MORAY WEST
OFFSHORE WINDFARM

Onshore Transmission Infrastructure Environmental Impact Assessment (EIA)

Moray Offshore Windfarm (West) Limited

Chapter 13 Land Use

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Acronyms	
Acronym	**Expanded Term**
AC	Aberdeenshire Council
DMRB	Design Manual for Roads and Bridges
EIA	Environmental Impact Assessment
FRA	Flood Risk Assessment
HDD	Horizontal directional drilling
LDP	Local Development Plan
LVIA	Landscape and Visual Impact Assessment
MC	Moray Council
MLWS	Mean Low Water Springs
MLURI	Macaulay Land Use Research Institute
OnTI	Onshore Transmission Infrastructure
OS	Ordnance Survey
PAB	Planning Application Boundary
SEPA	Scottish Environment Protection Agency
SNH	Scottish Natural Heritage

Glossary of Terms	
Term	**Definition**
Direct Effects	The material disturbance of land use resources.
Indirect effects	Where a development harms land use without causing direct disturbance; primarily arising from changes to connecting land use, or access points.

13 Land Use

13.1 Introduction

13.1.1.1 This Chapter considers the potentially significant effects on land use associated with the construction, operation, maintenance and decommissioning of the Moray West Onshore Transmission Infrastructure (OnTI).

13.1.1.2 The main objectives of this assessment are to:

- Describe all known land uses that may be impacted upon by the OnTI. This includes identification of settlement land, land used by the community, development land, agricultural land, forestry and watercourses;
- Set out any relevant land use policies;
- Provide information on consultation;
- Assess the potential effects of the OnTI on the land use resources; and
- Identify any mitigation that may be required to prevent, reduce or off-set any potentially significant effects of the OnTI.

13.1.1.3 This chapter is supported by the following figures:

- Figure 13.3.1 - Land Capability for Agriculture; and
- Figure 13.3.2 - Woodland and Mineral Areas of Search.

13.2 Approach to Assessment

13.2.1 Planning Policy and Legislative Context

National Planning Policy

13.2.1.1 National Planning Policies applicable to the study area include National Planning Framework 3 (NPF3; Scottish Government, 2014a), Scottish Planning Policy (SPP; Scottish Government, 2014b) and 'Getting the Best from Our Land - A Land Use Strategy for Scotland 2016 – 2021' (Scottish Government, 2016). Table 13.2.1 sets out the relevant national policies.

Table 13.2.1: National Planning Policies Relevant to Land Use

Policy Document	Summary
NPF3	NPF3 provides a statutory framework for Scotland's long-term spatial development. NPF3 sets out the Scottish Government's spatial development priorities for the next 20 to 30 years. • Paragraph 2.34. states that 'Land use and marine planning should aim to balance development with environmental quality and activities such as fishing and tourism.'; • Section 4 'A Natural, Resilient Place' addresses land use and makes reference to the Land Use Strategy which sets out key principles for the use and management of Scotland's land.
SPP	SPP sets out policy that will help to deliver the objectives of NPF3. The purpose of the SPP is to set out national planning policies which reflect Scottish Ministers' priorities for operation of the planning system and for the development and use of land. SPP promotes consistency in the application of policy across Scotland whilst allowing sufficient flexibility to reflect local circumstances. It directly relates to the preparation of development plans; the design of development, from initial concept through to delivery; and the determination of planning applications and appeals. • Paragraph 80 states that 'Where it is necessary to use good quality land for development, the layout and design should minimise the amount of such land

Table 13.2.1: National Planning Policies Relevant to Land Use	
Policy Document	**Summary**
	that is required. Development on prime agricultural land, or land of lesser quality that is locally important should not be permitted except where it is essential: ○ as a component of the settlement strategy or necessary to meet an established need, for example for essential infrastructure, where no other suitable site is available; or ○ for small-scale development directly linked to a rural business; or ○ for the generation of energy from a renewable source or the extraction of minerals where this accords with other policy objectives and there is secure provision for restoration to return the land to its former status'. • Paragraph 195 states that 'The Scottish Government expects public bodies to apply the Principles for Sustainable Land Use, as set out in the Land Use Strategy, when taking significant decisions affecting the use of land'.
Getting the Best from Our Land - A Land Use Strategy for Scotland 2016-2021	The Second Land Use Strategy identifies key principles for sustainable land use which reflect Government policies on the priorities that should influence land use choices. Although none of the specific proposals are directly relevant to the Moray West OnTI, the key principles and objectives of the strategy are of interest. The objectives are: Land based businesses working with nature to contribute more to Scotland's prosperity; and Responsible stewardship of Scotland's natural resources delivering more benefits to Scotland's people - Urban and rural communities better connected to the land, with more people enjoying the land and positively influencing land use. The principles are: a) Opportunities for land use to deliver multiple benefits should be encouraged; b) Regulation should continue to protect essential public interests whilst placing as light a burden on businesses as is consistent with achieving its purpose. Incentives should be efficient and cost-effective; c) Where land is highly suitable for a primary use (for example food production, flood management, water catchment management and carbon storage) this value should be recognised in decision-making; d) Land use decisions should be informed by an understanding of the functioning of the ecosystems which they affect in order to maintain the benefits of the ecosystem services which they provide; e) Landscape change should be managed positively and sympathetically, considering the implications of change at a scale appropriate to the landscape in question, given that all Scotland's landscapes are important to our sense of identity and to our individual and social wellbeing; f) Land-use decisions should be informed by an understanding of the opportunities and threats brought about by the changing climate. Greenhouse gas emissions associated with land use should be reduced and land should continue to contribute to delivering climate change adaptation and mitigation objectives; g) Where land has ceased to fulfil a useful function because it is derelict or vacant, this represents a significant loss of economic potential and amenity for the community concerned. It should be a priority to examine options for restoring all such land to economically, socially or environmentally productive uses; h) Outdoor recreation opportunities and public access to land should be encouraged, along with the provision of accessible green space close to where people live, given their importance for health and well-being;

Table 13.2.1: National Planning Policies Relevant to Land Use	
Policy Document	**Summary**
	i) People should have opportunities to contribute to debates and decisions about land use and management decisions which affect their lives and their future; and j) Opportunities to broaden our understanding of the links between land use and daily living should be encouraged.

Local Planning Policy

13.2.1.2 In conjunction with NPF3 and SPP, Local Development Plans (LDPs) are required for each local planning authority area across Scotland. These allocate sites, either for new development, such as housing, or sites to be protected and provide the policy framework to deliver the ideals of national planning policy at a local level. In turn, Supplementary Guidance provides further information and interpretation on the polices or proposals that are in the development plan, for example a master-plan for a site or open space requirements.

13.2.1.3 Table 13.2.2 sets out the relevant local plan policies that are applicable to land use in the two local planning authority areas that host the development (Moray Council (MC) and Aberdeenshire Council (AC)).

Table 13.2.2: Local Planning Policies Relevant to Land Use		
Policy Document	**Policy**	**Summary**
Moray LDP 2015 (MC, 2015)	Natural Environment E4	Where woodland is removed in association with development, Developers will generally be expected to provide compensatory planting. The Council may attach conditions to planning consents ensuring that existing trees and hedges are retained or replaced. A safeguarding distance should be retained between mature trees and proposed development. Proposals affecting woodland will be assessed against Policy ER2.
	Natural Environment E5	Sets out policies for safeguarding open spaces, including recreational amenity.
	Environmental Resources ER2	This covers development within woodland. Removal of ancient, native or semi natural woodland will not be supported and compensatory planting requirements are set out.
	Environmental Resources ER3	This policy safeguards mineral reserves from development.
	Environmental Resources ER5	Protects against development of prime agricultural land (Class 1, 2 and 3.1).
Aberdeenshire LDP 2017 (AC, 2017)	Protecting Resources PR1	These policies promote sustainable development while protecting major land resources that are needed for specific purposes. PR1 states that there will not be approval for developments that have a negative effect on important environmental resources associated with the water environment, important mineral deposits, prime agricultural land, peat and other carbon rich soils, open space (including outdoor sports facilities), and important trees and woodland. In all cases development which impacts on any of these features will only be permitted when public economic or social benefits clearly outweigh the value of the site to the local community, and there are no reasonable alternative sites.

Table 13.2.2: Local Planning Policies Relevant to Land Use		
Policy Document	**Policy**	**Summary**
		For mineral safeguarding areas, non-mineral developments will be refused unless they are small-scale and ancillary to existing uses, or of a temporary nature. Development resulting in the loss of, or serious damage to, trees and woodlands of significant ecological, recreational, historical, landscape or shelter value will not normally be permitted. Woodland creation or enhancement is promoted.
Aberdeenshire LDP Supplementary Guidance 6 - Areas Safeguarded or Identified as Areas of Search for Minerals Development (Aberdeenshire Council, 2017d)	Supplementary Guidance 6	Identifies an area of search for sand and gravel reserves approximately 1 km southwest of Fordyce (referred to as 'Cotton Hill, Fordyce'). These areas of search comprise mineral reserves that should not be sterilised by inappropriate development, but their boundaries are not accurately defined.

Other Relevant Plans, Policy and Guidelines

13.2.1.4 There are no formal Environmental Impact Assessment (EIA) guidelines for undertaking an assessment of land use, however there is guidance provided within the Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 6 (The Highways Agency *et. al*., August 2001). This DMRB guidance sets out the approach that is applied during the environmental assessment process undertaken for trunk roads (including new construction, expansion and improvement works). In this context, it is considered relevant guidance for linear construction projects and is applied, as considered relevant, to the Moray West OnTI.

13.2.2 Scope of Assessment

13.2.2.1 Moray Offshore Windfarm (West) Limited (Moray West) submitted a Scoping Report (Moray West, 2017) to MC and AC in July 2017 (Chapter 3: EIA Process). Within the Scoping Report it was proposed that land use would be assessed within the EIA Report and that the following potential effects required consideration:

- Direct, temporary disturbance of, or change in land use during construction; and
- Direct, permanent change in land use during operation, maintenance and decommissioning.

13.2.2.2 Indirect effects were scoped out of the EIA Report.

13.2.2.3 Within the joint Scoping Opinion received in August 2017 from MC (Moray Council, 2017b; Technical Appendix 3.1), both MC and AC agreed that the proposed approach and method of assessment of land use was acceptable. Some further advice and comment was provided as detailed in Table 13.2.3.

Consultation

13.2.2.4 Consultation with statutory authorities was completed as part of the Scoping exercise, with no further additional consultation needs being identified for land use. As part of the Scoping Opinion, the following consultation responses were received from MC and AC (Table 13.2.3). In addition, a further response was received from The Woodland Trust from community consultation.

Table 13.2.3: Consultation			
Date	**Consultee**	**Issue Raised**	**Moray West Approach**
Scoping Opinion – Joint Response 8th August 2017	Aberdeenshire Council	The Scoping Report has identified a Mineral Safeguarding Zone at Cotton Hill Fordyce. The approach to including, assessing and mitigating impacts, subject to the finalisation of the cable route, are considered to be appropriate.	Noted. The area safeguarded or identified as an area of search for minerals development at Cotton Hill, Fordyce has been excluded from the PAB as part of the embedded mitigation (Section 13.4). Further baseline information on areas safeguarded or identified as an area of search for minerals development is presented in Section 13.3.6. An assessment of this feature is presented in Section 13.5.
	Moray Council	Separate to the main body of the Moray LDP 2015, there is a separate supplementary Guidance on Rural Groupings which identify the various smaller groupings. Several of these smaller groupings lie within the Scoping area, and if located close to the proposed cable route should be identified as a consideration.	Reference to this Supplementary Guidance and baseline information on Rural Groupings present within the PAB is included within Section 13.3.3.
		If the development is likely to lead to the loss of any woodland, then an approach to the provision of compensatory woodland planting should be covered by the EIA Report.	Loss of woodland is addressed within Section 13.5. This is also addressed within Chapter 6: Ecology and Nature Conservation. No large-scale felling will take place and no compensatory woodland planting is currently identified as being required, but this will be identified further at the detailed design stage.
	Aberdeenshire Council and Moray Council	The Forestry Commission have a national forest inventory, that may inform the extent of woodland to be affected by the development, but this may be more pertinent once a more definite cable route and substation site is selected.	Noted and included within the sources of data gathering (Section 13.2.3), the baseline characterisation (Section 13.3) and illustrated in Figure 13.3.2.
		An assessment of compensatory woodland planting may be required.	Loss of woodland is addressed within section 13.5. This is also addressed within Chapter 6: Ecology and Nature Conservation. No large-scale felling will take place and no compensatory woodland planting is currently identified as being required, but this will be identified further at the detailed design stage.

Table 13.2.3: Consultation			
Date	**Consultee**	**Issue Raised**	**Moray West Approach**
	Scottish Environment Protection Agency (SEPA)	A map and table detailing any forestry removal must be submitted in support of the application.	Loss of woodland is addressed within section 13.5. This is also addressed within Chapter 6: Ecology and Nature Conservation. No large-scale felling will take place and no compensatory woodland planting is currently identified as being required, but this will be identified further at the detailed design stage.
Community Consultation 8th May 2018	The Woodland Trust	The Woodland Trust has serious concerns with the OnTI, relating to the potential significant impact to ancient woodland, and other areas of long-established woodland recorded on Scottish Natural Heritage's (SNH) Ancient Woodland Inventory (AWI). determined that the following classifications of ancient woodland are impacted by this development: 2b long-established of plantation origin (LEPO) which dates from at least 1860, 1a and 2a ancient semi-natural origin (ASNO) continuously wooded from at least 1750 and 1860 respectively, and 3 (Roy) which is woodland that is not present on the OS 1st Edition maps but is shown as continuously wooded on the Roy maps of 1750.	Noted. Ancient Woodland and other areas of long established woodland recorded in the AWI are illustrated on Figure 13.3.2 and addressed within Section 13.3.4. It is possible that ancient woodland may be impacted upon but this can only be determined at the detailed design stage. Embedded mitigation to avoid removal or damage to woodland is provided in Section 13.4. An assessment of potential effects on woodland is provided in Sections 13.5.1 and 13.5.2.
		The Woodland Trust is particularly concerned regarding the following: - Direct loss to ancient woodland and long-established woodland recorded on the Scottish AWI, which is sited within the corridor. - The impacts of noise, light and dust pollution to woodland within close proximity of the transmission installation. - The fragmentation of semi-natural adjacent habitats to the ancient woodlands to facilitate the transmission installation. - The potential for trampling of sensitive ancient woodland flora and soils if access is required within any adjacent ancient woodland.	Loss of woodland is assessed within Section 13.5.1 and 13.5.2. The impact of noise, light and dust on woodland is assessed within Chapter 6: Terrestrial Ecology, Chapter 10: Noise and Vibration and Chapter 11: Air Quality. The potential fragmentation of habitats, and construction effects upon habitats and species is assessed within Chapter 6: Terrestrial Ecology.

Table 13.2.3: Consultation			
Date	**Consultee**	**Issue Raised**	**Moray West Approach**
		The Woodland Trust requests that a 30m buffer is implemented between all areas of woodland concerned and the proposed works.	Noted. Embedded mitigation (Section 13.4) includes provision of a buffer between woodland / trees and construction activities.
		Creation of new areas of woodland or buffer zones around semi-natural habitats, and more particularly ancient woodland, will help to reduce and ameliorate the impact of damaging edge effects. Buffers are landscape features designed to protect a sensitive area from the impacts of development. These may be planted with trees or shrubs or simply be an area of land on which the development is not allowed to encroach, i.e. a grassy strip. Any buffer zone should be outlined as a construction exclusion zone, with no access for heavy machinery or construction vehicles. In addition to this, the Trust requests that screening is provided at the edge of the buffer zone during the construction process to negate the impacts of noise and dust pollution on any adjacent woodland.	Much of this detailed mitigation will be identified during the detailed design stages and due to the exact cable route within the cable corridor not yet being determined there will be opportunities to minimise the need for such mitigation, however the mitigation principles are presented within Sections 13.4 and 13.6.

13.2.3 Data Gathering

Study Area

13.2.3.1 The study area used for the land use assessment covers the area of land contained within the planning application boundary (PAB), as illustrated in Figures 1.1.2 and 1.1.3. This covers an area of approximately 29.4 km^2 or 2,943 hectares (ha). The PAB encompasses the land that extends inshore from Mean Low Water Springs (MLWS).

Desk Study

13.2.3.2 A baseline characterisation of the study area has been established through completion of a desk study in order to provide an overview of both existing and proposed land use practices.

13.2.3.3 The baseline characteristics have been identified through a review of the following data and information sources:

- Ordnance Survey (OS) mapping;
- Google Earth;
- The Macaulay Land Use Research Institute (MLURI) Land Capability for Agriculture in Scotland (2010) (http://www.hutton.ac.uk/learning/exploringscotland/land-capability-agriculture-scotland);
- Forestry Commission's National Woodland Inventory dataset (https://www.forestry.gov.uk/datadownload);

- Scotland's Environment website https://www.environment.gov.scot/default.aspx;
- Aberdeenshire LDP; and
- Moray LDP and interactive mapping facility (http://www.moray.gov.uk/moray_standard/page_118450.html).

13.2.4 Evaluation of Effects

13.2.4.1 The potential effects on land use that are being assessed are direct. Direct effects can arise from the material disturbance of land and primarily occur during the construction phase of a development. Construction effects are temporary and can be both reversible or irreversible, although they are restricted to the footprint of any works, including temporary construction compounds or storage areas. Direct effects do also occur during operation, maintenance and decommissioning phases of a development and these can be permanent, irreversible (during operation and maintenance) or reversible (during decommissioning).

13.2.4.2 As set out in Chapter 2: Project Description of this EIA Report, the exact route for the onshore cable circuits is not yet determined within the PAB but will be as part of the detailed design. This EIA therefore considers potential effects on all known land use resources within the PAB, presenting an assessment of a worst-case scenario.

Sensitivity of Receptor

13.2.4.3 The sensitivity of a land use receptor has been categorised in accordance with the terminology set out within Section 3.4.4 of Chapter 3: EIA Process. The criteria applied for categorisation is as set out in Table 13.2.4.

Table 13.2.4: Land Use Sensitivity Criteria

Receptor Sensitivity	Criteria
High	Presence of prime quality agricultural land (Grade 1, 2 or 3.1). Conventionally farmed intensive arable cropping and/or intensive livestock systems (e.g. dairying). Land of any farm type farmed according to organic/biodynamic standards. High value woodland (e.g. SAC, SSSI, AWI) or watercourse that is designated or distinctive and susceptible to small changes. Main settlements offering large-scale development opportunities. Mineral areas or mineral areas of search.
Moderate	Presence of agricultural land of moderate quality (Grade 3.2 and 4). Conventionally farmed mixed livestock and crop systems of moderate intensity. Moderate value woodlands or watercourses tolerant of moderate levels of change. Main settlements and rural groupings offering small-scale development opportunities.
Low	Presence of agricultural land of low quality (Grade 5, 6 & 7). Conventionally farmed extensive livestock systems. More commonplace woodland (e.g. coniferous plantation) or watercourses tolerant of noticeable change or undergoing substantial development. Main settlements and rural groupings offering limited or no development opportunities.

Magnitude of Impact

13.2.4.4 The magnitude of impact on land use receptors is assigned to one of four classes, as defined in Table 13.2.5.

Table 13.2.5: Definition of Magnitude of Impact

Magnitude	Definition
High	Total or substantial change to an area of land use. For example: • High degree of severance (> 10% of the farmed area); • Access to fields compromised with longer route required and machinery restricted; • High degree of disruption to cultivation patterns with high risk of change in land use; or • Noticeable change to the woodland over a wide area or an intensive change over a limited area. Large levels of disturbance to land used by the community or settlements.
Moderate	Partial alteration of an area of land use. For example: • Moderate degree of severance (>5% < 10% of the farmed area); • Access to fields changed but moderate increase in travelling and all machinery able to access; • Moderate degree of disruption to cultivation patterns with moderate risk of change in land use; or • Small changes to the woodland over a wide area or a noticeable change over a limited area. Moderate levels of disturbance to land used by the community or settlements.
Low	Minor alteration of an area of land use. For example: • Low degree of severance (<5% of the farmed area); • Access changed with minimal increase in travelling and all machinery able to access; • Minimal degree of disruption to cultivation patterns and low risk of change in land use; or • Very minor changes to the woodland over a wide area or minor changes over a limited area. Minor levels of disturbance to land used by the community or settlements.
Negligible	Negligible change to any of the above factors.

Significance of Effect

13.2.4.5 Potential effects have been evaluated using the significance matrix set out within Chapter 3: EIA Process (Table 13.2.6). This matrix is used as a guide only and the evaluation of a potential effect on land use is also dependent upon a level of professional judgement. Potential effects categorised as moderate and major are considered to be significant in EIA terms. Potential effects are determined as negative in nature unless it is specifically stated otherwise within the document.

Table 13.2.6: Determining Significance of Effects			
Magnitude of Impact	**Sensitivity of Receptor**		
	Low	**Moderate**	**High**
Negligible	Negligible / Minor	Minor	Minor / Moderate
Low	Minor	Minor / Moderate	Moderate
Moderate	Minor / Moderate	Moderate	Moderate / Major
High	Moderate	Moderate / Major	Major

13.3 Baseline Conditions

13.3.1.1 The land use within, and immediately adjacent to, the study area is dominated in nature by agricultural land, but also comprises areas of settlement land, forestry, development land and watercourses. Each of these is addressed in turn below. Figures 13.3.1 and 13.3.2 show the classification and distribution of agricultural land and woodland, along with the location of the 'Cotton Hill' Mineral Area of Search.

13.3.2 Agricultural Land

13.3.2.1 The dominant land use within the study area is agricultural (Macaulay Land Use Research Institute, 2010). The MLURI Land Use Capability system is the official agricultural classification system used in Scotland. The system is used to rank land based on its potential productivity and cropping flexibility. The majority of the land use within the PAB is comprised of Class 3.2 classification (capable of producing a moderate range of crops with a trend towards grass in the rotation), which covers an area of 2380 ha (81 % of the PAB). Table 13.3.1 indicates the coverage of each agricultural land class within the study area.

Table 13.3.1: MLURI Land Classification Coverage	
Land Class	**Coverage (ha)**
3.1	148
3.2	2380
4.1	274
4.2	66
5.3	40
6.2	35
Total Agricultural Land Coverage	2,943

13.3.2.2 According to the MLURI (2010), land within the northern section of the study area (between landfall and Greenhill Plantation; Page 1 of Figure 13.3.1) primarily falls within Class 3.2. There are limited areas of land that are classified as capable of supporting arable agriculture, with no

Class 1 or 2, and limited distribution of Class 3.1 (can produce a moderate range of crops with high yields of cereals and grass, potatoes and other vegetables are also grown). Other areas of land present include Class 4.1 (capable of producing a narrow range of crops, but primarily supports grassland with short arable breaks); Class 4.2 (suited to grassland but has limited potential to produce other crops e.g. barley and oats); and Class 5.3 (capable of use as improved grassland and although the sward can be established, deterioration can be rapid due to a range of factors).

13.3.2.3 Within the centre of the study area (between Greenhill Plantation and Gallowhill) there is no further Class 3.1 land (or any land classified as being capable of supporting arable agriculture), with almost all of the land falling within Class 3.2. Around Lurghill there are small areas of Class 4.1, 4.2 and 5.3 land with a further small area of Class 4.1 around Gallowhill (Figure 13.3.1, Pages 2 and 3).

13.3.2.4 The most southern section of the study area, including the substation location and proposed connection to Blackhillock, comprises very small and limited sections of Classes 4.1, 4.2, 5.3 and 6.2 (capable of only rough grazing due to intractable physical limitations, the semi-natural vegetation provides grazing of moderate value). Class 3.2 again dominates the southern section. The substation location at Whitehillock is located within Class 3.2 land, while the proposed connection around Blackhillock is dominated by Class 4.1 (Page 4 of Figure 13.3.1).

13.3.2.5 There are no built-up (or urban) areas within the PAB as defined by MLURI.

13.3.3 Settlement Land

13.3.3.1 Both the Moray and Aberdeenshire LDPs contain settlement statements which identify the key settlements that are present and allocate or designate land in and around these settlements for future development or certain uses, e.g. amenity greenspace, sports areas, green corridors and civic space.

13.3.3.2 There are no settlements within the PAB that have settlement statements. The largest settlement close to the PAB is Fordyce, which is located inland from the coast, to the south of Sandend within Aberdeenshire Council. Fordyce is a village community with a castle located in its centre (Fordyce Castle) and the Burn of Fordyce borders the western edge of the village (Figure 13.3.1, Page 1 of 4). The village also includes a school, church and cemetery. The settlement statement for Banff and Buchan includes Fordyce (Aberdeenshire Council, 2017c) and describes Fordyce as a historic settlement located at the foot of Durn Hill. Protected by Conservation Area status, the village has remained largely unchanged in modern times. The existing church, castle and distinctive architecture styles which include private gardens make Fordyce an attractive and 'green' village.

13.3.3.3 The settlement of Sandend is also close to the PAB and included within the Banff and Buchan area. This states that Sandend is a small fishing village situated where the Fordyce Burn flows into the firth at Sandend Bay. The old part of the village is made up of traditional cottages and has been designated as a Conservation Area. Local businesses within the village include a caravan park and fish wholesalers.

13.3.3.4 These are the only two settlements identified in the LDP that are close to the PAB that fall within AC. There are however scattered properties or groups of properties present.

13.3.3.5 The Moray LDP includes similar settlement statements for key settlements however none of these settlements are within the PAB which falls within MC. The closest settlement is Keith, which the PAB is located to the west and south of. The settlement statements only allocate land within the boundaries of the settlements.

13.3.3.6 Separate to the main body of the Moray Local Development Plan 2015 (MC, 2015), there is Supplementary Guidance on Rural Groupings (MC, 2016) which identifies the various smaller property groupings. These property groupings were originally identified as small rural settlements which served as social focal points for the surrounding area, with the presence of

one or more community facilities (school/hall/shop), but more recently these are designated based on their status as a cohesive, physical grouping and do not require community facilities to be present. There are no rural groupings within the PAB. The rural groupings of Kirktown of Deskford (located to the east and south of the PAB, north of Berryhillock), Berryhillock (located to the north west of the PAB, south of Kirkton of Deskford) and Grange Crossroads (located to the east of the PAB, north of the River Isla) are just out with the study area.

13.3.3.1 As with AC, there are scattered properties or groups of properties present throughout the study area, such as Mains of Glassaugh, Backies, Hoggie, Crannach, Mains of Auchoynanie and Blackhillock.

13.3.4 Forestry

13.3.4.1 Forestry covers approximately 406 ha (14%) of the study area. Although this includes broadleaf woodland and several areas of Ancient Woodland (Figure 13.3.2), it largely comprises blocks of commercial, coniferous forestry plantation or felled woodland.

13.3.4.2 There is no internationally or nationally designated woodland present within the study area. During route optioneering, the only area of woodland nationally designated, for its upland birch woodland, (Mill Wood Site of Special Scientific Interest (SSSI)) was excluded from the PAB, to ensure this woodland remains unaffected by the OnTI (Figure 13.3.2, Page 3 of 4).

13.3.4.3 Several of the woodlands within the study area are included on the Ancient Woodland Inventory (AWI), these being woodlands that have been established since at least 1750 and that consequently have important biodiversity and cultural values. Sites on the AWI are shown on Figure 13.3.2. The current condition of these areas of Ancient Woodland is not fully known and it is likely that some areas of woodland are no longer present (one such area being the Ancient Woodland recorded at Nethertown (Figure 13.3.2, Page 2 of 4) or in poor condition. The coverage of ancient woodland of semi-natural origin within the study area is 16.2 ha, while the long-established woodland (of plantation origin) covers 28 ha and ancient woodland classed as 'other' covers 2 ha.

13.3.4.4 The types of woodland that are present within the PAB, comprise various categories including assumed Woodland (15 ha), broadleaved (29 ha), conifer (213 ha), felled (81 ha), mixed mainly broadleaved (14 ha), mixed mainly conifer (3 ha), young trees (49 ha), shrub (1 ha) and wind blow (1 ha) (National Forest Inventory, 2016). The largest areas of forestry within the PAB are at Cotton Hill and Mid Skieth, both of these acting as borders to much larger areas of forestry land out with the PAB.

13.3.4.5 The most dominant category is commercial coniferous plantation covering approximately 213 ha, located at Cotton Hill, Mid Skeith to Nethertown, Over Windyhills to Myreton, and Gallow Hill with small unattached pockets at the most southerly landward extent of the study area.

13.3.5 Land Used By The Community

13.3.5.1 Land used by the community may have conservation, landscape or other heritage value. Where this is the case, the land requires assessment (The Highways Agency *et. al*, 2001). Land used by the community includes open space, which is defined in Scotland as any land laid out as public gardens or used for the purpose of public recreation, or land which is a disused burial ground (Her Majesty's Stationery Office, 1947). It also includes common land, which is also defined as any town or village green.

13.3.5.2 From a review of the LDPs, no areas of land used by the community have been identified within the PAB / study area. Within the Aberdeenshire area, the closest land used by the community is at the settlement of Sandend, which comprises an outdoor sports facility (a football pitch). The beach at Sandend Bay is used as an informal recreational area. Both Sandend and Sandend Bay are out with the PAB / study area.

13.3.5.3 Through review of the Moray LDP, the closest amenity land has been identified at Berryhillock, which is out with the PAB / study area.

13.3.6 Development Land

Mineral Extraction

13.3.6.1 Regarding minerals, the Proposals Maps within the Moray LDP safeguard three locations associated with existing quarries. These are Bogend Quarry near Buckie, and Cairdshill and Blackhillock Quarries close to the existing Blackhillock substation. None of these areas overlap with the PAB (Figure 13.3.2, Page 4 of 4) and as there is no potential for direct effects upon these mineral extraction sites, these receptors are not considered any further in this assessment.

13.3.6.2 Supplementary Guidance 6 of the Aberdeenshire LDP (Areas Safeguarded or Identified as Areas of Search for Minerals Development) identifies an area of search for sand and gravel reserves (referred to as 'Cotton Hill, Fordyce') to the immediate east of Cotton Hill, at Newpark / Firfield, south west of Fordyce (Figure 13.3.2 Page 1 of 4). These areas of search comprise mineral reserves that should not be sterilised by inappropriate development, but their boundaries are not accurately defined. The 'Cotton Hill' area of search has been excluded from the PAB as part of the embedded mitigation and there will be no direct effects upon this area. This receptor is not considered any further in this assessment.

Other Development

13.3.6.3 No other development area has been identified within the PAB.

13.3.7 Watercourses

13.3.7.1 Detailed information on the water resources is presented within Chapter 5: Hydrology, Hydrogeology and Geology. Section 5.3.7 of Chapter 5 describes the water resources within the hydrological study area including public and private water supplies and licensed abstractions and discharges.

13.3.7.2 There are several watercourses within the study area, with the main watercourse comprising of the River Isla, which crosses the study area to the east / north east of Keith. The River Isla is part of the River Deveron catchment and is known for its salmonid fishing interests. Other watercourses include Scattery Burn, Burn of Fordyce, Burn of Deskford, Burn of Paithnick, Burn of Ardrone, Burn of Drum and Burn of Cairnie. The southernmost section of the study area, close to the proposed substation location is within an area of springs referred to as Shenwell Springs (Chapter 5, Figure 5.2.1). Further detailed hydrological baseline is provided within Chapter 5: Hydrology, Hydrogeology and Geology.

13.3.8 Future Baseline

13.3.8.1 In the absence of the Moray West OnTI, any change to the baseline conditions would be expected to be minimal. Much of the land comprises open agricultural fields and as farming is of economic importance to Moray and Aberdeenshire, it is anticipated that farming activity would continue to dominate. The LDPs, settlement statements and associated policies do not promote significant changes to the land use within the study area in the foreseeable future. Some areas of forestry, such as commercial plantations, would be expected to undergo felling activity over time as the woodland matures, is thinned out and eventually felled for commercial processing. It is likely that new forestry planting would take place in these felled areas however. As such, the land use is likely to change subtly over the future, but primarily remain within the same key land uses.

13.3.9 Data Limitations

13.3.9.1 An attempt has been made to consult all readily available data sources during the desk study and it is considered that there are no gaps in the current baseline understanding of the existing land use. A specific site visit to ground truth existing land use was not specifically undertaken, however various site visits completed for other technical disciplines (e.g. ecological surveys,

landscape and visual impact assessment (LVIA) and engineering site visits) have been used to further inform this assessment and assist with ground truthing of existing data.

13.4 Embedded Mitigation

13.4.1.1 The route and site selection process applied to the identification of the PAB, has taken into consideration the various land uses and has incorporated embedded mitigation in order to minimise any potential effects that may arise on the land use receptors. These embedded mitigation measures include:

- The location of the onshore substation at Whitehillock has been chosen in order to maximise natural woodland screening of the substation and avoid any loss of woodland at Pitlurg Wood. The onshore cable circuits from the new substation to Blackhillock substation will be installed underneath Pitlurg Wood (using Horizontal Directional Drilling (HDD)) so that there is no loss, or severance, of woodland;
- The PAB was identified so as to avoid the 'Cotton Hill' Safeguarded Area / Area of Search for Minerals Development;
- Sections of the initially identified onshore cable corridor have been altered or realigned within the PAB in order to allow improved options for the cable circuit installation to be placed around developed land (e.g. Windyhills Wind Farm and Lurghill Wind Farm at Nethertown / Lurg Hill), or moved in order to follow existing wayleaves or edges of woodland, field boundaries or natural features such as watercourses or contours in order to avoid or reduce severance of or disruption to these features (e.g. Backmuir);
- Sections of the initially identified onshore cable corridor have been removed from the PAB in order to avoid designated sites (e.g. Mill Wood SSSI or woodland listed on the AWI); and
- The settlements, settlement boundaries and rural groupings of Sandend, Fordyce, Kirkton of Deskford and Berryhillock have been excluded from the PAB.

13.5 Assessment of Potential Effects

13.5.1 Potential Construction Effects

Temporary Disturbance / Change in Land Use

13.5.1.1 Depending upon the final landfall location and route for the onshore cable circuits, construction activity has the potential to temporarily disturb or change existing land use within the PAB, such as severance to agricultural land through the prevention of access to and use of agricultural land. Potential effects are direct but will be temporary in nature due to much of the construction related activity being limited to a 30-month period. Within this 30-month period, landfall construction is anticipated to take approximately 23 weeks, with the cable circuit installation taking approximately 69 weeks and substation construction taking approximately 100 weeks. Impacts associated with the onshore cable circuits will generally take place within a corridor of 30 m and will therefore occur on a relatively small spatial scale along the route of the onshore cable route. Construction along the route is likely to be phased or sequential as the cable is laid and buried in a linear fashion using the same workforce (approximately 50 – 100 personnel along the cable route and at landfall). Between 200 and 250 personnel are likely to be required for the substation construction. There will however be areas out with the onshore cable route where construction activities will also take place such as construction compounds (one located at the substation plus three others), welfare facilities and potentially new access requirements (where possible access will be taken along existing access tracks). Construction activity associated with the onshore substation (e.g. site clearance, erection of fencing and plant / vehicle presence) will also introduce temporary loss of land use and disturbance. Changes in land use associated with the onshore substation footprint are considered to be permanent (although the footprint may

be removed as part of the decommissioning) and are considered under potential operational effects.

13.5.1.2 Assessment of indirect effects upon land use during construction has been scoped out during the Scoping exercise, however these indirect effects are discussed elsewhere in this EIA Report, where relevant, in relation to other technical disciplines, for example construction noise that may indirectly affect recreational receptors is assessed within Chapter 10: Noise and Vibration.

Agricultural Land

Sensitivity of Receptor

13.5.1.3 The majority of the agricultural land present within the PAB is identified under the Land Capability Classification as Class 3.2. Throughout the study area land identified as Land Capability Class 3.2 to 6.2 (which is non-prime land) is the most dominant. The only prime land present within the PAB is Land Capability Class 3.1, with no Class 1 or 2 being recorded as present.

13.5.1.4 The Class 3.1 land is located in the northern extents of the PAB (immediately north and south of Cotton Hill) and within a small area located to the west of Keith, at Haugh. This Class 3.1 land is determined to be of **high** sensitivity and covers approximately 148 hectares within the PAB (5% of the PAB), although only a 30 m corridor through the Class 3.1 land would be temporarily affected by construction.

13.5.1.5 Class 3.2 – 4.2 is of **moderate** sensitivity and covers 2720 hectares in total throughout almost the entirety of the PAB (92%).

13.5.1.6 There is a thin section of Class 6.2 land stretching along most of the Onshore Landfall Area between the west of Sandend and Redhythe Point. Class 6.2 is also present at Carestown, Newmill and Mains of Auchoynanie (Figure 13.3.1). These areas of Class 5.3 – 6.2 (72 ha, 3% of the PAB) are of **low** sensitivity.

Magnitude of Impact

13.5.1.7 As the cable circuit installation will result in a narrow, approximately 30 m wide corridor of land being disturbed to allow burial of the cable, with existing land cover being restored and reinstated to its original condition and previous land use, the potential for severance from cable installation will be minimised. There will be some disturbance from the presence of construction compounds, temporary accesses and the construction of the substation. These will be located to allow existing land use to continue as far as possible, with existing roads and tracks used to gain access as far as possible. Any field access changes will be minimal, with limited increase in travelling and all machinery still able to access the land. With a worst case that the cable installation results in some temporary disturbance and low degree of severance of land during installation, completed over a short timeframe, undertaken in consultation with landlords / tenants and land reinstated to original condition, the magnitude of impact is considered to be **low**.

Significance of Effect

13.5.1.8 For the Class 3.1 land located to the west of Fordyce, around Cairnton and at Carestown, there is little opportunity for the cable circuit installation to avoid this arable agricultural land if the installation follows the north western route around Cotton Hill. This would result in a **moderate and significant** effect upon this Class 3.1 land.

13.5.1.9 For land classes between Class 3.2 and 4.2 (mixed agriculture), the significance of effect falls within the minor / moderate level. As all of this land, with the exception of the Class 3.2 land at Blackhillock covers very small areas within the PAB and will be exposed to temporary disturbance over a short construction timeframe, with no permanent loss occurring as a result of the construction works, it is considered that the significance of effect will be **minor and not significant**. For the Class 3.2 land and the onshore substation / compound at Blackhillock, the

majority of the width of the PAB at this location comprises Class 3.2 land and this is a common land class present within the wider area at and around Blackhillock. Class 3.2 land makes up 81% of the PAB and the land affected by construction of a compound (6 ha) is approximately 0.25% of this overall area of Class 3.2. As this small percentage of Class 3.2 land will be affected by temporary disturbance over a short construction timeframe, and will restored once the construction compound is no longer required, this is considered to have a **minor and not significant** effect.

13.5.1.10 For the remaining land classes of Class 5.3 and 6.2 (improved grassland and rough grazing), the significance of effect is considered to be **minor** and **not significant**.

Settlement Land

Sensitivity of Receptor

13.5.1.11 There are no settlements present within the PAB that are identified within the AC LDP or MC LDP. The closest settlements to the PAB of Fordyce and Sandend were both excluded from the PAB as part of the embedded mitigation, in order to remove any direct effects. The rural groupings of Kirkton of Deskford and Berryhillock were also excluded as part of the embedded mitigation. Only direct effects are assessed within this EIA, with indirect effects having been scoped out. These receptors are therefore not assessed any further.

13.5.1.12 The remaining scattered properties throughout the study area within both MC and AC are given a sensitivity of **low** due to not being within designated areas and their ability to accommodate development.

Magnitude of Impact

13.5.1.13 Cable installation will not be undertaken within any of the main settlements or rural groupings identified within MC and AC LDPs (or within an appropriate buffer area around these and other scattered properties). As the construction work associated with the cable installation will be temporary in nature, short-term, restricted to a narrow corridor of land which will be reinstated to its original land use and condition, and the routing of the cable circuit installation will be designed to ensure the most appropriate routes are chosen, the magnitude of impact is considered to be **negligible**.

Significance of Effect

13.5.1.14 Taking into consideration the embedded mitigation that no construction works will take place within an appropriate buffer area around scattered properties, the significance of effect for scattered properties is considered to be **negligible** and not significant.

Forestry

Sensitivity of Receptor

13.5.1.15 The quality and value of each individual woodland listed on the AWI can vary depending upon how established the woodland is, how semi-natural it is and how it has been managed or maintained over time. As AWI does not undergo any specific site condition monitoring, each woodland can be of different value and importance. As such, some areas of Ancient Woodland have deteriorated over the years naturally, or through clearance works (e.g. Nethertown), while some have remained as good examples or act as shelter belts. In general, this receptor is considered to be of moderate value and tolerant of moderate change. The sensitivity is therefore classed as **moderate**. Broadleaved woodland and scattered woodland / trees are also considered to be of **moderate** sensitivity due to providing shelter and acting as a land use boundary.

13.5.1.16 Coniferous plantation woodland is of commercial value to the local area but comprises of limited species diversity. Often large swathes of coniferous plantation are established and managed

across open ground, changing the land use of an area. The sensitivity of coniferous plantation is considered to be **low**.

Magnitude of Impact

13.5.1.17 Ancient woodland often comprises of less commonplace species that can be well established in terms of woodland age, which is not easy to replant or replace. However, embedded mitigation will be applied that includes areas of Ancient Woodland being avoided as far as possible by the cable circuit installation (along with Mill Wood SSSI and Pitlurg Wood), and where this is not possible HDD will be used as the preferred installation method. No large-scale felling of any woodland type will take place in relation to the OnTI in order to safeguard Ancient Woodland as well as minimise the risk of any newly exposed trees or woodland becoming uprooted or broken by wind exposure along new edges. Taking into consideration the embedded mitigation in place for AWI and given that no large-scale felling of any woodland will take place along the cable circuit route the magnitude of impact is considered to be **negligible** for all woodland types. Given that there is no woodland present within the proposed substation location, and HDD will be used to install cable circuits under Pitlurg Wood, the magnitude of impact at this location is also considered to be **negligible**.

Significance of Effect

13.5.1.18 For AWI, broadleaved woodland and scattered woodland, with no large-scale felling being required and with HDD being applied, the overall significance of effect would be **minor** and not significant. For coniferous woodland with a lower sensitivity, the significance of effect is considered to be **negligible / minor** and therefore not significant.

Land Used By The Community

Sensitivity / Magnitude of Impact of Receptor and Significance of Effect

13.5.1.19 There are no receptors related to land used by the community that have been identified within the PAB. The closest are present at Sandend and Sandend Bay, but these have been excluded from the PAB as part of the embedded mitigation, in order to avoid direct effects. The closest area of amenity land identified within the Moray LDP at Berryhillock has also been excluded. Only direct effects are assessed within this EIA, with indirect effects having been scoped out. As no excavation activities or construction work will have direct effects on this land used by the community, there will be no direct effects upon these receptors are therefore they are not assessed any further.

Development Land

Sensitivity / Magnitude of Impact of Receptor and Significance of Effect

13.5.1.20 The area of search for minerals at Cotton Hill, Fordyce has been excluded from the PAB and as such there will be no direct effect arising from construction. There is no other development land identified within the PAB. Only direct effects are assessed within this EIA, with indirect effects having been scoped out. As no excavation activities or construction work will have direct effects on this development land, there will be no direct effects upon these receptors are therefore they are not assessed any further.

Watercourses

Sensitivity of Receptor

13.5.1.21 All watercourses are important land use features, as they assist with the drainage and soil composition of neighboring farmland and woodland, while also providing variety of habitat for wildlife and often are used as a water source for farmland stock such as cattle. Watercourses are highly sensitive to farmland activities and to surrounding sources of pollution. These receptors are all given a sensitivity of **moderate** due to none of the watercourses within the study area having any form of formal designation in terms of ecology or water quality.

13.5.1.22 In terms of ecological or hydrological value, Chapter 5: Hydrology, Hydrogeology and Geology and Chapter 6: Ecology and Nature Conservation of this EIA Report present impact assessments for water resources.

Magnitude of Impact

13.5.1.23 For watercourse crossings, a variety of crossing techniques will be applied (Section 2.4 of Chapter 2: Proposed Development). One technique would include the cable circuits being installed using HDD, which would result in no disturbance or damage to watercourses or their riparian habitat. This approach would likely be undertaken on main rivers and sensitive watercourses (such as the River Isla). A second technique of open cut trenching may be applied for small / modified watercourses with straightforward reinstatement potential. This would result in temporary disturbance to the watercourse through the use of flumes located in the bed of the watercourse, damming upstream or 'in-river' works agreed with SEPA. Taking the HDD process into account, the magnitude of impact is considered to be **negligible**, while for the other two techniques the magnitude of impact is considered to be **low** due to the temporary and controlled nature of the works.

Significance of Effect

13.5.1.24 The significance of effect upon watercourses where HDD is applied is considered to be **minor** and not significant. The significance of effect for the other two installation techniques is considered to be **minor** and therefore not significant.

13.5.2 Potential Operational Effects

Permanent Change in Land Use

13.5.2.1 Once installed, the existing surface land use along the onshore cable route is likely to be able to resume due to the buried nature of the OnTI (with the exception of the substation and areas that were previously planted with trees). However, the presence of the onshore cable circuits and jointing bays will restrict future changes in land use, for example, development will not be possible along the route of the OnTI and neither would planting of trees.

13.5.2.2 The construction of the onshore substation will result in a permanent change in land use as the building will be constructed within an area of land currently used for agriculture.

Agricultural Land, Settlement Land and Watercourses

Sensitivity of Receptor

13.5.2.3 The sensitivity of the receptors remains the same as previously identified in section 13.5.1 above. For Class 3.1 agricultural land this is **high**, Class 3.2 – 4.2 land this is **moderate** and for Class 5.3 – 6.2 this is **low**. For all watercourses the sensitivity was determined as **moderate**.

Magnitude of Impact

13.5.2.4 In terms of the landfall and cable circuit installation (with the exception of jointing bays), once the cables are buried and operational, all the land use / watercourses will be reinstated fully to their previous state and purpose. All access will be returned to its previous condition, with soils backfilled and reinstated. As there will be no permanent severance or disruption the magnitude of impact is considered to be **negligible** for these receptors.

13.5.2.5 For the substation, the magnitude of impact is considered to be **low** given that although there will be a permanent loss of Class 3.2 land associated with the construction and retention of a substation and associated access track / parking facilities (or at least until decommissioning takes place), Class 3.2 land dominates the PAB (81%) and is common throughout the wider Moray area. The loss of the land associated with the onshore substation (6 ha) corresponds to 0.25% of the Class 3.2 land available within the PAB (and 0.2% of the overall PAB) and so is not significant in the context of other available Class 3.2 land in the surrounding and wider Moray

area. The onshore substation will also result in minor levels of disturbance to land used by the community or settlements and no severance when embedded mitigation is considered.

Significance of Effect

13.5.2.6 For Class 3.1 and Class 3.2 agricultural land the significance of effect is considered to be **minor** and not significant, while for Class 4.1 – 6.2 land the significance of effect is considered to be **negligible / minor** and not significant. For all watercourses the significance of effect is determined as **minor** and not significant.

13.5.2.7 For the substation, the sensitivity of the land is moderate and with a low magnitude of impact, this will result in an overall effect of **minor** and not significant in terms of change in land use.

Forestry

Sensitivity of Receptor

13.5.2.8 The sensitivity of the receptors remains the same as previously identified in section 13.5.1 above. For AWI or other broadleaved woodland the sensitivity is assessed as being **moderate**, while coniferous plantation woodland is assessed as being of **low** sensitivity.

Magnitude of Impact

13.5.2.9 During operation and maintenance, there will be no need to fell any trees along the cable circuit route (only vegetation clearance may be required e.g. around TJPs / or substation infrastructure). There will therefore be a **negligible** magnitude of impact.

Significance of Effect

13.5.2.10 During operation and maintenance of the OnTI, there will be a **negligible / minor** and not significant effect upon land use.

13.5.3 Potential Decommissioning Effects

Permanent Change in Land Use

13.5.3.1 After the lifetime of the Moray West Offshore Wind Farm (assumed to be up to 50 years from the start of offshore operation), it is possible that the Moray West Onshore Substation may be retained and not decommissioned. However, in accordance with the Scoping Report and Scoping Opinion received from Moray Council and Aberdeenshire Council, the most likely decommissioning scenario for the OnTI is also considered in this EIA Report.

13.5.3.2 The most likely decommissioning scenario is that, with the potential exception of cable within the intertidal area, all underground infrastructure will remain in-situ, with only the onshore substation being removed. The intertidal cables may be fully removed but land use will remain the same. There will therefore be no changes to land use resulting from the onshore cable circuits. As such, the magnitude of impact arising from decommissioning of the landfall / cable circuits will be **negligible**, resulting in **negligible to minor** and not significant effects (as identified in section 13.5.2).

13.5.3.3 Current proposals to remove above ground equipment from the onshore substation site will result in a change in land use, where it is likely that land use will revert back to its original agricultural use and status of Class 3.2 land.

13.5.3.4 The potential effects from decommissioning of the onshore substation would likely be similar to those described for the construction and operation activities (Sections 13.5.1 and 13.5.2). Decommissioning of the onshore substation will result in land use reverting back to agricultural use from built up. As the land would be reinstated back to its former pre-substation condition and use would revert back to agricultural use, magnitude of impact will be low and this will result in an overall effect of **minor** and not significant effect.

13.6 Additional Mitigation and Enhancement Measures

13.6.1.1 Significant effects have been identified in relation to temporary disturbance / change in land use during construction and these relate to temporary loss and disturbance to Class 3.1 agricultural land.

13.6.1.2 In order to reduce and / or minimise this potential significant effect and reduce other not significant effects further, the following mitigation measures will be applied:

- The process of identifying the cable circuit route at detailed design stage will be cognisant of existing and future land uses. Efforts will be made to avoid sensitive land uses (such as Class 3.1 arable agriculture land) and land take will be limited where practicable and will consider other environmental and technical constraints, e.g. routing the onshore cable corridor to follow field boundaries or through existing wayleaves between blocks of commercial forestry or around areas of valuable arable agricultural land where possible;
- Consultation with landowners and other interested parties (e.g. tenants) will take place to determine the preferred location for cable circuits to be placed in order to limit severance or disruption to current land use practices;
- Large-scale tree felling will be avoided. A buffer area of at least 6 m will be provided between any areas of woodland or trees and any construction activities. This buffer will be extended further to a distance of 30 m wherever possible or feasible; and
- Appropriate stakeholder consultation and pollution prevention measures will be undertaken and put in place to minimise temporary effects arising from the use of open trenching techniques at watercourses (as set out within Chapter 5: Hydrology, Hydrogeology and Geology and Chapter 6: Ecology and Nature Conservation), with particular consideration of migratory fish populations that may be present.

13.7 Residual Effects

13.7.1.1 Taking into consideration the additional mitigation measures identified above, temporary significant effects upon agricultural land can be reduced to be not significant in terms of EIA. Table 13.7.1 summarises the result of the significance of effects assessment.

13.7.1.2 For agricultural effects described as moderate and significant for Class 3.1 agricultural land, with the application of additional mitigation of consultation and sensitive routing at detailed design, this effect can be reduced to **minor** and not significant. For watercourses, the application of pollution prevention measures, stakeholder consultation and selection of most appropriate construction technique will further reduce any effects.

Table 13.7.1: Summary of Assessment						
Potential Effect	**Nature**	**Probability**	**Sensitivity of Receptor**	**Magnitude of Impact**	**Significance of Effect**	**Rationale**
Construction						
Temporary disturbance / change in land use						
Agricultural land	Direct, temporary	Possible – Certain	High (Class 3.1) Moderate Class 3.2 – 4.2) Low (Class 5.3 – 6.2)	Low	Moderate and significant Minor and not significant Minor and not significant	For agricultural effects described as significant for Class 3.1 agricultural land, the application of additional mitigation of consultation and sensitive routing at detailed design, reduces this effect to minor and not significant.
Settlement land	Direct, temporary	Unlikely	Low	Negligible	Negligible and not significant	With embedded mitigation, the PAB does not affect any of the settlements or rural groupings identified within the LDP. Scattered properties will be avoid and buffer areas will be applied to avoid direct effects.
Forestry	Direct, temporary	Possible - Certain	Moderate	Negligible	Minor and not significant Negligible and not significant	Mill Wood SSSI will be avoided. All AWI and other woodland to be avoided or HDD applied,

Table 13.7.1: Summary of Assessment						
Potential Effect	**Nature**	**Probability**	**Sensitivity of Receptor**	**Magnitude of Impact**	**Significance of Effect**	**Rationale**
			Low			with no large-scale felling. Buffer of at least 6m between construction activity and woodland.
Watercourses	Direct, temporary	Possible - Certain	Moderate	Negligible (HDD technique) Low (open trench technique)	Minor and not significant (HDD technique) Minor and not significant (open trench technique)	HDD installation will be undertaken at main watercourses / other sensitive watercourses where possible. Temporary mitigation will be put in place to maintain watercourse flows during open trenching and pollution prevention measures adopted in consultation with stakeholders.
Operational						
Change in land use - substation						
Agricultural land and watercourses	Direct, permanent	Certain	High to Low	Negligible (cable) Low (substation)	Negligible / Minor and not significant (cable) Minor and not significant (substation)	OnTI will involve temporary land take and land use will primarily be returned to baseline condition prior to construction, with the exception of the substation where land use will alter but involve

Table 13.7.1: Summary of Assessment						
Potential Effect	**Nature**	**Probability**	**Sensitivity of Receptor**	**Magnitude of Impact**	**Significance of Effect**	**Rationale**
						a very small area of land take (6 ha; 0.25% of PAB).
Forestry	Direct, permanent	Certain	Moderate	Negligible	Negligible / Minor and not significant	No felling of forestry or trees will be required along the cable route.
Decommissioning						
Change in land use	Direct, permanent	Probable	High - Low	Negligible (cable) Low (substation)	Negligible / Minor and not significant Minor and not significant	Onshore substation will either be retained or land use will likely revert back from built up to agricultural (Class 3.2) if substation is removed. Results in a land use change returning to baseline condition.

13.8 Assessment of Cumulative Effects

13.8.1.1 Consultation with Moray Council and Aberdeenshire Council has not identified any other development projects that require cumulative assessment in relation to changes in land use within the PAB. The two projects identified as requiring consideration within cumulative assessment (Aultmore Wind Energy Project and Lurg Hill Wind Farm) are not located within the study area and do not therefore overlap with changes in land use within the PAB. As such, no cumulative assessment has been carried out for land use receptors.

13.9 References

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