biodiversity resource will not be permitted “*unless:*

1. *it can be shown that the development has been designed and sited to minimise such losses (i.e. there are no alternative, better sites); and*
2. *mitigation is implemented, where possible; or*
3. *the contribution of the development of the good planning of the area clearly outweighs the loss of or reduction in biodiversity.*

Developers must show that they have had regard to the potential of the site for improving biodiversity value through built environment measures and landscaping. Habitat linkages within the site and to features outwith the site and the use of native species in landscape planting are particularly important.”

87 As outlined above, and in the ES, the Development has been carefully planned and a range of scenarios considered to avoid and reduce environmental impacts, including loss of biodiversity resources. A range of best-practice mitigation measures will be applied to the construction phase of the Development to ensure that the potential for disturbance of species and habitats is minimised.

88 No significant effects are predicted in relation to designated sites, priority species or habitats as a result of the proposed Development and proposed enhancement work at and around the proposed substation site will deliver improvements to an area of degraded habitat.

5.3.2.4 Woodland and trees

89 **Local Plan Policy DP14: Trees on or Adjacent to Development Sites** requires that the design of a new development should be sensitive to trees and hedgerows that contribute to the setting, amenity, or nature conservation value of an area. If the loss of such trees is permitted, appropriate replacement planting may then be made a condition of planning permission.

90 As noted above, a small number of trees will be cleared to enable ‘trenchless’ cable installation under the Thornton Burn. Felling is therefore vital to avoid far more significant impacts on watercourse morphology, marginal vegetation and water quality that would arise through the use of open cut trenching. In line with the policy, this limited intervention will “*contribute more to the good planning of the area than would retaining the tree or trees*”. As noted above, the Developer will also make provision for appropriate compensatory planting to ensure that no overall reduction in local woodland cover occurs.

91 There may be other small, localised losses of trees or hedgerows. Construction works will make use of existing gaps in vegetation as far as possible to minimise loss.

92 A number of ancient woodland features are located within the cable corridor. However, due to the sensitivity and national importance of these assets, a number of measures will be put in place to avoid adverse effects. These include establishing fenced-off tree root protection zones around woodland, strict adherence to chemical storage and use best practice guidance and the use of ‘trenchless’ cable construction techniques to avoid impacts on tree roots and ancient woodland ground flora. As a result, **negligible residual effects** on ancient woodland are predicted and the Development therefore complies with this policy.

5.3.3 Watercourses and flooding

93 **Structure Plan Policy ENV 12: Water Management and Flooding** states that “[d]evelopment, individually and/or cumulatively, that may lead to a significant increase in the risk of flooding, or that may itself be at risk from flooding, should not be permitted.” **Local Plan Policy DP16** outlines a presumption against development which would increase the risk of flooding unless certain conditions are met.

94 Consultation with the Scottish Environment Protection Agency (SEPA) and ELC provided no evidence of flooding along the cable route or at the substation site. Flood risk at all watercourse crossing points and at the substation is considered to be low, and the Flood Risk Assessment for the cable landfall point undertaken as part of the EIA indicates that the Development is not expected to result in any change in ground levels or change in flood risk to others.

95 Local Plan Policy DP16 also states that efforts to minimise flood risk and protect the watercourses should be implemented where any new development has the potential to affect existing watercourses. This is reflected



in the Developer's commitment to deploy a range of techniques to protect the function and integrity of watercourses.

96 **Local Plan Policy NH6: Watercourses and Wetlands** introduces a general presumption against any engineering works on watercourses, in view of the potential impact on the ecology and amenity of the area. As outlined above, 'trenchless' cable-laying techniques will be employed in key locations to avoid predicted adverse effects on hydrology and ecology. Furthermore, best practice construction approaches and rigorous sediment control measures will be employed to avoid impacts on water quality, resulting in residual effect of no more than **minor** significance.

97 The Development therefore complies with these policies.

5.3.4 Landscape

5.3.4.1 Areas of Great Landscape Value

98 **Structure Plan Policy ENV 1 D: Regional and Local Natural and Built Environment Interests** relates to designated areas including Areas of Great Landscape Value, and states that development affecting such interest or their settings will only be permitted where:

- a. *"The objectives and overall integrity of the designated area will not be compromised; or*
- b. *The social or economic benefits to be gained from the proposed development outweigh the conservation or other interest of the site."*

99 **Local Plan Policy NH4: Areas of Great Landscape Value** provides that development that *"harms the landscape character and appearance of Areas of Great Landscape Value will not be permitted"*.

100 While there are three Areas of Great Landscape Value designated by East Lothian Council in the vicinity of the Development (Coastal, Woodland and Lammermuir Hills)⁶, they will not sustain any significant impacts either during construction or operation of the Development. It should also be noted that, since its designation, the character of the Lammermuir Hills AGLV has changed significantly due to the presence of the Crystal Rig I and II and Aikengall wind farms.

5.3.4.2 Landscape character

101 **Local Plan Policy DP 1: Landscape and Streetscape Character** requires that all new development must be integrated into its surroundings and designed in order to retain important existing natural and physical features.

102 The process of selecting the route for the onshore cable has been strongly influenced by the Landscape and Visual Impact Assessment, prepared as part of the EIA process and included as Chapter 10 of the ES. In the first instance, selection of fully underground export and grid connection cables is a key means of avoiding impacts on landscape character and on views along the connection route. In contrast, routeing the cables via overhead lines would have resulted in significant visual intrusion and would have required felling of wayleaves through woodland – with consequent impacts on natural heritage and landscape quality.

103 The initial cable route avoided the majority of sensitive landscape features. However, a number of locations were identified where this initial cable route intersected sensitive features such as trees and woodlands. Where possible, the route was adjusted to avoid these locations. In addition, trenchless cable-laying techniques (e.g. HDD) are proposed at a number of locations along the route to avoid impacts on surface features that could have a significant effect on landscape resources, character and views. These include at Thornton Burn, the East Coast Main Line railway, and a number of woodland areas.

104 A few landscape elements, including hedgerows, stone walls and post-and-wire fences will be affected by open cut trenching, but will be fully reinstated following cable installation,. Impacts from the cable installation process will therefore be localised, temporary and reversible, and are assessed as having a **negligible effect on landscape character**.

105 The choice of substation location was limited by the grid connection offer to Near na Gaoithe Offshore Wind Limited by National Grid, necessitating a site adjacent to the existing Crystal Rig II substation. The equipment,

⁶ In addition to the Lammermuir Hills AGLV designated by Scottish Borders Council



material and finishes of the proposed substation will be similar to that already in place, helping the Development and neighbouring infrastructure to be read as a single unit in the landscape. In the context of this existing development – and the proximity to the Crystal Rig wind farm – the landscape around the proposed substation is considered to be of low sensitivity. Parts of the landscape resource will be changed in the long term from open moorland to development, while others will be reinstated and the landform slightly modified to include landscape berms and some tree and juniper scrub planting. These changes are assessed as being of **moderate** significance locally – but of **negligible** significance in the context of wider landscape character (within the *Lammermuir Plateau* landscape character area).

106 The Development is therefore considered to comply with this policy.

5.3.5 Cultural heritage

107 No significant effects are predicted on nationally designated historic environment assets, therefore **Structure Plan Policy ENV 1 C** need not be considered further.

108 **Local Plan Policy ENV 4: Development within Conservation Areas** is not considered relevant as it relates only to proposed development within the boundaries of designated Conservation Areas. Similarly as no permanent impacts on the setting of Listed Buildings are predicted, **Local Plan Policy ENV 3: Listed Buildings** is not considered further.

109 **Structure Plan Policy ENV 1 D: Regional and Local Natural And Built Environment Interests** states that development affecting sites of archaeological interest or their settings, “*will only be permitted where it can be demonstrated that:*

- a. The objectives and overall integrity of the designated area will not be compromised; or*
- b. The social or economic benefits to be gained from the proposed development outweigh the conservation or other interest of the site.”*

110 **Local Plan Policy ENV7: Scheduled Monuments and Archaeological Sites** requires that:

- 1. Where a proposed development might affect any site or area included in the East Lothian Sites and Monuments Record (of known or suspected archaeological interest), the developer must first undertake and make available to the Planning Authority a professional archaeological assessment and, if necessary, a field evaluation.*
- 2. Development that would harm a site of archaeological interest or its setting, particularly a Scheduled Monument, will not be permitted. The only exception to this will be situations where archaeological advice concludes that the significance of the remains is not sufficient to justify their physical preservation in situ when weighed against other material considerations, including the benefits of the proposed development. In such situations, the developer must make proper provision for the excavation, recording and analysis of the archaeological remains in advance of the commencement of development, any subsequent post-excavation work and the publication of the results. Appropriate conditions may be applied to any planning permission to achieve this.*
- 3. Where it is feasible within a proposed development to accommodate, preserve and enhance archaeological features or their setting, public access to and interpretation of these features will be expected.*

111 As noted above, no effects on Scheduled Monuments are predicted. A number of undesignated **archaeological** sites are located along the length of the cable corridor but, in line with national policy and guidance, the route has been planned to enable preservation in situ of the most significant and sensitive features. An appropriate programme of impact avoidance and mitigation – based on the outcomes of consultation with Historic Scotland and East Lothian Council Archaeology Service – is proposed in Chapter 9 of the ES, resulting in no more than minor effects on all but one of the sites identified within the application boundary.

112 Due to the nature of other constraints on the routeing of the Onshore Works, particularly the presence of underground high voltage electricity cables linking to Torness Power Station, it is not possible for the cable route to avoid both of a pair of sites identified within the construction corridor adjacent to Torness (Sites 10 and 11 in the ES). Therefore archaeological recording work will be necessary in advance of construction work to fully understand the value of the group of features and inform targeted mitigation. It is likely that the cable will be routed through the feature of lowest significance – necessitating excavation of the site within



the affected area. The scope of any such work will be agreed with ELC Archaeology Service and delivered in line with an approved Written Scheme of Investigation by suitably qualified and experienced professionals. However, this is assessed as producing no more than a **moderate effect** on the affected features (assumed in the ES to be site 11 – a prehistoric cropmark⁷ enclosure).

- 113 In agreement with Historic Scotland and East Lothian Council Archaeological Service, temporary effects on the setting of assets during construction were ‘scoped out’ of the assessment. This is due to the fact that effects will be temporary and wholly reversible. In operation, no effects on the setting of assets are predicted, as none of those sites identified during the assessment has theoretical intervisibility with the substation⁸.
- 114 The Development has been specifically designed to avoid adverse effects on cultural heritage, and it is considered that the impacts arising are significantly outweighed by the wider public benefits that will be delivered.

5.3.6 Coastal and countryside development

- 115 **Structure Plan Policy ENV 3: Development in the Countryside** states that “[d]evelopment in the countryside will be allowed where it has an operational requirement for such a location that cannot be met on a site within an urban area or land allocated for that purpose, and is compatible with the rural character of the area”. Similarly, **Local Plan Policy DC1: Development in the Countryside and Undeveloped Coast**, as it relates to the proposed Development, states that: “...infrastructure proposals, provided they have a clear operational requirement for a countryside location that cannot reasonably be accommodated within an existing urban or allocated area or, in the case of a proposed development within the undeveloped coast, that cannot be accommodated elsewhere and any potentially detrimental impact is outweighed by its social and economic benefits.
- 116 **The** location of the Development is entirely determined by operational requirements – namely the availability of a grid connection at Crystal Rig. As the majority of the Development will be imperceptible once construction and reinstatement is completed, it will not materially alter the rural character of the area. The substation, as the sole upstanding element of the proposal, is located immediately adjacent to a comparable installation within an existing wind farm. Its presence will not materially alter the rural character of the wider landscape.
- 117 **Policy DC1 goes on** to require that all development in the countryside and undeveloped coast must:
- a. *“be integrated into the landscape, reflect its character and quality of place, and be compatible with its surroundings;*
 - b. *...be sited so as to minimise visual intrusion and landscape impact with the open countryside or undeveloped coast...;*
 - c. *...have no significant adverse impacts on nearby uses;*
 - d. *...minimise the loss of prime agricultural land;*
 - e. *Account must be taken of the design policy framework contained in the local plan...;*
 - f. *Suitable access and infrastructure is or can be made available”.*
- 118 The majority of the Development will, in operation, be imperceptible in the landscape, thereby preserving the character and rural qualities of the area. The substation will be of similar design, materials and finish to that already in place at Crystal Rig II, with screening provided by landscaped berms and appropriate tree and scrub planting to reduce visual intrusion. While the new substation will introduce additional development to the landscape, it is directly comparable to the existing substation and the two installations will be read as a single unit in the landscape. Impacts on visual amenity are therefore assessed as being of **minor** significance once the scheme is operational. As noted above, the landscape surrounding the substation is considered to be of

⁷ The remains of past structures, truncated by agricultural activity, now only visible from the air as differential growth in crops – features cut into the subsoil retain moisture, allowing crops to grow taller and ripen later; solid features (such as walls or floors) retard crop growth due to reduced moisture availability, resulting in reduced height and earlier ripening.

⁸ The ‘Zone of Theoretical Visibility’ (ZTV) models produced using digital terrain models take no account of the screening effect of small-scale local topography or vegetation.



low sensitivity, resulting in moderate local effects – but no more than a minor overall impact on landscape character. (Compliance with design policies is discussed at 5.3.8.1 below.)

- 119 While the cable corridor is routed through some areas of high quality arable land, it will not result in the permanent loss of prime quality agricultural land or significant effects on soils or land capability across the Development area as a whole. Similarly, the Development makes use of pre-existing access infrastructure wherever possible, with no requirement for new permanent tracks or roads, further reducing the overall impact of the proposal. It therefore complies with these policies.

5.3.7 Open space, access and recreation

- 120 An area including the northern section of Thorntonloch beach and caravan park is covered by **Local Plan Policy C3: Protection of Open Space**. However, this policy should not apply as the proposed development will not result in the permanent loss or change of use of existing open space.
- 121 Access to and use of the beach and caravan park will be maintained throughout the construction period, although users of the area will be temporarily excluded from the working area for their own safety.
- 122 **Local Plan Policy C7: Core Paths and Other Routes** requires that development affecting a customary path, cycle way, bridleway or proposed or agreed Core Path will only be permitted where the overall integrity of the route and access network is maintained. The Development will not result in permanent alteration of the access network. During construction, the three Core Paths that cross the development boundary will require temporary diversion for reasons of public safety. Appropriate alternative routes and signage – agreed in advance with the East Lothian Council Access Officer – will be put in place to ensure access routes remain open. In operation, the Development will have no effect on access or recreation and therefore complies with both policies.

5.3.8 Other relevant development plan policies

5.3.8.1 Design

- 123 Relevant sections of **Local Plan Policy DP2: Design** include:

“The design of all new development, with the exception of alterations and extensions to existing buildings, must:

1. *Be appropriate to its location in terms of its positioning, size, form, massing, proportion and scale, and use of a limited palate [sic] of materials and colours that complement its surroundings;*
2. *Create or contribute to a sense of place and complement local character;*
- ...
8. *Retain physical or natural features, including watercourses, which are important to the amenity of the area or provide adequate replacements.*

- 124 The majority of the Development will, in operation, be imperceptible in the landscape, thereby preserving the character of the area. As noted above, significant effort has been made to design out adverse effects on landscape features, ensuring that effects on wider character and amenity are minimised.
- 125 The substation will be of similar design, materials and finish to that already in place at Crystal Rig II. Screening will be provided by landscaped berms and appropriate tree and scrub planting to reduce visual intrusion. While the presence of the substation will inevitably result in changes to its immediate environs, it is assessed as having a **minor** effect on the character of the wider landscape. It should also be noted that the substation is located within a local landscape which is strongly influenced by the presence of a large wind farm and ancillary development. This area has already been demonstrated to be suitable for such infrastructure, and this is reflected in both Scottish Ministers’ decision to grant consent for the multiple phases of the Crystal Rig wind farm and the members of East Lothian Council’s decision to support this.
- 126 The Development is therefore considered to comply with this policy.

5.3.8.2 Torness Consultation Zone

- 127 **Local Plan Policy NRG2: Torness Consultation Zone** requires certain planning applications within 4km of Torness nuclear power station to be referred to British Energy (EDF) for their observations.
- 128 The Developer has engaged with the operators of Torness, who have indicated that, as the Development does not affect their operational land, they have no objections.



5.3.8.3 Traffic and transport

- 129 **Local Plan Policy T2: General Transport Impact** requires that development must have no significant adverse consequences for:
- *“road safety;*
 - *the convenience, safety and attractiveness of walking and cycling in the surrounding area;*
 - *public transport operations in the surrounding area, both existing and planned, including convenience of access to these and their travel times;*
 - *the capacity of the surrounding road network to deal with traffic unrelated to the proposed development; and*
 - *residential amenity as a consequence of an increase in motorised traffic.”*
- 130 Where road crossings along the cable route are required (including crossing of the A1), lane closures managed by traffic signals will be put in place, agreed in advance with BEAR Scotland and in consultation with East Lothian Council. Any abnormal loads will be notified to the police, ELC and BEAR Scotland, with appropriate Temporary Traffic Regulation Orders put in place.
- 131 The construction phase of the project is assessed as resulting in a temporary increase in traffic on the area’s road network, with negligible effects on traffic levels predicted during operation. A Traffic Management Plan will be produced for the construction phase of the development to manage the effect of increased traffic levels. This will include details of the timing of site deliveries and measures to encourage multi-occupancy of vehicles used by construction workers. The Development is therefore considered to comply with this policy.

5.4 Overall conformity with the development plan

- 132 Any construction project of this scale will inevitably have an impact on the surrounding area. However, as the ES clearly illustrates, every effort has been made to identify and mitigate potentially significant effects.
- 133 The onshore works can therefore be held to be in compliance with the development plan, as no breaches of policy can be identified. In addition, the offshore wind farm stands to make a major contribution to meeting Scotland’s renewable energy targets, facilitating the distribution of up to 450MW of low carbon electricity. Therefore the societal and environmental benefits that the development will help to deliver significantly outweigh the small-scale, localised and generally minor adverse effects that the construction phase will generate.



6 Other material considerations

134 In addition to the local and regional policy framework, national planning policy and guidance may have a bearing on the determination of the application.

6.1 Emerging development plan

6.1.1 SESPlan: Proposed Strategic Development Plan for Edinburgh and South East Scotland

135 The first Strategic Development Plan (SDP) for Edinburgh and South East Scotland, known as ‘SESPlan,’ was recently finalised. The finalised SDP was submitted to Scottish Ministers in August 2012 and An Examination in Public into the Plan is currently underway.

136 The Proposed SDP is therefore a material consideration, as it represents the strategic spatial vision and overarching policies agreed by the partner authorities. It was approved by the Joint Committee in July 2011 and ratified by member authorities in August-October 2011. However, it will be subject to potentially significant alterations in response to representations.

6.1.1.1 Relevant policies

137 SDPs are intended to be much more streamlined and high level than their antecedent Structure Plans. Therefore the policy content of SESPlan is significantly less detailed and has limited relevance to the proposed Development.

138 A range of priorities are identified in the proposed SDP for the ‘East Coast’ portion of the region – including reinforcement of the electricity grid, in recognition of the need to accommodate ongoing growth in renewables. **Policy 10: Sustainable Energy Technologies** requires that emerging Local Development Plans “[s]et a framework for the encouragement of renewable energy proposals, taking into account relevant economic, social, environmental and transport considerations.” While no specific references to transmission infrastructure are included, the plan is supportive of renewable energy and recognises the need for the region to continue to contribute to meeting Scottish Government targets and international obligations.

139 **Policy 13: Other Countryside Designations** requires the partner authorities to review local designations “fulfilling a similar function to those of the Green Belt [sic]”. This may include local landscape designations, including AGLVs, which have experienced extensive landscape change since their original delineation and designation.

6.1.2 East Lothian Local Development Plan

140 The East Lothian Local Development Plan is currently at a very early stage in its development. As the Main Issues Report has not yet been published, it is not anticipated that it will be a material consideration.

6.2 National policy

6.2.1 National Planning Framework 2

141 National Planning Framework 2 (NPF2) sets the long-term context and strategy for the development of Scotland over the coming 20-25 years. It identifies key strategic infrastructure needs to ensure that each part of the country can develop its full potential. Placed on a statutory footing by The Planning etc. (Scotland) Act 2006, NPF2 provides the national context for Strategic and Local Development Plan and planning decisions, in addition to informing programmes of the Scottish Government, public agencies and local authorities. NPF2 also sets the framework for the conservation of Scotland’s natural and cultural heritage, highlighting the importance of these assets to sense of place, identity and economic competitiveness.

142 Promoting sustainable development is a key strand of NPF2, facilitating the delivery of the Scottish Government’s carbon reduction and renewable energy targets. Paragraph 48 reaffirms Scottish Ministers’ commitment to maximising Scotland’s renewable energy potential, and advises planning authorities of their duty to contribute to sustainable development through plan and decision making. Paragraph 145 highlights the importance of a mix of renewables – including offshore wind – in meeting targets and securing Scotland’s status as a leader in the field, and a net energy exporter, while Paragraph 146 highlights the likely importance of offshore wind to our energy mix over the coming quarter century.



- 143 NPF2 also recognises the comparative fragility of Scotland’s existing electricity transmission network. Paragraph 157 notes the continued trend for development of generating capacity in ‘remoter coastal and upland areas’ that requires upgrades to existing infrastructure to facilitate delivery. The strength of Ministers’ support for renewables is illustrated by NPF2’s introduction of a presumption in favour of adequate grid connection for areas identified by planning authorities as being preferred areas for renewable energy development. In addition, Paragraph 159 recognises the need for additional capacity in Central Scotland, with a need for new connections and routes.
- 144 NPF2 is therefore strongly supportive of delivering renewable energy and allied infrastructure in appropriate locations. Given that the Development will play a significant role in facilitating delivery of major generating capacity – with few adverse effects – it should be held to comply with the requirements of NPF2.

6.2.2 Scottish Planning Policy

- 145 SPP urges planning authorities to support the development of renewable energy in locations where the technology can operate efficiently and environmental and cumulative impacts can be satisfactorily addressed. Paragraph 192 of SPP requires planning authorities, through development plans, to identify appropriate locations for facilities linked to the operation of offshore wind farms – reaffirming Ministers’ commitment to the delivery of a thriving marine renewables sector and the need for the onshore planning regime to assist in the delivery of generating capacity. ELC therefore has the opportunity to support the delivery of offshore renewable energy, and key Scottish Government aspirations, by supporting the Development. Similarly, Paragraph 191 (albeit in relation to onshore wind) states that existing and approved grid capacity should be maximised wherever possible – a principle which implies strong support for the proposed Development. The same paragraph also states that “*grid constraints should not be used as a development constraint where renewable energy potential exists*”, suggesting that Ministers are unlikely to support planning decisions that use the need for grid connection to prevent otherwise sustainable and viable renewable energy development.
- 146 A key consideration for all development is Paragraph 25, which restates the requirement from the 1997 Act that planning decisions should be made in accordance with the development plan, unless material considerations indicate otherwise. As the Development is in compliance with the development plan policy framework, it should be granted planning permission. Other material considerations are strongly supportive of the principle of the proposal.

6.2.3 Scottish Government 2020 Routemap for Renewable Energy in Scotland

- 147 Section 2.2.4 recognises the level of investment required in new and upgraded electricity networks to enable connection of Scotland’s potentially enormous renewable energy resource. At section 2.3.2, the Routemap highlights the need for planning authorities – supported by the Scottish Government – to consider opportunities for all types of renewable energy, including offshore wind, and to develop Development Plans that “*encourage a diverse mix of renewables which make the most of locally available resources and guide developers to the correct locations*”. The Routemap goes on to highlight the fact that Ministers are actively considering the need for new planning advice that specifically deals with the relationship between offshore renewables and planning. Further, it explicitly states that the Scottish Government aims to increase the rate of deployment for renewables – recognising that onshore planning plays a key role in delivering Scotland’s offshore potential.

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

- 148 Produced by Marine Scotland, this plan represents the view of Scottish Ministers in relation to the delivery of offshore wind energy in Scotland.
- 149 Action 5 recognises the need for further integration of the on and offshore planning regimes, stating that “[d]evelopment planning for land use has a key role to play in ensuring that onshore aspects of development are delivered in an appropriate way.” This reinforces the view of Ministers that onshore works should be planned and provided for in a strategic manner by planning authorities. The East Lothian Local Plan 2008 was prepared and adopted before the allocation of The Crown Estate leases to prospective offshore wind developers, and could not therefore be expected to take cognisance of a then-nascent industry. In the absence of appropriate local policy, the Development accords with government policy that seeks to maximise



the potential of existing infrastructure – namely the grid connection capacity available at Crystal Rig. It also focuses development on an area that has already been judged to be acceptable for energy infrastructure by Scottish Ministers, through the issue of deemed planning permission for the Crystal Rig II wind farm and associated infrastructure.



7 Conclusions

150 This Planning Statement has demonstrated that:

- The rationale for the onshore works is strong, and is well supported by national policy – both in terms of meeting energy and climate change targets, and in relation to planning policy.
- The route selected for the cable and the location of the substation have been carefully designed to avoid significant adverse effects on the environment, the local economy and local people.
- The onshore works have been rigorously assessed in relation to potential environmental, social and economic effects, and every effort has been made to avoid and/or mitigate those effects that may be perceived to be significant and adverse.
- The environmental effects of the onshore works are generally minor, with no residual effects that could be held to constitute a breach of development plan policy.
- The benefits delivered by the onshore works – chiefly, facilitating the connection of up to 450MW of additional renewable generating capacity – significantly outweigh the few small-scale and highly localised adverse effects identified.

151 The onshore works should therefore be granted planning permission.



8 References

8.1 Acts

- Electricity Act, 1989
- The Town and Country Planning (Scotland) Act 1997, as amended
- The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations, 2009
- Marine (Scotland) Act, 2010
- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations, 2011

8.2 National Policy and Guidance

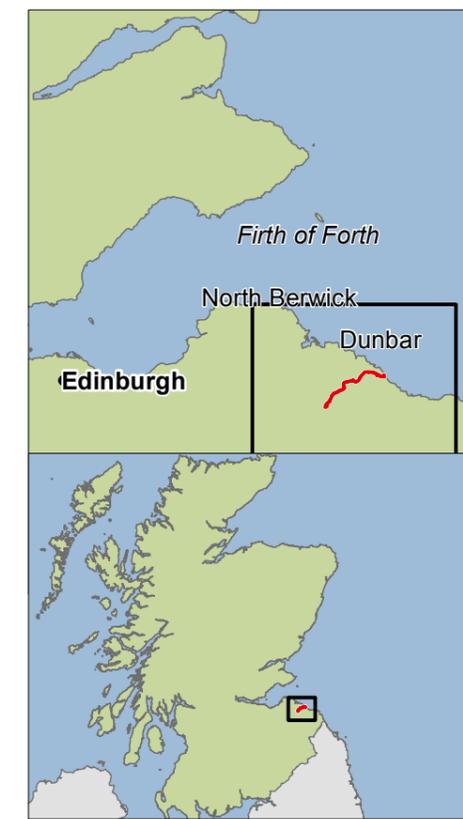
- National Planning Framework 2, 2009
- Scottish Planning Policy, 2010
- Scottish Government 2020 Routemap for Renewable Energy in Scotland, 2011
- Blue Seas – Green Energy: A Sectoral Marine Plan for Offshore Wind Energy in Scottish Territorial Waters , 2011

8.3 Regional and Local Planning Policy

- Edinburgh and Lothians Structure Plan (2015), 2004
- East Lothian Local Plan, 2008
- Proposed Strategic Development Plan for Edinburgh and South East Scotland ('SESPlan'), 2012

► **Site Location**

Application Boundary



Map Scale: 1:100,000

Figure 1



► **Substation Layout**

- Application Boundary
- Construction Compound
- Proposed Substation
- Crystal Rig access track diversion
- Existing Crystal Rig II Substation
- ⏏ Cut
- ⏏ Fill
- Existing overhead lines
- Existing hardstanding
- Existing buildings
- Existing turbines

NB: Separate consent is being sought by Scottish Power Transmission to connect Neart na Gaoithe to the National Grid.

Map Scale: 1:2,500

Figure 2

