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Volume 5 Proposed Development (Onshore)

Chapter 4 Landscape and Visual

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Table of Contents

A	cronyms and Abbreviations	v
E	ecutive Summary	. vii
4	Landscape and Visual	1
	4.1 Introduction	1
	4.2 Legislation, Policy and Guidance	1
	4.3 Stakeholder Engagement 4.3.1 Overview	
	 4.4 Baseline Characterisation 4.4.1 Study Area 4.4.2 Data Sources 4.4.3 Baseline Description 4.4.4 Future Baseline 4.4.5 Data Gaps and Limitations 	6 7 9 17
	 4.5 EIA Approach and Methodology. 4.5.1 Overview	20 20 21 21 23
	4.6 Key Parameters for Assessment 4.6.2 Proposed Development (Onshore) Phasing	
	 4.7 Potential Effects	32 52 67 69 73
	 4.8 Cumulative Effects	99 .101 .103
	4.9 In-combination Effects 4.9.2 In-Combination effects between onshore Proposed Development works	
	4.10 Mitigation Measures and Monitoring 4.10.1 Embedded Mitigation	
	 4.11 Residual Effects 4.11.2 Construction Effects 4.11.3 Operation Effects 4.11.4 Decommissioning Effects 	.137 .138



4.12	Summary of Effects	138
4.13	References	163

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List of Tables

Table 4-1: Legislation Policy and Guidance 1
Table 4-2: Scoping Opinion Response 3
Table 4-3: Stakeholder Engagement Activities
Table 4-4: Summary of key publicly available datasets for landscape andvisual amenity
Table 4-5: Representative viewpoints included in the LVIA
Table 4-6: Landscape Future Baseline During Construction and Operation . 18
Table 4-7: Landscape and visual scope of assessment
Table 4-8: Impacts Scoped Out 21
Table 4-9: Embedded Mitigation
Table 4-10: Worst Case Assessment Scenario Considered for Each Impact asPart of the Assessment of Likely Significant Effects29
Table 4-11: Landscape and Visual Cumulative Effects 100
Table 4-12: Summary of Effects 139
Table 4-13: Summary of Cumulative Effects – Scenario 1
Table 4-14: Summary of Cumulative Effects – Scenario 2

Acronyms and Abbreviations

AOD	Above Ordnance Datum	
CIA	Cumulative Impact Assessment	
EIA	Environmental Impact Assessment	
EIAR	Environmental Impact Assessment Report	
ELC	European Landscape Convention	
GDL	Garden and Designed Landscape	
GLVIA3	Guidelines for Landscape and Visual Impact Assessment, 3rd edition	
HDD	Horizontal Directional Drilling	
IEMA	Institute of Environmental Management and Assessment	
km	Kilometre	
LCA	Landscape Character Assessment	
LCT	Landscape Character Type	
LV	Landscape and Visual	
LVIA	Landscape and Visual Impact Assessment	
m	Metre	
MLWS	Mean Low Water Spring	
NCR	National Cycle Route	
NPF4	National Planning Framework 4	
ONEC	Onshore Export Cable Corridor	
OnTI	Onshore Transmission Infrastructure	
RAF	Royal Air Force	
SLA	Special Landscape Area	



SLVIA	Seascape, Landscape and Visual Impacts Assessment	
ТЈВ	Transition Joint Bay	
WTG	Wind Turbine generator	
ZTV	Zone of Theoretical Visibility	

Executive Summary

This chapter of the Environmental Impact Assessment Report (EIAR) assesses the potential effects from the Proposed Development (Onshore) on landscape and visual amenity. This includes direct, indirect, whole project assessment, cumulative, inter-related effects and inter-relationships effects.

Onshore receptors most sensitive to the effects of the Onshore Transmission Infrastructure (OnTI) include landscape elements within the Onshore Transmission Infrastructure (OnTI) Red Line Boundary (RLB) and visual receptors (people) within 1 kilometre (km) of the OnTI RLB. Onshore receptors most sensitive to the effects of the Onshore Substations include landscape elements within the Onshore Substations (as shown on Volume 7E, Appendix 4-2, Figure 4-1), landscape character within 3km of the Onshore Substations and visual receptors within 3km of the Onshore Substations.

The following impacts were identified as requiring assessment:

- Impacts on landscape elements within the OnTI RLB during construction, including removal of land from agricultural use and the removal of hedgerows, tree groups or woodland;
- Impacts on visual amenity within 1km of the OnTI RLB during construction;
- Impacts on landscape elements within the Onshore Substations during construction, including removal of land from agricultural use and the removal tree groups;
- Impacts on landscape character within 3km of the Onshore Substations during construction, operation and decommissioning; and
- Impacts on visual amenity within 3km of the Onshore Substations during construction, operation and decommissioning.

The assessment has taken account of embedded mitigation measures for the assessment of potential effects, including advanced mitigation planting of mixed native hedgerow, along the northern boundary of the OnTI RLB and parts of the eastern boundary, as well as blocks of mixed native woodland to the east of East Swanford, to be planted prior to the start of construction; mitigation planting after completion of Phase 1 platform earthworks comprising mixed native woodland/shrub mix woodland north of the Onshore Substations (refer to Volume 1, Chapter 5: Proposed Development Phasing for further information on construction phasing); and mitigation planting after completion of the Onshore Substations, comprising areas of mixed native woodland/shrub mix woodland and deciduous native woodland/shrub mix to the Onshore Substation boundaries as shown on Volume 7E, Appendix 4-2, Figure 4-4. Further mitigation planting will take place within the OnTI RLB comprising the reinstatement of removed hedgerows and the replanting of removed trees, where possible and areas of woodland within the OnTI RLB during the reinstatement and landscaping activities at the end of both phases of construction.

Potential significant adverse effects were identified on visual amenity at some viewpoints and local visual amenity during construction and operation of the Proposed Development and in the cumulative assessment for the proposed Onshore Substations before mitigation planting has established.



Potential significant adverse, medium term effects during construction were identified on the perceived landscape character of the Undulating Agricultural Heartland Landscape Character Type (LCT 20) within 600m of the Onshore Substations. Such potential adverse significant effects would also arise cumulatively during construction and operation when they would be long term.

Embedded mitigation includes planting around the Onshore Substations including native hedgerows, and native deciduous and mixed native woodland planting for screening. Some planting will be implemented in advance of the start of construction activity and some at the end of construction of Phases 1 and 2. The post Phase 1 planting will establish and provide more effective screening earlier in views from the north. For all viewpoints, the mitigation planting will be sufficient to reduce the effect of the Proposed Development (Onshore) to non-significant levels after 15 years of operation of both Onshore Substations.

Potentially, mounding of soil around the Onshore Substations would provide additional mitigation of its landscape and visual effects. At this stage, there is insufficient detail to consider what mounding may be feasible and for this reason this assessment has not considered mounding. This will be considered at the detailed design stage subject to further detail becoming available.

As mitigation of the landscape and visual effects of the Proposed Development (Onshore) is limited to embedded mitigation measures and precludes any requirement for secondary mitigation, the residual effects of the Proposed Development (Onshore) will be of the same level and nature as those assessed during the construction and operation phases.

4 Landscape and Visual

4.1 Introduction

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- 4.1.1.1 This chapter of the Environmental Impact Assessment Report (EIAR) identifies the potential effects on Landscape and Visual amenity associated with the construction, operation and decommissioning of the of the Proposed Development (Onshore) landward of Mean Low Water Spring (MLWS).
- 4.1.1.2 This chapter is supported by the following technical appendices:
 - Volume 7E, Appendix 4-1: Landscape and Visual Impact Assessment Methodology;
 - Volume 7E, Appendix 4-2: Landscape and Visual Figures; and
 - Volume 7E, Appendix 4-3: Landscape and Visual Visualisations.

4.2 Legislation, Policy and Guidance

- 4.2.1.1 Volume 1, Chapter 2: Legislation and Policy, of this EIAR sets out the policy and legislation associated with the Proposed Development.
- 4.2.1.2 Legislation, Policy and Guidance that relate to the Landscape and Visual Impact Assessment (LVIA) are identified and described in Table 4-1.

Table 4-1: Legislation Policy and Guidance

Relevant Legislation, Policy and Guidance	Description	
European Landscape Convention (ELC) (Council of Europe, 2000 ¹)	The ELC introduced a Europe-wide concept centred on the quality of landscape protection, management and planning and covering the entire territory that complements the Council of Europe's and UNESCO's heritage conventions.	
National Planning Framework 4 (NPF4) (Scottish Government, 2023 ²)	Scotland's National Planning Framework 4 (NPF 4) was adopted on 13th February 2023. NPF 4 sets out the spatial principles, regional priorities, national developments, and national planning policy.	
Aberdeenshire Local Development Plan 2023 (Aberdeenshire Council, 2023 ³)	Policy R1 Special Rural Areas- Safeguards the special nature of the green belt and coastal zone, by restricting development opportunities subject to the considerations set out in paragraphs R1.2 to R1.5.	
	Policy E2 Landscape - Restricts development that causes unacceptable effects on key characteristics, natural landscape elements,	

Relevant Legislation, Policy and Guidance	Description
	features or the composition or quality of the landscape character as defined NatureScot's Landscape Character Assessments
	Restricts development that has a significant adverse impact on the qualifying interests of a Special Landscape Area unless these effects are clearly outweighed by social, environmental or economic benefits of at least local importance.
	Appendix 13: Special Landscape Areas - The Appendix supports Policy E2 Landscape (LDP 2023), is used in the decision making process with regard to Development management and provides guidance to communities and landowners in coming to decisions affecting the management and use of land within Special Landscape Areas.
Landscape Character Assessment Guidance for England and Scotland. (Carys Swanwick Department of Landscape University of Sheffield and Land Use Consultants for The Countryside Agency and NatureScot, 2002 ⁴).	Provides guidance on how to carry out and use landscape and seascape character assessments.
Landscape Institute and Institute of Environmental Management and Assessment. Guidelines for Landscape and Visual Impact Assessment. 3rd edition. Routledge. (GLVIA3) (Landscape Institute and Institute of Environmental Management and Assessment (IEMA) 2013 ⁵).	Presents an authoritative statement of the principles of assessment and offers detailed advice on the process of assessing the landscape and visual effects of developments and their significance,
Landscape Institute. Visual Representation of Development Proposals. Technical Guidance Note 06/19 (Landscape Institute, 2019 ⁶).	Provides guidance on the selection, production and presentation of appropriate types of visualisation.
Landscape Institute. Assessing landscape value outside national designations. Technical Guidance Note 02/21 (Landscape Institute, 2021 ⁷)	Provides information and guidance about the value of a landscape outside national landscape designations in the context of the UK Town and Country Planning system.
NatureScot. Assessing the Cumulative Impact of Onshore Wind Energy Developments (NatureScot, 2021 ⁸)	Sets out advice on assessing cumulative landscape and visual impacts.
Scottish Government. Guidance for applicants on using the design envelope for applications under section 36 of the	Provides guidance for applicants on using the design envelope for applications under section 36 of the Electricity Act 1989.



Relevant Legislation, Policy and Guidance

Description

Electricity Act 1989 (Scottish Government, 2022⁹).

4.3 Stakeholder Engagement

- 4.3.1 Overview
- 4.3.1.1 The Scoping Report was submitted to Aberdeenshire Council in December 2022 who then circulated the report to relevant consultees. A Scoping Opinion was received from Aberdeenshire Council on 1 February 2023. Relevant comments from the Scoping Opinion specific to Landscape and Visual are provided in Table 4-2.

Table 4-2: Scoping Opinion Response

Consultee	Comment	Response
Aberdeenshire Council	Detailed survey work would be required to inform the EIAR. Following analysis of the aspects of the environment which would be likely to be significantly affected, a detailed assessment of the effects themselves would be required along with mitigation measures proposed.	Visual surveys to inform the LVIA were undertaken during October 2023. A preliminary analysis of the Landscape and Visual receptors within the study area was undertaken and those receptors likely to be significantly affected were identified. A detailed assessment of these receptors is undertaken in Sections 4.7, 4.8, 4.9 and 4.11.
Aberdeenshire Council	 "Examples of the types of issues that should be addressed include: Landscape Resource Visual Amenity Proposed Mitigation Measures" 	Landscape resource and visual amenity have been addressed in this chapter of the EIAR and supporting appendices. The baseline landscape environment is discussed in Section 4.4. Potential impacts are outlined in Sections 4.7 to 4.9 and 4.11 with mitigation



Consultee	Comment	Response
		measures and monitoring discussed in Section 4.5.6. A summary of effects after the application of mitigation is presented in Table 4-12.
Aberdeenshire Council	Visualisations showing the baseline and built development should be included within the EIAR.	Visualisations showing the baseline view and built development have been produced and are presented in Volume 7E, Appendix 4-3: Landscape and Visual Visualisations.
Aberdeenshire Council	The construction compound at the landfall site should be included within the visualisations and include any landscaping or mitigation as outlined at section 8.5.1.23 of the OSR.	Pre-application consultation with Aberdeenshire Council resulted in agreement that the construction compound at the Landfall Site does not require visualisations. A baseline view has been included which indicates the Onshore Export Cable Corridor within which the Landfall Site compound would be located, refer to Volume 7E, Appendix 4-3: Landscape and Visual Visualisations.
Aberdeenshire Council	The visualisations should be based on a Zone of Theoretical Visibility (ZTV) which the Council would be happy to consider, along with viewpoint selection as noted at section 8.11.1.1 of the OSR.	Aberdeenshire Council has subsequently agreed the LVIA viewpoints following a review of the Zone of Theoretical Visibility (ZTV) provided as part of pre- application consultation, refer to Table 4-3.
Aberdeenshire Council	Visual impact should be considered by a range of receptors where possible and include various landscape	The baseline landscape environment including receptors within the landscape and visual study



Consultee	Comment	Response
	character types and landscape designations as appropriate	area, landscape character types and landscape designations are outlined in Section 4.4.
		Potential effects on these receptors and landscape character types are presented in Section 4.7, with mitigation and monitoring detailed in Section 4.9.2.1.

4.3.1.2 Further consultation has been undertaken throughout the pre-application stage. Table 4-3 summarises the consultation activities carried out relevant to the landscape and visual.

Table 4-3:	Stakeholder	Engagement	Activities
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Date	Consultee and Type of Consultation	Summary
31 January 2024	Aberdeenshire Council, Email Correspondence	Agreement of viewpoint locations and additional locations at Slacks of Cairnbanno and Hillhead of Auchreddie, and North Mains of Auchmaliddie stone circle and Cairnbanno House to represent views from cultural heritage interests.
18 April 2024	Aberdeenshire Council, Pre-Application Advice	In April 2024 a formal pre-application response was received from Aberdeenshire Council. The responses were divided into two separate sections 'Landscape Impact' and 'Visual Impact'. Landscape Impact:
		A Landscape and Visual Assessment (LVIA) will be required to show the likely landscape and visual effects of the proposed development on landscape character and resources and visual amenity. The viewpoints provided to the

Date	Consultee and Type of Consultation	Summary
		Planning Service which are to be used in the LVIA appear to be acceptable and justified.
		Visual Impact:
		In terms of the visual impact, the development requires to visually blend into the landscape as much as possible, particularly when viewed from the south, east and north east, utilising existing and proposed boundary treatments to sufficiently screen the visual impact of any proposed infrastructure upon the immediately surrounding landscape.
		Response
		Landscape and Visual Mitigation Planting has been developed to provide screening of the Onshore Substations from all directions and to integrate them into the landscape. This retains existing planting as much as possible, takes consideration of the Onshore Substations visual impact on the immediately surrounding landscape and is shown on the Landscape and Visual Mitigation Planting plan (Volume 7E, Appendix 4-2, Figure 4-8).

4.4 Baseline Characterisation

4.4.1 Study Area

4.4.1.1 The landscape and visual study area has been defined on the basis of professional judgement regarding the geographical extent of likely significant effects arising from the Proposed Development (Onshore). This judgement is based on the scale of the construction and development of the Proposed Development (Onshore); the extent of the Proposed Development (Onshore)'s ZTV; previous experience of similar projects; and understanding of the local landscape character. The LVIA study area extends to a 3km radius from the Onshore Substations and 1km from the OnTI RLB and was agreed with Aberdeenshire Council. The LVIA study area comprises an Onshore Transmission Infrastructure 1km study area, based on a 1km buffer from the Onshore

Substations. These study areas have been defined by the geographical extent of the anticipated effects of the Onshore Export Cable and Onshore Substation, which would differ due to the differing nature of these elements. An explanation of how these terms used in this chapter is given below:

- 'LVIA study area' is used when referring to the area within which it is considered there is potential for significant effects on landscape elements, landscape character or visual amenity;
- 'Onshore Transmission Infrastructure 1km study area' is used when assessing an impact or effect of the Onshore Export Cable on landscape elements or on visual amenity during Construction; and
- 'Substation 3km study area' is used when assessing an impact or effect of the Onshore Substations on landscape elements within the areas affected by the Onshore Substations during Construction and Decommissioning or on landscape character or visual amenity during Construction, Operation and Decommissioning.
- 4.4.1.2 The LVIA study area encompasses the intertidal area (between Mean Low Water and Mean High Water Springs) that includes the beach and fragmented coastline west of Whitehills. This intertidal area overlaps with the offshore topic of Seascape, Landscape and Visual Impact Assessment. Please refer to Volume 2, 3 and 4, Chapter 12: Seascape, Landscape and Visual Impact Assessment of the EIAR for further detail.
- 4.4.1.3 The LVIA study area is not intended to provide a boundary beyond which the Proposed Development (Onshore) would not be seen, but rather to define the area within which there is potential for significant landscape or visual effects to occur. It is considered very unlikely that a significant effect would occur towards the boundary of the LVIA study area. The study area for landscape and visual assessment is shown in Volume 7E, Appendix 4-2, Figure 4-1.

4.4.2 Data Sources

4.4.2.1 The data sources that have been used to inform this landscape and visual chapter of the EIAR are presented within Table 4-4.

Table 4-4: Summary of key pu	ublicly available datasets for I	landscape and visual amenity
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Source	Year	Spatial Coverage	Summary
Aberdeenshire Coastal Trail web page	2023	Aberdeenshire	Route mapping and information
Aberdeenshire Local Development Plan 2023 Appendix 13 Aberdeenshire	2023	Aberdeenshire	Mapping and information



Source	Year	Spatial Coverage	Summary
Special Landscape Areas ¹²			
Core Paths Plan Maps	2023	Aberdeenshire	Mapping of core paths within Aberdeenshire
Gardens and designed landscapes web page	2023	Scotland	Mapping and information about Historic Environment Scotland's Inventory of Gardens and Designed Landscapes
Google Earth	2023	United Kingdom	Aerial and street-level photography
National Landscape Character Types (LCTs)	2023	Scotland	Mapping and descriptions of landscape characterisation in Scotland
National Trust for Scotland website	2023	Scotland	Locations and information about specific visitor attractions and tourist destinations
North East 250 web page	2023	Scotland	Route mapping and information
Ordnance Survey (OS) 1:25,000 scale mapping	2023	Great Britain	Mapping
OS County Region, Local Unitary Authority, Railways, Road and Settlements	2023	Great Britain	Mapping
OS Terrain 5 Digital Terrain Model (DTM) 5	2023	Great Britain	Digital Terrain Model

Desk Study

- 4.4.2.2 This chapter draws upon landscape descriptions within the National Landscape Character Assessment (NatureScot, 2019¹⁰) and information about designated landscape within the Inventory of Gardens and Designed Landscapes (Historic Environment Scotland, 2023¹¹) and the Aberdeenshire Local Development Plan Appendix 13: Special Landscape Areas (Aberdeenshire Council, 2023¹²).
- 4.4.2.3 Interactions have been identified between the Proposed Development (Onshore) and landscape and visual receptors, to predict potentially significant effects arising and measures are proposed to mitigate effects.

Site Specific Surveys

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- 4.4.2.4 For those receptors where a detailed assessment is required, primary data acquisition has been undertaken through a series of surveys. These surveys have included field survey verification of the ZTV from LCTs, micro-siting of viewpoint locations, panoramic baseline photography and visual assessment survey from all representative viewpoints. The viewpoint photography, visual assessment and landscape assessment surveys were undertaken during October 2023 and February 2024.
- 4.4.3 Baseline Description

Overview

- 4.4.3.1 An overview of the current baseline conditions for landscape and visual amenity is initially outlined and then subsequently described.
- 4.4.3.2 The baseline describes aspects of the landscape and visual environment that may be significantly affected by the OnTI, as required by:
 - The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (Scottish Parliament, 2017¹³); and
 - The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) (Scottish Government, 2017¹⁴) (for Scottish inshore waters).
- 4.4.3.3 Establishing the baseline will, when reviewed alongside the description of the OnTI, form the basis for the identification and description of the effects of the OnTI on Landscape and Visual receptors in Section 4.7.
- 4.4.3.4 The National Landscape Character Assessment (LCA) (NatureScot, 2019¹⁰) describes the baseline condition of the landscape character within the LVIA study area.
- 4.4.3.5 Section 4.7 provides a detailed description of the baseline for each landscape and visual receptor that may be significantly affected by the OnTI, as part of the assessment.
- 4.4.3.6 The baseline also describes current pressures that may cause change in the landscape in the future. Energy infrastructure developments that are operational or under construction are regarded part of the baseline landscape character of the area. The assessment of landscape and visual effects in Section 4.7 assesses any changes resulting from the OnTI within this context.
- 4.4.3.7 Section 4.7.6.1 considers the cumulative assessment of the Proposed Development (Onshore) in the context of energy infrastructure developments that are not yet present in the landscape but are at other stages in the consenting process, as requested in consultations with Aberdeenshire Council (Table 4-3).

Landscape baseline

LVIA study area

- 4.4.3.8 Volume 7E, Appendix 4-2, Figure 4-1 shows the LVIA study area, which is defined by the potential extent of significant effects resulting from the OnTI and extends 1km from the OnTI RLB, and to a 3km radius from the Onshore Substations.
- 4.4.3.9 Volume 7E, Appendix 4-2, Figure 4-1 shows that landform within the LVIA study area is undulating and relatively low (generally under 150m Above Ordnance Datum (AOD)).
- 4.4.3.10 Volume 7E, Appendix 4-2, Figure 4-2 shows the landscape character types and Volume 7E, Appendix 4-2 Figure 4-3 shows planning designations within the LVIA study area. Volume 7E, Appendix 4-2, Figure 4-4 shows the landscape elements within the OnTI RLB and Onshore Substations. Volume 7E, Appendix 4-2, Figure 4-5 shows the settlements, roads and recreational routes for walking and cycling within the LVIA Study Area which comprise the principal visual receptor locations.
- 4.4.3.11 The LVIA study area encompasses the section of coastline between Whyntie Head and Knock Head. This is a fragmented and rocky coastline with high headlands at Bear's Head, Stake Ness and Craig Neen. Sheer cliffs with occasional narrow inlets lie between the headlands with one sandy beach between Whyntie Head and Bear's Head. Coastal heath with gorse at Den Brae aligns the coastal edge with farmland behind.
- 4.4.3.12 From the coastline, the land gradually rises to the hills approximately 5km south of the coastline. Land within the LVIA study area is predominantly in agricultural usage. This is typically enclosed by post and wire fencing, or occasionally hedgerow. The field pattern is geometrical and largely rectilinear. While there is a range of field sizes, many of the fields are large. Inland from the coastline is Boyndie airfield, the disused Royal Air Force (RAF) Banff, Wind Turbine Generators (WTGs) and patches of woodland including Whyntie Wood.
- 4.4.3.13 The B9139 broadly follows the coastline, while further inland the A98 runs parallel to the Burn of Boyndie. From Hill of Culhirnie (158m AOD), the LVIA study area extends south-east, including several hills such as Hill of Alvah (178m AOD). A network of minor roads connects dispersed settlements within this area. There are WTGs atop Strath of Brydock (156m AOD). East of the hill, the A97 between Banff and Aberchirder crosses the LVIA study area. Further east the LVIA study area encompasses a section of the River Deveron, its broad containing valley, and the smaller valleys of its tributaries. This area is relatively well wooded, especially along the river. The A947 from Macduff to Turriff crosses the LVIA study area east of Back Hill of Plaidy.
- 4.4.3.14 North-east of Turriff, lies the Hill of Barnyards (165m AOD) with the Wood of Delgaty to the south. Several WTGs lie north-east of the woods. Idoch Water lies to the east of the town. Further south-east lies Castlehill (151m AOD) and to its

south, more settlements at Rosebrae. The Wood of Hatton lies to the west of the smaller valley containing the Burn of Balquholly, with more woodland to the east. The study area extends as far south as Hill of Lendrum (170m AOD).

4.4.3.15 Linear tree groups traverse the LVIA study area by the A97, on the southern boundary of a field at Mallyrust Farm; and west of the B9121, at Greenlaw. Woodland along the River Deveron enters within the LVIA study area. Linear tree groups traverse the LVIA study area approximately 1km east of the river, where there is a line of mature broadleaved trees on the boundary of several fields; south of Plaidy, where trees align the road of Parkside; and approximately 2km west of Cuminestown, where conifers align the Burn of Monquhitter. Approximately 2.8km west north-west of the Onshore Substations, grown out hedgerow along a minor road traverses the LVIA study area and extends along an adjoining access track. Near North Millbrex, the Burn of Swanford enters the LVIA study area. A linear tree group aligning the burn lies approximately 700m from the Onshore Substations.

OnTI RLB

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4.4.3.16 From the Landfall Site west of Whitehills, the OnTI RLB extends for approximately 37km through largely agricultural land to the Onshore Substations. South of the Landfall Site, the OnTI crosses the B9139 near the Boyndie Airfield, heading south to cross the A98 and the Burn of Boyndie. South of Blairshinnoch, it heads more south-easterly. The OnTI crosses the A97, B9121 and River Deveron. Continuing through farmland it crosses the A947, B9105 and B9170. Thereafter, the OnTI crosses several minor roads before turning more easterly and connecting with the Onshore Substation.

Substation 3km study area

4.4.3.17 Volume 7E, Appendix 4-2, Figure 4-6 shows the Onshore Substations and their wider landscape context. Low hills lie to the north, west and east of the Substation 3km study area. These enclose and slope down to lower land, encompassing the Onshore Substations. To the south is the River Ythan and its flood plain. Tributaries of the river, such as Burn of Asleid and Little Water, flow down from the surrounding hills within small valleys forming a gently rolling landscape. This landscape is relatively low in relief and generally lies below 120m AOD. Deer's Hill, towards the west of the Onshore Substations, is the highest point within it at 178m AOD. To the east, the landform is lower and comprises rolling hills separated by small valleys. To the south and south-west, as the valleys containing the Burn of Asleid and Little Water merge, there is less relief to the landscape. The undulating landscape is predominantly covered by agricultural fields predominantly enclosed by post and wire fencing in a geometric pattern of large fields. There are sporadic low lying boggy areas often adjoining burns within the Substation 3km study area. Sparse woodland cover is limited to coniferous plantations at Northburnhill and Mill of Muirtack; more mixed woodland at Cairns and Moss of Blackhillock; and smaller, dispersed woodland blocks, often planted as shelterbelts. Small groups of trees, often coniferous, lie within the curtilage of isolated properties and farmsteads that are

evenly dispersed across the landscape. These tend to lie along the network of minor roads that extends across the area or are set back from these minor roads with long access tracks. In places there are loose, small clusters of dwellings, notably at the junction near Maryhill. A short section of the B9170 enters the north of the Substation 3km study area. A line of pylons traverses the Substation 3km study area, east to west, connecting to the existing New Deer substation. Larger agricultural buildings are a common feature of the area.

4.4.3.18 Minor roads define the northern and eastern boundaries of the developable area containing the Onshore Substations. The Burn of Asleid defines the western boundary. The southern boundary adjoins the Moray East and New Deer substation sites. Several residential properties lie on these roads. Further properties lie to the west, at East Swanford and Bridge of Swanford. Beyond the northern, eastern and western boundaries is open farmland. The developable area containing the Onshore Substations comprises several fields enclosed by post and wire fencing. Properties lie within the north of this area, at Burnside and are accessed by a single track. These properties form a cluster of buildings. Tree groups lie within the curtilage of these properties, along the minor road to the north, extending south from the buildings. Smaller tree groups are located on the western and eastern boundary. These are regularly spaced at the southeast corner of the developable area containing the Onshore Substations. An access track to East Swanford traverses the developable area containing the Onshore Substations by the southernmost tree group. Another tree group lies at the west end of this track. A single pylon lies in the south-east corner. The developable area containing the Onshore Substations encompasses a short section of the Burn of Asleid, and a small adjoining field, to the west. A sole tree lies within this field. Further isolated trees lie on the western boundary towards the north-western corner. The Onshore Substations comprise 100,000m² of land that is currently in agricultural use, as stated in Volume 1, Chapter 4: Proposed Development Description (Onshore).

Landscape character

- 4.4.3.19 National LCTs (NatureScot, 2019) describe the landscape of the LVIA study area. Volume 7E, Appendix 4-2, Figure 4-2 shows that the LVIA study area lies within:
 - Cliffs and Rocky Coast Aberdeenshire (LCT 10);
 - Gently Undulating Coastal Farmland (LCT 14);
 - Farmed and Wooded River Valleys (LCT 32); and
 - Undulating Agricultural Heartland (LCT 20).
- 4.4.3.20 The Onshore Substations lie within the Undulating Agricultural Heartland (LCT 20), which is described and assessed in Section 4.7. The OnTI lies within LCTs 10, 14 and 32, these LCTs being excluding from detailed assessment for the reason given in Table 4-8.

Landscape planning designations

- 4.4.3.21 Volume 7E, Appendix 4-2, Figure 4-3 shows that the LVIA study area encompasses landscape within the following designated areas:
 - North Aberdeenshire Coast Special Landscape Area (SLA); and
 - Deveron Valley SLA.

Landscape elements

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- 4.4.3.22 Land use within the OnTI RLB is predominantly agricultural, with large arable and pastoral fields, limited hedgerow cover and occasional semi-natural and plantation woodland. The fields are extensively drained by a network of small burns around field boundaries.
- 4.4.3.23 Volume 7E, Appendix 4-2, Figure 4-4 shows the principal landscape elements within the LVIA study area. Due to the total length of the Onshore Export Cable Corridor (ONEC) (approximately 37km) the OnTI RLB is divided into four sections, below, based on the associated LCT and the relevant landscape elements are listed and described.

Section 1: Cliffs and Rocky Coast – Aberdeenshire (LCT 10)

- 4.4.3.24 This section runs southwards from the coastline some 680m west of Whitehills, crossing the B9139 near the Boyndie Wind Farm which is located within the former Royal Air Force station at RAF Banff to end approximately 140m south of the road. The relevant landscape elements within this section are:
 - Agricultural land, predominantly arable, extending to cliff edges in a very simple field pattern; and
 - Hedgerow, that aligns the B9139.
- Section 2 Gently Undulating Coastal Farmland (LCT 14)
- 4.4.3.25 This section runs from just south of the B9139 near RAF Banff to the western side slope of the Deveron Valley, near the B9121 at Greenlaw. The relevant landscape elements within the OnTI RLB are:
 - Agricultural land that is mainly arable, including fragments of moss and rushy pastures, in a simple pattern of large, geometric fields enclosed by post and wire fences; low and often broken boulder dykes; and scattered hedgerow;
 - Hedgerow, that is intermittent on field boundaries and more consistent along roads including the A98; and
 - Trees, in groups west of Boyndie and at Mallyrust Farm on the A97.
- Section 3 Farmed and Wooded River Valleys (LCT 32)
- 4.4.3.26 From the western side slope of the Deveron Valley, near the B9121 at Greenlaw, this section runs to the top of the eastern side slope, some 1.4km east of the River Deveron. The relevant landscape elements within this section are:

- Agricultural land that abuts both sides of the river, with mixed pastures and arable fields set out on the flat floodplain and gently rolling sides. Farmland is interspersed with mixed woodlands on valley sides;
- Hedgerow, along the minor road north of Hill of Scatterty; and
- Trees, in a row along the B9121, at Greenlaw, along the minor road south of Scatterty and extending southwards from Holm Wood; and mixed woodland that extends to the riverbanks on both sides of the River Deveron.
- Section 4 Undulating Agricultural Heartland (LCT 20)
- 4.4.3.27 This section runs from the top of the Deveron Valley's eastern side slope to the. The relevant landscape elements within this section are:
 - Agricultural land that comprises large fields enclosed by fences and occasionally low walls;
 - Hedgerow, scattered along field boundaries; and
 - Trees, along Parkside; linear tree groups along Burn of Monquhitter, field boundaries further south and the Burn of Swanford. Isolated trees within the OnTI RLB.

Visual baseline, views and visual amenity

4.4.3.28 The visual baseline focuses on and describes the area in which the Proposed Development (Onshore) may be visible, the different groups of people who may experience views of the Proposed Development (Onshore) (the visual receptors), the views they experience and the viewpoints where they will be affected, and the nature of the views at those points.

Visual receptors

- 4.4.3.29 Volume 7E, Appendix 4-2, Figure 4-5 shows that the principal visual receptors within the LVIA study area includes people within settlements, local residents, people driving on roads, visiting tourist facilities or historic environment assets, or engaged in recreational activity such as walking and cycling.
- 4.4.3.30 Within the LVIA study area, the principal visual receptors are identified as people in or users of:
 - Settlements comprising Whitehills, on the coast and Boyndie, inland;
 - Residential dwellings;
 - Recreational routes, including Aberdeenshire Council core paths and National Cycle Route (NCR) 1;
 - 'A' roads, including the A97, A98 and A947;
 - 'B' roads, including the B9139 and B9170;
 - Minor roads that adjoin or lie within close proximity of the Onshore Substations; and
 - The North-East 250 Scenic Route, which follows the B9139.

4.4.3.31 The views and visual amenity experienced by the aforementioned principal visual receptors are described and assessed in Section 4.7.5.

Character of views

- 4.4.3.32 In general, views from the settlements, dwellings and roads vary in nature due to the low relief of the landscape and its openness. Screening by smaller scale landscape elements, such as trees and woodland, is relatively infrequent. In places, larger agricultural buildings also provide screening, particularly those at Abbotshaugh. In the main, views tend to be shorter-range and reasonably wide. At higher locations, the views become longer-range and the openness of the landscape becomes more apparent. The surrounding low hills enclose outward views and define a low and gently undulating skyline.
- 4.4.3.33 The extent of potential visibility of the Onshore Substations is broadly defined by landform with the additional screening effects of woodland blocks and tree groups, particularly to the north. The undulating topography of the area means that likely visibility of the Onshore Substations is not consistent across the Substation 3km study area. There are high points providing longer range and wider views encompassing the Onshore Substations and low points between these undulations with little or no potential visibility of the Onshore Substations. A relatively sparse and dispersed pattern of tree cover will intermittently screen the Onshore Substations from view. Visibility of the Onshore Substations is restricted by landform to the area as far west as Deer's Hill and Middletack; to the north-west and the vicinity of Greens, by woodland blocks; and to the north as far as Maryhill and the north-east, by falling landform. Trees in this area further limit visibility of the Onshore Substations. Visibility of the Onshore Substations extends north-east as far as Slacks of Cairnbanno, where the landform steadily rises; as far east as Southfield and as far south as Hillhead of Asleid and Blackhillock, where the land is more even. The land rises more steeply to the south-west and west than the south-east and east with potential visibility restricted to within Netherton and Briggs.
- 4.4.3.34 The landscape experienced in views from the LVIA study area is settled and modified by agriculture. The New Deer and Moray East substations, associated pylons and wind turbines influence the visual context of the Substation 3km study area and the nature of views experienced therein.
- 4.4.3.35 Volume 7E, Appendix 4-2, Figure 4-6 shows the landscape context of the Onshore Substations and their construction stage components.
- 4.4.3.36 Volume 7E, Appendix 4-2, Figure 4-7 indicates that visibility of the Onshore Substations will be contained by the surrounding hills and fragmented due to the rolling topography of the area. To the west, land rising to Deer Hill, Waggle Hill and the adjoining hills to the north, limits the ZTV's westwards extent. To the north and east the ZTV is less clearly defined but more fragmented. It extends across higher ground between the small valleys formed by watercourses including the Burn of Greens, Little Water and Burn of Asleid. Hills at Balquhindachy and Middlemuir constrain the ZTV's extent to the south-east. To

the south, as the valleys containing the Little Water and Burn of Asleid merge, ZTV coverage is lower. There is less relief to the landscape in the south-west containing the Burn of Stonehouse with similar ZTV coverage.

Representative viewpoints

- 4.4.3.37 The term 'viewpoint' is used to define a place from where a view is gained, and that represents specific conditions or viewers (visual receptors).
- 4.4.3.38 Viewpoints have been compiled within the 1km Buffer incorporating consultee feedback (as stated in Table 4-2), the ZTV for the Maximum Design Parameters of the Onshore Substations (Volume 7E, Appendix 4-2, Figure 4-7), identification of the landscape and visual receptors within the ZTV, further desk study through wireline analysis, and field survey observations.
- 4.4.3.39 Table 4-5 sets out the representative viewpoints within the Substation 3km study area and Volume 7E, Appendix 4-2, Figure 4-7 shows their locations. The viewpoints aim to provide:
 - A range of locations from where there may be significant effects.
 - Publicly accessible locations that take into consideration the potential number and sensitivity of viewers who may be affected;
 - Locations within areas of high landscape, scenic or recreational value;
 - Locations with potential for combined views of the Proposed Development (Onshore) with similar operational or cumulative developments;
 - A range of views that are representative of views within the Substation 3km study area and views from specific viewpoints that are illustrative of certain effects;
 - A range of viewing directions, elevations and distances (up to 3.5km from the site) to test the threshold of significance;
 - A range of viewing experience and activities (e.g. Static views, views from settlements, tourist destinations, and views from sequential points along roads and recreational routes, such as long-distance walking routes); and
 - A range of view types (e.g. Panorama, vistas and glimpses).
- 4.4.3.40 Table 4-5 lists the viewpoints considered within this chapter that are described within the baseline description.

Table 4-5: Representative viewpoints included in the LVIA

ID	Name	Easting	Northing	Receptors represented
1	Minor road east of Deer's Hill	381426	845134	Road users, residents, Undulating Agricultural Heartland LCT
2	Minor road near Maryhill	382925	845634	Road users, residents, Undulating Agricultural Heartland LCT
3	Minor road near Upperton	384182	846008	Road users, residents, Undulating Agricultural Heartland LCT
4	Minor road near Woodhead	384541	845541	Road users, residents, Undulating Agricultural Heartland LCT
5	Minor road near Upper Mains of Asleid	383604	844411	Road users, residents, Undulating Agricultural Heartland LCT
6	Minor road near North Millbrex	382180	843640	Road users, residents, Undulating Agricultural Heartland LCT
7	Minor road near Slacks of Cairnbanno	384981	846326	Road users, residents, Undulating Agricultural Heartland LCT
8	Minor Road near Hillhead of Auchreddie	386264	846862	Road users, residents, Undulating Agricultural Heartland LCT

4.4.4 Future Baseline

- 4.4.4.1 In order to understand the evolution of the baseline conditions if the Proposed Development (Onshore) were not to come forward, an assessment of the future baseline conditions has also been carried out and is described within this section.
- 4.4.4.2 Volume 7A, Appendix 7-1: Cumulative Impact Assessment Methodology provides details of the reasonably foreseeable project or development that are assumed to be fully built and in use by the time the Proposed Development (Onshore) construction starts from Q3 2027. The following reasonably foreseeable projects or developments are assumed to make up the future baseline of relevance to the Landscape and Visual topic during construction and operation and are set out in Table 4-6.

Table 4-6: Landscape Future Baseline During Construction and Operation

Planning reference	Description	Part of construction future baseline?	Part of operation future baseline?
APP/2023/2040	Denhead Solar Farm. Formation of 25MW Solar Farm, Siting of Substation, CCTV, Erection of Security Fencing, Formation of Access and Associated Infrastructure	Yes, as likely to be operational before Q3 2027.	Yes, as likely to be operational before Q3 2030/2033.
APP/2023/1454	Green Volt Offshore Wind Farm, laying of underground cables and erection of substation	Yes, for the onshore cable as installation will take place between Q3, 2025 and Q3, 2025, and it will be operational thereafter. No, for the substation, whose construction phase runs from Q3, 2025 to Q3, 2027 and it is not likely to be operational before Q3 2027.	Yes, as likely to be operational before Q3 2030/2033.
Pre-application stage	Greens Substation	No, as not likely to be operational before Q3 2027.	

4.4.4.3 Implementation of reasonably foreseeable project or development Denhead Solar Farm will result in changes to the visual amenity within 1km of the OnTI RLB. These changes will represent an increase in the baseline level of large scale energy infrastructure within the LVIA study area. This reasonably foreseeable project or development has been included as part of the future baseline and considered within this topic assessment. 4.4.4.4 Implementation of the reasonably foreseeable project or development Green Volt Offshore Wind Farm, Aberdeenshire and Greens Substation will result in changes to the landscape character of Undulating Agricultural Heartland (LCT 20) and to visual amenity within 3km of the Onshore Substations. These changes will arise from the Green Volt Application substation and Greens Application substation and will represent an increase in the baseline level of large scale energy infrastructure within the LVIA study area. As implementation of the Green Volt Application onshore cable will be underground, it will have no lasting effect on the landscape character or visual amenity and changes arising from the Green Volt Application will be due to the substation only. These reasonably foreseeable projects or developments have been included as part of the future baseline and considered within this topic assessment.

4.4.5 Data Gaps and Limitations

Graphic Production

4.4.5.1 ZTV and photomontage visualisations have specific limitations which are described in detail as part of the LVIA Methodology in Volume 7E, Appendix 4-1.

Fieldwork

- 4.4.5.2 It is not possible to visit every part of the LVIA study area when undertaking an LVIA and, therefore, some aspects of the assessment are based on desk-based study and professional experience.
- 4.4.5.3 Extensive fieldwork was carried out within publicly accessible locations throughout the LVIA study area in line with current guidance contained within GLVIA3 to inform the baseline and provide an understanding of the potential effects of the Proposed Development (Onshore). Fieldwork was undertaken during periods of clear visibility in October 2023 and February 2024.
- 4.4.5.4 For the Onshore Substations, the focus of the field survey was on the baseline character of the local landscape and its susceptibility to the change that the Onshore Substations will introduce; the visual amenity of local residents and road-users; and how their views could be affected.
- 4.4.5.5 For the OnTI, the focus of the field survey was on those physical elements of the landscape that will be physically affected during the construction phase. Consideration was also given to the visual effects on visual receptors within the Onshore Transmission Infrastructure 1km study area that could arise as a result of changes to the physical elements. The field survey allows the assessors to judge the likely scale, distance, extent and prominence of the OnTI and Onshore Substations directly.
- 4.4.5.6 The field survey provided an experience of the character areas of the LVIA study area and the verification of how these areas might be affected by the OnTI and Onshore Substations.

4.5 EIA Approach and Methodology

4.5.1 Overview

CALEDON A

4.5.1.1 This section outlines the methodology for assessing the likely significant effects on Landscape and Visual from the construction, operation and decommissioning of the Proposed Development (Onshore). Full details of the methodology, including relevant assumptions and limitations, can be found in Volume 7E, Appendix 4-1.

4.5.2 Impacts Scoped in to the Assessment

4.5.2.1 The Onshore Scoping Report was submitted to Aberdeenshire Council in December 2022. The Scoping Report set out the overall approach to assessment and allowed for the refinement of the Proposed Development (Onshore) and LVIA study area over the course of the assessment. The proposed scope of the assessment is set out in Table 4-7.

Table 4-7: Landscape and visual scope of assessment

Potential Impact	Phase	Nature of Impact
Landscape elements within the OnTI RLB	Construction	Direct
Visual amenity within 1km of the OnTI RLB	Construction	Direct
Landscape elements within the areas affected by the construction of the Onshore Substations	Construction and Decommissioning	Direct
Landscape character within 3km of the Onshore Substations	Construction, Operation and Decommissioning	Direct
Visual amenity within 3km of the Onshore Substations	Construction, Operation and Decommissioning	Direct

4.5.3 Impacts Scoped out of the Assessment

4.5.3.1 The impacts scoped out of the assessment during EIA scoping, and the justification for this, are listed in Table 4-8.

Table 4-8: Impacts Scoped Out

Potential Impact	Justification
Landscape elements within the Onshore Substations during Operation	No potential effects during this phase as the impacts of the construction phase are anticipated to be permanent.
Landscape character within 1km of the OnTI RLB during Construction, Operation and Decommissioning	No potential for significant effects on landscape character due to the underground nature of the ONEC and the limited scale and duration of associated construction/decommissioning and operational maintenance works in the context of the wider landscape character.
Visual amenity within 1km of the OnTI RLB during Operation and Decommissioning	No potential for significant effects on visual amenity due to the underground nature of the ONEC and the limited scale of associated decommissioning and operational maintenance works.
Landscape elements within the Onshore Substations during Decommissioning	No potential effects during these phases as the impacts of the construction phase are anticipated to be permanent.
Landscape, visual and cumulative impacts beyond the agreed study area boundary during Construction, Operation and Decommissioning	No potential for significant effects on landscape or visual receptors during these phases due to the limited visibility of the onshore infrastructure from the wider area.

4.5.4 Assessment Methodology

- 4.5.4.1 The project-wide generic approach to assessment is set out in Volume 1, Chapter 7: EIA Methodology. The assessment methodology for Landscape and Visual for the EIAR is consistent with that provided in the Scoping Report.
- 4.5.4.2 The methodology for the assessment of landscape and visual is set out in full in Volume 7E, Appendix 4-1. An overview is provided in the following sections.
- 4.5.4.3 The LVIA has been undertaken in accordance with best practice guidance, listed below:
 - Guidelines for Landscape and Visual Impact Assessment: Third Edition (GLVIA3) (Landscape Institute and IEMA, 2013⁵);
 - Assessing the Cumulative Impact of Onshore Wind Energy Developments (NatureScot, 2021¹⁵);

- Guidance for applicants on using the design envelope for applications under section 36 of the Electricity Act 1989 (Scottish Government, 2022¹⁶); and
- Visual Representation of Development Proposals (Landscape Institute, 2019¹⁷).
- 4.5.4.4 Broadly, the LVIA is undertaken using the following steps:
 - The features of the Proposed Development (Onshore) that may result in landscape and visual effects are described;
 - The overall scope of the assessment is defined, including the study area and range of possible landscape and visual effects;
 - The landscape baseline is established using published landscape character assessments and ZTV maps, to identify landscape receptors that may be affected, their key characteristics and their value;
 - The visual baseline is established by identifying the ZTV's extent, the visual receptors within the ZTV, the people who may be affected by the Proposed Development (Onshore), and selecting representative viewpoints for these receptors;
 - Interactions are identified between the Proposed Development (Onshore) and the identified landscape and visual receptors, to predict potentially significant effects that may arise and measures are proposed to mitigate these effects;
 - The value attached to landscape receptors and views, and the susceptibility of landscape and visual receptors to specific changes arising from the Proposed Development (Onshore) are assessed and these judgements are combined to assess the sensitivity rating of the landscape and visual receptor to the Proposed Development (Onshore);
 - An assessment of the size/scale of landscape effect, the degree to which landscape elements are altered and the extent to which the effects change the key characteristics of the landscape is undertaken, combining these judgements to assess the magnitude of change on the landscape receptor;
 - An assessment of the size/scale of visual effect, the extent to which the change would affect views, whether this is unique or representative of a wider area, and the position of the Proposed Development (Onshore) in relation to the principal orientation of the view and activity of the receptor. These judgements are combined to assess the magnitude of change on the visual receptor; and
 - The assessments of sensitivity to change and magnitude of change are combined to assess the significance of landscape and visual effects.
- 4.5.4.5 GLVIA3 sets out an approach to the assessment of magnitude of change in which the size or scale of the effect, its geographical extent and its duration and reversibility are combined in considering the magnitude of change rating. Guidance within GLVIA3 suggests that this approach is to be applied in respect of both landscape and visual receptors. Noting that GLVIA3 does not provide a prescriptive methodology, it is considered that the process of combining all three

considerations in one rating can distort the aim of identifying likely significant effects of development.

- 4.5.4.6 In this chapter, the consideration of the size or scale of the effect, its geographical extent and its duration and reversibility has been undertaken separately, by basing the magnitude of change on size or scale to determine where significant and not significant effects occur, and then describing the geographical extents of these effects and their duration and reversibility separately.
- 4.5.4.7 Duration and reversibility are stated separately in relation to the assessed effects and are considered as part of drawing conclusions about likely significance, combining with other judgements on sensitivity and magnitude, to allow a final judgement to be made on whether each effect is significant or not significant.
- 4.5.4.8 The assessment methodology utilises six scales of magnitude of change high, medium-high, medium, medium-low, low and negligible/none; which are preferred to the 'maximum of five categories' suggested in GLVIA3 as a means of clearly defining and summarising magnitude of change judgements. The assessment methodology in regard to magnitude of change used in this LVIA assessment therefore differs from the standard approach set out in Volume 1, Chapter 7: EIA Methodology.

4.5.5 Approach to Cumulative Effects

- 4.5.5.1 The Cumulative Impact Assessment (CIA) assesses the impact associated with the Proposed Development (Onshore) together with other relevant plans, projects and activities. Cumulative effects are therefore the combined effect of the Proposed Development (Onshore) in combination with the effects from a number of different projects, on the same receptor or resource.
- 4.5.5.2 The approach to the CIA for the Landscape and Visual topic follows the process outlined in Volume 7E, Appendix 4-1: Landscape and Visual Impact Assessment Methodology, Section 1.3 Cumulative, Landscape and Visual Effects.
- 4.5.5.3 The list of relevant developments for potential inclusion within the CIA is outlined in Volume 7A, Appendix 7-1: Cumulative Impact Assessment Methodology.
- 4.5.5.4 Developments which are located within the Onshore Transmission Infrastructure 1km study area or within the Substation 3km study area have the potential to result in a cumulative effect. Developments which are either operational or in the decommissioning stage are considered to be part of the baseline and are not considered within the CIA.

4.5.6 Embedded Mitigation

- 4.5.6.1 Where possible, mitigation measures will be embedded into the design of the Proposed Development (Onshore).
- 4.5.6.2 A key mitigation of potential landscape and visual effects was the Applicant's decision to underground the grid connection, which has avoided the need for pylon mounted overhead transmission lines.
- 4.5.6.3 Where embedded mitigation measures have been developed into the design of the Proposed Development (Onshore) with specific regard to landscape and visual receptors, these are described in Table 4-9. The impact assessment presented in Sections 4.7 to 4.11 take into account this embedded mitigation.



Table 4-9: Embedded Mitigation

Code	Mitigation Measure	Securing Mechanism
M-76	Use of trenchless crossing techniques at key crossing areas including: - Class A roads; - Protected woodlands; - Drains adjacent to A roads; - Major watercourses; - Water Framework Directive (WFD) Waterbodies; - Salmon Watercourses; and - Drainage features (ditches / drains) or minor watercourses adjacent to major watercourses. The micro-routing of ONEC to avoid loss of hedgerows and trees where practical.	Outlined within the Outline CEMP and secured by condition attached to the PPP.
M-77	Location of construction compounds to avoid loss of hedgerows and trees where practical.	Outlined within the Outline CEMP and secured by condition attached to the PPP.
M-78	Compensatory planting of removed trees and ecologically notable hedgerows within the ONEC is to be implemented during or at end of construction period.	Outlined within the Outline CEMP and secured by condition attached to the PPP.
M-79	Implementation of mitigation planting around the Onshore Substations including native hedgerows, and native deciduous and mixed native woodland planting for screening. Some planting to be implemented in advance of the start of construction activity and some at the end of construction of Phases 1 and 2.	Route design / Design Principles and planting undertaken in accordance with landscape mitigation proposals outlined within the EIAR, secured via PPP condition which requires a Landscape Management



Code	Mitigation Measure	Securing Mechanism
		Plan to be provided at Approval of Matters Specified in Conditions stage.
M-92	Works around Hill of Scattery woodland strip will adhere to the following principles:	
	 Establish root and tree canopy protection zones for all trees not being removed to minimize soil compaction and impact on trees remaining in situ. Reduction in corridor width: The working corridor width will be reduced to 50m. 	Design Principles through a CMS secured through a condition attached to the PPP.

4.6 Key Parameters for Assessment

CALEDON A

- 4.6.1.1 Volume 1, Chapter 4: Proposed Development Description (Onshore) details the parameters of the Proposed Development (Onshore) using the Rochdale Envelope approach. This section identifies those parameters during construction, operation and decommissioning relevant to potential impacts on landscape and visual.
- 4.6.1.2 The worst case assumptions with regard to landscape and visual are summarised in Table 4-10.

4.6.2 Proposed Development (Onshore) Phasing

- 4.6.2.1 As described in Volume 1, Chapter 5: Proposed Development Phasing, three possible construction programme scenarios have been identified for the Proposed Development (Onshore).
- 4.6.2.2 The worst case assumptions with regard to the consideration of construction scenarios are also summarised in Table 4-10.
- 4.6.2.3 The assessment of impacts presented in Section 4.7 considers the sequential scenario, with regards to the Landfall Site and ONEC construction works; and the enabling scenario, with regards to the construction works for the Onshore Substations.
- 4.6.2.4 The assessment in Section 4.7 considers the sequential scenario, for construction of the Landfall Site and ONEC due to its longer construction window (7 years) compared to the that of the enabling and concurrent scenario.
- 4.6.2.5 It is anticipated that Phase 1 of construction of the Landfall Site and ONEC will take place from Q3 2027 to Q4 2030 with reinstatement and landscaping beginning in Q1 2030 and lasting for six to twelve months. Construction of Phase 2 of the Landfall Site and ONEC is anticipated to take place from Q3 2030 to Q4 2033 with reinstatement and landscaping over a similar period starting at Q1 2033.
- 4.6.2.6 The enabling scenario is considered the worst case scenario, with regards to the Onshore Substations construction works as, assuming there is no gap period between Phase 1 and Phase 2 of construction, it would result in a six and a half year duration of construction works. This is shorter than under the Sequential scenario and provides less time for mitigation planting to establish.
- 4.6.2.7 It is anticipated that Phase 1 of construction will take place from Q3 2027 to Q4 2030 with reinstatement and landscaping beginning in Q3 2030 and lasting for three to six months. Construction of Phase 2 is anticipated to take place from Q3 2031 to Q4 2033 with reinstatement and landscaping over a similar period starting at Q1 2033. While these dates provide the basis for the assessment, at this stage they have not been finalised and are considered a best assumption.
- 4.6.2.8 Advanced mitigation planting is proposed to take place during the winter prior to the start of construction in Q3 2027 within a four month window during Q1 and Q2 2027, when plants are dormant, in order to make use of the following growing season. Mitigation planting is anticipated to take place during the reinstatement and landscaping periods for each phase.
- 4.6.2.9 The assessment in Section 4.7 considers the following scenarios for construction of the Onshore Substations:
 - Construction of Onshore Substations (identified as A and B) (without any mitigation by advanced planting);
 - Operation of Onshore Substations A and B (with 6 years of advanced planting growth and 3 years of post-Phase 1 planting growth but no mitigation by post-construction planting); and
 - Operation of Onshore Substations A and B (21 years of advanced planting growth, 18 years of growth post-Phase 1 of construction and 15 years of postconstruction planting).



Table 4-10: Worst Case Assessment Scenario Considered for Each Impact as Part of the Assessment of Likely Significant Effects

Potential Impact	Assessment Parameter	Explanation
Construction		
Landscape elements within the OnTI RLB	Onshore export cable length between Transition Joint Bay (TJB) at the Landfall Site and the Onshore Substations: 37km (approximately).	
Visual amenity within 1km of the OnTI RLB		
	Four cable trenches, each containing a single duct holding three cables in trefoil formation.	
	4m wide cable trenches.	
	7.5m separation between trefoils in each pair of circuits.	These parameters represent the maximum potential alteration to the physical elements of the landscape (the worst case design parameters) and the ensuing worst case consideration of potential visual effects of
	20m separation between each pair of circuits.	
	100m working corridor width. 7 year construction window (Q3, 2027 to Q4 2033).	the Onshore Export Cable Route and Landfall Site during construction.
	Removal of landscape elements within the Onshore Export Cable Route during the 7year construction window comprising agricultural land, hedgerow, tree groups, and woodland.	
	Trenchless installation (Horizontal Directional Drilling (HDD) ⁱ) where the Onshore Export Cable Route crosses the Moray East onshore export cable, Class A	

ⁱTrenchless crossing techniques hereafter referred to as 'HDD' in this chapter of the EIAR.



Potential Impact	Assessment Parameter	Explanation
	roads and adjoining drains, protected woodlands, major watercourses and Water Framework Directive (WFD) Waterbodies.	
	Reinstatement of hedgerow and compensatory planting of tree groups, and woodland within the 100m working corridor width during two periods of six to twelve months from Q3 2030 to Q4 2033 and starting in Q1 2033.	
Landscape elements within the Onshore Substations	Construction activity and works including construction compounds and facilities, storage areas, the presence of plant, access routes, earthworks, Sustainable Drainage Systems (SuDS) and construction of emerging structures within a spatial envelope with a maximum 250m width, 400m length and 15m height above the Finished Floor Level (FFL) 108.075m Above Ordnance Datum (AOD).	These parameters represent the maximum potential alteration to the physical elements of the landscape (the worst case design parameters) and the ensuing worst case consideration of the potential visual effects of the Onshore Substations during construction.
Landscape character within 3km of the Onshore Substations		
Visual amenity within 3km of the Onshore Substations		
Q1 2033) Advanced 2027, bef Screen m Substatio earthwork	6.5 year construction window (Q3, 2027 to Q1 2033).	
	Advanced mitigation planting during Q1 2027, before construction.	
	Screen mixed woodland to north of Onshore Substations planted at the end of Phase 1 earthworks in Q4 2030; and after end of construction of both Onshore Substations,	



Potential Impact	Assessment Parameter	Explanation
	within a six to twelve month window from Q1 2033 to Q4 2033.	
Operation		
Landscape character within 3km of the Onshore Substations	Operation of structures within a spatial envelope with a maximum 250m width, 400m length and 15m height above the FFL 108.075m AOD and associated access track earthworks, SuDS and mitigation planting beyond this area. There may also be a surplus of soil following the completion of the earthworks.	These parameters represent the maximum potential alteration to the physical elements of the landscape (the worst case design
Visual amenity within 3km of the Onshore Substations		parameters) and the ensuing consideration of the worst case potential visual effects of the Onshore Substations during operation.
Operation of Onshore Substations A and B		Section 4.7 assumes, as a worst case scenario, there is no screening due to soil mounding, as there is insufficient information available about the quantity of soil or where it would be placed, at this stage.
Decommissioning		
Landscape character within 3km of the Onshore Substations Visual amenity within 3km of the Onshore	Decommissioning of structures within a spatial envelope with a maximum 250m width 400m length and 15m height above FFL 108.075 m AOD. Section 4.7 assumes that underground infrastructure will be left in place to avoid unnecessarily disturbing habitats and that all structures above ground level will be completely removed, the Onshore Substation and foundations broken up and that the Onshore Substations will be reinstated to their original condition.	These parameters represent the maximum potential alteration to the physical elements of the landscape (the worst case design parameters) ensuing consideration of the worst case potential visual effects of the Onshore Substations during their decommissioning.
Substations		

4.7 Potential Effects

CALEDON A

4.7.1 Landscape elements within the OnTI RLB during construction

- 4.7.1.1 The effects of the OnTI on landscape elements during construction are assessed in this section. Due to the scale of the OnTI RLB, the assessment is broken down into sections relating to the relevant LCT. As the detailed design of the Onshore Export Cable Route within the OnTI has not concluded at this stage, the assessment of potential effects on landscape elements assumes a worst case where all the landscape elements within the OnTI RLB may potentially be affected.
- 4.7.1.2 Volume 7E, Appendix 4-2, Figure 4-4 shows the sections of the OnTI RLB in the context of each LCT where they are contributary components. The main landscape elements within each section are identified and assessed below.

Section 1: Cliffs and Rocky Coast - Aberdeenshire (LCT 10)

Baseline

- 4.7.1.3 A fragmented and rocky coastline with high headlands, sheer cliffs, occasional narrow inlets and sheltered bays characterises the LCT. There are caves, jagged islets, arches, dens, and deep rocky ravines carved by water courses that contain grassland and scrub. Sheltered areas contain grasses and occasional gorse. Rough grassland, gorse and coastal heath covers some headlands with farmland in simple patterns enclosed by gorse hedging typically extending to the cliff edge. The open and windswept area has few trees. Distinctive, small former fishing villages associated with inlets feature a distinctive tight pattern of cottages. At the mouth of the River Deveron are the historic coastal towns of Banff and Macduff, which includes the part of the Duff House Garden and Designed Landscape (GDL). Portsoy includes 17th to 18th Century traditional buildings and a 17th Century harbour. There are sparse built features beyond the tightly contained fishing villages, a strong remote guality and a strong sense of naturalness where development is absent. Limited offshore shipping is visible. The North Sea coastal path extends along this coast.
- 4.7.1.4 The key characteristics of the LCT are:
 - Fragmented coastline featuring caves, numerous jagged islets and arches.
 - Raised beaches, some with distinctive small former fishing villages;
 - Colonisation of every available sheltered area by short creeping grasses and wind pruned gorse;
 - Deep rocky ravines cut by small water courses (known locally as dens) with lush vegetation;
 - Farmland extending to cliff edges;

- Historic towns, often where rivers join the sea; and
- Lighthouses, and ruined castles and coastal churches occur infrequently along the coast and form landmark features seen from roads and coastal footpaths.
- Absence of development along more remote stretches of coast.
- 4.7.1.5 Within the Cliffs and Rocky Coast Aberdeenshire (LCT 10), the OnTI RLB encompasses land currently in agricultural use. Hedgerows align the B9139 and enclose the fields adjoining the westbound carriageway. This section of the OnTI RLB does not contain trees or woodland. A commitment has been made to align the OnTI with hedgerow and reduce hedgerow removal where possible.
- 4.7.1.6 Volume 7E, Appendix 4-2, Figure 4-4a shows the agricultural land and hedgerows within this section.

Agricultural land

Description of potential effect

4.7.1.7 Temporary removal of land from agricultural use to facilitate construction of the OnTI, including the Landfall Site and an OnTI RLB construction compound. Up to approximately 88ha of agricultural land will be temporarily removed to facilitate construction of the OnTI within this section.

Identification of sensitivity

4.7.1.8 Agricultural land within this section has been attributed a medium sensitivity rating, reflecting that it has medium-high value and medium-low susceptibility to change, for the reasons set out below.

Value

4.7.1.9 This section is located within the locally designated North Aberdeenshire Coast SLA, indicating a higher quality and value to the area. The special qualities of the North Aberdeenshire Coast SLA mainly derive from the abrupt coastal edge, associated coastal features and settlements and its elemental qualities. Its special qualities do not include agricultural land, which is widespread and commonplace throughout this part of north-east Aberdeenshire. However, land within this section is representative of the key characteristic of "Farmland extending to cliff edges".

Susceptibility

4.7.1.10 Arable crops and grassland are considered relatively easy to replace and agricultural land is readily returned to agricultural use. The level of existing disruption by crop cultivation and the widespread presence of agricultural land as a landscape element and the ease with which these types of vegetation can be reinstated, means that its susceptibility is considered to be medium-low.

- 4.7.1.11 A low magnitude of change will occur as a minor part of a key landscape element will be altered.
- 4.7.1.12 Volume 7E, Appendix 4-2, Figure 4-4a shows the agricultural land within this section.

- 4.7.1.13 Open cut trenching will be used within this section of the OnTI RLB. The construction works will all be at or below ground level with machinery forming the most visible elements. The 20,000m² HDD construction working area and a construction compound will be located within this section of the OnTI RLB. These compounds will have more of an impact on the agricultural land than the open cut trenching owing to the laying of a temporary hard surface, as well as the stripping and storage of topsoil. Reinstatement will involve the removal and disposal of the temporary hard surface and the relaying of the topsoil to bring the agricultural land back into production.
- 4.7.1.14 The construction works will appear relatively small in scale and contained within landscape characterised by farming. The disturbance of soil and presence of machinery is a common feature in relation to agricultural land-uses. The construction works will occur on land that is routinely worked by machinery and the construction works will typically not have a sufficient influence to redefine the character of these landscapes.
- 4.7.1.15 Construction of the Landfall Site, Transition Joint Bays (TJBs), haul roads and OnTI within the OnTI RLB will affect a relatively small area of land. This restricted area of land will limit the impacts of the OnTI on landscape character to those localised areas at and around the Landfall Site and the ONEC.

Significance of effect

4.7.1.16 Considering the medium sensitivity of agricultural land within this section and the low magnitude of impact, the overall effect of the OnTI during construction is considered to be minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

Hedgerows

Description of potential effect

4.7.1.17 Removal of hedgerows along the B9139 and within field boundaries adjoining the B9139 to the south and north of Dallachy Cottages to facilitate construction of the OnTI.

Identification of sensitivity

4.7.1.18 Hedgerows have been attributed a medium sensitivity rating, reflecting that they are of medium value and medium-low susceptibility to change, for the reasons set out below.

Value

4.7.1.19 Typically, hedgerows are an important landscape element that contributes to the rural character of a landscape by providing structure, containment and shelter. Hedgerows are not a key characteristic of the landscape within this section nor associated with a special quality of the North Aberdeenshire Coast SLA. There is little hedgerow within this section although where it is present along the road corridor it is of importance.

Susceptibility

- 4.7.1.20 The susceptibility of hedgerows to the OnTI is related to their condition, maturity, the perceived overtness of their loss and the duration required for their reinstatement. Where hedgerows are in good condition or are mature a higher susceptibility (medium to high) would apply as their loss would be more apparent and compensatory planting would require longer to reach a comparable condition.
- 4.7.1.21 Hedgerows within this section appear to be well-maintained and are deemed to be of medium quality overall. As hedgerows are scarce within this section, any loss of hedgerow will be readily apparent. However, the relative ease with which sections of hedgerow lost to construction works will be reinstated after construction reduces their susceptibility to the OnTI.

Identification of magnitude

- 4.7.1.22 A low magnitude of change will occur as a minor part of a key landscape element will be altered.
- 4.7.1.23 Volume 7E, Appendix 4-2, Figure 4-4a shows the hedgerows within this section.
- 4.7.1.24 Up to approximately 200m of hedgerow along the B9139 and an adjoining 150m of hedgerow forming internal field boundaries south of the B9139 and 556m north of Dallachy Cottages will potentially be removed to facilitate construction of the OnTI. The actual area of lost hedgerow is expected to be much lower when the final cable route is identified within the RLB. This represents a comparatively small proportion of hedgerow within the LCT. The loss of these lengths of hedgerow will be readily apparent from the road but the effect will be highly localised. As there is little hedgerow within the LCT and its contribution to the landscape character is relatively low, the removal of these lengths of hedgerow is considered to result in little overall change. Hedgerows will be reinstated where possible following completion of the OnTI and is expected to take place during Q1 2030 for a period of three to six months.

Significance of effect

4.7.1.25 Taking account of the medium sensitivity of hedgerow within this section and the low magnitude of change it will undergo the effect of the OnTI during construction will be minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

Section 2: Gently Undulating Coastal Farmland (LCT 14)

Baseline

4.7.1.26 The LCT comprises two areas on either side of the Deveron valley. The LCT's landform is gently undulating with extensive shallow basins and low rounded ridges. More rounded and distinct small hills occur close to the coast and in some areas to the east. Small burns flowing to the coast carve the landscape. Landcover predominantly comprises large arable fields enclosed by post and wire

fences, low and often broken boulder dykes and scattered hedgerows with clumps of gorse and sparse trees. The amount of tree cover is low with small broadleaved groups around farms and villages, occasional roadside planting and coniferous plantations within shallow basins and on hillsides. Rough grassland with gorse and heather covers the tops of higher hills and more knobbly hills at the coast. The village of Fordyce lies at the foot of Durn Hill with Cornhill also close to the southern boundary with evenly dispersed farms throughout, some with large outbuildings, grain silos or single WTGs. A former airfield at Boyndie includes a wind farm which is prominent inland. The A98, A95 and overhead transmission lines run through the LCT. The open low-lying landscape has a strong sense of expansiveness that is emphasised by large skies and sea views.

4.7.1.27 The key characteristics of the LCT are:

CALEDON A

- Very gently undulating broad shallow valleys and low ridges. More rounded and distinct small hills close to the coast;
- Small insignificant burns running north to the coast;
- Simple pattern of large, geometric, mainly arable fields, pinky-brown when ploughed;
- Few field boundaries;
- Few trees, limited to small clumps of broadleaves around farms and villages and ash planted along roadsides in some areas;
- Blocks of forestry within shallow basins and on hillsides;
- Fragments of moss and rushy pastures, studded with birch;
- Even distribution of farmsteads, and only occasional villages;
- Views of the sea and landmark hills; and
- General feeling of openness.
- 4.7.1.28 Within the Gently Undulating Coastal Farmland (LCT 14), the OnTI RLB encompasses land currently in agricultural use and infrequent lengths of hedgerow, to the east of Thriepland; along a minor road south-west of Boyndie; and along the A98, with much shorter lengths bounding fields adjoining the westbound carriageway. Further lengths of hedgerow lie south of Hill of Tipperty, bounding the field west of Mallyrust Farm; along the A97, south of Mallyrust Farm; and along a south-easterly aligned field boundary south of Mill of Ryland.
- 4.7.1.29 Tree cover is generally limited to small clumps around farms and villages, with linear tree groups along roadsides in places. Tree groups aligning the A97 just extend into the OnTI RLB at Mallyrust Farm, with hedgerow trees extending westwards from the farm.
- 4.7.1.30 There is very little woodland within this section. Adjoining the east of the OnTI RLB at Boyndie is a distinctive semi-mature deciduous woodland of Silver Birch, Rowan, Ash and Willow. There are two smaller areas of similar mixed deciduous woodland at Inchdrewer Hill with another adjoining the OnTI RLB to the south.

Coniferous plantation woodland traverses the OnTI RLB with a similar small block nearby, west of Greenlaw and the B9121.

4.7.1.31 Volume 7E, Appendix 4-2, Figure 4-4b shows the agricultural land, hedgerows, tree groups and woodland within this section.

Agricultural land

Description of potential effect

4.7.1.32 Removal of land from agricultural use within a relatively narrow strip from the vicinity of Boyndie to the vicinity of Greenlaw during construction of the OnTI. Up to approximately 142ha of agricultural land will be removed to facilitate construction of the OnTI.

Identification of sensitivity

4.7.1.33 Agricultural land has been attributed a medium sensitivity rating, reflecting that it has medium value and low susceptibility to change, for the reasons set out below.

Value

4.7.1.34 This section of the OnTI RLB is not designated and is largely typical of farmland within north-east Aberdeenshire. Agricultural land is a widespread and commonplace feature within the wider landscape context. This section is characteristic of the area's "Simple pattern of large, geometric, mainly arable fields, pinky-brown when ploughed" with "Few field boundaries".

Susceptibility

4.7.1.35 Arable crops and grassland are considered relatively easy to replace and agricultural land is readily returned to agricultural use. The level of existing disruption by crop cultivation and the widespread presence of agricultural land as a landscape element and the ease with which these types of vegetation can be reinstated, means that susceptibility is considered to be low.

- 4.7.1.36 A low magnitude of change will occur as a minor part of a key landscape element will be altered.
- 4.7.1.37 Volume 7E, Appendix 4-2, Figure 4-4b show the agricultural land, hedgerows, tree groups and woodland within this section.
- 4.7.1.38 Open cut trenching will be used within the OnTI RLB, with trenchless technique being implemented where the corridor crosses the Burn of Brydock and Burn of Brydon. Open cut trenching will disturb the agricultural land within a 100m working width. This section may contain construction compounds and crossing compounds either side of the Burn of Brydock and Burn of Brydon. These compounds will have more of an impact on the agricultural land than the open cut trenching owing to the stripping and storage of topsoil and laying of a temporary hard surface.
- 4.7.1.39 Trenching, construction of haul roads, and the presence of soil bunds and construction compounds within the OnTI RLB will form a relatively small-scale

and localised disturbance to the agricultural land. After the cable has been laid, the trench will be backfilled, and temporary working areas and haul roads removed. The agricultural land will then return to its previous use. Reinstatement is therefore considered relatively straightforward with minimal disruption required to return the land to its previous use.

Significance of effect

4.7.1.40 Taking account of the medium sensitivity, in landscape and visual terms, of agricultural land within this section and the low magnitude of change it will undergo, the effect of the OnTI during construction will be minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

Hedgerows

Description of potential effect

4.7.1.41 Removal of hedgerows to facilitate construction of the OnTI.

Identification of sensitivity

4.7.1.42 Hedgerows have been attributed a medium-low sensitivity rating, reflecting that they are of medium-low value and low susceptibility to change, for the reasons set out below.

Value

4.7.1.43 Hedgerow is a relatively infrequent landscape element within this section that generally aligns roads, notably the A98 and A97, and less frequently bounds fields. Typically, hedgerow is an important contributor to the rural character of the rolling landscape that provides structure, containment and shelter but is not a key characteristic of this area's landscape. "Few field boundaries" characterise the area.

Susceptibility

4.7.1.44 Hedgerows within this section are well established, with a minority being well maintained and deemed to be of good quality while most of the hedgerow in this section is considered medium to poor quality overall. Typically, hedgerow is species poor, often intermittent and not well managed, the relative ease with which sections of hedgerow lost to construction works will be reinstated post construction reduces their susceptibility to the OnTI.

- 4.7.1.45 A medium-low magnitude of change will occur as a minor part of a key landscape element will be altered.
- 4.7.1.46 Volume 7E, Appendix 4-2, Figure 4-4b shows the hedgerows within this section.
- 4.7.1.47 Hedgerows will be removed along the boundaries of fields south of the B9139 (approximately 161m, 159m and 128m), along the minor road linking the B9139 and Boyndie (approximately 248m) and along both sides of the minor road running south-west from Boyndie (approximately 537m and 389m). Shorter lengths forming interior boundaries of fields adjoining the A98 (approximately

64m and 35m) will also be removed. Further removals will occur including part of the access to Ballyrust Farm (approximately 132m, 39m, 127m) and along a field boundary crossing Hill of Itlaw (approximately 422m).

- 4.7.1.48 The decrease in hedgerows within this section will be noticeable due to the increasingly flat landscape towards the coastline and the relatively high proportion aligning roads. Towards the B9139 the removal of hedgerows will be readily apparent from the road. However, topography, the larger scale of the landscape and the very low amount of hedgerow in the area will moderate the impact of their removal. The removal of hedgerows aligning the minor road from Boyndie to the A98 will be readily apparent from the road but largely imperceptible elsewhere due to local topography and intervening landscape elements including trees and buildings. Other sections of hedgerow that will be removed define internal field boundaries away from the A98 and B9121. While perceptible, the removal of these hedgerows will be less apparent.
- 4.7.1.49 In general, hedgerows aligning roads are highly visible and exert a reasonably strong influence on the landscape character within their immediate vicinity that reduces substantially elsewhere. For this reason, the removal of hedgerows to facilitate construction of the OnTI will have little effect on the landscape character of the area overall. Hedgerows will be reinstated where possible following completion of the OnTI and is expected to take place during Q1 2030 for a period of three to six months.

Significance of effect

4.7.1.50 Taking account of the medium-low sensitivity of hedgerow within this section and the medium-low magnitude of change it will undergo the effect of the OnTI during construction will be minor and not significant. This temporary, mediumterm adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

Tree groups

Description of potential effect

4.7.1.51 Removal of tree groups within the OnTI RLB.

Identification of sensitivity

4.7.1.52 Tree groups have been attributed a medium sensitivity rating, reflecting that they are of medium value and medium susceptibility to change, for the reasons set out below.

Value

4.7.1.53 Trees are valued for their importance in mitigating climate change impacts and while there are few trees within the Gently Undulating Coastal Farmland (LCT 14), they make an important contribution to the historical pattern and landscape character of the area. Small groups of native broadleaved trees adjoining Boyndie and at Inchdrewer Hill are characteristic features of this landscape that provide structure and enclosure. These generally appear to be mature and in good condition. Tree removals to enable construction of the OnTI will be replaced

somewhere within the OnTI red line boundary as part of the mitigation proposals.

Susceptibility

4.7.1.54 Trees are more susceptible to the impact of the OnTI due to the time required for compensatory tree planting to establish. However, tree removals to enable construction of the OnTI will be mitigated in agreement with Aberdeenshire Council, either through compensatory planting within the OnTI RLB, locations outside of the OnTI RLB or via another agreed process. Tree groups within this section appear to be mature and are deemed to be of good quality overall. As there are few trees within this section, any loss will be observable and will be relatively slow to reinstate.

Identification of magnitude

- 4.7.1.55 Volume 7E, Appendix 4-2, Figure 4-4b shows the tree groups within this section.
- 4.7.1.56 A low magnitude of change will occur as the OnTI RLB has been designed to avoid trees and woodland and tree removals within this section will be limited to a line of mature native broadleaved hedgerow trees west of Ballyrust Farm, comprising an approximately 140m length of mature trees. This group represents a very small proportion of the trees within the LCT. While the removal of this group will be noticeable in the immediately surrounding area and along the A97 it makes a limited contribution to the landscape character. This removal will not alter the current balance of landscape elements due to sparse and well dispersed tree cover within the wider landscape. Its loss will not be sufficiently extensive to alter the baseline character.

Significance of effect

4.7.1.57 Taking account of the medium sensitivity of trees within this section and the low magnitude of change they will undergo the effect of the OnTI during construction will be minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

Woodland

Description of potential effect

4.7.1.58 Removal of woodland within the OnTI RLB. It should be noted that, as the Onshore Cable Corridor has not yet been designed, there are opportunities for the Onshore Cable Corridor Route to be located away from woodland. The actual effects of the Onshore Cable Corridor Route are likely to be less than potential effects assessed here as the assessment assumes the removal of any woodland within the OnTI RLB.

Identification of sensitivity

4.7.1.59 Woodland has been attributed a medium sensitivity rating, reflecting that they are of medium-low value and medium susceptibility to change, for the reasons set out below.

Value

4.7.1.60 Woodland is valued for their importance in mitigating climate change impacts and while there is little woodland within the Gently Undulating Coastal Farmland (LCT 14), is contributes to the historical pattern and landscape character of the area. Blocks of conifer forestry are characteristic features of this landscape that provide structure and enclosure.

Susceptibility

4.7.1.61 Woodlands are more susceptible to the impact of the OnTI due to the time required for compensatory tree planting to establish. However, tree removals to enable construction of the OnTI will be replaced somewhere within the OnTI RLB as part of the mitigation proposals. Woodland within this section appears to be mature and is deemed to be of good quality overall. As there is little within this section, any loss will be observable and will be relatively quick to reinstate due to their coniferous nature.

Identification of magnitude

- 4.7.1.62 Volume 7E, Appendix 4-2, Figure 4-4b shows the woodland within this section.
- 4.7.1.63 A low magnitude of change will occur as the OnTI RLB has been designed to avoid woodland and tree removals within this section will be limited to a small part of mixed broadleaved woodland at Inchdrewer Hill (approximately 1,150m²) and non-native conifer woodlands along the field boundary and forming a nearby block at Greenlaw. A small proportion of one broadleaved woodland lies within the OnTI RLB while the other two adjoin it and may be affected. Up to a 440m length (approximately) of the linear block of conifers and 1,357 m² (approximately) of the woodland block may be removed.
- 4.7.1.64 The woodland within this section represents a small proportion of the trees within the LCT. Additionally, the coniferous nature of trees at Greenlaw mean that they are relatively easily and quickly replaced. The removal of woodland within this section will be noticeable in the immediately surrounding area but will not alter the current balance of landscape elements due to sparse and well dispersed tree cover within the wider landscape. These losses will not be sufficiently extensive to alter the baseline character. Tree removals to enable construction of the OnTI will be replaced somewhere within the OnTI RLB as part of the mitigation proposals.

Significance of effect

4.7.1.65 Taking account of the medium sensitivity of woodland within this section and the low magnitude of change it will undergo the effect of the OnTI during construction will be minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

Section 3: Farmed and Wooded River Valleys (LCT 32)

Baseline

CALEDON A

- 4.7.1.66
 - The LCT comprises the relatively shallow valley of the River Bogie and the deeper valleys of the Rivers Deveron and Ythan. Broad rolling hills strongly contain the wide valley of the River Deveron, for much of its length. The valley contains the estate policies of Duff House, Forglen and Netherdale. The LCT is largely farmed with mixed pasture and arable fields covering the flat floodplain and lower valley sides where mixed woodland, often comprising policy woodlands, are characteristic of this landscape. Woodland is more mixed on higher slopes and hill tops. Small towns are concentrated at river confluences and key bridging points. Villages lie in the sheltered valleys with Fyvie above the Ythan and the large market town of Turriff, on a bluff above River Deveron. Slopes overlooking the valleys are well settled with relatively large farms and evenly dispersed farms lie on lower slopes and terraces. Roads run alongside the rivers, with the A947 being a busy arterial route between Aberdeen and Banff aligning the Burn of Turriff. There is a sense of seclusion due to the level of development and quietness of the roads. The landscape is attractive with a high degree of integrity. There is a small amount of wind development within these scenic valleys with more located in adjoining LCTs visible from this landscape.
- 4.7.1.67 The key characteristics of the LCT are:
 - The River Deveron, aligned through a relatively broad valley strongly contained by rolling hills;
 - Wooded policies and small parklands in places;
 - Little marginal or wetland vegetation on the floodplains, with farmland abutting both rivers except where semi-natural woodland comes down to the riverbanks in more inaccessible, steep-sided areas;
 - Mixed woodland with policies of designed landscapes extending onto the rolling hills;
 - Well settled hill slopes overlooking the valleys with relatively large farms;
 - Villages and large market towns;
 - Castles, mansion houses and historic built features; and
 - Quiet roads and paths giving a sense of seclusion, contrasting with the busy A947 Aberdeen to Banff arterial route.
- Within the Farmed and Wooded River Valleys (LCT 32), the OnTI RLB 4.7.1.68 encompasses land currently in agricultural use and two lengths of hedgerow: one along the B9121 at Greenlaw and another, along a minor road between Breedless and Holm. A further hedgerow adjoins the southern boundary of the OnTI RLB. Non-native coniferous linear woodland also runs along the B9121 at Greenlaw. Deciduous woodland runs along the River Deveron, forms the adjoining Haugh of Scattertie and forms a long linear block north of Hill of Scatterty. To the north of the OnTI RLB is Holm Wood, a long-established

woodland of plantation origin with another smaller wood, to the south along with the Wood of Shaws, an ancient woodland of semi-natural origin.

4.7.1.69 Volume 7E, Appendix 4-2, Figure 4-4c shows the agricultural land, hedgerows and woodland within this section. No tree groups lie within this section.

Agricultural land

Description of potential effect

4.7.1.70 Temporary removal of land from agricultural use. Up to approximately 77ha of agricultural land will be temporarily removed to facilitate construction of the OnTI.

Identification of sensitivity

4.7.1.71 Agricultural land in this section has been attributed a medium-low sensitivity rating, reflecting that it has medium value and low susceptibility to change, for the reasons set out below.

Value

- 4.7.1.72 This section lies within the Deveron Valley SLA, indicating a higher quality and value to this area. However, the special qualities of the SLA do not include agricultural land, which is widespread and commonplace throughout this part of north-east Aberdeenshire. The special qualities of the Deveron Valley SLA mainly derive from the continuous valley landscape, which forms a contained setting for settlements, estates and houses along its length.
- 4.7.1.73 Land within this section of the OnTI RLB is representative of the key characteristic of "Little marginal or wetland vegetation on the floodplains, with farmland abutting both rivers except where semi-natural woodland comes down to the riverbanks in more inaccessible, steep-sided areas."

Susceptibility

4.7.1.74 Arable crops and grassland are considered relatively easy to replace and agricultural land is readily returned to agricultural use. The level of existing disruption by crop cultivation and the widespread presence of agricultural land as a landscape element and the ease with which these types of vegetation can be reinstated, makes for lower susceptibility.

- 4.7.1.75 A low magnitude of change will occur as a minor part of a key landscape element will be altered.
- 4.7.1.76 Volume 7E, Appendix 4-2, Figure 4-4c shows the agricultural land within this section.
- 4.7.1.77 Open cut trenching will be used within most of this section of the OnTI RLB, with HDD being implemented at the crossing with the River Deveron and where the OnTI RLB traverses a linear tree group further east. Open cut trenching will perceptibly disturb the agricultural land within a 100m working width and HDD compounds will be located either side of the Deveron River and linear woodland, further east.

- 4.7.1.78 Trenching, construction of haul roads, and the presence of soil bunds and construction compounds within the OnTI RLB will form a relatively small-scale and localised disturbance to the agricultural land. Where trenchless techniques are to be used, this disturbance will occur underground with no visible impact on the landscape character of the LCT. After the cable has been laid, the trench will be backfilled, and temporary working areas and haul roads removed. The agricultural land will then return to its previous use.
- 4.7.1.79 While the area of agricultural land lost to construction activity will be readily observable, its contribution to the overall landscape character is small, due to the widespread presence of agricultural land. Within this context, the removal of these areas of land from agricultural use is considered negligible.

Significance of effect

4.7.1.80 Taking account of the medium-low sensitivity of agricultural land within this section and the low magnitude of change it will undergo the effect of the OnTI during construction will be minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

Hedgerows

Description of potential effect

4.7.1.81 Removal of hedgerow to facilitate construction of the OnTI. It should be noted that, as the Onshore Cable Corridor has not yet been designed, there are opportunities for the Onshore Cable Corridor Route to be located away from hedgerows. The actual effects of the Onshore Cable Corridor Route are likely to be less than potential effects assessed here as the assessment assumes the removal of any hedgerows within the OnTI RLB.

Identification of sensitivity

4.7.1.82 Hedgerows have been attributed a medium-low sensitivity rating, reflecting that they are of medium-low value and low susceptibility to change. Reasoning for this sensitivity rating is given below.

Value

4.7.1.83 Hedgerow is particularly sparse within this section and is restricted to two roadside lengths along a minor road. Hedgerows provide less structure and containment to the more open landscape here, and their contribution to its rural character is weaker than within the LCTs 14 and 32.

Susceptibility

4.7.1.84 This section's hedgerows are deemed to be of generally good quality overall and their loss may be relatively easily missed due to the already low levels of hedgerow. For this reason, and as hedgerow within this section will be relatively easily reinstated post construction, their susceptibility is considered to be lower.

Identification of magnitude

4.7.1.85 A low magnitude of change will occur as a minor part of a key landscape element will be altered.

- 4.7.1.86 Volume 7E, Appendix 4-2, Figure 4-4c shows the hedgerows within this section.
- 4.7.1.87 Sections of native hedgerow aligning the north-easterly running minor road between Hill of Scatterty and Holm (up to approximately 477m) will be removed. Native hedgerow adjoining the OnTI RLB's southern boundary (up to approximately 90m in length) may also be affected.
- 4.7.1.88 While this represents much of the hedgerow within this section of the OnTI RLB, this is a small proportion of hedgerow within the LCT. As there is little hedgerow within this LCT and its contribution to the landscape character is low, the alteration arising from construction of the OnTI will be restricted to the immediate vicinity of the minor road and will be very small overall. Hedgerows will be reinstated where possible following completion of the OnTI and is expected to take place during Q1 2030 for a period of three to six months.

Significance of effect

4.7.1.89 Taking account of the medium-low value of hedgerow within this section and the low magnitude of change it will undergo the effect of the OnTI during construction will be minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

Woodland

Description of potential effect

4.7.1.90 Removal of woodland within the OnTI RLB. It should be noted that, as the Onshore Cable Corridor has not yet been designed, there are opportunities for the Onshore Cable Corridor Route to be located away from woodland. The actual effects of the Onshore Cable Corridor Route are likely to be less than potential effects assessed here as the assessment assumes the removal of any woodland within the OnTI RLB.

Identification of sensitivity

4.7.1.91 Woodland has been attributed a medium-high sensitivity rating, reflecting its medium-high value and susceptibility to change. Reasoning for these sensitivity ratings is given below.

Value

4.7.1.92 Trees are valued for their importance in mitigating climate change impacts. Woodland makes an important contribution to the historical pattern and landscape character of the area, which has been heavily modified by intensive agricultural practices. Woodland has been identified as contributing to the key characteristics of the valley which contains "Wooded policies and small parklands in places" and "semi-natural woodland [that]comes down to the riverbanks in more inaccessible, steep-sided areas." For this reason, woodland within this section is considered medium-high value.

Susceptibility

4.7.1.93 Within this section any loss of trees will remain over the 35 year long operational phase because replanting will not be possible above the underground cables.

Woodland is more susceptible to the impact of the OnTI due to the time required for compensatory tree planting to establish. However, tree removals to enable construction of the OnTI will be replaced somewhere within the OnTI red line boundary as part of the mitigation proposals. For this reason woodland is considered medium-high susceptibility.

Identification of magnitude

- 4.7.1.94 Woodland within this section will undergo a low magnitude of change as the alteration to the landscape element will be barely discernible.
- 4.7.1.95 Volume 7E, Appendix 4-2, Figure 4-4c shows the woodland within this section.
- 4.7.1.96 The OnTI RLB avoids trees and woodland wherever possible. HDD will be used to avoid removing larger woodlands along the River Deveron that includes native woodland. Construction works will avoid a linear woodland south of the dwelling at Scatterty, along its access. An approximately 50m long section of trees will be removed from an approximately 815m long linear woodland between Hill of Scatterty and Holm Wood. This linear woodland comprises a row of beech trees running along the ridgeline of a low hill and piercing the skyline. The removal of this section will be notable from the surrounding landscape. Tree protection zones will be established to minimise soil compaction and impacts on all trees not being removed. Tree removals to enable construction of the OnTI will be mitigated in agreement with Aberdeenshire Council.
- 4.7.1.97 A very small proportion of the woodland within this short section of the OnTi RLB will be removed. Removal of a short section of the row of beech trees between Hill of Scatterty and Holm Wood will be notable because of the prominence of these trees on the skyline. However, the level of woodland within the Deveron Valley is sufficient that the overall level of tree cover will appear unaffected. The pattern and level of surrounding tree cover is such that the contribution of woodland to the landscape character along the valley will largely remain as at baseline.

Significance of effect

4.7.1.98 Taking account of the medium-high sensitivity of woodland within this section and the low magnitude of change it will undergo the effect of the OnTI during construction will be moderate-minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

Section 4: Undulating Agricultural Heartland (LCT 20)

Baseline

4.7.1.99 The LCT comprises a gently undulating, rolling landform with relief generally 100 to 190m AOD, with low hills and ridges cut by broad shallow valleys that forms part of a vast rolling plain. Landcover is predominantly agricultural with large fields enclosed by fences or occasional low walls or stone dykes. There are beech and thorn hedges in places. Sparse woodland comprises shelterbelts along hill

ridges, around farms and in small coniferous blocks. Larger coniferous plantations lie at Waggle Hill, at the transition with the Ythan valley where they are part of estate policies and within wetter basins. Mixed policy woodlands lie within the den of Craigston Castle and around Cuminestown. Small mixed groups of trees shelter farms and contrast with the smoothly rounded farmland. Settlement is limited to small settlements and larger villages, many being 18th Century, planned fermtouns, including Strichen, New Deer, New Byth and Cuminestown. There are frequent, regularly dispersed farmsteads with large barns and silos with smaller farms and crofts on higher slopes and valleys to the west. Grand castles in designated landscapes lie at Delgatie, Craigston and Hatton. The Culsh monument above New Deer is a key landmark. Many farms have a small WTGs and infrequent small wind farms are located on low ridges and hills. Views over the open and expansive landscape are long with visibility of landmark hills within Aberdeenshire and Moray under certain conditions. Relatively limited relief and openness emphasises big skies and the movement of the clouds overhead.

- 4.7.1.100 The key characteristics of the LCT are:
 - Gently undulating, rolling landform of low hills and ridges, with broad shallow valleys;
 - Smoothly rounded terrain;
 - Large fields;
 - Occasional beech and thorn hedges, with stone dykes more common in parts;
 - Generally sparse woodland cover, with broadleaf trees concentrated in shelterbelts along ridges, and around farms. Larger coniferous forests occur in some areas, and estate policies and occasional beech shelterbelts also occur;
 - A well settled landscape with a number of small settlements including historic, planned fermtouns, castles and designed landscapes;
 - Frequent, regularly dispersed medium-sized farms, with pockets of smaller farms and crofts; and
 - Open, expansive character with views to landmark hills; the Culsh monument above New Deer is a key landmark feature.
- 4.7.1.101 Within the Undulating Agricultural Heartland (LCT 20), the OnTI RLB encompasses land currently in agricultural use, a few hedgerows and sparse trees.
- 4.7.1.102 Agricultural land tends to be bounded by post and wire fencing and intermittent gorse. Within this larger section hedgerows lie along field boundaries north of Breedless Croft and run north-east to North Hollymill; between Slackadale Croft and Crossfields Farm; and along the northern slope of Hill of Burnside. Further hedgerow lies south of Haremoss, aligning roads east of Backhill, east of South Redbriggs and south of Corsehill, where some boundary hedgerow also enters the OnTI RLB. South of Sprottyneuk, hedgerow aligns the north side of a minor road. Grown out hedgerow extends along an access track adjoining a minor

road, approximately 2.8km west north-west of the Onshore Substations. Hedgerow aligns a minor road west of the Onshore Substations. Faster growing conifer trees tend to predominate the area, especially in larger shelter belts. Within the OnTI RLB are tree groups along the road of Parkside, south of Plaidy; the Burn of Monquhitter, approximately 2km west of Cuminestown; a minor road, approximately 2.8km west north-west of the Onshore Substations; and the Burn of Swanford near North Millbrex, 700m from the Onshore Substations.

4.7.1.103 Volume 7E, Appendix 4-2, Figure 4-4d show the agricultural land, hedgerows, and trees within this section. No woodland lies within this section.

Agricultural land

Description of potential effect

4.7.1.104 Removal of land within from agricultural use. Up to approximately 524ha of agricultural land will be removed to facilitate construction of the OnTI.

Identification of sensitivity

4.7.1.105 Agricultural land has been attributed a medium-low sensitivity rating, reflecting that it has medium value and low susceptibility to change, for the reasons set out below.

Value

4.7.1.106 Land within this section of the OnTI RLB is representative of the key characteristic of "Frequent, regularly dispersed medium-sized farms, with pockets of smaller farms and crofts." The level of existing disruption resulting from crop cultivation, within arable areas; and the capability for reinstatement of agricultural land following development or disturbance, means that it is quite robust. The Moray East onshore cable corridor lies to the east of the LVIA study area, beyond Whitehills. The presence of Moray East onshore cable indicates that areas of land can be removed from agricultural use with little detriment to its overall extent within the area.

Susceptibility

4.7.1.107 Arable crops and grassland are considered relatively easy to replace and agricultural land is readily returned to agricultural use. The level of existing disruption by crop cultivation and the widespread presence of agricultural land as a landscape element and the ease with which these types of vegetation can be reinstated, means that susceptibility is considered to be low.

- 4.7.1.108 A low magnitude of change will occur as a minor part of a key landscape element will be altered.
- 4.7.1.109 Volume 7E, Appendix 4-2, Figure 4-4d shows the agricultural land within this section.
- 4.7.1.110 Open cut trenching will be used within the OnTI RLB, with trenchless techniques being implemented crossing the Burn of Monquhitter and B9170. Open cut trenching will disturb the agricultural land for cable laying within a maximum

100m working width. It is likely that construction compounds will be located within this section. These compounds will likely be small in area and dispersed an average of 2.5km apart. HDD compounds will also be required at the crossing with the Burn of Monguhitter.

- 4.7.1.111 Trenching, construction of haul roads, and the presence of soil bunds and construction compounds within the OnTI RLB will form a relatively small-scale and localised disturbance to the agricultural land. After the cable has been laid, the trench will be backfilled, and temporary working areas and haul roads removed. The agricultural land will then return to its previous use.
- 4.7.1.112 While the area of agricultural land lost to construction activity will be readily observable, its contribution to the overall landscape character is small, due to the widespread presence of agricultural land. Within this context, the removal of these areas of land from agricultural use is considered low.

Significance of effect

4.7.1.113 Taking account of the medium-low sensitivity of agricultural land within this section and the low magnitude of change it will undergo the effect of the OnTI during construction will be minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

Hedgerows

Description of potential effect

4.7.1.114 Removal of hedgerows within the OnTI RLB. It should be noted that, as the Onshore Cable Corridor has not yet been designed, there are opportunities for the Onshore Cable Corridor Route to be located away from hedgerows. The actual effects of the Onshore Cable Corridor Route are likely to be less than potential effects assessed here as the assessment assumes the removal of any hedgerows within the OnTI RLB.

Identification of sensitivity

4.7.1.115 Hedgerows have been attributed a medium sensitivity rating, reflecting that they are of medium value and medium susceptibility to change, for the reasons set out below.

Value

4.7.1.116 Hedgerow is a relatively infrequent landscape element within this section that generally aligns roads and less frequently bounds fields. Typically, hedgerow is an important contributor to the rural character of the rolling landscape that provides structure, containment and shelter but is not a key characteristic of this area's landscape.

Susceptibility

4.7.1.117 Hedgerows within this section appear to be managed and are deemed generally to be of medium quality with some that appear to be well managed being of good quality. Hedgerows are more prevalent in parts of this section compared to other sections and any loss of hedgerow will be readily apparent. However, the relative ease with which sections of hedgerow lost to construction works will be reinstated after construction reduces their susceptibility to the OnTI.

Identification of magnitude

- 4.7.1.118 A low magnitude of change will occur as a minor part of a key landscape element will be altered.
- 4.7.1.119 Volume 7E, Appendix 4-2, Figure 4-4d shows the hedgerows within this section.
- 4.7.1.120 This longer section of the OnTI RLB will undergo more hedgerow removal than other shorter sections. Hedgerow along an internal field boundary traversing the OnTI RLB will be removed west of North Holymill (up to approximately 203m), approximately 800m west of the A947. Similar hedgerows approximately 660m east of the A947, between Slackadale Croft and Crossfields Farm (up to approximately 221m), and 493m south-east of the B9105, north of Hill of Barnyards (up to approximately 210m) will also be removed. South of Haremoss (up to approximately 83m), hedgerow along an access road and boundary hedgerow (up to approximately 230m) away from the road will be removed. North of Newton of Greenness hedgerow along a minor road (up to approximately 162m) and a short length of hedgerow forming an internal field boundary (up to approximately 26m) will be removed. The largest area of potential removals lies east of South Redbriggs where hedgerow aligning both sides of the access to Upper Keithen (two lengths of up to approximately 253m and 250m), the access to Corsehill (two lengths of up to approximately 211m and 137m) and the adjoining minor road (three lengths of up to 71m, 95m and 192m) will be removed. South of Eggarsglen a considerable length of consistent hedgerow along a minor road (up to approximately 477m) will be removed.
- 4.7.1.121 Much of the hedgerow that will be removed either forms internal field boundaries that are located away from roads or settlement or aligns minor roads or access tracks. The latter, by nature, are relatively remote. This factor and the generally restricted visibility of hedgerow within the OnTI RLB, due to intervening landform and surface features, means that their loss will be relatively easy to overlook. The decreasing influence of hedgerow will be largely imperceptible beyond their immediate context. Hedgerows will be reinstated where possible following completion of the OnTI and is expected to take place during Q1 2030 for a period of three to six months.

Significance of effect

4.7.1.122 Taking account of the medium sensitivity of hedgerow within this section and the low magnitude of change it will undergo the effect of the OnTI during construction will be minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

Tree groups

Description of potential effect

4.7.1.123 Removal of tree groups within the OnTI RLB. It should be noted that, as the Onshore Cable Corridor has not yet been designed, there are opportunities for the Onshore Cable Corridor Route to be located away from tree groups. The actual effects of the Onshore Cable Corridor Route are likely to be less than potential effects assessed here as the assessment assumes the removal of any tree groups within the OnTI RLB.

Identification of sensitivity

4.7.1.124 A medium-high sensitivity rating has been attributed to tree groups within this section reflecting their medium value and medium-high susceptibility to change, for the reasons set out below.

Value

4.7.1.125 Trees make an important contribution to the historical pattern and landscape character of the area, which has been heavily modified by intensive agricultural practices. Small groups of trees are characteristic features of the landscape that provide structure and enclosure. For this reason, trees within this section are considered medium value.

Susceptibility

4.7.1.126 The trees that may be affected by the OnTI are deemed to be of good quality overall. Within the OnTI RLB any loss of trees will remain over the 35 year long operational phase because replanting will not be possible above the underground cables. Trees are more susceptible to the impact of the OnTI due to the time required for compensatory tree planting to establish. However, tree removals to enable construction of the OnTI will be replaced in agreement with Aberdeenshire Council as part of the mitigation proposals. For this reason trees are considered medium-high susceptibility.

- 4.7.1.127 A low magnitude of change will occur as a minor part of a key landscape element will be altered.
- 4.7.1.128 Volume 7E, Appendix 4-2, Figure 4-4d and Figure 4-4e shows the tree groups within this section.
- 4.7.1.129 Tree removals within this section will include an area of broadleaved plantation woodland (0.4ha) west of Dummies Howe, a length of semi-mature non-native conifers along the Burn of Monquhitter (up to approximately 206m), part of a deciduous linear group west of Backhill (up to approximately 88m) and an area of conifer woodland north of Backhill of Greeness (up to approximately 460m²). While these groups represent most of the trees within this section, they represent a small proportion of trees within the LCT. The removal of these groups, particular along the burn, will be noticeable in the immediately surrounding area. However, the level and dispersal of tree cover within the wider landscape is sufficient that these removals will not alter the current balance of

landscape elements and the influence of trees and woodland will remain the same as at baseline. Tree removals to enable construction of the OnTI will be replaced somewhere within the OnTI RLB as part of the mitigation proposals.

Significance of effect

4.7.1.130 Taking account of the medium-high sensitivity of trees within this section and the low magnitude of change they will undergo the effect of the OnTI during construction will be moderate and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

4.7.2 Visual amenity within 1km of the OnTI RLB during construction

Whitehills - Residents

Baseline Characteristics

- 4.7.2.1 The small coastal village descends to the coast and adjoins a small harbour, to the north. Inland, the B9139 runs broadly parallel to the coast with the B9038, B9121 and a minor road leading of it to meet in the centre of the village. Constituent development lies in various planned patterns that tend to address the sea, particularly along the seaward edge at West End and Low Shore. Industrial development lies on Harbour Place linking the residential areas with the harbour. A static caravan park is located to the north-east, all but isolated from the village by screening woodland around it and adjoining open grassland. B9121/ Seafield Street bisects the village with the smaller part to the west. The straight Reidhaven Street runs westwards from B9121/ Seafield Street. Houses address the street. Buildings within the village restrict visibility of the surrounding countryside to its western, southern and eastern edges. Typically the main facades of properties on these edges face inwards with the rear facades facing outwards, to the east, south and south-west. The gable end of properties on the western edge face the open countryside.
- 4.7.2.2 Much of the village, to the west and including the seafront, comprises a conservation area. This encompasses listed properties mainly lying along the western seafront on West End and Low Shore. Further listed properties lie on Knock St, within the east of the village.
- 4.7.2.3 Volume 7E, Appendix 4-3, Figure 4-19 is representative of the views experienced by people from locations to the west of Whitehills and along the village's western edge.

Description of potential effect

4.7.2.4 Changes to views and visual amenity experienced by receptors within Whitehills.

Sensitivity to Change

4.7.2.5 A medium-high sensitivity rating has been attributed to residential receptors within Whitehills, reflecting the medium-high value of views from the village and

their medium-high susceptibility to the Proposed Development (Onshore), based on the following.

Value

4.7.2.6 Views from the village are not protected by planning policy. The coastal landscape within these views lies within the North Aberdeenshire Coast SLA, whose special qualities are protected by local planning policy. There is little to indicate that views towards the Proposed Development (Onshore) are informally recognised or culturally important. Farmland surrounding Whitehills is typical of the wider landscape and while it provides visual amenity to receptors within the village, it has no particularly distinctive landscape features.

Susceptibility

4.7.2.7 Residents of Whitehills are of medium-high susceptibility to construction activity within the agricultural setting of the village residents as they take in the view from their place of residence and owing to the long duration and long-term nature of their views.

Identification of magnitude

- 4.7.2.8 The magnitude of change to the views and visual amenity will be medium.
- 4.7.2.9 The closest point of the OnTI RLB, at the Landfall Site, will lie approximately 700m from Whitehills at its closest point with the OnTI initially running south from the village before turning south-west to the Onshore Substations. Associated construction activity at the Landfall Site will be visible at close range. The presence and activity of construction works will contrast with the predominantly rural character of the landscape. As landform rises to the south of the coastal village and screens the inland corridor from view, visibility of the construction works will be restricted to the Landfall Site and only a small proportion of the works as a whole will be visible. The baseline influence of intensively farmed farmland and built development within the surrounding landscape limits the magnitude of change.

Significance of effect

- 4.7.2.10 Taking account of the medium-high sensitivity of residential receptors within Whitehills and the medium magnitude of change, the effect of the OnTI during construction will be moderate and significant.
- 4.7.2.11 This effect will extend across the western edges of the village, where there is potential visibility of the OnTI, while no effect will occur within the village where buildings screen it from view from more distant parts of the village to the east. This adverse effect will be temporary and, as the Landfall Site installation will take place over six months during Q2 2029, short-term. The land will be reinstated as arable farmland post construction reducing the significant effect to not significant.

National Cycle Route 1, Montcoffer Croft to Maud (NCN Route 1d, North-east 250 and B9139

Baseline Characteristics

- 4.7.2.12 As National Cycle Route (NCR) 1, the core path (NCN Route 1d) and the Northeast 250 scenic route largely follow the same route along the B9139 through the LVIA study area, they are considered together.
- 4.7.2.13 The 2,034km NCR 1 runs between Dover and Tain, with the core path (NCN Route 1d) running along the same route from Maud. The route runs through rolling farmland interspersed with woodland, farmsteads and individual dwellings, often along the route. There are far reaching views across the surrounding farmland from higher parts of the route with the rolling landform screening it from view in lower areas. Surfaces features within the surrounding area such as buildings and trees intervene within these intermittent views.
- 4.7.2.14 The route runs westwards from Maud through open countryside to the village of Cuminestown. Exiting the village on the west, the route turns north to cross the Idoch Water and then turns west to follow the B9170, before skirting the Wood of Delgaty's southern edge and passing through Turriff. From there the route runs along the eastern side of the Deveron valley to Bridge of Eden, which crosses the Burn of King Edward. North of the Burn, the route follows minor roads to Bridge of Denmill, crossing the Den Burn to head north-west and meeting the Bridge of Alvah Circular (102.01) at Montcoffer Crofts. The route joins the A947 south of Macduff, following the road to Banff. Thereafter, the route follows the coastline through Whitehills, joining the B9139 west of the village.
- 4.7.2.15 East of Turriff, the route runs through open farmland with topography foreshortening views north. Buildings within the village contain the views from the route. West of the village, the route runs along the lower slopes of the Deveron Valley and briefly runs on the crest of the eastern valley side at Denhead Farm. The valley generally contains views from this section. The route continues northwards, rising on the southern slopes of Comfort Law with increasingly expansive views south as it climbs; and descends via a tree-lined road on a faint ridge to join the A947at Macduff. The small, wooded valley of the Gelly Burn encloses the route south of the village. The route crosses the River Deveron to Banff with views overlooking the town and the Moray from Banff Bridge. There are expansive sea views from the coastline with the village screening inland views. The route runs to Whitehills either along the coastline or by passing inland of Inverboyndie. The route joins the B9139 south-west of Banff, following the road to Portsoy and overlooking farmland dropping down to the open sea.
- 4.7.2.16 The 7.4km road between Inverboyndie and Portsoy is set back from and broadly follows the coastline. Generally straight, its east to west orientation provides peripheral views of the sea and inland landscape. The road overlooks gently

undulating farmland with sparse development that is generally agricultural or residential. The presence of energy infrastructure is limited to WTGs within Boyndie Airfield.

Description of potential effect

4.7.2.17 Changes to views and visual amenity experienced by receptors using NCR 1, the Montcoffer Croft to Maud core path (NCN Route 1d), North-east 250 or B9139.

Identification of sensitivity

4.7.2.18 A medium-high sensitivity rating has been attributed to receptors on NCR 1 and NCN Route 1d, reflecting that views from the B9139 are of medium-high value and that cyclists and walkers are of medium-high susceptibility to change. Motorists on the North-east 250 and B9139 have been attributed a medium-high sensitivity rating, reflecting that their susceptibility to change within the view is medium.

Value

4.7.2.19 The route of the NCR 1 and core path largely lies within and overlooks the Deveron Valley SLA, passing through the Forglen GDL. This indicates that the landscape of the valley is higher quality, despite its modified nature. While the scenic quality of the valley is recognised, there is little indicating that views of the wider landscape from the route are either informally or culturally recognised. Beyond the Deveron Valley, particularly to the east of the valley, the landscape is modified by farmland, roads, intermittent settlements and woodland plantations.

Susceptibility

- 4.7.2.20 Users of the NCR 1 and core path are considered to be of medium-high susceptibility to the effects of development as appreciation of the view is an intrinsic part of the experience for these receptors. The slowly changing nature of these views experienced and their prolonged but not long-term duration raises receptor susceptibility.
- 4.7.2.21 Motorists on the North-east 250 and B9139 are considered to be of medium susceptibility to the Proposed Development (Onshore) as, while the view is generally experienced at higher speeds and over a shorter duration relative to other visual receptors, it is an intrinsic part of their experience, particularly west of Whitehills where the route is more winding, the road is narrower and lower driving speeds increase motorist susceptibility to the Proposed Development (Onshore).

Identification of magnitude

4.7.2.22 A medium magnitude of change will occur to the visual amenity from the B9139. The road crosses the OnTI RLB north of Thriepland. Construction of the Landfall Site and OnTI will be readily apparent at close-range from the section of road approximately between Easter Whyntie and the B9121 to the western edge of Whitehills, due to the area's very gently undulating landform and its openness.

- 4.7.2.23 Construction of the Landfall Site compound, construction compounds and OnTI will be visible at close-range along this section of road and will contrast with the rural setting. The removal of existing landscape elements, including roadside hedgerow, and the introduction of construction activity will be readily apparent. Rolling hills form the valley of the Burn of Brydock, with works in the valley being readily appreciable. The Landfall Site compound and the construction compounds, next to the road, will be particularly noticeable and discordant within the rural area.
- 4.7.2.24 Motorists will see the works from the wider landscape as they approach the OnTI RLB. Visibility of the works will be restricted by local topography to within approximately 500m and 1.5km to the to the west and east, respectively. There will be visibility of construction of the Landfall Site and works within the associated part of the OnTI RLB. A very small proportion of the works as a whole will be visible from the B9121 at close-range as the road crosses the OnTI RLB.
- The medium magnitude of change that will be observed by receptors located at 4.7.2.25 the coast west of Whitehills will decrease to low for cyclists on NCR 1 as the route progresses inland. The NCR crosses the OnTI RLB three times: just south of the Landfall Site, where it follows the B9139 west of Whitehills; south of Scatterty; and west of Haremoss. At these three separate locations, construction of the OnTI will be visible at close-range and will contrast with the rural setting. The removal of existing landscape elements, such as hedges and trees, and the introduction of construction activity may be readily apparent. However, this impact will be highly localised due to the OnTI, the topography of the area through which it runs, and the screening provided by surface features and elements. A very small proportion of the works will be visible at close-range as the NCR crosses the OnTI RLB. For receptors on the NCR, visibility of the work will increase as they approach the crossing points. Once past each crossing point, the OnTI will lie behind the receptors, with little impact on their visual amenity.
- 4.7.2.26 Visibility of the OnTI will likely be restricted to the approximately 50km section of the NCR between Portsoy and Maud. The most apparent changes will occur at the three near regularly spaced locations where the NCR crosses the OnTI, as the B9139 lies approximately 10km away from that south of Scatterty with the crossing point west of Haremoss lying approximately 11km away from that crossing point. Between Portsoy and Maud there will be intermittent visibility of the construction works, due to screening by landform and small landscape elements, at a maximum range of approximately 6km. Construction of the OnTI may be perceptible to varying degrees along this section of the NCR.

Significance of effect

4.7.2.27 For motorists on the North-East 250 and B9139 the effect will be moderate and not significant, based on their medium-high sensitivity and the medium magnitude of change to the visual amenity. For motorists the effect on visual amenity is considered to be not significant because of the relatively low intrusiveness of the construction works in the context of intensively managed

farmland and the nearby settlement of Whitehills. Furthermore, much of the works will appear peripheral to the road and will disappear from view once the motorist has passed them.

- 4.7.2.28 Taking account of the medium-high sensitivity of cyclists on NCR1 and walkers on the core path, and the medium to low magnitude of change to their visual amenity, the effect of the OnTI during construction will be moderate and not significant west of Whitehills and moderate but not significant inland.
- 4.7.2.29 For cyclists and walkers the effect on visual amenity is considered to be not significant because of the relatively low intrusiveness of the construction works in the context of intensively managed farmland, the nearby settlement of Whitehills and road traffic on the B9139. While these receptors will have more prolonged visibility of the construction work, briefly seen ahead on the section of road between the B9139 and Whitehills, it will appear sufficiently similar to farming activity or construction activity within Whitehills that it will not dramatically alter the existing visual amenity.
- 4.7.2.30 This temporary, short-term adverse effect will be restricted to sections of the route with close-range visibility of construction activity, within approximately 3km of the OnTI and in more elevated locations up to 5km from it.
- 4.7.2.31 Cyclists on the route beyond 5km of the OnTI RLB with visibility of construction within it will undergo a negligible adverse effect to their visual amenity that is not significant, temporary and short-term. No effect will occur where cyclists have no visibility of the construction works.

A98

Baseline Characteristics

4.7.2.32 The 82.2km route between Fraserburgh and Fochabers broadly follows the Moray coastline. From Banff the route runs south-westwards through gently undulating hills predominantly covered by farmland interspersed with farmsteads, smaller settlements and occasional woodland blocks. From the Hills of Boyndie the road is quite straight and follows the Burn of Boyndie, running parallel to a dismantled railway before turning north-west, west of Mill of Rettie. This section of the route is relatively level and runs along the mid-slope of the shallow valley formed by the burn. Once operational, the Denhead Solar Farm will be visible on the crest of a low hill to the south-east, with WTGs at Strath of Brydock beyond. A line of pylons also crosses the shallow valley and the road, south of Boyndie.

Description of potential effect

4.7.2.33 Changes to views and visual amenity experienced by receptors using the A98.

Identification of sensitivity

4.7.2.34 Motorists have been attributed a medium sensitivity rating, reflecting that the views they experience are of medium value and their susceptibility to change within the view is medium-low. Reasoning for these ratings is set out below.

Value

4.7.2.35 The landscape in view is not recognised for its scenic value and is representative of the wider landscape character without features or elements that would distinguish it.

Susceptibility

4.7.2.36 Motorists are less liable to the Proposed Development (Onshore) due to the incidental, transient and short-lived nature of the views they experience.

Identification of magnitude

- 4.7.2.37 A low magnitude of change will occur to the route's visual amenity. The A98 will cross the OnTI RLB between dwellings at Rettie and the Blairshinnoch farmstead. Construction of the OnTI and a construction compound within the shallow valley of the Burn of Boyndie will be visible at close-range along this straight section of road.
- 4.7.2.38 The removal of existing landscape elements, including roadside hedgerow, and the introduction of construction activity will be readily apparent. Visibility of the works from the wider area will be relatively extensive because of the relative openness and larger scale of the landscape. Westbound and eastbound receptors will have similar visibility of the OnTI that will be limited by largely consistent roadside hedgerow.
- 4.7.2.39 Once past the crossing point, the OnTI will lie behind the receptors, with little impact on their visual amenity. A very small proportion of the works as a whole will be visible at close-range as the road crosses the OnTI RLB. These will be seen within a rural context that is influenced by the Denhead Solar Farm, more distant WTGs and pylons.

Significance of effect

4.7.2.40 Taking account of the medium receptor sensitivity and the low magnitude of change, the effect of the OnTI during construction will be minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

A97

Baseline Characteristics

4.7.2.41 The 90.3km road between Dinnet and Banff runs broadly north-east to Banff from Blacklaw. From Aberchirder the route runs through and overlooks gently rolling hills predominantly covered by farmland interspersed with farmsteads, isolated dwellings and occasional woodland blocks. North of Aberchirder the route skirts the western edge of Black Law, tuns north-east at Hill of Maunderlea and skirts the eastern slopes of Hill of Firfolds. Three WTGs lie atop the hill. North of the hill, the route descends and becomes more winding before entering a wooded straight on the boundary of the Duff House estate. The coast appears not to come into view even at the gateway into Banff as the road continues uphill.

Description of potential effect

4.7.2.42 Changes to views and visual amenity experienced by receptors using the A97.

Identification of sensitivity

4.7.2.43 Motorists on the A97 have been attributed a medium sensitivity rating, reflecting that the view motorists experience is of medium value and that their susceptibility to change within the view is medium-low, for the reasons set out below.

Value

4.7.2.44 The landscape in view is not recognised for its scenic value and is representative of the wider landscape character without features or elements that would distinguish it.

Susceptibility

4.7.2.45 Motorists are less liable to the Proposed Development (Onshore) due to the incidental, transient and short-lived nature of the views they will experience.

Identification of magnitude

4.7.2.46 A low magnitude of change will occur to the visual amenity. The A97 crosses the OnTI RLB between Strath of Brydock wind farm and Mallyrust Farm. Construction of the OnTI will be visible at close-range along the section of road between Coach Brae and Bruntbrae Bridge, to the north and south respectively, and will contrast with the rural setting, with two trenchless crossing compounds potentially required either side of the Burn of Brydock. The removal of existing landscape elements, such as hedges and trees, and the introduction of construction activity will be readily apparent. However, this impact will be highly localised due to the OnTI, the topography of the area through which it runs, and the screening provided by surface features and elements. For northbound receptors, visibility of the works will be restricted by hills forming the valley of the Burn of Brydock, with works in the valley and the trenchless crossing compounds being readily appreciable. Works at the more distant compound will also be partially visible. For southbound receptors, works across the lower slopes of these hills will be readily seen along with works in the valley. Receptors may see more of the works within the wider landscape as they approach the OnTI RLB. The visibility of these works is unlikely to extend very far beyond the vicinity of the road due to screening by landform and surface features, with Hill of Firfolds, to the north; Hill of Alvah, to the north-east; and Hill of Itlaw, to the south-east primarily containing views of the works. Once past the crossing point, the OnTI will lie behind the receptors, with little impact on their visual amenity. A very small proportion of the works as a whole will be visible at close-range as the road crosses the OnTI RLB between Coach Brae and Bruntbrae Bridge, to the north and south respectively.

Significance of effect

4.7.2.47 Taking account of the medium sensitivity of motorists and the low magnitude of change, the effect of the OnTI during construction will be minor and not significant. This temporary, medium-term adverse effect will be restricted to the

section of road between Coach Brae and Bruntbrae Bridge, to the north and south respectively.

A947

Baseline Characteristics

4.7.2.48 The 65.5km road between Bucksburn and Banff runs broadly north north-west between Banff and Turriff. The route lies east of the Deveron Valley and most of it lies inland. The route runs through gently undulating farmland with scattered properties and occasional woodland blocks. North of Turriff the road dips into small valleys with relatively shallow gradients. It crosses the Burn of Kinbate, west of Kinbate Farm and north of Meikle Whiterashes. Skirting the east of Back Hill of Plaidy. North of Balchers an old railway line runs alongside the road on a long straight. South of Macduff, the road sweeps round to the north-west, to enter the Gelly Burn.

Description of potential effect

4.7.2.49 Changes to views and visual amenity experienced by receptors using the A947.

Identification of sensitivity

4.7.2.50 Motorists on the A947 have been attributed a medium sensitivity rating, reflecting that the view motorists experience is of medium value and that their susceptibility to change within the view is medium-low, for the reasons set out below.

Value

4.7.2.51 The surrounding landscape is not designated for its scenic quality. The Deveron valley, covered by a locally designated SLA, is glimpsed momentarily from this straight stretch just north of Back Plaidy. Beyond this, the landscape in view is not recognised for its scenic value and is representative of the wider landscape character without features or elements that would distinguish it.

Susceptibility

4.7.2.52 Motorists are less liable to the Proposed Development (Onshore) due to the incidental, transient and short-lived nature of the views they experience.

- 4.7.2.53 A medium-low magnitude of change will occur to the visual amenity. The A947 crosses the OnTI RLB east of Back Hill Plaidy and runs broadly parallel to the Burn of Kinbate. Construction of the OnTI will be visible at close-range along this section of road and will contrast with the rural setting. A construction compound may be located within this section. The introduction of construction activity will be readily apparent. However, this impact will be highly localised due to the OnTI, the topography of the area through which it runs, and the screening provided by surface features and elements.
- 4.7.2.54 The orientation of the road and an adjoining tree group will restrict northbound receptors' visibility of the works. Landform and the roadside Wood of Fearnystrype will restrict southbound receptors' visibility of the works. The road's route, tree cover, and local topography will screen the works from the wider

area. A very small proportion of the works as a whole will be visible at closerange as the road crosses the OnTI RLB.

Significance of effect

4.7.2.55 Taking account of the medium sensitivity of motorists and the medium-low magnitude of change to their visual amenity, the effect of the OnTI during construction will be moderate-minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Export Cable Route working corridor.

B9121

Baseline Characteristics

4.7.2.56 The 15km route between Slack of Scotson and Whitehills lies to the west of the Deveron Valley. From a junction with the B9025, the route runs broadly northwards across undulating terrain, passing through a shallow gap in the hills at Pole of Itlaw. It then crosses undulating fields, with a couple of short straights leading past Greenlaw farm, before falling to cross the Burn of Stonieley. It follows the burn up stream to adjoin the A97. The route then turns north at Tipperty, through farmland with glimpses of the Denhead Solar Farm to the west and crosses the Burn of Boyndie and A98 west of Inverboyndie. The road crests a low hill, before the sea comes into view ahead, to fill the horizon as Whitehills also comes into view.

Description of potential effect

4.7.2.57 Changes to views and visual amenity experienced by receptors using the B9121.

Identification of sensitivity

4.7.2.58 Motorists on the B9121 have been attributed a medium sensitivity rating, reflecting that the view they experience is of medium value and that their susceptibility to change within the view is medium-low, for the reasons set out below.

Value

4.7.2.59 The landscape in view is not recognised for its scenic value and is representative of the wider landscape character without features or elements that would distinguish it.

Susceptibility

4.7.2.60 Motorists are less liable to the Proposed Development (Onshore) due to the incidental, transient and short-lived nature of the views they experience.

Identification of magnitude

4.7.2.61 A low magnitude of change will occur to the visual amenity. The road crosses the OnTI RLB south of the Greenlaw farmstead. Construction of the OnTI will be visible at close-range along this straight section of road and will contrast with the rural setting. Further west, visibility of OnTI construction will be visible within a rural context that also includes the Strath of Brydock WTGs, particularly towards the A97. The removal of existing landscape elements, including roadside trees, and the introduction of construction activity will be readily apparent. Receptors will see the works from the wider landscape as they approach the OnTI RLB from the south with landform, roadside trees and buildings at Greenlaw screening them from the north. Visibility of the works will be restricted by local topography to within approximately 500m and 600m to the north and south, respectively. A very small proportion of the works as a whole will be visible at close-range as the road crosses the OnTI RLB. Further north, the road passes the Denhead Solar Farm between Tipperty and the A98. North of Mid Culbeuchy, this will be partially visible above the ridge of a low hill and will be broadly perpendicular to the road. Construction of the OnTI towards the A98 will be visible within the context of the solar farm and WTGs at Whyntie Wood. North of the A98 intervening woodland or buildings, particularly at Boyndie, will largely screen the OnTI construction.

Significance of effect

4.7.2.62 Taking account of the medium receptor sensitivity and low magnitude of change, the effect of the OnTI during construction will be minor and not significant. This temporary, short-term effect will be adverse and will be restricted to within an approximately 1.1km section of road.

B9105

Baseline Characteristics

4.7.2.63 The 9.3km route between Marnonwells and Latch of Cook is a cross-country route that forms part of the route between Turriff and Fraserburgh. From a junction with the A947 north of Turriff, the route heads north-east, through farmland with farmsteads and dwellings scattered along the roadside. The route falls to the small village of Fintry, then follows the edge of the Craigston Castle estate to Mill of Craigston. It then climbs across farmland, with a long straight leading it through crossroads at Cauldwells. The route then winds up to a summit of around 160m, before dropping again to terminate at a junction with the A98.

Description of potential effect

4.7.2.64 Changes to views and visual amenity experienced by receptors using the B9105.

Identification of sensitivity

4.7.2.65 Motorists on the B9105 have been attributed a medium sensitivity rating, reflecting that the view they experience is of medium value and that their susceptibility to change within the view is medium, for the reasons set out below.

Value

4.7.2.66 The landscape in view is not recognised for its scenic value and is representative of the wider landscape character without features or elements that would distinguish it, such that the view is considered medium value.

Susceptibility

4.7.2.67 Motorists are less susceptible to the Proposed Development (Onshore) due to the incidental, transient and short-lived nature of the views they experience, and are considered to be of medium susceptibility.

Identification of magnitude

- 4.7.2.68 A low magnitude of change will occur to the visual amenity. The road crosses the OnTI RLB between Fintry Smithy and Brackens. Construction of the OnTI will be visible at close-range along this section of road and will contrast with the rural setting. The introduction of construction activity will be readily apparent from a moderately wide area, due to the area's gently undulating landform and its openness.
- 4.7.2.69 Construction of the OnTI and a potential compound will be visible at close-range along this section of road and will contrast with the rural setting. The introduction of construction activity will be readily apparent. Receptors will see the works from the wider landscape as they approach the OnTI RLB with landform, the orientation of the road and a group of trees adjoining the road limiting visibility from the north. Visibility from the south is more restricted due to additional screening by buildings and dispersed trees and tree groups, that are more plentiful to the south. A very small proportion of the works as a whole will be visible at close-range as the road crosses the OnTI RLB.

Significance of effect

- 4.7.2.70 Taking account of the medium receptor sensitivity and the low magnitude of change the effect of the OnTI during construction will be minor and not significant.
- 4.7.2.71 This temporary, short-term effect will be adverse and will be restricted to within the Onshore Export Cable Route working corridor width.

B9170

Baseline Characteristics

- 4.7.2.72 The 50km route runs from Darra to Inverurie via Turriff and New Deer.
- 4.7.2.73 From a junction with the A947 at Darra, south of Turriff, the route passes through and overlooks undulating farmland, with larger woodland blocks towards Turriff and sparse, smaller woodlands to the east. Farmsteads and dwellings are evenly dispersed across the farmland with a larger settlement at Cuminestown.
- 4.7.2.74 The route heads north-east alongside the Idoch Water, climbs a steep bank on the north side and winds along the top of the bank. It follows the north bank of the Burn of Monquhitter. After crossing the burn the route climbs around a double bend into Cuminestown. The route climbs through the linear village and into the open countryside beyond. It then turns south-east and gently descends into the valley of the Little Water, before climbing Bruce Hill. From there the route descends to New Deer entering the village on Auchreddie Road West.
Description of potential effect

4.7.2.75 Changes to views and visual amenity experienced by receptors using the B9170.

Identification of sensitivity

4.7.2.76 Motorists on the B9170 have been attributed a medium sensitivity rating, reflecting that the view they experience is of medium value and that their susceptibility to change within the view is medium, for the reasons set out below.

Value

4.7.2.77 The landscape in view is not recognised for its scenic value and is representative of the wider landscape character without features or elements that would distinguish it.

Susceptibility

4.7.2.78 Motorists are less liable to the Proposed Development (Onshore) due to the incidental, transient and short-lived nature of the views they experience.

Identification of magnitude

- 4.7.2.79 A low magnitude of change will occur to the visual amenity. The road crosses the OnTI RLB between the Woodhead of Delgaty and Haremoss farmsteads. Construction of the OnTI and construction compounds will be visible at closerange along this section of road and will contrast with the rural setting. The introduction of construction activity will be readily apparent from a small area, due to the area's greater relief.
- 4.7.2.80 Construction of the OnTI and the construction compounds will be visible at closerange along this section of road and will contrast with the rural setting. The introduction of construction activity will be readily apparent. Landform will screen the works from the wider landscape to the south, beyond approximately 600m from the OnTI RLB. Intervening landform will screen much of the works from the wider area to the north, beyond 1.5km of the OnTI RLB, with trees along the Burn of Monquhitter strongly filtering the construction compounds to the south. A very small proportion of the works as a whole will be visible at close-range as the road crosses the OnTI RLB.

Significance of effect

4.7.2.81 Taking account of the medium receptor sensitivity and the low magnitude of change, the effect of the OnTI during construction will be minor and not significant. This temporary, short-term effect will be adverse and will be restricted to the section of road extending approximately 1.5km and 600m from the OnTI RLB to the north and south, respectively.

Views from residences within the Onshore Transmission Infrastructure 1km study area

4.7.2.82 The effects of the OnTI on views from residences are assessed in this section. Due to the scale of the OnTI and as characteristic landscape elements including landform and surface elements such as hedgerows, trees, woodland and buildings also function as screening elements, the assessment is broken down into sections relating to the relevant LCT. Volume 7E, Appendix 4-2, Figure 4-4 shows the sections of the OnTI RLB in the context of each LCT.

Description of potential effect

4.7.2.83 Changes to views and visual amenity experienced by residential receptors within the OnTI RLB.

Sensitivity to Change

4.7.2.84 A medium-high sensitivity rating has been attributed to residential receptors within the OnTI RLB, reflecting the medium value of their views and their medium-high susceptibility to the Proposed Development (Onshore), based on the following.

Value

4.7.2.85 Views from residential dwellings are not protected by planning policy. There is little to indicate that views towards the OnTI are informally recognised or culturally important. Farmland surrounding these dwellings is typical of the wider landscape and while it provides visual amenity to residents, it has no particularly distinctive landscape features.

Identification of magnitude

- 4.7.2.86 The magnitude of change to the views and visual amenity of residential receptors will range from medium to low for the reasons given below.
- Section 1: Cliffs and Rocky Coast Aberdeenshire (LCT 10)
- 4.7.2.87 Landform will largely contain visibility of construction of the Proposed Development (Onshore) within the area defined by Easter Whyntie and Whitehills. Residential visual amenity may be affected due to the flatness an openness of the coastal landscape. There are several farmsteads and a low number of dwellings that will have close-range visibility of construction activity related to the Landfall Site and within the OnTI RLB. This includes farmsteads at Easter Whyntie, Upper Dallchy and Thriepland. Views from residences may be affected at Dallchy Cottages, Lover Warylip and Fitmacan. The effect is likely to be similar to that arising within the vicinity of the western edge of Whitehills, as assessed in sections 4.7.2.1 to 4.7.2.11 and informed by the Landfall Site viewpoint in Volume 7E, Appendix 4-3, Figure 4-19.

Section 2 - Gently Undulating Coastal Farmland (LCT 14)

- 4.7.2.88 Away from the coastline, the relief of the landscape will interrupt and constrain the extent of visibility of the construction works to largely within approximately 1.5km of the OnTI RLB. Views from residences will be most affected where dwellings are located close to the OnTI RLB. This will be most noticeable at Rettie, Mill of Rettie, Mill of Blairshinnoch, Wester Culbeuchly, Blairshinnoch, Littel Blairshinnoch, Hilton, Todhills and Inchdrewer. Residents of Ballyrust Farm will be more affected due to tree removals within the OnTI RLB, adjoining the farmstead.
- 4.7.2.89 Residential properties between the A98 and A97 will see the OnTI construction within a rural context that also contains Denhead Solar farm, WTGs at Whyntie

Wood and Strath of Brydock, and pylons broadly following but inset from the coast. Main facades of houses in this area tend to address adjoining minor roads which lie in a range of orientations. Houses between the OnTI RLB and Denhead Solar Farm tend to have trees in their curtilage which isolates them from the surrounding landscape. South-west of the OnTI it is peripheral to the front facades of houses while others tend to face the OnTI and solar farm beyond from the rear.

Section 3 - Farmed and Wooded River Valleys (LCT 32)

4.7.2.90 The Deveron Valley will contain visibility of the wider construction works and dwellings within this section will likely only observe close range changes. Views from residences will be most affected where dwellings are located close to the OnTI RLB such as at Greenlaw and Scatterty.

Section 4 - Undulating Agricultural Heartland (LCT 20)

4.7.2.91 Further inland, the relief of the landscape will likely interrupt and constrain the extent of visibility of the construction works. Views from residences will be most affected where dwellings are located close to the OnTI RLB such as at South Hollymill, Parkside, Lower Plaidy, North Skene House, Back Plaidy and Kinbate. Flatter topography further east and the loose clustering of dwellings means that there will be visual effects on several dwellings between Kinbate and Brackens. Hill of Barnyards will be particularly affected due to its elevation. East of Greeness there are relatively few dwellings and residential views will be most affected at Ewebrae, Easter Ewebrae, South Redbriggs, Keithen, Deershill and Eggarsglen, where the route of the OnTI RLB takes it close to these properties. Approaching the Onshore Substations, there will be generally close-range and uninterrupted visibility of the OnTI construction works from properties at Swanford, Burnside and East Swanford.

Significance of effect

Taking account of the medium-high sensitivity of residential receptors and the medium to low magnitude of change, the effect of the OnTI during construction will range from moderate and significant, where there is uninterrupted and close range visibility of the OnTI construction; to moderate-minor and not significant, where there is visibility of the OnTI construction, that is either longer-range or more interrupted. Significant effects will largely be restricted to dwellings within approximately 500 m of the OnTI RLB. For residential receptors the effects of the OnTI construction will be temporary, medium-term and adverse.

4.7.3 Landscape elements within the Onshore Substations during construction

Agricultural Land

CALEDON A

Baseline Characteristics

4.7.3.1 The baseline character of the Undulating Agricultural Heartland (LCT 20) and its key characteristics are described above in Section 4.7.1.99.

Identification of sensitivity

4.7.3.2 Agricultural land has been attributed a medium sensitivity rating, on account of its medium value and medium susceptibility to change, for the reasons set out below.

Value

4.7.3.3 The landscape within the Onshore Substations is not covered by a planning designation and is typical of the Undulating Agricultural Heartland (LCT 20) within which it its located. While agricultural land contributes to the character of the landscape, it is commonplace and widespread with a relative lack of distinctiveness. It is locally valued for its open, undeveloped character and perceived naturalness.

Susceptibility

4.7.3.4 Agricultural land is widespread throughout the LVIA study area, which comprises farmland interspersed with small clusters of dwellings and farmsteads. The Onshore Substations lie within Undulating Agricultural Heartland (LCT 20) and large fields and "frequent, regularly dispersed medium-sized farms, with pockets of smaller farms and crofts" are key characteristics of this landscape. The existing New Deer and Moray East substations occupy a notable proportion of the LVIA study area, much of which contains minor roads and small, dispersed settlements that fragment the agricultural land. Agricultural land is susceptible to the proposed new use of the land as parts of the site will no longer be undeveloped, open or perceived as natural. The level of existing disruption resulting from crop cultivation, within arable areas; and the capability for reinstatement of agricultural land following development or disturbance means that it is quite liable to changes arising from the Proposed Development (Onshore).

Description of potential effect

4.7.3.5 Loss of agricultural land within the Onshore Substations as a component of the wider landscape.

Identification of magnitude

4.7.3.6 A low magnitude of change will occur as a minor part of a key landscape element will be altered.

- 4.7.3.7 Up to approximately 3ha (30,000m²) of agricultural land will be removed to facilitate construction of the Onshore Substations with additional land lost to due to works including earthworks, construction compounds, access track and SuDS. This represents a very small proportion of agricultural land within the LCT. While the area of agricultural land lost will be readily observable, its contribution to the overall landscape character is small, due to the widespread presence of agricultural land throughout the LCT. The presence of the New Deer and Moray East substations indicates that areas of land can be removed from agricultural use with little detriment to its overall extent within the area. Within this context, the removal of this area of land from agricultural use is considered low in magnitude.
- 4.7.3.8 On completion of the Onshore Substations some agricultural land will be restored or turned to grassland for biodiversity mitigation.

Significance of effect

4.7.3.9 Taking the medium sensitivity of agricultural land within the LCT and the low magnitude of impact, the overall effect of the OnTI during construction is considered to be minor and not significant. This temporary, medium-term adverse effect will be restricted to within the Onshore Substations.

Tree groups and woodland

Description of potential effect

4.7.3.10 Removal of trees from the Onshore Substations and implementation of mitigation planting within the land available for development.

Identification of sensitivity

4.7.3.11 A medium sensitivity rating has been attributed to trees within this section reflecting their medium-low value and medium susceptibility to change, for the reasons set out below.

Value

4.7.3.12 Trees make an important contribution to the historical pattern and landscape character of the area. Small groups of trees are characteristic features of the landscape that provide structure and enclosure. The small number of trees within the Substation 3km study area are non-native coniferous and are less representative of the "Generally sparse woodland cover, with broadleaf trees concentrated in shelterbelts along ridges, and around farms" that are a key characteristic of the Undulating Agricultural Heartland (LCT 20). They are likely to be locally valued as they break up the otherwise expansive views over the agricultural land and one area marks the entrance to a property access.

Susceptibility

4.7.3.13 Trees within the Onshore Substations are considered to be of lower susceptibility to changes associated with the Onshore Substations. The trees that may be affected by the Onshore Substations are deemed to be of good quality although they would benefit from some management/thinning. While these trees are

susceptible to removal to facilitate development, they are generally immature conifers and, as they are faster growing than deciduous trees, any similar compensatory tree planting would reach maturity relatively quickly. Proposed mitigation planting would more than offset any potential tree losses in the medium to long term.

Identification of magnitude

- 4.7.3.14 A medium-high magnitude of change will occur as, while a minor part of a key landscape element will be removed, substantial tree planting before and during construction will greatly increase the extent of woodland within the land available for development, thereby increasing the coverage of this key landscape element.
- 4.7.3.15 Three short, linear groups of conifer trees along the eastern OnTI RLB will be removed to facilitate construction of the Onshore Substations. This represents a very small proportion of the tree groups within the LCT. While the removal of these trees will readily observable, particularly from the adjoining road, their contribution to the overall landscape character is small because of the number of similar tree groups throughout the LCT. Within the vicinity of the Onshore Substations, their loss will be more apparent, but the dispersal and pattern of existing tree cover will largely remain unchanged.
- 4.7.3.16 Large areas of mixed and deciduous woodland will be introduced to the land available for development and will be located around the Onshore Substations before, during and at the end of the construction process. Whilst these will take time to become established and to reach a similar stature to those that will be removed, they will more than compensate for their loss as a landscape element of the wider landscape.

Significance of effect

4.7.3.17 Taking the medium sensitivity of trees within the Onshore Substations and the medium-high magnitude of impact, the overall effect of the OnTI during construction is considered to be moderate and significant. This reversible, long-term beneficial effect will be restricted to within the Onshore Substations land available for development, shown on Volume 7E, Appendix 4-2, Figure 4-8.

4.7.4 Landscape character within 3km of the Onshore Substations

Undulating Agricultural Heartland (LCT 20)

Baseline Characteristics

4.7.4.1 The baseline character of the LCT and its key characteristics are described above in Section 4.7.1.99. Viewpoints 1 to 8 (Volume 7E, Appendix 4-3, Figure 4-11 to Figure 4-18) are located within this LCT and provide a useful indication of the changes in perception of the landscape character.

Description of potential effect

4.7.4.2 Perceived changes to the landscape character of the Undulating Agricultural Heartland (LCT 20).

Identification of sensitivity

4.7.4.3 A medium-low sensitivity rating has been attributed to Undulating Agricultural Heartland (LCT 20), reflecting its medium-low value and medium-low susceptibility to change, for the reasons set out below.

Value

4.7.4.4 This LCT does not encompass an area that is designated for its scenic value. Undulating Agricultural Heartlands are common and cover an extensive area of north-east Aberdeenshire. The landscape largely comprises undulating farmland that is well settled with associated landscape elements including a network of minor roads and power infrastructure including the New Deer and Moray East substations and WTGs. Intensive farming has modified the landscape and influences its scenic and perceptual qualities. The landscape is typically agricultural and variable in condition but generally good but is not notably valued for recreation or scenery. There are no particularly rare or uncommon features and, it is not particularly recognised for these perceptual aspects overall.

Susceptibility

4.7.4.5 The LCT is relatively robust in character as it is largely characterised by farmland interspersed with scattered settlement and associated road infrastructure. The landscape can accommodate changes to its fabric as it is an extensive area of consistent relief, which extends west to east between Turriff and Maud and north to south between New Pitsligo and Woodhead. The undulating topography provides some enclosure but the scale of the landform and general lack of hedgerows with only sparse woodland/tree clumps makes for a larger scale landscape. Openness varies due to this undulating character, with screening by landform lowering susceptibility. The skyline seen from within the LCT is generally undeveloped with some large-scale elements such as pylons and WTGs rising above screening landform and vegetation cover. There are few distinctive features on the skyline. A combination of the rolling landform and smaller landscape elements provides intermittent screening that often restricts visibility within the LCT such that many of the small/scattered settlements and developments only have localised influence on the landscape.

Identification of magnitude

Construction of the Onshore Substations

4.7.4.6 The magnitude of change to the Undulating Agricultural Heartland (LCT 20) during the construction phase will be medium-high, within the immediate vicinity of the Onshore Substations; medium-low, in the area between approximately 600m and 1km from the Onshore Substations; to low, beyond 1km from it. This range of magnitude reflects the scale of the construction works and their decreasing influence away from the Onshore Substation.

- 4.7.4.7 Construction of the Onshore Substations will exert a strong influence on a very localised area of the rural landscape. This will decrease as intervening distance, landform and surface features reduce the visual impact of the works and their perceived influence on landscape character. Further afield, other closer range contextual character influences of this robust landscape become more influential and reduces the influence of the Proposed Development (Onshore). Where the works have a close-range influence, within approximately 600m to 1km of the Onshore Substations, the contrast of the large scale of the works with the agricultural landscape will be most pronounced.
- 4.7.4.8 Agricultural practices have modified the rural character of the area and provide a baseline of an active landscape. The existing New Deer and Moray East substations, associated pylons and overhead electricity transmission lines and WTGs have established energy infrastructure within the area. These factors moderate the impact of the introduction of construction work as part of its landscape character.

Operation of the Onshore Substations at year 1 of operation.

- 4.7.4.9 The magnitude of change to the Undulating Agricultural Heartland (LCT 20) at year one of the operational phase will be medium, within the immediate vicinity of the Onshore Substations; medium-low, in the area between approximately 600m and 1km from the Onshore Substations; and reducing to low, beyond 1km from it.
- 4.7.4.10 The Onshore Substation's influence on the landscape character will be determined by its visibility and that of the existing New Deer and Moray East substations and other energy development which establishes energy infrastructure influences within this landscape. Proximity to the Onshore Substations will vary this influence with increasing distance reducing its apparent scale and increased screening by the accumulation of intervening landform and landscape elements such as hedgerows, trees and woodland.
- 4.7.4.11 The magnitude of change will be medium in the immediate vicinity of the Onshore Substations, where it will be highly visible at close-range and will appear as a large scale feature that covers a wide horizontal extent and has some features that are of similar scale to those of the existing New Deer and Moray East substation buildings. Electrical infrastructure will be visible in between these buildings within a fenced enclosure. Much of the Onshore Substations and a high proportion of its constituent structures will be visible with little screening by intervening surface features or landscape elements. Mitigation planting at this stage will have partially established, with hedgerow along the northern being planted before the start of construction (with three years' growth) and the block of mixed native woodland north of the Onshore Substations planted at the end of phase two (with three and a half years' growth). Further mitigation planting implemented at the end of phase two, to the west, north and east of the Onshore Substations, and further block to the south and west, will not have established. The Onshore Substations will from a relatively tall and wide feature that will contrast with the surrounding farmland.

However, the existing presence of the New Deer and Moray East substations has established this type of development within the area and the Onshore Substations will only extend this influence on the landscape character. Local topography is such that this close-range influence is contained within the area 1km north, 700m east, 400m south and 700m west. The additional screening effect of landscape elements in the wider landscape including buildings and trees will further restrict visibility of the Onshore Substations. Visibility of the Onshore Substations will drop considerably towards Moss of Sprottynook, and Greens, east of Mains of Asleed and south of the New Deer Moray East substations. The visual influence of the Onshore Substations will be strongest in the area defined by Deer's Hill, Middletack, Maryhill, Hillhead of Auchreaddie, Easfield, Tillyfar, Blackhillock, Netherton and Briggs.

- 4.7.4.12 Further afield, the magnitude of change will reduce to medium-low as distance from the Onshore Substations and the larger, more open character of the surrounding landscape will moderate the additional influence of the Onshore Substations in the context of the New Deer and Moray East substations. The influence of the Onshore Substations will exert a less noticeable influence between approximately 1 to 2km of the Onshore Substations.
- 4.7.4.13 The magnitude of change will be low beyond approximately 2km from the Onshore Substations as distance will reduce its perceived scale. The Onshore Substations will not influence landscape character beyond 2km to the west and north-west, where they will not be visible; or to the south-west and south, where there will be intermittent and long-range visibility. The limited visibility of the Onshore Substations from these more distant locations and the stronger influence from the close-range baseline landscape will ensure that the Onshore Substations will not form the defining feature in terms of landscape character. Where there is no visibility, there will be no change.

Operation of the Onshore Substations +15 yrs

4.7.4.14 Volume 7E, Appendix 4-2, Figure 4-8 shows the proposed mitigation measures, including deciduous native woodland, mixed native woodland and hedgerows. These will surround the Onshore Substations and will create an effective screen from the surrounding landscape. During the approximate 15 year period of growth, the mitigation planting will reduce the magnitude of change on the LCA to low or negligible.

Significance of Effect

Construction of the Onshore Substations

- 4.7.4.15 There will be heavily localised, moderate significant effects on the Undulating Agricultural Heartland (LCT 20) within approximately 600m of the Onshore Substations. The effects beyond this extent will reduce to minor and not significant beyond 600m from the Onshore Substations with no effect where there will be no perception of the works.
- 4.7.4.16 The effects of the construction phase will be adverse, medium-term and reversible.

4.7.4.17 The construction stage effects of the Onshore Substations on landscape character will be significant within their immediate vicinity as their influence swiftly decreases due to intervening distance, screening elements and the perceptible influence of the existing New Deer and Moray East substations, it is considered that effects on landscape character beyond approximately 600m of the Onshore Substations will not be significant.

Operation of the Onshore Substations

4.7.4.18 The effect on the Undulating Agricultural Heartland (LCT 20) will be moderateminor and not significant within the immediate vicinity of the Onshore Substations. This will reduce to minor (not significant), in the area beyond approximately 600m from the Onshore Substations, with no effect where there will be limited perception of the Onshore Substations.

Operation of the Onshore Substations +15 yrs

4.7.4.19 The effect will gradually reduce to a minor or negligible level, which is not significant, after an approximate 15-year period during which mitigation planting will grow to create an effective screen between the Onshore Substations and the surrounding local landscape.

4.7.5 Visual amenity within 3km of the Onshore Substations

Viewpoint 1: Minor road east of Deer's Hill

Baseline Characteristics

- 4.7.5.1 Volume 7E, Appendix 4-3, Figure 4-11 shows the viewpoint location and baseline panorama from Viewpoint 1, which is representative of residents and motorists in the vicinity of Deer's Hill. The viewpoint lies approximately 1.48km to the west of the Onshore Substation.
- 4.7.5.2 The viewpoint is elevated at a relatively high point on a minor road on land that slopes down to the south-east. The view overlooks gently undulating farmland with sporadic woodland groups, past the farmstead at Swanford to the Onshore Substations and the neighbouring New Deer and Moray East substations. The scene is predominantly rural and pastoral with a low, relatively even skyline defined by low hills within the background. Pylons lead from New Deer Substation in the midground to the background, crossing the view. There are also small, isolated WTGs within the midground, beyond the farmstead, and the background. These features punctuate the skyline. Farming, small forest and tree groups have strongly modified the landscape in the view which is lightly settled by dispersed farmsteads and isolated dwellings. The view is not particularly far ranging or expansive but is broad and relatively open.

Description of potential effect

4.7.5.3 Perceived changes to the views seen by and the visual amenity of residents and motorists.

Identification of sensitivity

4.7.5.4 At Deershill, residents have been attributed a medium sensitivity rating and motorists have been attributed a medium sensitivity rating. This reflects the medium value of views from this location, the medium susceptibility of residents and the medium susceptibility of motorists, for the reasons set out below.

Value

- 4.7.5.5 The landscape in the view is not recognised for its scenic value, although it may be locally valued. It is representative of the wider landscape character without features or elements that would distinguish it, such that the view is considered medium value.
- 4.7.5.6 The viewpoint is not a recognised viewpoint that is shown on OS mapping or otherwise identified for its scenic quality. The view and the landscape within the view are not afforded protection in planning policy at a national or local level, indicating that they are not recognised for their scenic qualities. The landscape in view exhibits the "Smoothly rounded terrain" with "Large fields", that are key characteristics of the Undulating Agricultural Heartland (LCT 20) and is representative of the "Gently undulating, rolling landform of low hills and ridges, with broad shallow valleys", "Generally sparse woodland cover, with broadleaf trees concentrated in shelterbelts along ridges, and around farms" and "Frequent, regularly dispersed medium-sized farms, with pockets of smaller farms and crofts" that are also key characteristics of the LCT.

Susceptibility

- 4.7.5.7 Residents of Deershill take in the views from their place of residence and as it is an intrinsic part of their experience, they are liable to be more affected by the Proposed Development (Onshore). However, the attention and interest of local residents is generally focused south or occasionally south eastwards from the front of the property, including their entrance and front rooms, to the open landscape west of the Onshore Substations. This directional focus, which makes the Onshore Substations peripheral to views from the main façade and entrances of local dwellings means that residents are less susceptible to the effects of the Onshore Substations.
- 4.7.5.8 Motorists, due to the incidental, transient and short-lived nature of the views they experience, are considered to be less susceptible to the effects of the Onshore Substations.

Identification of magnitude

Construction of the Onshore Substations

- 4.7.5.9 The magnitude of change during the construction phase will be medium.
- 4.7.5.10 This rating relates to a combination of the distance between the Onshore Substations and the viewpoint, the horizontal extent of the construction site and compound seen within this local area, and the presence of the construction cranes and emerging Onshore Substations in the relatively open aspect to the south-east. The upper parts of tall cranes may be seen above the distant skyline.

Construction of the Onshore Substations will contrast visually with the rural character of the local landscape, which has been modified by agricultural practices. The Onshore Substations construction will be partially screened by the existing farmstead and tree group at Swanford. However, construction works and the emerging Onshore Substations will be seen within the context of New Deer substation, and immediately behind the Onshore Substations, associated pylons and overhead electricity transmission lines.

Operation of the Onshore Substations

- 4.7.5.11 The magnitude of change during the operational phase will be medium-low.
- 4.7.5.12 Volume 7E, Appendix 4-3, Figure 4-11 shows that the Onshore Substations will be visible in the middle distance and will constitute a relatively small scale feature in the expansive view. Much of the Onshore Substations will be visible albeit partly screened by intervening vegetation and the Swanford farm buildings. Introduction of the Onshore Substations will represent a relatively small change to the view due to the scale of the surrounding landscape. The Onshore Substations will appear relatively narrow in extent and low in height compared to its background and will lie below the horizon. While the infrastructural character of the Onshore Substations will contrast notably with the surrounding agricultural landscape it will be similar in form, scale and appearance to the existing New Deer and Moray East substations. Buildings within the Onshore Substations will have a similar appearance to large agricultural sheds within the nearby farmstead at Swanford. The presence of an overhead electricity transmission line, modification by agriculture and the medium to large scale of the landscape, will moderate the influence of the Onshore Substations. Visibility off the Onshore Substations will not vary throughout the year due to the prevalence of coniferous trees in the area.

Operation of the Onshore Substations +15 yrs

4.7.5.13 As shown in the photomontages on Volume 7E, Appendix 4-3, Figure 4-11, the mitigation planting along the western boundary of the Onshore Substations will gradually come to screen the lower parts of the Onshore Substations in views from this south easterly direction. The upper parts of the Onshore Substations will remain visible above the mitigation planting following an approximate 15 year period of growth so that the magnitude of change remains medium-low.

Significance of Effect

Construction of the Onshore Substations

4.7.5.14 The effect of the Onshore Substations during the construction phase will be moderate and not significant for residents, based on the medium magnitude of change and their medium sensitivity; and moderate (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, mediumterm and reversible.

Operation of the Onshore Substations

4.7.5.15 The effect of the Onshore Substations during the operation phase will be moderate-minor and not significant for residents, based on the medium-low

magnitude of change and their medium sensitivity; and moderate-minor (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, long-term and reversible.

Operation of the Onshore Substations A and B +15 yrs

- 4.7.5.16 The not significant effect will gradually reduce but remain moderate-minor for residents and moderate-minor for motorists, after an approximate 15 year period during which mitigation planting will grow to screen the lower portion of the Onshore Substations.
- 4.7.5.17 For residents, these effects will occur in the area towards and adjoining the minor road leading north-east, particularly at Westfield, with areas to the north and west of their dwellings undergoing no effect. These effects will occur for eastbound road users on the stretch of road between the Burn of Stonehouse and Burn of Swanford. East of the latter burn intervening landform will increasingly screen the Proposed Development (Onshore), reducing the level of these effects. The Onshore Substations will increasingly lie behind westbound road users, who largely will not be affected.

Viewpoint 2: Minor road near Maryhill

Baseline Characteristics

CALEDON A

- 4.7.5.18 Volume 7, Appendix 4-3, Figure 4-12 shows the viewpoint location and baseline panorama from Viewpoint 2, which is representative of residents and motorists Maryhill. The viewpoint lies approximately 347m to the north of the Onshore Substations, as shown on Volume 7E, Appendix 4-2, Figure 4-7.
- 4.7.5.19 The viewpoint lies on a minor road adjoining the north of the OnTI RLB. The view overlooks level pasture enclosed by post and wire fencing, in the foreground; and more gently rolling farmland enclosed by hedgerows, in the middle and background. Sporadic tree groups and woodlands lie on field boundaries within the farmland. Coniferous tree groups lie at residential properties including The Neuk, in the foreground; and East Swanford, in the near middle ground. Pylons and overhead cables extend from the east across the view to the south-west. Pole mounted transmission lines cross the view with a single WTG to the southeast, in the middle ground and more WTGs towards the background further south. Rising land within and around the Onshore Substations encloses the view south that, with tree cover, partially screens New Deer substation, beyond. The scene is predominantly rural and pastoral, with a low gently undulating skyline defined by the Onshore Substation, buildings within New Deer substation that appear low on the skyline and low enclosing hills to the east and west. The landscape in view is modified with relatively little, dispersed settlement being visible. The view is not particularly broad but quite open and distantly enclosed by low hills.

Description of potential effect

4.7.5.20 Perceived changes to the view and visual amenity of the receptors.

Identification of sensitivity

4.7.5.21 At Maryhill, residents have been attributed a medium-high sensitivity rating and motorists have been attributed a medium sensitivity rating. This reflects the medium value of views from this location, the high susceptibility of residents and the medium susceptibility of motorists, for the reasons set out below.

Value

- 4.7.5.22 The landscape in view is not recognised for its scenic value and is representative of the wider landscape character without features or elements that would distinguish it, such that the view is considered to be of medium value.
- 4.7.5.23 The viewpoint is not a recognised viewpoint that is shown on OS mapping or otherwise identified for its scenic quality. The view and the landscape within the view are not afforded protection in planning policy at a national or local level, indicating that they are not recognised for their scenic qualities. The landscape in view is likely to be locally valued and is representative of the key characteristics of the Undulating Agricultural Heartland (LCT 20) being characterised by smoothly rounded and gently undulating landform covered by large fields and sparse woodland concentrated in shelterbelts and around dispersed mediumsized farms.

Susceptibility

- 4.7.5.24 Residents of the properties on the minor road adjoining the OnTI RLB's northern boundary take in the view from their place of residence and as it is an intrinsic part of their experience, they are liable to be more affected by the Proposed Development (Onshore). The attention and interest of local residents is generally focused southwards from the front of the property, including their entrance and front rooms, to the open landscape. This directional focus means that residents are more susceptible to the effects of the Onshore Substations. The existing New Deer and Moray East substations, being similar to the Onshore Substations, although more distant, establishes large scale energy infrastructure as part of the visual baseline. Associated pylons are also in the baseline view as well as WTGs and numerous pole mounted transmission lines.
- 4.7.5.25 Motorists are less liable to be affected by the Onshore Substations, due to its peripheral location relative to the road and the incidental, transient and short-lived nature of the views they experience, and are considered to be of medium susceptibility.

Identification of magnitude

Construction of the Onshore Substations

- 4.7.5.26 The magnitude of change during the construction phase will be medium-high.
- 4.7.5.27 This rating relates to a combination of the distance between the Onshore Substations and the viewpoint, the horizontal extent of the construction site and compound seen within this local area, and the presence of the construction cranes and emerging substation in the relatively open aspect to the south. Construction of the Onshore Substations will contrast visually with the rural

character of the local landscape, which has been modified by agricultural practices. However, construction works and the emerging Onshore Substations will be seen within the context of New Deer substation, immediately behind, and associated pylons and overhead electricity transmission lines.

Operation of the Onshore Substations at year 1

- 4.7.5.28 The magnitude of change will be medium-high as the Proposed Development (Onshore) will be a relatively large scale feature that is visible in the near distance and which also extends above the existing skyline that is defined by low hills.
- 4.7.5.29 From this location the Proposed Development (Onshore) will be visible at close range within a slightly enclosed landscape that is smaller scale. The Proposed Development (Onshore) will be visible at close range and will constitute a larger feature in the view. Much of the Proposed Development (Onshore) will be visible although many parts to the south will be screened by constituent elements. A lack of intervening vegetation means that the Proposed Development (Onshore) will be clearly seen. Mitigation planting including the advanced planting of hedgerow along the minor road and subsequent planting of mixed native woodland after the phase one enabling works will screen some of the lowest parts of the Onshore Substations. The change to the view due to the addition off the Proposed Development (Onshore), will be relatively large scale, extending across approximately 25 degrees of the field of view with built forms that will appear large compared to other buildings in this view but that are not as tall as other elements, which break the skyline. The Proposed Development (Onshore) will contrast with the surrounding farmland. However, existing energy infrastructure provides a visual context for the Proposed Development (Onshore). The New Deer substation is set at a greater distance than the Proposed Development (Onshore) in the midground, partially screened by intervening trees around East Swanford and with pylons leading to it extending across the view. Isolated WTGs lie in the foreground and midground with overhead wires in the foreground. Low hills within the background define an undulating skyline which is pierced by pylons and WTGs. The Proposed Development (Onshore) will rise above the skyline and define a part of it. Visibility off the Proposed Development (Onshore) will not be affected by seasonal changes to the surrounding vegetation.

Operation of the Onshore Substations +15 yrs

4.7.5.30 As shown in the photomontages on Volume 7E, Appendix 4-3, Figure 4-12, the intervening phase one mitigation planting along the intermediate field boundary (which will have had 18 years to establish by this point) will gradually come to screen most of the Onshore Substations in views southwards, with only the topmost parts of the Onshore Substations partially visible by 15 years of operation. The phase one mitigation planting will establish and provide more effective screening earlier in this view than would otherwise have been the case. Over the mitigation planting establishment period, whilst it is recognised that some of the openness of the view south will be lost, the mitigation planting will

gradually reduce the medium-high magnitude of change to low. While mounding is not considered in this assessment, its implementation to the north of the Onshore Substations would further reduce the level of effect at this viewpoint.

Significance of Effect

Construction of the Onshore Substations

4.7.5.31 The effect of the Onshore Substations during the construction phase will be major-moderate and significant for residents, based on the medium-high magnitude of change and their medium-high sensitivity; and moderate (significant) for motorists, who are of medium sensitivity. These effects will be adverse, medium-term and reversible.

Operation of the Onshore Substations

4.7.5.32 The effect of the Onshore Substations during the operation phase will be majormoderate and significant for residents, based on the medium-high magnitude of change and their medium-high sensitivity; and moderate (significant) for motorists, who are of medium sensitivity. These effects will be adverse, longterm and reversible.

Operation of the Onshore Substations +15 yrs

- 4.7.5.33 The significant effect will gradually reduce to a not significant effect at a moderate-minor and minor level by 15 years after the start of operation (when post-Phase 1 planting will have had approximately 18 years to establish) and by which time it will almost fully screen visibility the Onshore Substations from near Maryhill.
- 4.7.5.34 For residents, these effects will occur in areas towards and adjoining the minor road along the northern boundary of the OnTi RLB with no effects to the north of their dwellings. For road users travelling in both directions these effects will occur on the stretch of road along the OnTI RLB. Westbound receptors will also experience these effects descending from Netherton of Greens.

Viewpoint 3: Minor road near Upperton

Baseline Characteristics

- 4.7.5.35 Volume 7E, Appendix 4-3, Figure 4-13 shows the viewpoint location and baseline panorama from Viewpoint 3, which is representative of the views of residents and motorists around Upperton. The viewpoint lies approximately 1.25km to the north-east of the Onshore Substations.
- 4.7.5.36 The elevated viewpoint lies on a minor road descending the western slope of a low hill whose summit lies at Slacks of Cairnbanno. The view overlooks very gently rolling farmland that is enclosed by post and wire fencing and hedgerow. Small woodlands lie in the foreground next to the road and in the middle ground at Mains of Asleid. Pylons cross the farmland, extending from the foreground into the distance. A single WTG lies near large agricultural sheds at Abbotshaugh. The view looks past these to the Onshore Substation. The New Deer substation adjoins the southern boundary of the OnTI RLB. The scene is predominantly rural



with the landform creating a level horizon against a backdrop of low enclosing hills that define a gently undulating skyline. The modified landscape is lightly settled. Topography and relatively sparse surface features allow a longer range view.

Description of potential effect

4.7.5.37 Perceived changes to the views seen by and the visual amenity of residents and motorists.

Identification of sensitivity

4.7.5.38 At Upperton, residents have been attributed a medium-high sensitivity rating and motorists have been attributed a medium sensitivity rating. This reflects the medium value of views from this location, the high susceptibility of residents and the medium susceptibility of motorists, for the reasons set out below.

Value

- 4.7.5.39 The landscape in view is not recognised for its scenic value and is representative of the wider landscape character without features or elements that would distinguish it.
- 4.7.5.40 The viewpoint is not a recognised viewpoint that is shown on OS mapping or otherwise identified for its scenic quality. The view and the landscape within the view are not afforded protection in planning policy at a national or local level, indicating that they are not recognised for their scenic qualities. The landscape in view is locally valued and representative of the key characteristics of the Undulating Agricultural Heartland (LCT 20) being characterised by smoothly rounded and gently undulating landform covered by large fields and sparse woodland concentrated in shelterbelts and around dispersed medium-sized farms.

Susceptibility

- 4.7.5.41 Upperton's residents take in the view from their place of residence and as it is an intrinsic part of their experience, they are liable to be more affected by the Onshore Substations. The attention and interest of local residents is generally focused south-westwards from either the front of their properties, including the entrance and front rooms of the property south of the road, or the rear, of the property to the north. The existing New Deer and Moray East substations, and associated pylons establish large scale elements of energy infrastructure as part of the visual baseline.
- 4.7.5.42 Motorists are less liable to be affected by the Onshore Substations, due to the incidental, transient and short-lived nature of the views they experience.

Identification of magnitude

Construction of the Onshore Substations

- 4.7.5.43 The magnitude of change during the construction phase will be medium.
- 4.7.5.44 This rating relates to a combination of the distance between the Onshore Substations and the viewpoint, the horizontal extent of the construction site and

compound seen within this local area, and the presence of the construction cranes and emerging Onshore Substations in the relatively open aspect to the south-west. Construction of the Onshore Substations will contrast visually with the rural character of the local landscape, which has been modified by agricultural practices. However, construction works and the emerging Onshore Substations will be seen within the context of New Deer substation, immediately to the south, associated pylons and overhead electricity transmission lines as well as large scale farm buildings.

Operation of the Onshore Substations at year 1

- 4.7.5.45 The magnitude of change will be medium-low as the Proposed Development (Onshore) will be a relatively moderate in scale feature within the view.
- 4.7.5.46 The view of the Proposed Development (Onshore) will be relatively close range with it lying towards the background against a backdrop of low hills and rising ground but partially seen rising above an uneven skyline. A moderate proportion of the Proposed Development (Onshore) will be visible with lower elements screened by intervening surface features including trees (outside the OnTI RLB, as some within will have been removed during the construction phase), hedgerow and landform. The change to the view will be moderate in scale, as the Proposed Development (Onshore) will form a smaller feature relative to the large scale and expansive landscape and will appear broadly similar in scale to existing agricultural sheds and other features, such as woodland. While the Proposed Development (Onshore) will contrast with the open, agricultural fields it will appear similar to the existing New Deer and Moray East substations and agricultural sheds in the foreground. Numerous other features including pylons and WTGs establish large scale elements of energy infrastructure within the view. The Onshore Substations will appear sufficiently similar to the sheds and existing substation that its introduction will not markedly contrast with the existing scene. The Proposed Development (Onshore) will encroach on the low and undulating skyline. Pylons and WTGs will appear much taller than the Proposed Development (Onshore) and have a much greater impact on the skyline, that is interrupted in many places by buildings and trees. A smaller number of constituent elements will be visible from this viewpoint and, as tree cover is predominantly coniferous, this will not change with the seasons.

Operation of the Onshore Substations +15 yrs

4.7.5.47 As shown in the photomontages on Volume 7E, Appendix 4-3, Figure 4-13, the mitigation planting along the roadside boundary will gradually come to screen most of the lower parts of the Onshore Substations in views from this north easterly direction. However the upper parts of the buildings and electrical infrastructure of the Onshore Substations will still be visible above the planting around the Onshore Substations. Over the approximate 15 year period of growth, the mitigation planting will gradually reduce the medium-low magnitude of change to low.

Significance of Effect

Construction of the Onshore Substations

4.7.5.48 The effect of the Onshore Substations during the construction phase will be moderate and significant for residents, based on the medium magnitude of change and their medium-high sensitivity; and moderate (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, mediumterm and reversible.

Operation of the Onshore Substations

4.7.5.49 The effect of the Onshore Substations during the operation phase will be moderate and significant for residents, based on the medium-low magnitude of change and their medium-high sensitivity; and moderate-minor (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, longterm and reversible.

Operation of the Onshore Substations A and B +15 yrs

4.7.5.50 The significant effect will gradually reduce to a not significant effect at a moderate-minor or minor level after an approximate 15 year period during which mitigation planting will grow to partially screen visibility of the Onshore Substations from the Minor Road near Upperton and associated properties.

For residents, these effects will occur in the areas towards and adjoining the minor road while the areas north and east of their dwelling will be unaffected. These effects will occur for westbound road users on the stretch of road descending from Upperton to the valley of Little Water. Eastbound road users will not be affected as the Onshore Substations will lie behind them.

Viewpoint 4: Minor road near Woodhead

Baseline Characteristics

- 4.7.5.51 Volume 7E, Appendix 4-3, Figure 4-14 shows the viewpoint location and baseline panorama from Viewpoint 4, which is representative of residents and motorists at Woodhead. The viewpoint lies approximately 1.35km to the east of the Onshore Substation.
- 4.7.5.52 The elevated viewpoint lies on a minor road between Upper Cairnbanno and Cairnbanno House, to the north and south respectively. The view overlooks very gently rolling farmland that is enclosed by post and wire fencing and, less often, hedgerow. Sporadic single trees and small woodlands are dispersed across the landscape, generally on field boundaries. A small tree group surrounds a property at North Asleid in the near middle ground. Pylons extend into the distance and cross much of the view from the foreground to the background. The horizon is low and level, towards the south, and rises gently to form a low hill that encloses the view, in the north. The New Deer substation appears low against the southern part of the horizon against a backdrop of low enclosing hills that define the south western skyline. The scene is rural with landscape modified by pastoral and cereal farming with some dispersed settlement being visible.

Topography and the openness of the farmland combine to contain the reasonably broad and longer range view.

Description of potential effect

4.7.5.53 Perceived changes to the views seen by and the visual amenity of residents and motorists.

Identification of sensitivity

4.7.5.54 At Woodhead, residents have been attributed a medium-high sensitivity rating and motorists have been attributed a medium sensitivity rating. This reflects the medium value of views from this location, the medium-high susceptibility of residents and the medium susceptibility of motorists, for the reasons set out below.

Value

- 4.7.5.55 The landscape in view is not recognised for its scenic value and is representative of the wider landscape character without features or elements that would distinguish it, such that the view is considered medium value.
- 4.7.5.56 The viewpoint is not a recognised viewpoint that is shown on OS mapping or otherwise identified for its scenic quality. The view and the landscape within the view are not afforded protection in planning policy at a national or local level, indicating that they are not recognised for their scenic qualities. The landscape in view is locally valued and representative of the key characteristics of the Undulating Agricultural Heartland (LCT 20) being characterised by smoothly rounded and gently undulating landform covered by large fields and sparse woodland concentrated in shelterbelts and around dispersed medium-sized farms.

Susceptibility

- 4.7.5.57 Woodhead's residents, due to their direct view of the landscape north of the New Deer and Moray East substations are liable to the impact of the Proposed Development (Onshore). Their susceptibility is moderated by the presence of development that is of a similar nature and scale to the Onshore Substations and the modified nature of the landscape in view, such that they are considered to be of medium-high susceptibility.
- 4.7.5.58 Motorists are less liable to be affected by the Onshore Substations, due to their peripheral location relative to the road and the incidental, transient and short-lived nature of the views they experience, and are considered to be of medium susceptibility.
- 4.7.5.59 Woodhead's residents take in the view from their place of residence and as it is an intrinsic part of their experience, they are liable to be more affected by the Proposed Development (Onshore). However, settlement along the minor road varies in orientation. The farmstead at Woodhead, the property to the north and the three to the south are oriented north/south with the Onshore Substations nearly perpendicular to the main façade of each and the dominant aspect of each properties' front and back gardens. Each dwelling adjoins the minor road with

only the farmstead and the dwelling to the south having access tracks leading west to the minor road. Farm buildings and trees restrict views westwards from the northernmost dwelling with the opposite dwelling and landform beyond restricting westward views from the southernmost dwelling. The attention and interest of local residents being generally focused either northwards or southwards from the front or rear of their properties, the Onshore Substations lies beyond the main focus of their views.

Identification of magnitude

Construction of the Onshore Substations

- 4.7.5.60 The magnitude of change during the construction phase will be medium.
- 4.7.5.61 This rating relates to a combination of the distance between the Onshore Substations and the viewpoint, the horizontal extent of the construction site and compound seen within this local area, and the presence of the construction cranes and emerging substation in the relatively open aspect to the south-west. Construction of the Onshore Substations will contrast visually with the rural character of the local landscape, which has been modified by agricultural practices. However, construction works and the emerging Onshore Substations will be seen within the context of New Deer substation, immediately to the south, and associated pylons and overhead electricity transmission lines.

Operation of the Onshore Substations

- 4.7.5.62 The magnitude of change during the operational phase will be medium-low.
- 4.7.5.63 The Proposed Development (Onshore) will be visible in the mid ground and at moderate range. Much of the Proposed Development (Onshore) will be visible with little screening by a few intervening trees. The removal of trees along the eastern OnTI RLB will slightly reduce the level of screening. A large number off the constituent elements will be discernible. A relatively small change to the view will occur due to the introduction of the Proposed Development (Onshore). This is due to the large scale of the surrounding landscape its openness and relatively flat topography. The Proposed Development (Onshore) will extend across a moderate proportion of the view and because of the intervening distance will not appear very tall. As an element of energy infrastructure the Onshore Substations will contrast with the surrounding farmland. However, there are numerous pylons located across the view which establish energy infrastructure within the view and whilst New Deer substation is less clearly visible, it is of similar form to the Proposed Development (Onshore), thus reducing its magnitude of change. The two Onshore Substations will appear similar in form, although the Onshore Substations will be closer and appear larger with a larger number of buildings. As such the introduction of the Proposed Development (Onshore) will appear to have a degree of consistency with the baseline. From this viewpoint the Proposed Development (Onshore) will extend above the skyline at its southerly extent which is interrupted by pylons and intermittently by much smaller trees. A higher number of the components of the Proposed Development (Onshore) will

be visible and due to a lack of intervening features this will remain so throughout the year.

Operation of the Onshore Substations +15 yrs

4.7.5.64 As shown in the photomontages on Volume 7E, Appendix 4-3, Figure 4-14, the mitigation planting along the intermediate field boundary will gradually come to screen the lower parts of the Onshore Substations in views from this north easterly direction, although the upper parts of the Onshore Substations. Over the approximate 15 year period of growth, the mitigation planting will gradually reduce the medium-low magnitude of change to low.

Significance of Effect

CALEDON A

Construction of the Onshore Substations

4.7.5.65 The effect of the Onshore Substations during the construction phase will be moderate and significant for residents, based on the medium magnitude of change and their medium-high sensitivity; and moderate (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, mediumterm and reversible.

Operation of the Onshore Substations

- 4.7.5.66 The effect of the Onshore Substations during the operation phase will be moderate and significant for residents, based on the medium-low magnitude of change and their medium-high sensitivity; and moderate-minor (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, longterm and reversible.
- 4.7.5.67 This effect on the visual amenity of local residents will be significant because of the scale of the Onshore Substations relative to its landscape context, its visual extent and the perceived increase in energy infrastructure they represent within a rural context that already contains large scale energy infrastructure. As residents are more sensitive to this impact and as the existing New Deer and Moray East substations appears slightly removed from the Onshore Substations, the effect will be significant. For motorists, who are less sensitive to the Onshore Substations, the effect will be not significant.

Operation of the Onshore Substations +15 yrs

- 4.7.5.68 The significant effect on the views of residents will gradually reduce to a not significant effect at a moderate-minor level for residents and to a minor level that is not significant for motorists, after an approximate 15 year period during which mitigation planting will grow to partially screen visibility of the Onshore Substations from the minor road near Woodhead and associated properties.
- 4.7.5.69 For residents of properties along the minor road, these effects will occur within their curtilage to the west, towards and adjoining the minor road, while the areas east of their dwelling will be unaffected.
- 4.7.5.70 These effects will occur for road users traveling in both directions on the stretch of road between Smiddyhill and Upper Cairnbanno.

Viewpoint 5: Minor road near Upper Mains of Asleid

Baseline Characteristics

CALEDON A

- 4.7.5.71 Volume 7E, Appendix 4-3, Figure 4-15 shows the viewpoint location and baseline panorama from Viewpoint 5, which is representative of residents and motorists at Upper Mains of Asleid. The viewpoint lies approximately 652m to the southeast of the Onshore Substation.
- 4.7.5.72 The viewpoint lies at the T-junction formed by two minor roads at Upper Mains of Asleid. The view overlooks gently sloping farmland in the immediate foreground and grass covered mounding associated with the New Deer substation, beyond. Post and wire fencing encloses the farmland. The substation is partially visible beyond the mounding with a cluster of pylons rising above the horizon they define. Little of the landscape beyond is visible. The upper parts of large agricultural buildings, trees groups and woodlands rise above the mounding and appear against a backdrop of rising land covered by fields and more extensive woodland. This woodland and rising land defines the low and relatively even skyline. The view reasonably broad and not particularly far-ranging due to the enclosing landform.

Description of potential effect

4.7.5.73 Perceived changes to the views seen by and the visual amenity of residents and motorists.

Identification of sensitivity

4.7.5.74 At Upper Mains of Asleid, residents have been attributed a medium-high sensitivity rating and motorists have been attributed a medium sensitivity rating. This reflects the medium value of views from this location, the high susceptibility of residents and the medium susceptibility of motorists, for the reasons set out below.

Value

- 4.7.5.75 The landscape in view is not recognised for its scenic value and is representative of the wider landscape character without features or elements that would distinguish it.
- 4.7.5.76 The viewpoint is not a recognised viewpoint that is shown on OS mapping or otherwise identified for its scenic quality. The view and the landscape within the view are not afforded protection in planning policy at a national or local level, indicating that they are not recognised for their scenic qualities. The landscape in view is locally valued and representative of the key characteristics of the Undulating Agricultural Heartland (LCT 20) being broadly characterised by smooth, gently undulating landform, large fields and sparse woodland.

Susceptibility

4.7.5.77 Residents of Upper Mains of Asleid take in the view from their place of residence and as it is an intrinsic part of their experience, they are liable to be more affected by the Proposed Development (Onshore). Settlement along the minor road varies in orientation. The nearer property is orientated north/south with the main entrance on the northern façade and the main views seen from the southern façade. The cottages further south address the road with their main entrances facing east and the main views looking east. The attention and interest of local residents being generally focused either southwards or westwards from the front or rear of their properties, the Onshore Substations lie beyond the main focus of their views, although they may be visible from the garden grounds and other aspects.

4.7.5.78 Motorists are liable to be affected by the Onshore Substations, due to its location relative to the road and as it appears directly ahead of westbound motorists. This is offset by the incidental, transient and short-lived nature of the views they experience.

Identification of magnitude

Construction of the Onshore Substations

- 4.7.5.79 The magnitude of change during the construction phase will be medium.
- 4.7.5.80 This rating relates to a combination of the distance between the Onshore Substations and the viewpoint, the horizontal extent of the construction site within this local area, and the presence of the construction cranes and emerging substation in the relatively open aspect to the south-west. Construction of the Onshore Substations will contrast visually with the rural character of the local landscape, which has been modified by agricultural practices. However, construction works, including tall cranes and the emerging substations will be seen within the context of closer range New Deer substation, and associated pylons and overhead electricity transmission lines. Some lower elements of the construction process will not be visible due to intervening landform.

Operation of the Onshore Substations

- 4.7.5.81 The magnitude of change to the view during the operational phase will be medium-low.
- 4.7.5.82 The Proposed Development (Onshore) will be visible in the mid ground and at moderate range. Only the upper parts of the Onshore Substations will be visible due to screening by landform. A low number off the constituent elements will be discernible. A relatively small change to the view will occur due to the introduction of the Proposed Development (Onshore) because a smaller part of it will be visible. This remains true despite the smaller scale of the surrounding landscape and its enclosure, which typically emphasises the larger scale of similar developments. The Proposed Development (Onshore) will extend across a small proportion of the view and, in part due to its location on landform that rises to north, it will not appear out of scale in comparison with the buildings of the New Deer Substation. As an element of energy infrastructure the Onshore Substations will contrast with the surrounding farmland. However, pylons stretching across the view and the nearby New Deer substation establish large scale energy infrastructure within the view. Although the New Deer substation appears noticeably larger and taller, the two Onshore Substations will appear

sufficiently similar in form and scale that the introduction of the Proposed Development (Onshore) will appear quite consistent with the baseline view. Low hills define much of the skyline with the New Deer substation defining a smaller part. However, it will introduce further development within a part of the view that is currently undeveloped. The Onshore Substations will define another part of the skyline and will extend above it. Visibility of a lower number of its components will not vary throughout the year due to the openness of intervening farmland.

Operation of the Onshore Substations +15 years

4.7.5.83 As shown in the photomontages on Volume 7E, Appendix 4-3, Figure 4-15, the mitigation planting along the intermediate field boundary will gradually come to screen much of the Onshore Substations in northerly views, although the uppermost parts will still be visible above the planting around the Onshore Substations. Over the approximate 15 year period of growth, the mitigation planting will gradually reduce the medium-low magnitude of change to low.

Significance of Effect

Construction of the Onshore Substations

4.7.5.84 The effect of the Onshore Substations during the construction phase will be moderate and significant for residents, based on the medium magnitude of change and their medium-high sensitivity; and moderate (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, mediumterm and reversible.

Operation of the Onshore Substations

4.7.5.85 The effect of the Onshore Substations during the operation phase will be moderate and significant for residents, based on the medium-low magnitude of change and their medium-high sensitivity; and moderate-minor (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, longterm and reversible.

Operation of the Onshore Substations A and B +15 yrs

- 4.7.5.86 The significant effect will gradually reduce to a not significant effect at a minor (residents) or minor (motorists) level after an approximate 15 year period during which mitigation planting will grow to almost fully screen visibility of the Onshore Substations.
- 4.7.5.87 For residents of properties along the minor road, these effects will occur within their curtilage to the west, towards and adjoining the minor road, while the areas east of their dwelling will be unaffected.
- 4.7.5.88 These effects will occur for northbound road users on the stretch of road between Upper Mains of Asleid Cottage and the junction with the east-west running minor road near Maryhill. Southbound road users will not be affected as the Onshore Substations will lie behind them.

Viewpoint 6: Minor road near North Millbrex

Baseline Characteristics

CALEDON A

- 4.7.5.89 Volume 7E, Appendix 4-3, Figure 4-16 shows the viewpoint location and baseline panorama from Viewpoint 6, which is representative of the views of residents and motorists at North Millbrex. The viewpoint lies approximately 1.5km to the south-west of the Onshore Substation.
- 4.7.5.90 The slightly elevated viewpoint is located just east of a residential property on the minor road. The view looks north-east to the area north of the New Deer and Moray East substations, over fields of rough grazing enclosed by post and wire fencing, stone walling and hedgerow in the foreground. The Onshore Substations location lies in the middle ground and to the north of the existing New Deer and Moray East substations. Isolated trees and tree groups are dispersed across the farmland in the middle ground. These partially screen the New Deer substation. Pylons extend from the foreground to the middle ground and beyond across the northern part of the view. The background comprises land covered by farmland interspersed with woodlands that define a gently undulating skyline. The view is wide and shorter range due to the enclosing hills. The landscape in view is modified, lightly settled with prominent elements of energy infrastructure.

Description of potential effect

4.7.5.91 Perceived changes to the views seen by and the visual amenity of residents and motorists.

Identification of sensitivity

4.7.5.92 Residents of North Millbrex have been attributed a medium sensitivity rating and motorists have been attributed a medium sensitivity rating. This reflects the medium value of views from this location, the medium susceptibility of residents and the medium susceptibility of motorists, for the reasons set out below.

Value

4.7.5.93 The viewpoint is representative of residents and motorists at North Millbrex and is not a recognised viewpoint that is shown on OS mapping or otherwise identified for its scenic quality. The view and the landscape within the view are not afforded protection in planning policy at a national or local level, indicating that they are not recognised for their scenic qualities. The landscape in view is of local value and exhibits the "Smoothly rounded terrain" with "Large fields", that are key characteristics of the Undulating Agricultural Heartland (LCT 20) and is representative of the "Gently undulating, rolling landform of low hills and ridges, with broad shallow valleys", "Generally sparse woodland cover, with broadleaf trees concentrated in shelterbelts along ridges, and around farms" and "Frequent, regularly dispersed medium-sized farms, with pockets of smaller farms and crofts" that are also key characteristics of the LCT.

Susceptibility

4.7.5.94 Residents of North Millbrex take in the view from their place of residence and as it is an intrinsic part of their experience, they are liable to be affected by the

Proposed Development (Onshore). The attention and interest of local residents is generally focused east-south-eastwards from the front of the properties, including their front gardens, entrances and front rooms, to the open landscape containing the Onshore Substation as part of their peripheral views. This directional focus means that residents are less susceptible to the effects of the Onshore Substations.

4.7.5.95 Motorists are similarly liable to the Proposed Development (Onshore) as, while the Onshore Substations will be visible towards the direction of travel for eastbound motorists, their views are incidental, transient and short-lived.

Construction of the Onshore Substations

- 4.7.5.96 The magnitude of change during the construction phase will be medium.
- 4.7.5.97 This rating relates to a combination of the distance between the Onshore Substations and the viewpoint, the horizontal extent of the construction site and compound seen within this local area, and the presence of the construction cranes and emerging Onshore Substations in the relatively open aspect to the north-east. Construction of the Onshore Substations will contrast visually with the rural character of the local landscape, which has been modified by agricultural practices. Intervening tree groups assist in breaking up the horizontal extent of the area affected and the Proposed Development (Onshore) construction will occur largely below the skyline formed by the rising ground beyond. The construction works and the emerging Onshore Substations will be seen within the context of New Deer substation, immediately to the south and associated pylons and overhead electricity transmission lines.

Operation of the Onshore Substations

- 4.7.5.98 The magnitude of change to the view during the operational phase will be medium.
- 4.7.5.99 The Proposed Development (Onshore) will be visible in the mid ground and at moderate range. Much of the Proposed Development (Onshore) will be visible with some screening by a few intervening trees and lower parts screened by hedgerow. A large proportion off the constituent elements will be discernible. A modest change to the view will occur due to the introduction of the Proposed Development (Onshore). This is due to the large scale of the surrounding landscape its openness and relatively flat topography. The Proposed Development (Onshore) will extend across a moderate proportion of the view and because of the intervening distance and the presence of much taller pylons, it will not appear very tall. As an element of energy infrastructure the Onshore Substations will contrast with the surrounding farmland but will appear consistent with the New Deer substation and associated pylons stretching across the view. The Onshore Substations will extend the level of energy infrastructure in the view with the similar appearance, form and scale of the two substations maintaining the character of the baseline view. Neither Onshore Substation intrudes upon the skyline that is defined by low hills and pierced by existing pylons. More of the Onshore Substations' components will be visible throughout

the year due to a low level of screening and the preponderance of conifer trees within the area.

Operation of the Onshore Substations +15 yrs

4.7.5.100 As shown in the photomontages on Volume 7E, Appendix 4-3, Figure 4-16, the mitigation planting around the south-western edge of the Onshore Substations will gradually come to screen of the lower parts of the Onshore Substations in north-easterly views, although the upper parts of the buildings and electrical infrastructure of the Onshore Substations will still be visible above the planting. Over the approximate 15 year period of growth, the mitigation planting will gradually reduce the medium magnitude of change to low.

Significance of Effect

CALEDON A

Construction of the Onshore Substations

4.7.5.101 The effect of the Onshore Substations during the construction phase will be moderate and not significant for residents, based on the medium magnitude of change and their medium sensitivity; and moderate (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, mediumterm and reversible.

Operation of the Onshore Substations

4.7.5.102 The effect of the Onshore Substations during the operation phase will be moderate and not significant for residents, based on the medium magnitude of change and their medium sensitivity; and moderate (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, longterm and reversible.

Operation of the Onshore Substations A and B +15 yrs

- 4.7.5.103 The effect will gradually reduce from moderate to moderate-minor or minor level after an approximate 15 year period during which mitigation planting will grow to partially screen visibility of the Onshore Substations from the minor road near North Millbrex and associated properties.
- 4.7.5.104 For residents of North Millbrex, these effects will occur within their curtilage to the east, towards and adjoining the minor road, while the areas west of their dwelling will be unaffected.
- 4.7.5.105 These effects will occur for east bound road users on the stretch of road from North Millbrex to Upper Mains of Asleid. Westbound road users will not be affected as the Onshore Substations will lie beyond the existing New Deer and Moray East substations and will increasingly lie behind them.

Viewpoint 7: Minor road near Slacks of Cairnbanno

Baseline Characteristics

4.7.5.106 Volume 7E, Appendix 4-3, Figure 4-17 shows that the viewpoint lies approximately 2.1km to the north-east of the Onshore Substation.

4.7.5.107 The viewpoint is located at a high point on the minor road marked by a triangulation station. The view looks south-west to the area north of the New Deer and Moray East substations, over gently undulating, open farmland comprising large, arable fields and pasture. Relatively sparse field boundaries are defined by post and wire fencing, hedgerows and occasional patches of gorse. The Onshore Substations location lies towards the mid to background and to the north of the existing New Deer substation. Relatively low tree cover is dispersed across the farmland, becoming more extensive in the distance. To the south, pylon mounted transmission lines extend across the middle ground. Low, rising ground covered by extensive woodland lies in the background and encloses the view, defining a gently undulating skyline. The view is extensive and longer range, due to the elevation with layers of different landscape features and visibility of more prominent hills forming a backdrop to the comparatively complex view. The landscape in view is modified, lightly settled with prominent elements of energy infrastructure.

Description of potential effect

4.7.5.108 Perceived changes to the views seen by and the visual amenity of residents and motorists.

Identification of sensitivity

4.7.5.109 Residents of Slacks of Cairnbanno have been attributed a medium-high sensitivity rating and motorists have been attributed a medium sensitivity rating. This reflects the medium value of views from this location, the high susceptibility of residents and the medium susceptibility of motorists, for the reasons set out below.

Value

4.7.5.110 The viewpoint is representative of residents and motorists at Slacks of Cairnbanno and is not a recognised viewpoint that is shown on OS mapping or otherwise identified for its scenic quality. The view and the landscape within the view are not afforded protection in planning policy at a national or local level, indicating that they are not recognised for their scenic qualities. The landscape in view is locally valued and exhibits the "Smoothly rounded terrain" with "Large fields", that are key characteristics of the Undulating Agricultural Heartland (LCT 20) and is representative of the "Gently undulating, rolling landform of low hills and ridges, with broad shallow valleys", "Generally sparse woodland cover, with broadleaf trees concentrated in shelterbelts along ridges, and around farms" and "Frequent, regularly dispersed medium-sized farms, with pockets of smaller farms and crofts" that are also key characteristics of the LCT. Lack of designation indicates that that the landscape in view is not recognised for its scenic value and, as it is representative of the wider landscape character without any distinguishing features or elements, the view is considered medium value.

Susceptibility

4.7.5.111 Residents take in the view from their place of residence and as it is an intrinsic part of their experience, they are liable to be more affected by the Proposed

Development (Onshore). Motorists are less liable to the Proposed Development (Onshore) due to the incidental, transient and short-lived nature of the views they experience, and are considered to be of low susceptibility even though in this instance the substation is seen directly ahead of the direction of travel. This open view only occurs for a short distance in this location.

Identification of magnitude

Construction of the Onshore Substations

4.7.5.112 The magnitude of change during the construction phase will be low. This rating relates to a combination of the distance between the Onshore Substations and the viewpoint, the horizontal extent of the construction site and compound seen within this local area, and the presence of the construction cranes and emerging Onshore Substations in the relatively open aspect to the south-west. Construction of the Onshore Substations will contrast visually with the rural character of the local landscape, which has been modified by agricultural practices. However, construction works and the emerging Onshore Substations will be seen within the context of New Deer substation, immediately to the south, large scale agricultural buildings, WTGs and associated pylons and overhead electricity transmission lines.

Operation of the Onshore Substations

4.7.5.113 The magnitude of change to the view during the operational phase will be low. The Proposed Development (Onshore) will be visible in the mid ground and at moderate to far range. Much of the Proposed Development (Onshore) will be visible with little screening by a few intervening trees and lower parts screened by hedgerow. A large proportion of the constituent elements will be discernible. A small change to the view will occur due to the introduction of the Proposed Development (Onshore) due to the large scale and complexity of the surrounding landscape, its openness and relatively low relief. The Proposed Development (Onshore) will extend across a small proportion of the view and because of the intervening distance, the height of intervening trees, the greater scale of hills within the backdrop and the presence of much taller pylons within the midground, it will not appear very tall. As an element of energy infrastructure, the Onshore Substations will contrast with the wider rural landscape but will appear consistent with similar scale farm sheds and infrastructural elements comprising pylons and New Deer substation. The latter it is of similar form to the Proposed Development (Onshore), thus reducing its magnitude of change with the two Neither substation intrudes upon the undulating skyline defined by larger hills that is pierced by existing pylons. More of the Onshore Substations' components will be visible throughout the year due to a low level of screening from the elevated viewpoint.

Operation of the Onshore Substations A and B +15 yrs

4.7.5.114 As shown in the photomontages on Volume 7E, Appendix 4-3, Figure 4-17, the mitigation planting along the roadside will gradually come to screen the lower parts of the Onshore Substations in views from this north-easterly direction, although the upper parts of the buildings of the Onshore Substations will still be

visible above the planting around the Onshore Substations so that the magnitude of change will remain as low.

Significance of Effect

Construction of the Onshore Substations

4.7.5.115 The effect of the Onshore Substations during the construction phase will be moderate-minor and not significant for residents, based on the low magnitude of change and their medium-high sensitivity; and minor (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, mediumterm and reversible.

Operation of the Onshore Substations

4.7.5.116 The effect of the Onshore Substations during the operation phase will be moderate-minor and not significant for residents, based on the low magnitude of change and their medium-high sensitivity; and minor (not significant) for motorists, who are of medium sensitivity. These effects will be adverse, longterm and reversible.

Operation of the Onshore Substations A and B +15 yrs

4.7.5.117 The not significant effect will remain moderate-minor for residents and minor for motorists after an approximate 15 year period as, while mitigation planting will grow to partially screen the Onshore Substations, its upper parts will remain visible at distance.

For residents of properties along the minor road, these effects will occur within their curtilage to the west, towards and adjoining the minor road, while the areas east of their dwelling will be unaffected.

These effects will occur for westbound road users on the stretch of road between descending from just west of Slacks of Cairnbanno to Upper Cairnbanno. Eastbound road users will not be affected as the Onshore Substations will lie behind them.

Viewpoint 8: Minor road near Hillhead of Auchreddie

Baseline Characteristics

- 4.7.5.118 Volume 7E, Appendix 4-3, Figure 4-18 shows the viewpoint location and baseline panorama from Viewpoint 8, which is representative of motorists at Hillhead of Auchreddie. The viewpoint lies approximately 3.4km to the north-east of the Onshore Substations.
- 4.7.5.119 The slightly elevated viewpoint is located at the access to Brownhill of Auchmunziel where it joins the minor road. The view looks south-west to the area north of the New Deer and Moray East substations, over gently undulating open farmland comprising large arable fields and pasture. Field boundaries are relatively sparse with post and wire fencing and occasional patches of gorse, particularly in the foreground. The area north of the New Deer and Moray East substations lies towards the background and to the north of the existing New

Deer substation. Isolated tree groups are dispersed across the farmland in the middle ground. These partially screen the New Deer substation. To the south, Pylons extend across the middle ground. Low, rising ground covered by extensive woodland lies in the background and encloses the view, defining a gently undulating skyline. The view is extensive and longer range due to the low, relatively featureless landscape. The landscape in view is modified, lightly settled with prominent elements of energy infrastructure, which add to its complexity.

Description of potential effect

4.7.5.120 Perceived changes to the views seen by and the visual amenity of motorists.

Identification of sensitivity

4.7.5.121 Motorists at Hillhead of Auchreddie have been attributed a medium sensitivity rating. This reflects the medium value of views from this location and the medium susceptibility of motorists, for the reasons set out below.

Value

4.7.5.122 The viewpoint is representative of motorists at Hillhead of Auchreddie and is not a recognised viewpoint that is shown on OS mapping or otherwise identified for its scenic quality. The view and the landscape within the view are not afforded protection in planning policy at a national or local level, indicating that they are not recognised for their scenic qualities. The landscape in view is locally valued and exhibits the "Smoothly rounded terrain" with "Large fields", that are key characteristics of the Undulating Agricultural Heartland (LCT 20) and is representative of the "Gently undulating, rolling landform of low hills and ridges, with broad shallow valleys", "Generally sparse woodland cover, with broadleaf trees concentrated in shelterbelts along ridges, and around farms" and "Frequent, regularly dispersed medium-sized farms, with pockets of smaller farms and crofts" that are also key characteristics of the LCT.

Susceptibility

4.7.5.123 Motorists are of limited susceptibility to the Proposed Development (Onshore) due to the incidental, transient and short-lived nature of the views they experience.

Identification of magnitude

Construction of the Onshore Substations

4.7.5.124 The magnitude of change during the construction phase will be low. This rating relates to a combination of the distance between the Onshore Substations and the viewpoint, the horizontal extent of the construction site and compound seen within this local area, and the presence of the construction cranes and emerging Onshore Substations in the relatively open aspect to the south. Construction of the Onshore Substations will contrast visually with the rural character of the local landscape, which has been modified by agricultural practices. However, construction works and the emerging Onshore Substations will be seen within the context of large scale farm sheds, New Deer substation, immediately to the south, and associated pylons and overhead electricity transmission lines.

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Operation of the Onshore Substations

- 4.7.5.125 The magnitude of change during the operational phase will be low.
- 4.7.5.126 The Proposed Development (Onshore) will be visible towards the background and at far range. Much of the Proposed Development (Onshore) will be visible in the distance with limited screening by intervening trees and hedgerows. A large proportion of the Onshore Substations' components will be discernible but a small change to the view will occur as they will be introduced to a large scale landscape that is largely open and relatively flat. The Proposed Development (Onshore) will extend across a small proportion of the view and because of the intervening distance, the height of intervening trees, the presence of much taller pylons within the midground and the greater scale of hills within the backdrop, they will not appear particularly tall. While the Onshore Substations' infrastructural character will contrast with the rural landscape it will appear consistent with similar infrastructural elements at New Deer substation and associated pylons. The former provides a visual context for the Onshore Substations and the two Onshore Substations will appear sufficiently similar in form and scale that their introduction will maintain the character of the baseline view. Neither Onshore Substation intrudes upon the undulating skyline defined by larger hills that is just pierced by existing pylons. More of the Onshore Substations' components will be visible throughout the year due to a low level of screening from the elevated viewpoint.

Operation of the Onshore Substations +15 yrs

4.7.5.127 As shown in the photomontages on Volume 7E, Appendix 4-3, Figure 4-18, the mitigation planting along the roadside boundary will gradually come to screen of the lower parts of the Onshore Substations in views from this north easterly direction, although a small extent of the upper parts of the Onshore Substations will still be visible above the planting around the Onshore Substations so that the magnitude of change will remain as low after an approximate 15 year period of growth.

Significance of Effect

Construction of the Onshore Substations

4.7.5.128 The effect of the Onshore Substations during the construction phase will be minor for motorists based on the low magnitude of change and medium sensitivity. These effects will be adverse and medium-term but reversible.

Operation of the Onshore Substations

4.7.5.129 The effect of the Onshore Substations during the operation phase will be minor for motorists based on the low magnitude of change and medium sensitivity. These effects will be adverse and long-term but reversible.

Operation of the Onshore Substations +15 yrs

4.7.5.130 The effect of the Onshore Substations during the operation phase after approximately 15 years of mitigation planting establishment will be minor for motorists based on the low magnitude of change and medium sensitivity. These effects will be adverse and long-term but reversible. These effects will occur for westbound road users as they descend from Hillhead of Auchreddie, at the edge of the woodland, to the area north of Sunnybrae. Landform will briefly screen the Onshore Substations east of Slacks of Cairnbanno. Eastbound road users will not be affected as the Onshore Substations will lie behind them.

Effects on Visual Amenity

- 4.7.5.131 The impact of the Proposed Development (Onshore) will increase over the duration of the construction phase as the Onshore Substations emerge in the context of compounds, cranes and construction activity. The visual impact will increase over the course of the construction phase with the greatest impact occurring when the Onshore Substations are near completion but compounds and cranes are still in use. The visual impact will be greatest in close proximity, generally within approximately 600m, of the Onshore Substations. This impact will decrease with distance from the Onshore Substations, as they will increasingly appear smaller and as intervening features have an increasing screening effect.
- 4.7.5.132 Primary receptor locations within close proximity of the Onshore Substations will undergo the most change. This includes the minor roads abutting the OnTI RLB to the north and east, which continue westwards and eastwards; and southwards, respectively. Residents of dwellings along these minor roads and motorists using them will observe the most change. This is particularly true of dwellings whose main façades face directly towards the Onshore Substation. This includes dwellings towards Maryhill, further west opposite Burnside and at Swanford. The visual impact on motorists will be greatest as they approach the Onshore Substations from the west, east and south. Tree cover will restrict visibility of the Onshore Substation from the north, beyond Maryhill. Other nearby dwellings, such as the Neuk, which tend not to face directly towards the Onshore Substations will observe less impact due to their orientation. The main facade of East Swanford is orientated southwards, however views from its garden grounds and access approach will be highly modified by views of the Onshore Substations at close proximity.
- 4.7.5.133 Further afield the impact of the Onshore Substations will generally be less. A minor road south of the Onshore Substations leading westwards to North Millbrex and a minor road running broadly north to south to the east both lie within 1.5km of the Onshore Substations. At this range, the Onshore Substations will be less clearly visible within a wider landscape context, particularly from elevated locations. This includes, but is not limited to, dwellings at Sprottyneuk and North Millbrex and where the Proposed Development (Onshore) will also be peripheral to the view from each dwelling and the associated minor roads.
- 4.7.5.134 Increasing relief of the landform will limit visibility of the Proposed Development (Onshore) from minor roads. This will be intermittent due to the generally undulating nature of the landform and will be more consistent where there are longer climbs. In places, such as towards Slack of Cairnbanno, elevated sections

of road will provide views of the Proposed Development (Onshore) directly ahead.

4.7.5.135 The landform of the area will largely restrict visibility of the Proposed Development (Onshore) to the broad area within approximately 2.5km to the west, 1.5km to the north, 3.5km to the east and 2km to the south of the Onshore Substations. Landform and tree cover will restrict this visibility from the area north of Maryhill and south-east from Cairnbanno House to Tillyfar and Eastfield. To the south-west, landform will restrict visibility of the Proposed Development (Onshore) to the area within Blackhillock, Netherton and Briggs. To the north-west tree cover will intervene to limit visibility of the Proposed Development (Onshore) to the area within Colinshill, Mill of Muirtack and Middletack. Within these more distant areas there is likely to be some distant visibility of the Onshore Substations that partially screened. From the minor roads, this is likely to be more intermittent and peripheral to the direction of travel due to the orientation of the minor roads relative to the Onshore Substations.

4.7.6 Decommissioning

- 4.7.6.1 This section describes the potential impacts of the decommissioning of the Proposed Development (Onshore) with regard to impacts on landscape and visual receptors.
- 4.7.6.2 The Onshore Export Route cables and the ducts would be left in situ in order to minimise further ground disturbance. As such, there would be no potential for significant effects on landscape elements within the OnTI RLB or visual amenity within 1km of the OnTI RLB.
- 4.7.6.3 In relation to the Onshore Substations, the programme for decommissioning is expected to be similar in duration to the construction phase. The detailed activities and methodology would be determined at a later stage, but are expected to include:
 - Dismantling and removal from site of outside electrical equipment located within the Onshore Substation compounds and removal of cabling from site;
 - Dismantling and removal of electrical equipment from within the Onshore Substation buildings and removal of Onshore Substation buildings;
 - Removal of areas of hard standing; and
 - Reinstatement of the Onshore Substation footprints and platform areas to agricultural land-uses and hedgerows.
- 4.7.6.4 Under the decommissioning phase, the following impacts have been assessed:
 - Landscape elements within the Onshore Substations;
 - Landscape character within 3km of the Onshore Substations; and
 - Visual amenity within 3km of the Onshore Substations.

Landscape elements within the Onshore Substations

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- 4.7.6.5 Whilst details regarding the decommissioning of the Onshore Substations are currently unknown, considering the worst-case assumption (which would be the removal and reinstatement of the current land use at the Onshore Substations) it is anticipated that the impacts would be similar to or less than those assessed during construction. The difference at the decommissioning phase would be that mitigation planting would have matured over the operational life of the onshore elements of the Proposed Development (Onshore) and would therefore screen the decommissioning works from many of the surrounding landscape and visual receptors.
- 4.7.6.6 The decommissioning methodology would need to be finalised nearer to the end of the lifetime of the Proposed Development (Onshore) so as to reflect current guidance, need, policy and legislative context at that point.

Landscape character within 3km of the Onshore Substations

4.7.6.7 Decommissioning of the Proposed Development (Onshore) has the potential to result in significant effects on the perceived character of the Undulating Agricultural Heartland (LCT 20). The magnitude of change on landscape character arising from decommissioning of the Onshore Substations are assessed as being less than or equal to the magnitude of change during construction with similar levels of significance, as assessed in Section 4.7.4.

Visual amenity within 3km of the Onshore Substations

- 4.7.6.8 Decommissioning of the Proposed Development (Onshore) has the potential to result in significant effects on the views and visual amenity of the visual receptors.
- 4.7.6.9 Decommissioning phase effects on views and visual amenity will occur as a result of the decommissioning activities, including the presence and activity of plant. Visibility of these decommissioning phase activities in combination may alter the views from and visual amenity of locations throughout the vicinity of the Onshore Substations. The magnitude of change on visual amenity within arising from decommissioning of the Onshore Substations are assessed as being less than or equal to the magnitude of change during construction with similar levels of significance, as assessed in Section 4.7.5.

4.8 Cumulative Effects

- 4.8.1 Overview
- 4.8.1.1 The list of developments identified for assessing cumulative effects is presented in Volume 7A, Appendix 7-1: Cumulative Impact Assessment Methodology. In Table 4-11 the potential for cumulative effects with each of these developments
is examined, and an assessment of the potential for cumulative effects presented, where appropriate.

Table 4-11: Landscape and Visual Cumulative Effects

Development	Potential for significant cumulative effects	Comments
New Deer Green Volt Offshore Wind Farm, laying of underground cables and erection of substation APP/2023/1454 (the Green Volt Application)	Yes, during construction of the Onshore Substations, on visual amenity within 3km of the Onshore Substations and the landscape character of Undulating Agricultural Heartland (LCT 20).	Construction of the consented development may overlap for a short period with that of the Proposed Development (Onshore). The development is intended to be operational by Q4 2027 and will form part of the future baseline during operation of the Proposed Development (Onshore).
Greens Substation / located at Site 13 Greens (Scottish and Southern Electricity Network) Pre-application stage (the Greens Application)	Yes, during construction and operation of the Onshore Substations, on visual amenity within 3km of the Onshore Substations and the landscape character of Undulating Agricultural Heartland (LCT 20).	The pre-application stage development's construction programme is currently undefined. Construction of the development may overlap for a medium term period with that of the Proposed Development (Onshore). The development is likely to be operational ahead of the Proposed Development (Onshore) and will form part of the future baseline during operation.
Stromar Offshore Wind Farm Onshore Infrastructure Stromar Offshore Wind Farm Limited Pre-application stage (the Stromar Application)	Yes, during construction and operation of the Onshore Substations, on visual amenity within 3km of the Onshore Substations and the landscape character of Undulating Agricultural Heartland (LCT 20).	The pre-application stage development's location and construction programme are currently undefined. Based on the four and a half year construction period, it has been assumed that construction may overlap with that of the Proposed Development (Onshore) and that the development may come into operation at the same time as the Proposed Development (Onshore).
Beauly to Blackhillock to New Deer to Peterhead 400kv Connection Pre-application stage (the Beauly Application)	Yes, during construction and operation of the Onshore Substations, on visual amenity within 3km of the Onshore Substations and the landscape character of Undulating Agricultural	Construction is identified over a four- year period from 2026 to October 2030. Construction of the development may overlap for a medium term period with that of the Proposed Development (Onshore).

Development	Potential for significant cumulative effects	Comments
	Heartland (LCT 20) and Farmed and Wooded River Valleys (LCT 32).	The development is likely to be operational ahead of the Proposed Development (Onshore) and may form part of the future baseline during operation.

- 4.8.1.2 Volume 7A, Appendix 7-1: Cumulative Impact Assessment Methodology presents a list of projects that have the potential to contribute to cumulative impacts in combination with the Proposed Development (Onshore) and describes the approach to its compilation. The LVIA has undertaken a further process of considering the projects from this list, based on professional judgement, assessment rationale and guidance relevant to the assessment of landscape and visual impacts. Volume 7E, Appendix 4-2, Figure 4-9 shows the location of the cumulative developments listed in Table 4-11. Figure 4-10 presents a cumulative ZTV showing the interaction of theoretical visibility between the Onshore Substations and the Greens Substation.
- 4.8.1.3 The cumulative effects assessment for LVIA is undertaken in accordance with the methodology provided in Volume 7E, Appendix 4-1 and assesses the cumulative effects of the Onshore Substations during their construction phase with the construction of the Green Volt Application, Greens Application and Stromar Application substations; the Beauly Application Overhead Line (OHL) and pylons; and during its operational phase, with all identified substation applications and OHL applications.
- 4.8.1.4 The worst case design parameters for the construction and operational phases of the Proposed Development (Onshore) are as set out for the main assessment in Section 4.7.
- 4.8.1.5 For the purpose of this cumulative assessment it is assumed that the Proposed Development (Onshore) Substations will undertake some advance planting at the start of 2027, begin construction in Quarter 3 2027 and be complete and operational at the end of 2033.

4.8.2 Cumulative Scenarios

- 4.8.2.1 Cumulative effects refer to effects upon receptors arising from the OnTI when considered alongside other proposed developments and activities and any other reasonably foreseeable projects or proposals.
- 4.8.2.2 In assessing the potential cumulative effects of the Proposed Development (Onshore) it is important to bear in mind that projects, predominantly those that are currently 'proposed', may or may not be ultimately taken forward for development. To build in some consideration of certainty (or uncertainty)

cumulative projects and plans have been allocated into tiered 'Cumulative Scenarios' reflecting their current status within the planning and development process.

- 4.8.2.3 All relevant operational and under construction developments have been included as part of the baseline situation in the main assessment. The cumulative effects of the OnTI are considered in relation to the following cumulative scenarios which include developments that are considered to be part of a Future Baseline as noted in Section 4.4.4:
 - Cumulative Scenario 1 assesses the effects of adding the Proposed Development (Onshore) to a cumulative situation comprising all relevant operational, under construction and consented large-scale developments; and
 - Cumulative Scenario 2 assesses the effects of adding the Proposed Development (Onshore) to a cumulative situation comprising all operational, under construction, consented, application stage and pre-application/scoping stage large-scale developments (Cumulative Scenario 1 plus preapplication/scoping stage developments).
- 4.8.2.4 These cumulative scenarios reflect the different stages at which the cumulative developments are at in the planning system, with generally more certainty that those developments which are consented will be built out and less certainty surrounding application stage developments and less again surrounding scoping stage developments.

Cumulative scenario 1

4.8.2.5 This includes the consented Green Volt Application substation and onshore grid connection, which is planned to still be under construction during the start of construction of the Onshore Substations but will become operational by the end of 2027. It is assumed that the majority of the Green Volt Application substation construction works will be complete by the time the Proposed Development (Onshore) Onshore Substation construction works begin in earnest. There are no relevant under construction developments included in the short list.

Cumulative Scenario 2

- 4.8.2.6 In the case of the pre-application stage Greens Application substation the Applicants have shared information such as the proposed location and maximum height of the developments proposed. This is to inform the respective cumulative assessments since it is likely that the applications will be considered over a similar timescale. According to information received it is assumed that construction of the Greens Application substation will start in mid-2026 and that it would be operational in early 2029.
- 4.8.2.7 Whilst the certainty of the Greens Application substation is not known, the information available and obtained through a direct request to SSEN, means that a cumulative assessment that includes this project can be undertaken.

- 4.8.2.8 In the case of the scoping stage Stromar Application, there is a high degree of uncertainty about the location of the Stromar substation and its construction programme. Currently, only a search area for the substation and cable corridor is within the public domain and no dates are available as to when its construction would begin or when it be in operation. It is assumed for the purpose of this cumulative assessment that the substation and that it will take around four years to construct. A planned operational date has not been made public. However it is assumed, for the purpose of this cumulative assessment, that its construction and operational phases will overlap with those of the Proposed Development (Onshore).
- 4.8.2.9 In the case of the scoping stage Beauly Application, a proposed route has been made public and a four year construction window between 2026 and 2030 has been defined. This cumulative assessment is based on the proposed route that will connect with the Greens Application substation. Construction of the 400kV Overhead Line and the Proposed Development (Onshore); and the operational phases of both developments, will overlap, based on this four year construction window. Limited information regarding the precise locations and specifications of the proposed structures is available at the time of writing and it has been assumed that the proposed structures would be similarly spaced and similar in appearance to pylons carrying the overhead cables to the New Deer substation.

4.8.3 Landscape character within 3km of the Onshore Substations

Undulating Agricultural Heartland (LCT 20)

Main Assessment

4.8.3.1 The main assessment in Section 4.7.4 assessed the Undulating Agricultural Heartland (LCT 20) as medium-low sensitivity and undergoing a medium-high to low magnitude of change during construction and operation of the Proposed Development (Onshore), depending on proximity to the Onshore Substations. The effects on the Undulating Agricultural Heartland (LCT 20) have been assessed as ranging from moderate and significant during construction and moderate-minor and not significant during operation within approximately 600m of the Onshore Substations, to -minor and not significant beyond 600m,with no effect where there will be no visibility of the Onshore Substations. These effects have been assessed as adverse and medium-term during the construction phase.

Scenario 1 – Cumulative assessment

4.8.3.2 In this scenario the consented Green Volt Application substation will be constructed and become operational to the south of the existing New Deer substation. It connects into New Deer substation underground to the north-west. Its underground onshore cables will extend eastwards and work on these is likely to be complete prior to the OnTI construction commencing. The Green Volt

Application onshore cable connection is therefore not relevant to this assessment.

- 4.8.3.3 The addition of the Proposed Development (Onshore) to Scenario 1 will result in a cumulative magnitude of change arising from construction of the Onshore Substations ranging from medium-high to low, with no cumulative effect occurring where the Onshore Substations exert no perceived influence on the landscape character of the LCT.
- 4.8.3.4 Construction of the Onshore Substations will exert a strong influence on a relatively localised area of the rural landscape that will decrease as intervening distance, landform and tree cover reduces their perceived influence on the landscape character. Where works associated with the Onshore Substations have a close-range influence, within approximately 600m of the Onshore Substations, their contrast with the agricultural landscape will be most pronounced.
- 4.8.3.5 In terms of extents, construction and operation of the Onshore Substations and Green Volt Application substation will occur within and be theoretically visible across a small part of the Undulating Agricultural Heartland (LCT 20). Theoretically, the Green Volt Application substation will be visible from within 4km to the west and 5km to the east, with visibility extending further to the north and south (Green Cat Renewables, 2023. Volume 2, Figure 10.4). However, local topography is such that visibility will be intermittent and patchy even before taking account of screening by small scale landscape elements including buildings and trees. The latter will restrict the substations' visual influence on the LCT to the area north of Burnside.
- 4.8.3.6 The introduction of the construction phase Onshore Substations will be notable in their close proximity with the effects of distance, the large scale of the host landscape and screening by landform and tree cover diminishing their impact further afield.
- 4.8.3.7 Generally the Green Volt Application substation will extend the energy infrastructure characteristics south of the existing New Deer and Moray East substations whilst the Onshore Substations will extend these characteristics further north with both of these influences occurring within a relatively confined area with limited intervisibility arising between the two, due to the intervening existing New Deer substations. In views from the west and east these projects will combine to extend across a wider field of view emphasising the presence of energy infrastructure as characterising element.
- 4.8.3.8 As construction and operation of the Onshore Substations will exert an influence on the same approximate and localised area as those of the consented Green Volt Application, it is considered that the magnitude of change to the landscape character will be slightly greater but broadly similar to that for the Onshore Substations alone. This is in part because it will extend the duration over which the LCT will be affected by large scale construction works and it will also extend the geographical extent of the influence of the construction and operation of energy infrastructure into further areas to the north.

Cumulative Significance of Effect

- 4.8.3.9 The cumulative effect during construction and operation will be moderate and significant within approximately 600m of the Onshore Substations reducing to minor or lower and not significant beyond this local area owing principally to the limited influence of the Onshore Substations on the wider character of the LCT. The effect during construction and operation will be medium or long-term respectively, adverse and reversible.
- 4.8.3.10 The significant effects will reduce further by year 15 of operation owing to the growth and screening effect of the mitigation planting around the Onshore Substations.

Scenario 2 – Cumulative Assessment

- 4.8.3.11 This scenario assumes that the Greens Application and Beauly Application will be located to the north-west and will be separated from these developments by a minor road at Burnside as well as an area of settled agricultural land with some areas of forestry. The Stromar Application covers the area around the Greens Application site and, potentially, the Stromar substation may be located nearby.
- 4.8.3.12 The construction and operation of these projects will together make the influence of energy infrastructure more widespread within the LCT, extending it into areas to the north-west of the areas affected by the existing New Deer and Moray East substations and the consented Green Volt Application and in a direction not currently affected by overhead, pylon mounted transmission lines.
- 4.8.3.13 The addition of the construction and operation phase Onshore Substations to this context may influence parts of the intervening settled agricultural land that may also be influenced by the Greens Application, Beauly Application and potentially also the Stromar Application. The cumulative ZTV presented on Figure 4-10 illustrates the areas where there may be theoretical visibility of both the Onshore Substations and the Greens Application substation.
- 4.8.3.14 There will however be little actual intervisibility of the construction and operational phases of the Onshore Substations with construction and operation of the Greens Application. Tree cover at Burnside and west of Parkhill is sufficient that the Greens Application substation will have little visual influence on the landscape character of the LCT south of Burnside. The lack of intervisibility between the two developments within their immediate vicinity means that their visual influence over these areas will be similar to that for each development alone. Further afield, both developments may exert some perceived influence on the landscape character, although this will be limited in magnitude by distance and intervening features. Different parts of the LCT may be influenced by visibility of one or other energy developments and this will likely result in a wider perception of character change.
- 4.8.3.15 There will be visibility of the construction and operational phases of the Onshore Substations with construction and operation of the Beauly Application. Tree heights at Burnside and west of Parkhill are not sufficient to screen the emerging and completed Beauly Application pylons. These will have some visual influence

on the landscape character of the LCT south of Burnside. Intervisibility between the two developments within their immediate vicinity means that their visual influence over these areas will be higher than for each development alone. Further afield, both developments may exert some perceived influence on the landscape character, although this will be limited in magnitude by distance and intervening features. Different parts of the LCT may be influenced by visibility of one or other energy developments and this will likely result in a wider perception of character change.

- 4.8.3.16 The cumulative magnitude of change in the context of the construction and operational phases of the Greens Application substation will be broadly similar to the construction phase Onshore Substations alone, medium-high to low, with none where they do not exert a visual influence.
- 4.8.3.17 The cumulative magnitude of change in the context of the construction and operational phases of the Beauly Application will be higher than that of the construction phase Onshore Substations alone, but will remain within medium-high to low levels, with none where they do not exert a visual influence.
- 4.8.3.18 The cumulative magnitude of change in respect of the construction and operational phases of the possible Stromar Application substation will be medium-high to low. This reflects the location of the Stromar Application substation within the same broad area as the Greens Application substation, as shown on Volume 7E, Appendix 4-2, Figure 4-9.

Cumulative Significance of Effect

- 4.8.3.19 The cumulative effect of the Onshore Substations during the construction phase in conjunction with the consented Green Volt Application substation, the preapplication stage Greens Application substation and Beauly Application and scoping stage Stromar Application substation, on the Undulating Agricultural Heartland (LCT 20) will be:
 - higher than the effect of the Onshore Substations alone but still within the medium-high level of magnitude and moderate (significant) within approximately 600m of the Onshore Substations;
 - moderate-minor to minor and not significant, beyond this area; and with
 - no effect where there will be no visibility of the Onshore Substations.
- 4.8.3.20 The cumulative effect of the Onshore Substations during the operational phase on the Undulating Agricultural Heartland (LCT 20) in conjunction with the consented Green Volt Application substation, pre-application stage Greens Application substation and Beauly Application pylons, and scoping stage Stromar Application substation will be moderate and significant within approximately 600m; moderate-minor to minor and not significant, beyond this area; and with no cumulative effect where there will be no visibility of the Onshore Substations.
- 4.8.3.21 The significant effects will reduce to not significant by year 15 of operation owing to the growth and screening effect of the mitigation planting around the Onshore Substations.

4.8.4 Visual amenity within 3km of the Onshore Substations

Scenario 1 – Cumulative assessment

Viewpoint 1: Minor road east of Deer's Hill Description of Potential Cumulative Effect

- 4.8.4.1 The main assessment of the effects of the Onshore Substations on Viewpoint 1: Minor road east of Deer's Hill, presented in Section 4.7.5, rated the sensitivity of residents as medium and that of road-users as medium. The magnitude of change was assessed as medium during construction and medium-low during operation resulting in moderate and not-significant effects for residents and for road-users during construction. There will be a moderate-minor effect for residents and moderate-minor effects for road-users, that are not significant for both receptor classes during operation.
- 4.8.4.2 A cumulative effect that will arise as a result of the Onshore Substations Construction is that it will initially coincide with the end of the Green Volt Application construction phase and will continue on once this is complete for a number of years. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant continuously over a longer duration than with the Proposed Development (Onshore) construction alone.
- 4.8.4.3 Construction of the Onshore Substations will be visible approximately 1.5km to the east with the existing New Deer, Moray East and consented Green Volt Application substations behind and to the south. The construction phase Onshore Substations will be a moderately distant feature in the view seen to the north of the New Deer and construction phase Green Volt Application substations. It will therefore occur within an area that has a context of similar forms and scale of development, and within a similar area of landscape character suggesting an integrated approach. As they will be contiguous, the three developments will appear similarly distant with comparable visibility of each. The Green Volt substation is proposed to be set low within its site and will be largely concealed behind coniferous tree belts, intervening landform and the sheds at Burnside from this viewpoint. Tall cranes and the upper parts of buildings may be visible over these features. The Onshore Substations' construction will appear more prominent due to the angle of view and closer range.
- 4.8.4.4 Once operational the Green Volt Application substation will be largely hidden from view with limited, upper parts apparent beyond the Greenburn farm sheds.

Cumulative Magnitude of Change

4.8.4.5 During the initial stages of the construction of the Onshore Substations in a context of the final stages of construction of the Green Volt Application substation the cumulative magnitude of change resulting from the addition of the Onshore Substations would be medium.

- 4.8.4.6 During the ongoing construction of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be medium-low.
- 4.8.4.7 During the operation of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be low.
- 4.8.4.8 Once the proposed mitigation planting around the Green Volt Application substation is established the cumulative magnitude of change will be negligible.

Cumulative Significance of Effect

- 4.8.4.9 Taking account of the medium sensitivity of the receptors and the medium cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the final few months of the construction of the Green Volt Application substation will be moderate and significant, adverse and short term.
- 4.8.4.10 Taking account of the medium sensitivity of the receptors and the medium-low cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate-minor and not significant, adverse and medium term.
- 4.8.4.11 Taking account of the medium sensitivity of the receptors and the low cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the operational Green Volt Application substation will be minor and not significant, adverse and long term.
- 4.8.4.12 Once the proposed mitigation planting around the Green Volt Application substation is established the cumulative effect will be minor/negligible.

Viewpoint 2: Minor road near Maryhill

Description of Potential Cumulative Effect

- 4.8.4.13 The main assessment of the effects of the Onshore Substations on Viewpoint 2: Minor road near Maryhill, presented in Section 4.7.5, rated the sensitivity of residents as medium-high and that of motorists as medium. The magnitude of change was assessed as medium-high with major-moderate effects for residents and moderate effects for road-users, that are significant for both receptor classes during construction and the early stages of operation. After 15 years of operation (18 years post-Phase 1 mitigation planting growth) the magnitude of change will have reduced to low, due to the establishment of intervening woodland, resulting in a moderate-minor, not significant effect. The phase one mitigation planting will establish and provide more effective screening earlier in this view than would otherwise have been the case.
- 4.8.4.14 Construction of the Onshore Substations will appear in front of the existing New Deer substation and the under construction/operational Green Volt Application substation. The Green Volt Application substation is unlikely to be visible from

this location except for when tall cranes may be in use on the site and may be visible above the intervening landform, New Deer substations and trees.

4.8.4.15 A cumulative effect that will arise as a result of the Onshore Substations construction is that it will initially coincide with the end of the Green Volt Application construction phase and will continue on once this is complete for a number of years. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant continuously over a longer duration than with the Proposed Development (Onshore) construction alone.

Cumulative Magnitude of Change

- 4.8.4.16 During the initial stages of the construction of the Onshore Substations in a context of the final stages of construction of the Green Volt Application substation (when only the upper parts of tall cranes may be visible above the intervening landform, existing New Deer substation and trees) the cumulative magnitude of change resulting from the addition of the Onshore Substations would be medium-low.
- 4.8.4.17 During the operational phase of the Green Volt Application substation the cumulative magnitude of change would be negligible/no change at this viewpoint.

Cumulative Significance of Effect

- 4.8.4.18 Taking account of the medium-high sensitivity of the residents and the medium sensitivity of the motorists and the medium-low cumulative magnitude of change of the construction phase of the Onshore Substations in the context of the final few months of the construction of the Green Volt Application substation will be moderate and not significant for residents and moderate-minor (not significant) for motorists. Effects would be adverse and short term.
- 4.8.4.19 Taking account of the medium-high and medium sensitivity of the receptors and the medium-low cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate and not significant for residential receptors and moderate-minor, adverse and medium-term.
- 4.8.4.20 Taking account of the medium-high and medium sensitivity of the receptors and the negligible/no change cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the operational Green Volt Application substation will be minor and not significant, adverse and long term, for both residents and motorists.
- 4.8.4.21 Once the proposed mitigation planting around the Green Volt Application substation is established, during operation, the cumulative effect will be minor/negligible for residents and motorists.

Viewpoint 3: Minor road near Upperton - Residents and Motorists *Description of Potential Cumulative Effect*

- 4.8.4.22 The main assessment of the effects of the Onshore Substations on Viewpoint 3: Minor road near Upperton, presented in Section 4.7.5, rated the sensitivity of residents as medium-high and that of road-users as medium. The magnitude of change was assessed as medium during construction and medium-low during operation. This resulted in moderate (significant) effects for residents and moderate (not significant) effects, for motorists. These effects would occur during construction and operation but will reduce to moderate-minor and minor after an approximate 15 year mitigation planting establishment period.
- 4.8.4.23 The construction phase Onshore Substations will appear to the north of the existing New Deer substation and the under construction/operational Green Volt Application substation. The works on both sites will be visible at medium range within a rural and reasonably large scale landscape, in the context of large scale energy infrastructure with varied levels of screening by intervening trees.
- 4.8.4.24 The Green Volt Application substation is likely to be largely screened from this location due to the intervening tree belts to the north of Mains of Asleid. This is with the exception of when tall cranes may be in use on the site during construction and the upper parts of the buildings which may be visible above the intervening trees.
- 4.8.4.25 A cumulative effect that will arise as a result of the Onshore Substations construction is that it will initially coincide with the end of the Green Volt Application construction phase and will continue on once this is complete for a number of years. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant continuously over a longer duration than with the Proposed Development (Onshore) construction alone.

Cumulative Magnitude of Change

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- 4.8.4.26 The construction phase Onshore Substations will appear more intrusive than the Green Volt Application substation works due to their location which is more in line with the road. The addition of construction works related to the Onshore Substations will increase the level of such works within the view but their similarity in appearance and scale to works within Green Volt Application means that there appears to be an integrated approach to the siting and design of the developments.
- 4.8.4.27 During the initial stages of the construction of the Onshore Substations in a context of the final stages of construction of the Green Volt Application substation the cumulative magnitude of change resulting from the addition of the Onshore Substations would be medium.
- 4.8.4.28 During the ongoing construction of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of

change will be low as the Green Volt Application substation will be largely screened from view by intervening trees.

- 4.8.4.29 During the operation of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be low as the Green Volt Application substation will be largely screened from view by intervening trees.
- 4.8.4.30 Once the proposed mitigation planting around the Green Volt Application substation is established the cumulative magnitude of change will be negligible.

Cumulative Significance of Effect

- 4.8.4.31 Taking account of the medium-high and medium sensitivity of the receptors and the medium cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the final few months of the construction of the Green Volt Application substation will be moderate and significant for residents and moderate and not significant for motorists. These effects will be adverse and short term.
- 4.8.4.32 Taking account of the medium-high and medium sensitivity of the receptors and the low cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate-minor or minor and not significant, adverse and medium-term.
- 4.8.4.33 Taking account of the medium-high and medium sensitivity of the receptors and the low cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate-minor for residents or minor and not significant for motorists. Both effects are adverse and long term.
- 4.8.4.34 Once the proposed mitigation planting around the Green Volt Application substation is established the cumulative effect will be minor/negligible.

Viewpoint 4: Minor road near Woodhead - Residents and Motorists *Description of Potential Cumulative Effect*

- 4.8.4.35 The main assessment of the effects of the Onshore Substations on Viewpoint 4: Minor road near Woodhead, presented in Section 4.7.5, rated the sensitivity of residents as medium-high and that of road-users as medium. The magnitude of change was assessed as medium during construction resulting in moderate significant effects on residents and moderate not significant effects on motorists. The magnitude of change will reduce to medium-low during operation resulting in moderate (significant) effects for residents and moderate-minor (not significant) effects for road-users.
- 4.8.4.36 The Green Volt Application substation is likely to be largely screened from this location due to the intervening tree belts to the north of Mains of Asleid. This is with the exception of when tall cranes may be in use on the site during construction and the upper parts of the buildings which may be visible above the intervening trees.

4.8.4.37 A cumulative effect that will arise as a result of the Onshore Substations construction is that it will initially coincide with the end of the Green Volt Application construction phase and will continue on once this is complete for a number of years. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant continuously over a longer duration than with the Proposed Development (Onshore) construction alone.

Cumulative Magnitude of Change

- 4.8.4.38 The construction phase Onshore Substations will appear more intrusive than the Green Volt Application works due to their closer proximity, the angle of the view and orientation of the Onshore Substations within it and their location within a more open part of the view. The addition of construction works related to the Onshore Substations will increase the level of such works within the view but their similarity, in appearance and scale, to works within Green Volt Application means that there appears to be an integrated approach to the siting and design of the developments.
- 4.8.4.39 During the initial stages of the construction of the Onshore Substations in a context of the final stages of construction of the Green Volt Application substation the cumulative magnitude of change resulting from the addition of the Onshore Substations would be medium.
- 4.8.4.40 During the ongoing construction of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be low as the Green Volt Application substation will be largely screened from view by intervening trees.
- 4.8.4.41 During the operation of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be low as the Green Volt Application substation will be largely screened from view by intervening trees.
- 4.8.4.42 Once the proposed mitigation planting around the Green Volt Application substation is established the cumulative magnitude of change will be negligible.

Cumulative Significance of Effect

- 4.8.4.43 Taking account of the medium-high and medium sensitivity of the receptors and the medium cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the final few months of the construction of the Green Volt Application substation will be moderate and significant for residents and moderate and not significant for motorists. These effects will be adverse and short term.
- 4.8.4.44 Taking account of the medium-high and medium sensitivity of the receptors and the low cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate-minor for residents or minor for motorists and not significant. The effects will be adverse and medium term.

- 4.8.4.45 Taking account of the medium-high and medium sensitivity of the receptors and the low cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate-minor (residents) or minor (motorists) and not significant, adverse and long term.
- 4.8.4.46 Once the proposed mitigation planting around the Green Volt Application substation is established the cumulative effect will be minor/negligible.

Viewpoint 5: Minor road near Upper Mains of Asleid – **Residents and motorists** *Description of Potential Cumulative Effect*

4.8.4.47 The main assessment of the effects of the Onshore Substations on Viewpoint 5: Minor road near Upper Mains of Asleid, presented in Section 4.7.5, rated the sensitivity of residents as medium-high and that of road-users as medium. The magnitude of change was assessed as medium during construction with moderate significant effects for residents and moderate not significant effects for road users. During operation the magnitude of change was assessed as mediumlow resulting in moderate significant effects for residents and moderate-minor not significant effects for road-users.

Cumulative Magnitude of Change

- 4.8.4.48 The construction phase Onshore Substations will appear less intrusive than the Green Volt Application works due to their greater distance from the viewpoint and location beyond the existing New Deer substation and earth works.
- 4.8.4.49 The addition of construction works related to the Onshore Substations will increase the level of such works within the view but their similarity in appearance and scale to works within Green Volt means that there appears to be an integrated approach to the siting and design of the development.
- 4.8.4.50 During the initial stages of the construction of the Onshore Substations in a context of the final stages of construction of the Green Volt Application substation the cumulative magnitude of change resulting from the addition of the Onshore Substations would be medium. It is largely the Green Volt Application works that will be prominent during this period with the Onshore Substations' construction having a more limited influence. It will however introduce further construction works into a different part of the view, ahead of north bound road users, from this location.
- 4.8.4.51 During the ongoing construction of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be medium. It is largely the Green Volt Application substation that will be prominent during this period with the Onshore Substations' construction having a more limited influence. It will however involve construction works within different parts of the view from this location.
- 4.8.4.52 During the operation of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be medium-low. It is largely the Green Volt Application substation

that will be prominent during this period with the Onshore Substations' operation having a more limited influence. It will however result in energy development within a different part of the view from this location, although partially concealed by intervening landform and the establishing woodland within the New Deer substation site. The similarity of developments and the existing energy development context in the form of pylon mounted transmission lines reduces the cumulative magnitude of change resulting from the Onshore Substations in operation.

4.8.4.53 Once the proposed mitigation planting around the Green Volt Application substation and the Onshore Substations becomes established the cumulative magnitude of change will be low.

Cumulative Significance of Effect

- 4.8.4.54 Taking account of the medium-high and medium sensitivity of the receptors and the medium cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the final few months of the construction of the Green Volt Application substation will be moderate and significant for residents and moderate and not significant for motorists. These effects will be adverse and short term.
- 4.8.4.55 Taking account of the medium-high and medium sensitivity of the receptors and the medium cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate and significant for residents and moderate and not significant for motorists. These effects will be adverse and medium term.
- 4.8.4.56 Taking account of the medium-high and medium sensitivity of the receptors and the medium-low cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate (residents) or moderateminor (motorists) and not significant, adverse and long term.
- 4.8.4.57 Once the proposed mitigation planting around the Green Volt Application substation is established the cumulative effect will be moderate-minor or minor.

Viewpoint 6: Minor road near North Millbrex – Residents and motorists *Description of Potential Cumulative Effect*

- 4.8.4.58 The main assessment of the effects of the Onshore Substations at Viewpoint 6: Minor road near North Millbrex, presented in Section 4.7.5, rated the sensitivity of residents as medium and that of road-users as medium. The magnitude of change was assessed as medium with moderate not significant effects for residents and road-users during both construction and operation.
- 4.8.4.59 The Green Volt Application substation will be located close to the minor road that runs east from this viewpoint in an open part of the view that is back clothed by rising land and the trees around Upper Mains of Asleid. It will be readily apparent in views from this location. It is proposed to be set into the rising land which

may conceal lower parts of the substation in views from this direction. Screen planting is proposed along the western edge of the substation and along the minor road to the south.

4.8.4.60 A cumulative effect will arise as a result of the Onshore Substations construction initially coinciding with the end of the Green Volt Application construction phase and will continue on once this is complete for a number of years. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant continuously over a longer duration than with the Proposed Development (Onshore) construction alone.

Cumulative Magnitude of Change

- 4.8.4.61 The construction phase Onshore Substations will appear less intrusive than the Green Volt Application substation works due to their location, which is at a slightly greater distance along with partial screening by intervening trees located to the south of East Swanford. The addition of construction works related to the Onshore Substations will increase the level of such works within the view but their similarity in appearance and scale to works within Green Volt Application means that there appears to be an integrated approach to the siting and design of the developments.
- 4.8.4.62 During the initial stages of the construction of the Onshore Substations in a context of the final stages of construction of the Green Volt Application substation the cumulative magnitude of change resulting from the addition of the Onshore Substations would be medium.
- 4.8.4.63 During the ongoing construction of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be medium as both developments will be readily apparent across this view.
- 4.8.4.64 During the operation of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be medium-low as the operational Onshore Substations become less noticeable within this context.
- 4.8.4.65 Once the proposed mitigation planting around the Green Volt Application substation and the Onshore Substations is established the cumulative magnitude of change will be low.

Cumulative Significance of Effect

4.8.4.66 Taking account of the medium sensitivity of the receptors and the medium cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the final few months of the construction of the Green Volt Application substation will be moderate and significant for residents and moderate and not significant for motorists. These effects will be adverse and short-term.

- 4.8.4.67 Taking account of the medium sensitivity of the receptors and the medium cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate and significant for residents and moderate and not significant for motorists. These effects will be adverse and medium-term.
- 4.8.4.68 Taking account of the medium sensitivity of the receptors and the medium-low cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate-minor for residents and motorists, not significant, adverse and long term.
- 4.8.4.69 Once the proposed mitigation planting around the Green Volt Application substation is established the cumulative effect will be minor.

Viewpoint 7: Minor road near Slacks of Cairnbanno

Description of Potential Cumulative Effect

- 4.8.4.70 The main assessment of the effects of the Onshore Substations on Viewpoint 7: Minor road near Slacks of Cairnbanno, presented in Section 4.7.5, rated the sensitivity of residents as medium-high and road-users as medium. The magnitude of change was assessed as low with moderate-minor and minor effects for residents and road-users respectively, that are not significant.
- 4.8.4.71 The Green Volt Application substation is likely to be largely screened from this location due to the intervening tree belts to the north of Mains of Asleid. This is with the exception of when tall cranes may be in use on the site during construction and the upper parts of the buildings which may be visible above the intervening trees.
- 4.8.4.72 A cumulative effect that will arise as a result of the Onshore Substations construction is that it will initially coincide with the end of the Green Volt Application construction phase and will continue on once this is complete for a number of years. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant continuously over a longer duration than with the Proposed Development (Onshore) construction alone.

Cumulative Magnitude of Change

4.8.4.73 The construction phase Onshore Substations will appear more intrusive than the Green Volt Application works due to their slightly closer proximity, the angle of the view and orientation of the Onshore Substations Site within it and their location within a more open part of the view ahead of the direction of travel west along the road in this viewpoint. The addition of construction works related to the Onshore Substations will increase the level of such works within the view but their similarity in appearance and scale to works within the Green Volt Application means that there appears to be an integrated approach to the siting and design of the developments.

- 4.8.4.74 During the initial stages of the construction of the Onshore Substations in a context of the final stages of construction of the Green Volt Application substation the cumulative magnitude of change resulting from the addition of the Onshore Substations would be medium-low.
- 4.8.4.75 During the ongoing construction of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be low as the Green Volt substation will be largely screened from view by intervening trees.
- 4.8.4.76 During the operation of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be low as the Green Volt substation will be largely screened from view by intervening trees.
- 4.8.4.77 Once the proposed mitigation planting around the Green Volt Application substation and the Onshore Substations is established the cumulative magnitude of change will be low/negligible.

Cumulative Significance of Effect

- 4.8.4.78 Taking account of the medium high and medium sensitivity of the receptors and the medium-low cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the final few months of the construction of the Green Volt Application substation will be moderate and not significant for residents and moderate-minor and not significant for motorists. These effects will be adverse and short term.
- 4.8.4.79 Taking account of the medium-high and medium sensitivity of the receptors and the low cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate-minor or minor and not significant, adverse and medium term.
- 4.8.4.80 Taking account of the medium-high and medium sensitivity of the receptors and the low cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the operational Green Volt Application substation will be moderate minor or minor and not significant, adverse and long term.
- 4.8.4.81 Once the proposed mitigation planting around the Green Volt Application substation is established the cumulative effect will be minor/negligible.

Viewpoint 8: Minor Road near Hillhead of Auchreddie

Description of Potential Cumulative Effect

4.8.4.82 The main assessment of the effects of the Onshore Substations on Viewpoint 8: Minor Road near Hillhead of Auchreddie, presented in Section 4.7.5, rated the sensitivity of road-users as medium. The magnitude of change was assessed as low during construction and operation with minor, not significant effects for road-users.

- 4.8.4.83 The Green Volt Application substation is likely to be largely screened from this location due to the intervening tree belts to the north of Mains of Asleid. This is with the exception of when tall cranes may be in use on the site during construction and the upper parts of the buildings which may be visible above the intervening trees.
- 4.8.4.84 A cumulative effect that will arise as a result of the Onshore Substations construction is that it will initially coincide with the end of the Green Volt Application construction phase and will continue on once this is complete for a number of years. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant continuously over a longer duration than with the Proposed Development (Onshore) construction alone.

Cumulative Magnitude of Change

- 4.8.4.85 The construction phase Onshore Substations will appear more intrusive than the Green Volt Application works due to their slightly closer proximity, the angle of the view and orientation of the Onshore Substations within it and their location within a more open part of the view ahead of the direction of travel west along the road in this viewpoint. The addition of construction works related to the Onshore Substations will increase the level of such works within the view but their similarity in appearance and scale to works within Green Volt Application means that there appears to be an integrated approach to the siting and design of the developments.
- 4.8.4.86 During the initial stages of the construction of the Onshore Substations in a context of the final stages of construction of the Green Volt Application substation the cumulative magnitude of change resulting from the addition of the Onshore Substations would be medium-low.
- 4.8.4.87 During the ongoing construction of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be low as the Green Volt substation will be largely screened from view by intervening trees.
- 4.8.4.88 During the operation of the Onshore Substations in the context of the operational Green Volt Application substation the cumulative magnitude of change will be low as the Green Volt Application substation will be largely screened from view by intervening trees.
- 4.8.4.89 Once the proposed mitigation planting around the Green Volt Application substation and the Onshore Substations is established the cumulative magnitude of change will be negligible.

Cumulative Significance of Effect

4.8.4.90 Taking account of the medium sensitivity of the receptors and the medium-low cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the final few months of the

construction of the Green Volt Application substation will be moderate-minor and not significant for motorists. These effects will be adverse and short term.

- 4.8.4.91 Taking account of the medium sensitivity of the receptors and the low cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the operational Green Volt Application substation will be minor and not significant, adverse and medium term.
- 4.8.4.92 Taking account of the medium sensitivity of the receptors and the low cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the operational Green Volt Application substation will be minor and not significant, adverse and long term.
- 4.8.4.93 Once the proposed mitigation planting around the Green Volt Application substation is established the cumulative effect will be minor/negligible.

Scenario 2 – Cumulative assessment

Viewpoint 1: Minor road east of Deer's Hill - Residents and Motorists *Description of Potential Cumulative Effect*

- 4.8.4.94 The main assessment of the effects of the Onshore Substations on Viewpoint 1: Minor road east of Deer's Hill, presented in Section 4.7.5, rated the sensitivity of residents as medium and that of road-users as medium. The magnitude of change was assessed as medium during construction and medium-low during operation resulting in moderate and not significant effects for road-users during construction. There will be a moderate-minor effect for residents and moderateminor effects for road-users, that are not significant for both receptor classes during operation.
- 4.8.4.95 A cumulative effect that will arise as a result of the Onshore Substations construction is that it will coincide with the construction of the Greens Application substation and will continue on once this is operational for a short period. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as successive views of tall construction plant than would occur with the Proposed Development (Onshore) construction alone.
- 4.8.4.96 The Greens Application substation will be located approximately 1.5km northnorth-west of the Onshore Substations. Lying to the north of the viewpoint, it will be screened from view by intervening landform.
- 4.8.4.97 The Green Volt Application substation will adjoin the New Deer and Moray East substations to the south, extending such development southwards. It will appear contiguous with the adjoining substations forming a cluster of substations with the Onshore Substations forming a slightly separated outlier.
- 4.8.4.98 The Beauly Application pylons will extend from the west to the Greens Application substation before receding into the distance in the east. Intervening

landform will limit their visibility. Vegetation will partially screen the pylons which will pierce the skyline in places.

4.8.4.99 The Stromar Application substation during the construction and operational phases may be visible north of the Onshore Substation beyond the minor road at Burnside. It's location within the search area has not yet been determined but it may result in further cumulative influences at this viewpoint.

Cumulative Magnitude of Change

- 4.8.4.100 Construction of the Onshore Substations would be apparent within the context of construction of the Greens Application, Green Volt substations, Beauly Application pylons and possibly the Stromar Application substation. Intervening landform and screening by small scale landscape elements will restrict visibility of the construction works within the cumulative developments to tall construction plant and operations at height. The addition of the construction phase Onshore Substations will generally appear larger and more disruptive, as ground levels works will be visible. The cumulative magnitude of change resulting from the addition of the Onshore Substations would be medium.
- 4.8.4.101 The Greens Application substation, Beauly Application pylons and Stromar Application substation, potentially, will likely be strongly filtered or screened by landform and vegetation during construction of the Onshore Substations and the cumulative magnitude of change will be similar to that of the Onshore Substations alone, medium.
- 4.8.4.102 The operational Onshore Substations will likely have limited cumulative effects with the operational cumulative developments due to their screening by landform and surface features.

Cumulative Significance of Effect

4.8.4.103 The cumulative effects of the construction phase Onshore Substations and the under construction Greens Application and Green Volt substations, Beauly Application Pylons; and those with the under construction Stromar Application substation, are likely to be similar to those of the Onshore Substations alone, moderate and significant for residents and moderate but not significant for motorists.

Viewpoint 2: Minor road near Maryhill - Residents and Motorists *Description of Potential Cumulative Effect*

4.8.4.104 The main assessment of the effects of the Onshore Substations on Viewpoint 2: Minor road near Maryhill, presented in Section 4.7.5, rated the sensitivity of residents as medium-high and that of motorists as medium. The magnitude of change was assessed as medium-high with major-moderate effects for residents and moderate effects for road-users, that are significant for both receptor classes during construction and the early stages of operation. After 15 years of operation (18 years post-Phase 1 mitigation planting growth) the magnitude of change will have reduced to low, due to the establishment of intervening woodland, resulting in a moderate-minor, not significant effect. The phase one mitigation planting will establish and provide more effective screening earlier in this view than would otherwise have been the case.

- 4.8.4.105 Construction of the Onshore Substations will appear in front of the existing New Deer substation and Green Volt Application substation, and in the opposite direction from construction of the Greens Application substation, possible location of the Stromar Application substation and Beauly Application pylons. Construction of the cumulative projects is unlikely to be visible from this location except for when tall cranes may be in use on the site and may be visible above the trees.
- 4.8.4.106 A cumulative effect that will arise as a result of the Onshore Substations construction is that it will coincide with the construction of the Greens and Green Volt Application substations and Beauly Application pylons and will continue on once these are operational for a short period. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as successive views of more tall construction plant than would occur with the Proposed Development (Onshore) construction alone.

Cumulative Magnitude of Change

- 4.8.4.107 During the construction phase of the Onshore Substations in a context of the construction of the Greens Application substation, the Beauly Application pylons and potentially also the Stromar Application substation, only the upper parts of tall cranes may be visible above intervening trees, in the opposite direction from the Onshore Substations. The latter stages of the Green Volt Application substation construction may also be visible. The cumulative magnitude of change resulting from the addition of the Onshore Substations would be medium-low.
- 4.8.4.108 During the operational phase of the Greens Application substation and the possible Stromar Application substation as they would be strongly filtered or screened by trees, the cumulative magnitude of change would be negligible/no change at this viewpoint.
- 4.8.4.109 The Green Volt Application substation will lie beyond the Onshore Substations, and the New Deer and Moray East substations to the south. The intervening substations, landform and trees will screen much of the Green Volt Application substation.
- 4.8.4.110 The Beauly Application pylons will lie behind the viewer, directly opposite the Onshore Substations and extending to the west and east. Nearby trees north of the minor road will obscure the lower parts of the pylons while their tops will be visible above.

Cumulative Significance of Effect

4.8.4.111 Taking account of the medium-high sensitivity of the residents, the medium sensitivity of the motorists and the medium-low cumulative magnitude of change arising from construction of the Onshore Substations in the context of the construction phase of the Greens Application substation, the Beauly Application

pylons, the Green Volt Application substation and potentially also the Stromar Application substation, the cumulative effect will be moderate (not significant) for residents and moderate-minor (not significant) for motorists. Effects would be adverse and short-term.

- 4.8.4.112 Taking account of the medium-high sensitivity of the residents, the medium sensitivity of the motorists and the negligible/no change cumulative magnitude of change arising from construction of the Onshore Substations in the context of the operational Greens Application substation, the Beauly Application pylons, the Green Volt Application substation and potentially also the Stromar Application substation, the cumulative effect will be minor and not significant for residents and motorists. Effects would be adverse and short-term.
- 4.8.4.113 The operational Onshore Substations will likely have no cumulative effects with the operational cumulative developments due to their screening by intervening trees.

Viewpoint 3: Minor road near Upperton - Residents and Motorists *Description of Potential Cumulative Effect*

- 4.8.4.114 The main assessment of the effects of the Onshore Substations on Viewpoint 3: Minor road near Upperton, presented in Section 4.7.5, rated the sensitivity of residents as medium-high and that of road-users as medium. The magnitude of change during construction was assessed as medium-low with moderate significant effects for residents and moderate not significant effects for roadusers.
- 4.8.4.115 Construction of the Greens Application substation will form a moderately distant feature on the near level skyline to the north-west. The location of the Greens Application substation site on sloping land means that much of the works and emerging structures will be visible with intervening trees and woodland screening the lower parts of the site as indicated by Figure 4-13g
- 4.8.4.116 Construction and operation of the Green Volt Application substation will extend construction activity south of the existing New Deer and Moray East substations, with construction of the Onshore Substations to the north. Intervening landform, woodland and other vegetation will screen much of the Green Volt Application substation's ground level works.
- 4.8.4.117 The construction and operation phase Beauly Application pylons will lie nearby, extending to the Greens Application substation and receding into the distance beyond. They will form a near to moderately distant feature extending to the skyline to the north-west. Construction and operation of the Beauly Application pylons will be associated with that of the Greens Application substation, the two developments separated from the cluster of substation developments to the south. Intervening trees and woodland will intermittently screen lower parts of the pylons.

- 4.8.4.118 Construction of the Stromar Application substation would appear similar to that of the New Deer Application substation and has been assumed would occur within the proximity of the Greens Application substation.
- 4.8.4.119 A cumulative effect will arise as a result of the Onshore Substations construction phase occurring at the same time, during 2026 and 2027, as the start of the Greens Application substation construction phase with its construction continuing for a number of years. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant continuously over a longer duration than with the Onshore Substations construction alone.
- 4.8.4.120 A cumulative effect will arise as a result of the completed the Onshore Substations within the context of the completed Greens Application substation, Green Volt Application substation and Beauly Application pylons.
- 4.8.4.121 The location of the Stromar Application substation has not yet been determined but it may result in further cumulative influences at this viewpoint. These may arise during the construction and operational phases of the Stromar Application substation when it may be visible north of the Onshore Substations beyond the minor road at Burnside.

Cumulative Magnitude of Change

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- 4.8.4.122 The construction phase Onshore Substations will be a moderately distant feature in the view that will be visible to their full extent and to the north of the existing New Deer substation and the Green Volt Application substation, with the Greens Application substation (and potentially also the Stromar Application substation) some distance further north and the construction phase Beauly Application extending towards and receding into the distance and over the skyline beyond.
- 4.8.4.123 A medium-high cumulative magnitude of change is considered likely to arise from the addition of the construction phase of the Onshore Substations to a cumulative baseline including the under construction Greens Application substation, the possible Stromar Application substation and Green Volt Application substation. This reflects the similarity in scale and appearance of these developments and the extent of the view they would occupy. This also takes into account the presence of the Beauly Application construction within the context of the existing pylons leading to the New Deer substation. Separation between the areas of construction will increase the extent of construction works within the view and their visual impact, particularly as the cumulative developments will be separated from similar construction works and activity at the Onshore Substations.
- 4.8.4.124 Once the cumulative substations and pylons are operational and the disruptive presence of construction activity and tall plant is removed, the cumulative magnitude of change of the operation of the Onshore Substations will reduce to medium.

4.8.4.125 At present no details are known regarding mitigation planning for the cumulative projects. However, when proposed mitigation planting around the Onshore Substations has established the cumulative magnitude of change will reduce further. Assuming a worst-case scenario without mitigation planting within the cumulative developments, the cumulative magnitude of change will likely remain medium. Should mitigation planting that is similar to that within the Onshore Substations be implemented within the cumulative projects, there will be a medium-low cumulative magnitude of change once it has established.

Cumulative Significance of Effect

- 4.8.4.126 Taking account of the medium-high or medium sensitivity of the receptors and the medium-high cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the Greens Application and Green Volt Application substations and Beauly Application pylons will be major-moderate and significant for residents or moderate and not significant for road users, adverse and short term.
- 4.8.4.127 Taking account of the medium-high or medium sensitivity of the receptors and the medium cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the Greens Application, possible Stromar Application and Green Volt Application substations and Beauly Application pylons and Stromar Application substations will be moderate and significant for residents and not significant for road users, adverse and medium term.

Viewpoint 4: Minor road near Woodhead - Residents and Motorists Description of Potential Cumulative Effect

- 4.8.4.128 The main assessment of the effects of the Onshore Substations on Viewpoint 4: Minor road near Woodhead, presented in Section 4.7.5, rated the sensitivity of residents as medium-high and that of road-users as medium. The magnitude of change was assessed as medium during construction resulting in moderate significant effects on residents and moderate not significant effects on motorists. The magnitude of change will reduce to medium-low during operation resulting in moderate (significant) effects for residents and moderate-minor (not significant) effects for road-users.
- 4.8.4.129 Construction of the Greens Application substation will be visible as a moderately distant feature on the near level skyline to the west against a backdrop of woodland. The location of the substation on sloping land means that much of the works will be visible with intervening trees and woodland screening those within the lower parts of each site. Construction cranes will rise above the backing woodland, piercing the skyline. The Stromar Application substation may also be similarly visible in the vicinity of the Greens Application substation.
- 4.8.4.130 Construction of the Green Volt Application substation and Onshore Substations will appear either side of the existing New Deer and Moray East substations, with the operational substations forming a much wider cluster of such development

within the view. Intervening vegetation will screen ground level works with construction cranes rising just above the skyline.

- 4.8.4.131 The construction and operation phase Beauly Application pylons will lie to north and north-west, extending to the Greens Application substation and receding into the distance beyond. They will form a near to moderately distant feature extending to the skyline to the north-west. Construction and operation of the Beauly Application pylons will be associated with that of the Greens Application substation, the two developments separated from the cluster of substation developments to the south. Intervening trees and woodland will intermittently screen lower parts of the pylons. The emerging Beauly Application pylons and associated works at height will be visible above the skyline, leading to and receding from the Greens Application substation.
- 4.8.4.132 A cumulative effect will arise as a result of the Onshore Substations construction phase occurring at the same time, during 2026 and 2027, as the latter stages of the Green Volt Application substation and the start of the Greens Application substation construction phase with its construction continuing for a number of years; potentially the construction of the Stromar Application, from 2027 to 2030. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant and emerging pylons continuously over a longer duration than with the Onshore Substations construction alone.
- 4.8.4.133 A cumulative effect will arise as a result of the completed the Onshore Substations within the context of the completed Green Volt and Greens Application substations and the completed Beauly Application pylons.
- 4.8.4.134 The location of the Stromar Application substation has not yet been determined but it may result in further cumulative influences at this viewpoint. These may arise during the construction and operational phases of the Stromar Application substation when it may be visible north of the Onshore Substations beyond the minor road at Burnside.

Cumulative Magnitude of Change

4.8.4.135 A medium cumulative magnitude of change will arise from the addition of the construction phase Onshore Substations to a cumulative baseline including the under construction Greens Application substation, Green Volt Application substation and Beauly Application pylons as well as possibly also the Stromar Application substation. The addition of the Onshore Substations will extend the level of construction works and activity that will be visible at relatively close range, with cranes rising above the skyline in two distinct areas: either side of the existing substations and further north at the Greens Application substation and extending across the north to north-west within the Beauly Application. The construction phase Onshore Substations will appear closer and will be more

clearly visible. For this reason, the magnitude of change will be greater but remain broadly similar to that of arising from the Onshore Substations alone.

- 4.8.4.136 During the operation of the Onshore Substations in the context of the operational Greens Application substation, Green Volt Application substation and Beauly Application pylons, the cumulative magnitude of change will be medium as the Greens 400kv substation will be readily apparent, due to its location on sloping landform; and as the operational Beauly Application pylons extend to the Greens Application substation.
- 4.8.4.137 Once any proposed mitigation planting around the Greens Application substation is established the cumulative magnitude of change will be low. This is due to the visibility of the Onshore Substations amidst the ongoing visibility of the Beauly Application pylons.

Cumulative Significance of Effect

- 4.8.4.138 Taking account of the medium-high and medium sensitivity of the receptors and the medium cumulative magnitude of change, the cumulative effect of the construction phase of the Onshore Substations in the context of the Green Volt Application,Greens Application and possibly also Stromar Application substations and Beauly Application pylons will be moderate and significant for residents, moderate and not significant for motorists, adverse and short-term.
- 4.8.4.139 Taking account of the medium-high or medium sensitivity of the receptors and the medium cumulative magnitude of change, the cumulative effect of the operational phase of the Onshore Substations in the context of the GreenVolt Application, Greens Application and possibly also Stromar substations and Beauly Application pylons will be moderate and significant for residents and moderate and not significant for road users, adverse and medium-term.
- 4.8.4.140 Once any proposed mitigation planting around the cumulative developments and the Onshore Substations is established the significance will reduce to moderateminor (not significant) for residents and minor (not significant) for road users.

Viewpoint 5: Minor road near Upper Mains of Asleid - Residents and Motorists *Description of Potential Cumulative Effect*

- 4.8.4.141 The main assessment of the effects of the Onshore Substations on Viewpoint 5: Minor road near Upper Mains of Asleid, presented in Section 4.7.5, rated the sensitivity of residents as medium-high and that of road-users as medium. The magnitude of change was assessed as medium during construction with moderate significant effects for residents and moderate not significant effects for road users. During operation the magnitude of change was assessed as mediumlow resulting in moderate (significant) effects for residents and moderate-minor (not significant) effects for road-users.
- 4.8.4.142 Tall cranes that may be in use on the site during construction and the upper parts of the buildings may be visible above the intervening trees to the north of Mains of Asleid that will likely largely screen the Greens Application and possible

Stromar Application substation from this location except for possibly tall, distant cranes.

- 4.8.4.143 The Green Volt Application substation will be located just south of the existing New Deer and Moray East substations. Much of the associated construction works and emerging structures and the completed substation will be visible at short-range. The location and lack of surrounding landscape elements means visibility of the works will be largely unimpeded. Ground level works, activity at height and the merging structures will be clearly visible.
- 4.8.4.144 Works at height related to the Beauly Application pylons, construction cranes and the emerging pylons may also be visible in the middle to far distance. A cumulative effect will arise as a result of the concurrent construction of the Onshore Substations, Greens Application substation, possibly the Stromar Application substation and Green Volt Application substation and Beauly Application pylons. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic, tall construction plant and emerging pylons continuously over a longer duration than with the Onshore Substations construction alone.
- 4.8.4.145 No cumulative effect is likely to arise as a result of the completed the Onshore Substations within the context of the completed Greens Application substation or the completed Stromar Application substation due to screening of the cumulative projects by intervening woodland and landform. Visibility of the Onshore Substations, the Green Volt Application substation and the Beauly Application pylons will give rise to a cumulative effect.

Cumulative Magnitude of Change

- 4.8.4.146 During the construction of the Onshore Substations in a context of the initial stages of construction of the Greens Application substation and construction of the Green Volt Application Substation and Beauly Application pylons, the cumulative magnitude of change resulting from the addition of the Onshore Substations would be medium-high. Once Green Volt is operational this would reduce to medium.
- 4.8.4.147 The construction phase Onshore Substations will appear more intrusive than the Greens Application substation, possible Stromar Application substation and Beauly Application pylons works due to their closer proximity and higher visibility. The addition of construction works related to the Onshore Substations will increase the level of such works within the view, within the foreground at the Green Volt Application substation. Their similarity in appearance and scale to works within the Green Volt Application substation substation and, less so, the slightly separate Greens Application substation will appear to indicate an integrated approach to the siting and design of this type of development. The Onshore Substations works will be more prominent during this period with the Green Volt Application substation works having a more limited influence and the Green Volt Application substation having a comparable impact. The Onshore Substations will

increase the level of construction works nearly ahead of north bound road users from this location, in addition to similar works at the nearby Green Volt Application substation and construction activity at height in the middle distance, related to the Beauly Application. Once Green Volt is operational there will be less construction activity in view.

- 4.8.4.148 During the operation of the Onshore Substations in the context of the operational Green Volt Application and Greens Application substations, Beauly Application pylons and the possible Stromar Application substation, the cumulative magnitude of change will be medium-high. The completed Onshore Substations will be nearly as visible as the Green Volt Application substation; more visible than the Greens Application substation, which will be screened by woodland, and much more visible than the partially screened Beauly Application pylons. The Onshore Substations will increase the level of energy development that is visible from this location. The similar appearance of the operational Onshore Substations and the Green Volt Application substation to the existing New Deer and Moray East substations and the context of pylon mounted transmission lines will reduce the cumulative magnitude of change.
- 4.8.4.149 Once the mitigation planting around the Onshore Substations becomes established and because the New Deer substation will be screened, the cumulative magnitude of change will be medium.

Cumulative Significance of Effect

- 4.8.4.150 Taking account of the medium-high and medium sensitivity of the receptors and the medium-high cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the Green Volt Application, Greens Application and possibly Stromar Application substations; and the Beauly Application pylons will be major-moderate reducing to moderate and significant (residents), moderate and not significant (motorists),adverse and short term.
- 4.8.4.151 Taking account of the medium-high and medium sensitivity of the receptors and the medium-high to medium cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the Greens Application, Green Volt Application and Stromar Application substations; and the Beauly Application pylons will be moderate and significant (residents), moderate and not significant (motorists), adverse and medium term.

Viewpoint 6: Minor road near North Millbrex - Residents and Motorists *Description of Potential Cumulative Effect*

4.8.4.152 The main assessment of the effects of the Onshore Substations on Viewpoint 6: Minor road near North Millbrex, presented in Section 4.7.5, rated the sensitivity of residents as medium and that of road-users as medium. The magnitude of change was assessed as medium during construction with moderate not significant effects for residents and for road users during both construction and operation.

- 4.8.4.153 Tall cranes that may be in use on the site during construction and the upper parts of the buildings may be visible above the intervening trees to the north of North Millbrex that will likely largely screen the Greens Application and possible Stromar Application substations from this location. Visibility of the construction phase Green Volt Application substation will be similar to that of the Onshore Substations. Construction activity will envelop the existing substations. Ground level construction of the Beauly Application pylons will be similarly screened with tall cranes, activity at height and the emerging pylons visible above the intervening landform and vegetation.
- 4.8.4.154 A cumulative effect will arise as a result of the Onshore Substations construction phase occurring at the same time, during 2026 and 2027, as the start of the Greens Application substation construction phase, possibly the Stromar Application substation construction and the Beauly application pylons with its construction continuing for a number of years. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant continuously over a longer duration than with the Onshore Substations construction alone.
- 4.8.4.155 No cumulative effect is likely to arise as a result of the completed Onshore Substations within the context of the completed Greens Application substation or the completed Stromar Application substation due to screening of the cumulative projects by intervening woodland and landform. A cumulative effect is likely to arise from the completed Onshore Substations, Green Volt Application substation and Beauly Application pylons.

Cumulative Magnitude of Change

- 4.8.4.156 During the construction of the Onshore Substations in a context of the initial stages of construction of the Greens Application substation, construction of the Green Volt Application substation, possibly the Stromar Application substation and Beauly Application pylons, the cumulative magnitude of change resulting from the addition of the Onshore Substations will be medium.
- 4.8.4.157 The construction phase Onshore Substations will appear more intrusive than the Greens Application substation and Beauly Application works due to their closer proximity and higher visibility. The Onshore Substations will increase construction works within the view, established by the Green Volt Application substation, with similar works at the Greens Application substation and Beauly Application works appearing separate from these. While similar in appearance and scale to these works, the separation of the areas of construction may be perceived as indicating a less integrated approach to the siting and design of this type of development.
- 4.8.4.158 During the operation of the Onshore Substations in the context of the operational Green Volt Application substation, Greens Application substation (and possibly the Stromar Application substation) and the Beauly Application pylons, the cumulative magnitude of change will be medium.

- 4.8.4.159 The completed Onshore Substations will be much more visible than the Greens Application substation, which will be screened by woodland; and the Beauly Application pylons, which will be partially screened. The Onshore Substations and the Green Volt Application substation will increase the level of energy development that is visible from this location. The operational Onshore Substations and Green Volt Application substation's similarity in appearance to the existing New Deer and Moray East substations and the context of pylon mounted transmission lines will limit the cumulative magnitude of change.
- 4.8.4.160 Once the mitigation planting around the Onshore Substations becomes established and because the Greens Application substation will be largely screened, the cumulative magnitude of change will be medium-low.

Cumulative Significance of Effect

- 4.8.4.161 Taking account of the medium-high and medium sensitivity of the receptors and the medium cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the Green Volt Application, Greens Application and possibly the Stromar Application substations as well as the Beauly Application pylons under construction will be moderate and significant, for residents and moderate and not significant for motorists, adverse and short term.
- 4.8.4.162 Taking account of the medium-high and medium sensitivity of the receptors and the medium cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the operational Green Volt Application, Greens Application substation, possible Stromar Application and Beauly Application pylons will be moderate and significant for residents and moderate and not significant, adverse and medium term for motorists.
- 4.8.4.163 Once the proposed mitigation planting around the Green Volt substation and Onshore Substations is established the cumulative effect will be moderate-minor and not significant for residents and motorists.

Viewpoint 7: Minor road near Slacks of Cairnbanno *Description of Potential Cumulative Effect*

- 4.8.4.164 The main assessment of the effects of the Onshore Substations on Viewpoint 7: Minor road near Slacks of Cairnbanno, presented in Section 4.7.5, rated the sensitivity of residents as medium-high and road users as medium. The magnitude of change was assessed as low during construction, resulting in moderate-minor and minor (not significant effects on residents and motorists respectively; and low during operation, resulting in moderate-minor (not significant) effects for residents and minor effects for road-users respectively, that are not significant.
- 4.8.4.165 Construction of the Greens Application substation, and possible Stromar Application substation will be visible as a moderately distant feature on the near level skyline to the west against a backdrop of woodland. The location of the Greens Application substation on sloping land means that much of the works will

be visible with intervening trees and woodland screening those within the lower parts of each site. Construction cranes will rise above the backing woodland, piercing the skyline.

- 4.8.4.166 Construction activity will extend south of the existing New Deer and Moray East substations, within the Green Volt Application substation; and north, within the Onshore Substations. Intervening landform and vegetation will screen much of the Green Volt Application substation's ground level works and some of those within the onshore Substations.
- 4.8.4.167 Construction of the Beauly Application pylons will extend from the near to the far distance. The emerging pylons, tall cranes and works at height will pierce the skyline. Much of the works will be visible with intervening landform and vegetation intermittently screening ground level works.
- 4.8.4.168 A cumulative effect will arise as a result of the Onshore Substations construction phase occurring at the same time, during 2026 and 2027, as the start of the Greens Application substation construction phase, with its construction continuing for a number of years; the Green Volt Application substation; and the start of the Beauly Application construction phase. For receptors at this viewpoint and using the minor roads this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant continuously over a longer duration than with the Onshore Substations construction alone.
- 4.8.4.169 A cumulative effect will arise as a result of the completed the Onshore Substations within the context of the completed Greens Application substation, Green Volt Application substation and Beauly Application pylons.
- 4.8.4.170 The location of the Stromar Application substation has not yet been determined but it may result in further cumulative influences at this viewpoint. These may arise during the construction and operational phases of the Stromar Application substation when it may be visible north of the Onshore Substations beyond the minor road at Burnside and is assumed to be in the vicinity of the Greens Application substation.

Cumulative Magnitude of Change

- 4.8.4.171 A medium-low cumulative magnitude of change will arise from the addition of the construction phase Onshore Substations to a cumulative baseline including the under construction Green Volt Application, Greens Application and possible Stromar Application substations and Beauly Application pylons.
- 4.8.4.172 The construction phase Onshore Substations will form a relatively distant feature in the view that is visible to their full extent, to the north of the existing New Deer and Moray East substations. These developments will largely appear equally distant with comparable visibility of each. Intervening landform and landscape elements, mainly trees, will interrupt this visibility. Large scale energy infrastructure is characteristic of the view.

- 4.8.4.173 Construction of the Green Volt Application substation will be visible at comparable range to the Onshore Substations and will be partially visible to the south of the existing substations. The construction works will appear similar to those within the Onshore Substations but will appear narrower.
- 4.8.4.174 The construction phase Beauly Application pylons will be visible at close to moderate range, with much of the development being visible as it approaches the Greens Application substation. Intervening small scale landscape elements, will intermittently screen the pylons at ground level. Construction of the Onshore Substation will likely appear less intrusive than that of the Beauly Application pylons due their contained extent and comparatively low height.
- 4.8.4.175 The addition of the Onshore Substations will extend the level of construction works and activity that will be visible at a relatively distant range, with cranes rising above the skyline in two distinct areas. This may be perceived as indicating a less considered approach to the siting of similar types of development.
- 4.8.4.176 During the operation of the Onshore Substations in the context of the operational Greens Application substation, Green Volt Application substation, possible Stromar Application substation and the Beauly Application pylons, the cumulative magnitude of change will be low. This reflects the Onshore Substations' similarity in scale, appearance and landscape context as the Greens Application substation.
- 4.8.4.177 Once any proposed mitigation planting around the Greens Application substation other cumulative developments (where practical) and the Onshore Substations is established the cumulative magnitude of change will be low.

Cumulative Significance of Effect

- 4.8.4.178 Taking account of the medium-high and medium sensitivity of the receptors and the medium-low cumulative magnitude of change the cumulative effect of the construction phase of the Onshore Substations in the context of the Green Volt Application, Greens Application, possible Stromar Application and Beauly Application will be moderate and moderate-minor and not significant, adverse and short term.
- 4.8.4.179 Taking account of the medium-high and medium sensitivity of the receptors and the low cumulative magnitude of change the cumulative effect of the operational phase of the Onshore Substations in the context of the Greens Application substation and Beauly Application pylons will be minor and not significant, adverse and medium term.

Viewpoint 8: Minor Road near Hillhead of Auchreddie - Motorists Description of Potential Cumulative Effect

4.8.4.180 The main assessment of the effects of the Onshore Substations on Viewpoint 8: Minor Road near Hillhead of Auchreddie, presented in Section 4.7.5, rated the sensitivity of road-users as medium. The magnitude of change was assessed as low during construction and operation with minor, not significant effects for road-users.

- 4.8.4.181 Construction of the Greens Application substation and possible Stromar Application substation will be visible as a distant feature against a backdrop of woodland towards the near level skyline to the west. The location of the Greens Application substation on sloping land and the elevation of the viewpoint means that much of the works will be visible within the site. Construction cranes will rise above the backing woodland that defines the skyline.
- 4.8.4.182 Construction of the Green Volt Application substation will be visible at comparable range to the Onshore Substations and will be partially visible to the south of the existing substations. The construction works will appear similar to those within the Onshore Substations but will appear narrower.
- 4.8.4.183 Construction of the Beauly Application pylons will be visible extending from the near to moderate distance. The emerging pylons, tall cranes and works at height will pierce the near level skyline. Much of the works will be visible with intervening trees, woodland and other small scale landscape elements intermittently screening ground level works and the lower parts of each pylon.
- 4.8.4.184 A cumulative effect will arise as a result of the Onshore Substations construction phase occurring at the same time, during 2026 and 2027, as the start of the Greens Application substation construction phase, with the latter's construction continuing for a number of years; and the start of the Green Volt Application and Beauly Application's construction phases. For receptors at this viewpoint and using the minor road this will result in a sense of ongoing construction within this local area, which may give rise to views of construction traffic as well as views of tall construction plant continuously over a longer duration than with the Onshore Substations construction alone.
- 4.8.4.185 A cumulative effect will arise as a result of the completed Onshore Substations within the context of the completed Greens Application substation, Green Volt Application substation and Beauly Application pylons and potentially, the Stromar Application substation.
- 4.8.4.186 The location of the Stromar Application substation has not yet been determined but it may result in further cumulative influences at this viewpoint. These may arise during the construction and operational phases of the Stromar Application substation when it may be visible north of the Onshore Substations beyond the minor road at Burnside, and assumed to be in the vicinity of the Greens Application substation.

Cumulative Magnitude of Change

4.8.4.187 A medium-low cumulative magnitude of change will arise from the addition of the construction phase Onshore Substations to a cumulative baseline including the under construction Green Volt Application, possible Stromar Application and Greens Application substations and Beauly Application pylons. The addition of the construction phase Onshore Substations will introduce construction works and activity in the distance. During the operation of the Onshore Substations in the context of the operational Greens Application substation and Beauly Application pylons, the cumulative magnitude of change will be low. This reflects the Onshore Substations' similarity in scale, appearance and landscape context as the Greens Application substation.

4.8.4.188 Once any proposed mitigation planting around the Greens Application substation, other cumulative developments (as appropriate) and the Onshore Substations is established the cumulative magnitude of change will be negligible.

Cumulative Significance of Effect

- 4.8.4.189 Taking account of the medium sensitivity of road users, and the medium-low cumulative magnitude of change, the cumulative effect of the construction phase Onshore Substations in the context of construction of the Greens Application substation, possible Stromar Application substation and Beauly Application pylons will be moderate-minor for motorists, not significant, adverse and short term.
- 4.8.4.190 Taking account of the medium sensitivity of road users, and the low cumulative magnitude of change, the cumulative effect of the operational Onshore Substations in the context of the operational Greens Application substation and Beauly Application pylons will be minor for motorists and not significant, adverse and short term.
- 4.8.4.191 Once proposed mitigation planting around the Greens Application substation, other cumulative developments as appropriate and the Onshore Substations is established the cumulative effect will be minor.

4.9 In-combination Effects

- 4.9.1.1 In-combination impacts may occur through the inter-relationship with another EIAR topic that may lead to different or greater environmental effects than in isolation.
- 4.9.1.2 The potential in-combination effects for Landscape and Visual receptors resulting from effects between onshore Proposed Development (Onshore) works are described below.
- 4.9.1.3 There is also the potential for in-combination impacts resulting from onshore and offshore works. These are identified within Volume 6, Chapter 5: Intertidal Assessment and are therefore not repeated here.

4.9.2 In-Combination effects between onshore Proposed Development works

4.9.2.1 Volume 5, Chapter 3: Terrestrial Ecology and Biodiversity. Both chapters consider the potential effects of hedgerow and tree removal, the LVIA considering the impact on hedgerows and trees as landscape elements, and the Onshore Ecology assessment considering the impact on hedgerows and trees as

ecological assets. Both chapters consider the mitigation of hedgerow and tree loss in respect of planting proposed as outline landscape mitigation principles.

- 4.9.2.2 Volume 6, Chapter 2: Socio-Economics, Tourism and Recreation. Both chapters consider the potential effects of the onshore elements of the Proposed Development (Onshore) on the visual amenity of recreational users in the local area.
- 4.9.2.3 Volumes 2, 3 and 4, Chapter 12: Seascape, Landscape and Visual Impacts Assessment (SLVIA), Section 12.9.2. The SLVIA considers the inter-relationship between the SLVIA and the LVIA. It assesses the inter-relationship between the coastal, landscape and visual effects of Caledonia OWF and the landscape and visual effects of Proposed Development (Onshore). Such effects may occur where landscape and visual receptors may be materially impacted through visibility of both parts of the project.

4.10 Mitigation Measures and Monitoring

4.10.1 Embedded Mitigation

4.10.1.1 The following sections set out the mitigation measures that have been identified and adopted as part of the evolution of the project design (embedded into the project design) and that are relevant to LVIA. The mitigation includes embedded measures such as design changes and applied mitigation which is subject to further study or approval of details; these include avoidance measures that will be informed by pre-construction surveys, and necessary additional consents where relevant. The composite of embedded and applied mitigation measures apply to all parts of the Proposed Development (Onshore) development works, including pre-construction, construction, operation and maintenance and decommissioning.

Primary Embedded Mitigation

- 4.10.1.2 Primary Embedded mitigation to ensure the potential impacts are avoided or reduced, in respect of the OnTI, has involved the sensitive siting and design of the Landfall Site, Onshore Export Cable and Onshore Substations; and the undergrounding of the Onshore Export Cable.
- 4.10.1.3 The site selection process considered a range of environmental and technical constraints including separation from settlement and rural properties; avoiding landscape elements, such as woodlands, trees and hedgerows; and considering issues such as surface water flooding. The sensitivity of the surrounding landscape and of residents, road-users, workers and recreational users of the landscape was also a key consideration.
- 4.10.1.4 The capacity of the landscape to accommodate the OnTI is assessed in relation to the natural screening afforded by landform, woodlands and trees and the degree to which other surrounding infrastructure and buildings influence visual screening.
- 4.10.1.5 The close proximity of the existing New Deer and Moray East substations to the Onshore Substation was considered in site selection and is considered to be embedded mitigation. Further information on site selection is included within Volume 1, Chapter 6: Site Selection and Alternatives. The location of the Onshore Substations has been carefully considered. The decision to locate it next to the existing New Deer and Moray East substations and the clustering of infrastructure together at this location has been taken in order to avoid more widespread cumulative influence within this rural landscape.
- 4.10.1.6 Mitigation measures that were identified and adopted as part of the evolution of the project design (embedded into the Proposed Development (Onshore)) and that are relevant to the LVIA are presented below.

Onshore Substations Mitigation

- 4.10.1.7 An indicative mitigation planting plan has been developed for the Onshore Substations (Volume 7E, Appendix 4-2, Figure 4-8). This figure shows Landscape and Visual mitigation proposals, including deciduous native woodland, mixed native woodland, mixed native hedges and scrub woodland edges.
- 4.10.1.8 Planting in advance of the completion of construction is proposed. This includes the planting of hedgerows around the northern and north-eastern field boundaries and woodland planting to the south-east of East Swanford in the planting season prior to the commencement of construction. It is also proposed to plant a mixed woodland strip to the north of the Onshore Substations at the end of the main earthworks phase in the enabling scenario. These would provide earlier screening of the Onshore Substations with planting of the remaining hedgerows, woodland and planting around the SUDs basin occurring at the end of the Proposed Development (Onshore) Substations construction.
- 4.10.1.9 These mitigation measures and the predicted height of mitigation planting at year one and after 15 years' growth, are presented in the visualisations in Volume 7E, Appendix 4-3, Figure 4-11 to Figure 4-18.
- 4.10.1.10 Depending on the final design and size of the Onshore Substations, soil strip and earthworks to create the Onshore Substations platform may result in surplus soil and excavation material. If available, this could potentially be used in the creation of landscape bunding. This will further limit views of the Onshore Substations and provide further landscape and visual mitigation. Due to the unknown quantity and suitability of such soils for mounding this is not shown in the visualisations.
- 4.10.1.11 The final layout and composition of the mitigation measures would be finalised at the detailed design phase. The indicative landscape and visual mitigation measures shown on Volume 7E, Appendix 4-2, Figure 4-8 are provided to inform the assessment.

OnTI RLB Mitigation

- 4.10.1.12 Mitigation measures that were identified and adopted as part of the evolution of the Proposed Development (Onshore) design (embedded into the Proposed Development (Onshore) design) and that relate to the OnTI RLB include:
 - Achievement of the best environmental fit of the OnTI RLB where practicable, particularly in relation to maintaining separation from settlement and rural properties;
 - Employing trenchless techniques at major crossings and the micro-routing of the Onshore Export Cable Route to avoid loss of hedgerows and trees where practical;
 - Reinstatement of removed sections of hedgerows, or suitable compensatory hedgerow planting provided for displaced or severed sections of hedgerows where practical;
 - Sensitive siting of construction compounds such that the locations have been carefully selected considering landscape and visual receptors to reduce impacts during the construction period where practicable;
 - Restoration of all temporary works and construction areas, except in cases where planning consent has been obtained for the permanent retention of any temporary infrastructure, in relation to re-establishment of ground cover;
 - Protection of all retained trees during the construction phase where practicable; and
 - Diversion and reinstatement of footpaths or cycleways that would be temporarily disrupted by the OnTI.
- 4.10.1.13 Following construction of the OnTI, disturbed landcover and habitats will be reinstated. The overall aim of the reinstatement will be the re-establishment of existing ground cover or returning the disturbed ground to its original agricultural use. Where possible, excavated soils will be carefully stored and reinstated as soon as possible.

4.11 Residual Effects

4.11.1.1 Where effects on were assessed as significant taking into account secondary mitigation to reduce the magnitude of impacts, the residual effects have been assessed below.

4.11.2 Construction Effects

4.11.2.1 No secondary mitigation has been proposed or is practicable with respect to the Landscape and Visual effects and the residual effects of the Proposed Development (Onshore) will remain as reported in Section 4.7.

4.11.3 Operation Effects

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4.11.3.1 No secondary mitigation has been proposed or is practicable with respect to the Landscape and Visual effects and the residual effects of the Proposed Development (Onshore) will remain as reported in Section 4.7.

4.11.4 Decommissioning Effects

4.11.4.1 No secondary mitigation has been proposed or is practicable with respect to the Landscape and Visual effects and the residual effects of the Proposed Development (Onshore) will remain as reported in Section 4.7.

4.12 Summary of Effects

4.12.1.1 Table 4-12 presents a summary of the significant effects assessed within this EIAR, any mitigation required, and the residual effects are provided.



Table 4-12: Summary of Effects

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect				
Construction and Decommissioning									
Impacts on landscape	e elements within t	the OnTI RLB: Re	moval of land from a	agricultural use					
Section 1 (LCT 10)	Low	Medium	Minor (Not significant) medium term and temporary	Embedded	Minor (Not significant) medium term and temporary				
Section 2 (LCT 14)	Low	Medium	Minor (Not significant) medium term and temporary	Embedded	Minor (Not significant) medium term and temporary				
Section 3 (LCT 32)	Low	Medium-low	Minor (Not significant) medium term and temporary	Embedded	Minor (Not significant) medium term and temporary				
Section 4 (LCT 20)	Low	Medium-low	Minor (Not significant) medium term and temporary	Embedded	Minor (Not significant) medium term and temporary				

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect					
Impacts on landscape	Impacts on landscape elements within the OnTI RLB: Removal of hedgerows									
Section 1 (LCT 10)	Low	Medium	Minor (Not significant) medium term and temporary	Embedded	Minor (Not significant) medium term and temporary					
Section 2 (LCT 14)	Medium-low	Medium-low	Minor (Not significant) medium term and temporary	Embedded	Minor (Not significant) medium term and temporary					
Section 3 (LCT 32)	Low	Medium-low	Minor (Not significant) medium term and temporary	Embedded	Minor (Not significant) medium term and temporary					
Section 4 (LCT 20)	Low	Medium	Minor (Not significant) medium term and temporary	Embedded	Minor (Not significant) medium term and temporary					
Impacts on landscape	Impacts on landscape elements within the OnTI RLB: Removal of tree groups									
Section 2 (LCT 14)	Low	Medium	Minor (Not significant)	Embedded	Minor (Not significant)					

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect				
			medium term and temporary		medium term and temporary				
Section 4 (LCT 20)	Low	Medium-high	Moderate (Not significant) medium term and temporary	Embedded	Moderate (Not Significant) medium term and temporary				
Impacts on landscape	Impacts on landscape elements within the OnTI RLB: Removal of woodland								
Section 2 (LCT 14)	Low	Medium	Minor (Not significant) medium term and temporary	Embedded	Minor (Not Significant) medium term and temporary				
Section 3 (LCT 32)	Low	Medium-high	Moderate-minor (Not significant) medium term and temporary	Embedded	Moderate-minor (Not significant) medium term and temporary				
Impacts on visual ame	Impacts on visual amenity within 1km of the OnTI RLB								
Receptors within Whitehills	Medium	Medium-high	Moderate (Significant) medium term and temporary	None	Moderate (Significant) medium term and temporary				

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect
Walkers on Montcoffer Croft to Maud (NCN Route 1d) core path and cyclists on NCR 1 (also B9139)	Medium to Low	Medium-high	Moderate to Moderate-minor (Not significant) medium term and temporary	None	Moderate to Moderate- minor (Not significant) medium term and temporary
Motorists using the north-east 250/B9139	Medium	Medium-high	Moderate (Not Significant) medium term and temporary	None	Moderate (Not Significant) medium term and temporary
Motorists on the A98	Low	Medium	Minor (Not significant) medium term and temporary	None	Minor (Not significant) medium term and temporary
Motorists on the A97	Low	Medium	Minor (Not significant) medium term and temporary	None	Minor (Not significant) medium term and temporary
Motorists on the A947	Medium-low	Medium	Moderate-minor (Not significant) medium term and temporary	None	Moderate-minor (Not significant) medium term and temporary
Motorists on the B9121	Low	Medium	Minor	None	Minor

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect
			(Not significant) medium term and temporary		(Not significant) medium term and temporary
Motorists on the B9105	Low	Medium	Minor (Not significant) medium term and temporary	None	Minor (Not significant)
Motorists on the B9170	Low	Medium	Minor (Not significant) medium term and temporary	None	Minor (Not significant) medium term and temporary
Views from residences within the Onshore Transmission Infrastructure 1km study area	Medium to Low	Medium-high	Moderate (Significant) within 500m of the OnTI RLB to Moderate-minor (Not Significant) beyond 500m, medium term and temporary	None	Moderate (Significant) within 500m of the OnTI RLB to Moderate-minor (Not Significant) beyond 500m, medium term and temporary
Impacts on landscape of	elements within t	he Onshore Subs	stations		
Agricultural Land	Low	Medium	Minor (Not significant) medium term and temporary	None	Minor (Not significant) medium term and temporary

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect
Tree groups & woodland	Medium-high	Medium	Moderate (Significant) medium term and temporary	None	Moderate (Significant) medium term and temporary
Impacts on landscape of	haracter within 3	km of the Onsh	ore Substations		
Perceived changes to the landscape character of the Undulating Agricultural Heartland (LCT 20)	Medium-high, within the immediate vicinity of the Onshore Substations; Medium-low, in the area between approximately 600m and 1km from the Onshore Substations; and reducing to low, beyond 1km from it.	Medium-low	Moderate (Significant), within the immediate vicinity of the Onshore Substations; and minor (Not Significant) beyond approximately 600m of the Onshore Substations. Medium-term	Woodland screening	Moderate (Significant), within the immediate vicinity of the Onshore Substations; and minor (Not Significant) beyond approximately 600m of the Onshore Substations. Medium-term
Impacts on visual amer	nity within 3km of	the Onshore Su	ubstations		
Viewpoint 1: Minor road east of Deer's Hill - Residents	Medium	Medium	Moderate (Not Significant) Medium-term	None	Moderate (Not Significant) Medium-term

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect
Viewpoint 1: Minor road east of Deer's Hill - Motorists	Medium	Medium	Moderate (Not Significant) Medium-term	None	Moderate (Not Significant) Medium-term
Viewpoint 2: Minor road near Maryhill – Residents	Medium-high	Medium-high	Major-moderate (Significant) Medium-term	None	Major-moderate (Significant) Medium-term
Viewpoint 2: Minor road near Maryhill – Motorists	Medium-high	Medium	Moderate (Significant) Medium-term	None	Moderate (Significant) Medium-term
Viewpoint 3: Minor road near Upperton – residents	Medium	Medium-high	Moderate (Significant) Medium-term	Moderate	Moderate (Significant) Medium-term
Viewpoint 3: Minor road near Upperton – Motorists	Medium	Medium	Moderate (Not Significant) Medium-term	None	Moderate (Not Significant) Medium-term
Viewpoint 4: Minor road near Woodhead – Residents	Medium	Medium-high	Moderate (Significant) Medium-term	None	Moderate (Significant) Medium-term

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect
Viewpoint 4: Minor road near Woodhead – Motorists	Medium	Medium	Moderate (Not Significant) Medium-term	None	Moderate (Not Significant) Medium-term
Viewpoint 5: Minor road near Upper Mains of Asleid – Residents	Medium	Medium-high	Moderate (Significant) Medium-term	None	Moderate (Significant) Medium-term
Viewpoint 5: Minor road near Upper Mains of Asleid – Motorists	Medium	Medium	Moderate (Not Significant) Medium-term	None	Moderate(Not Significant) Medium-term
Viewpoint 6: Minor road near North Millbrex – Residents	Medium	Medium	Moderate (Not Significant) Medium-term	None	Moderate (Not Significant) Medium-term
Viewpoint 6: Minor road near North Millbrex – Motorists	Medium	Medium	Moderate (Not Significant) Medium-term	None	Moderate (Not Significant) Medium-term
Viewpoint 7: Minor road near Slacks of Cairnbanno – Residents	Low	Medium-high	Moderate-minor (Not Significant) Medium-term	None	Moderate-minor (Not Significant) Medium-term

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect
Viewpoint 7: Minor road near Slacks of Cairnbanno – Motorists	Low	Medium	Minor (Not Significant) Medium-term	None	Minor (Not Significant) Medium-term
Viewpoint 8: Minor Road near Hillhead of Auchreddie – Motorists	Low	Medium	Minor (Not Significant) Medium-term	None	Minor (Not Significant) Medium-term
Operation Impacts on landscape of	character within 3	km of the Onshe	ore Substations		
Perceived changes to the landscape character of the Undulating Agricultural Heartland (LCT 20)	Medium, within the immediate vicinity of the Onshore Substations; medium-low, in the area between approximately 600m and 1km from the Onshore Substations; and reducing to low, beyond 1km from it.	Medium-low	Moderate-minor (Not Significant), within the immediate vicinity of the Onshore Substations; and minor (Not Significant) beyond approximately 600m of the Onshore Substations. Long term	Woodland screening	Moderate-minor (Not Significant), within the immediate vicinity of the Onshore Substations; an minor (Not Significant) beyond approximately 600m of the Onshore Substations, reducing to Minor or Negligible (Not Significant) after approximately 15 years. Long term

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect
Impacts on visual ame	nity within 3km of	the Onshore Su	Ibstations	'	
Viewpoint 1: Minor road east of Deer's Hill - Residents	Medium-low remaining Medium-Low after 15 years	Medium	Moderate-minor (Not Significant) Remaining Moderate- minor after 15 years Long term	Embedded	Moderate-minor (Not Significant) Remaining Moderate- minor after 15 years Long term
Viewpoint 1: Minor road east of Deer's Hill - Motorists		Medium	Moderate-minor (Not Significant) Remaining Moderate- minor after 15 years Long term	Embedded	Moderate-minor (Not Significant) Remaining Moderate- minor after 15 years Long term
Viewpoint 2: Minor road near Maryhill – Residents	Medium-high reducing to Low after 15 years	Medium-high	Major-moderate (Significant) reducing to Moderate- minor (Not Significant) after 15 years Long term	Embedded	Major-moderate (Significant) reducing to Moderate- minor (Not Significant) after 15 years Long term
Viewpoint 2: Minor road near Maryhill – Motorists		Medium	Moderate (Significant) reducing to Minor (Not Significant) after 15 years Long term	Embedded	Moderate (Significant) reducing to Minor (Not Significant) after 15 years Long term

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect
Viewpoint 3: Minor road near Upperton – residents	Medium-low reducing to Low after 15 years	Medium-high	Moderate (Significant) reducing to Moderate-minor after 15 years Long term	Embedded	Moderate (Significant) reducing to Moderate-minor (Not Significant) after 15 years Long term
Viewpoint 3: Minor road near Upperton - Motorists		Medium	Moderate-minor (Not Significant) reducing to Minor (Not Significant) after 15 years Long term	Embedded	Moderate-minor (Not Significant) reducing to Minor (Not Significant) after 15 years Long term
Viewpoint 4: Minor road near Woodhead - Residents	Medium-low reducing to Low after 15 years	Medium-high	Moderate (Significant) reducing to Moderate-minor (Not Significant) after 15 years Long term	Embedded	Moderate (Significant) reducing to Moderate-minor (Not Significant) after 15 years Long term
Viewpoint 4: Minor road near Woodhead – Motorists		Medium	Moderate-minor (Not Significant) reducing to Minor (Not Significant) after 15 years Long term	Embedded	Moderate-minor (Not Significant) reducing to Minor (Not Significant) after 15 years Long term

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect
Viewpoint 5: Minor road near Upper Mains of Asleid – Residents	Medium-low reducing to Low after 15 years	Medium-high	Moderate (Significant) reducing to Minor (Not Significant) after 15 years Long term	Embedded	Moderate (Significant) reducing to Minor (Not Significant) after 15 years Long term
Viewpoint 5: Minor road near Upper Mains of Asleid – Motorists		Medium	Moderate-minor (Not Significant) reducing to Minor (Not Significant) after 15 years Long term	Embedded	Moderate-minor (Not Significant) reducing to Minor (Not Significant) after 15 years Long term
Viewpoint 6: Minor road near North Millbrex – Residents	Medium reducing to Low after 15 years	Medium	Moderate (Not Significant) reducing to Moderate- minor (Not Significant) after 15 years Long term	Embedded	Moderate (Not Significant) reducing to Moderate-minor (Not Significant) after 15 years Long term
Viewpoint 6: Minor road near North Millbrex - Motorists		Medium	Moderate (Not Significant) reducing to Minor (Not Significant) after 15 years	Embedded	Moderate (Not Significant) reducing to Minor (Not Significant) after 15 years

Impact	Magnitude	Sensitivity of Receptor	Significance	Mitigation Measures	Residual Effect
			Long term		Long term
Viewpoint 7: Minor road near Slacks of Cairnbanno - Residents	Low remaining Low after 15 years	Medium-high	Moderate-minor (Not Significant) remaining Moderate- minor (Not Significant) after 15 years Long term	Embedded	Moderate-minor (Not Significant) remaining Moderate- minor (Not Significant) after 15 years Long term
Viewpoint 7: Minor road near Slacks of Cairnbanno – Motorists		Medium	Minor (Not Significant) remaining Minor (Not Significant) after 15 years Long term	Embedded	Minor (Not Significant) remaining Minor (Not Significant) after 15 years Long term
Viewpoint 8: Minor Road near Hillhead of Auchreddie – Motorists	Low remaining Low after 15 years	Medium	Minor (Not Significant) remaining Minor (Not Significant) after 15 years Long term	Embedded	Minor (Not Significant) remaining Minor (Not Significant) after 15 years Long term

4.12.1.2 Table 4-13 presents a summary of the significant cumulative effects in Cumulative Scenario 1 (the effects of adding the Proposed Development (Onshore) to a cumulative situation including the Green Volt Application substation) assessed within this EIAR.



Table 4-13: Summary of Cumulative Effects – Scenario 1

Impact	Cumulative Magnitude (Construction)	Sensitivity of Receptor	Cumulative Significance (Construction)	Cumulative Magnitude (Operation)	Cumulative Significance (Operation)
Impacts on landso	cape character with	nin 3km of the Ons	hore Substations – Sce	nario 1	
Perceived changes to the landscape character of the Undulating Agricultural Heartland (LCT 20)	Medium-high, within 600m; medium-low, in the area between approximately 600m and 1km; and reducing to low, beyond 1km from the Onshore Substations	Medium-low	Moderate (Significant), within 600m; and minor (Not Significant) in the area between approximately 600m and 1km; and reducing to Minor/Negligible, beyond 1km from the Onshore Substations. Medium term	Medium-high, within 600m; medium-low, in the area between approximately 600m and 1km; and reducing to low, beyond 1km from the Onshore Substations.	Moderate (Significant), within 600m; and minor (Not Significant), in the area between approximately 600m and 1km, reducing to Minor/Negligible (Not Significant), beyond 1km from the Onshore Substations, reducing to Minor or No Effect (Not Significant) after approximately 15 years of operation. Long term.
Impacts on visual	amenity within 3k	m of the Onshore	Substations – Scenario	1	
Viewpoint 1: Minor road east of Deer's Hill – Residents	Medium during construction of Green Volt Medium-Low during operation of Green Volt	Medium	Moderate (Significant) during construction of Green Volt Moderate-Minor (Not Significant) during operation of Green Volt Short term	Low reducing to Negligible	Minor (Not significant), reducing to Minor/Negligible (Not Significant) Long term

Impact	Cumulative Magnitude (Construction)	Sensitivity of Receptor	Cumulative Significance (Construction)	Cumulative Magnitude (Operation)	Cumulative Significance (Operation)
Viewpoint 1: Minor road east of Deer's Hill – Motorists		Medium	Moderate (Significant) during construction of Green Volt Moderate-Minor (Not Significant) during operation of Green Volt Short term		Minor (Not significant), reducing to Minor/Negligible (Not Significant) Long term
Viewpoint 2: Minor road near Maryhill - Residents	Medium-low during construction of Green Volt	Medium-high	Moderate (Not Significant) during construction of Green Volt Minor (Not Significant) during operation of Green Volt Short term	Negligible/No Change	Minor (Not significant), reducing to Minor/Negligible (Not Significant) Long term
Viewpoint 2: Minor road near Maryhill - Motorists	Negligible/no change during operation of Green Volt	Medium	Moderate-Minor (Not Significant) during construction of Green Volt Minor (Not Significant) during operation of Green Volt Short term		Minor (Not significant), reducing to Minor/Negligible (Not Significant) Long term

Impact	Cumulative Magnitude (Construction)	Sensitivity of Receptor	Cumulative Significance (Construction)	Cumulative Magnitude (Operation)	Cumulative Significance (Operation)
Viewpoint 3: Minor road near Upperton - Residents	Medium during construction of Green Volt Low during operation of Green Volt	Medium-high	Moderate (Significant) during construction of Green Volt Moderate-Minor (Not Significant) during operation of Green Volt Short term	'	Moderate-minor (Not significant) reducing to Minor/Negligible (Not Significant) Long term
Viewpoint 3: Minor road near Upperton - Motorists		Medium	Moderate (Not Significant) during construction of Green Volt Minor (Not Significant) during operation of Green Volt Short term	Low reducing to Negligible	Minor (Not significant), reducing to Minor/Negligible (Not Significant) Long term
Viewpoint 4: Minor road near Woodhead - Residents	Medium during construction of Green Volt Low during operation of Green Volt	Medium-high	Moderate (Significant) during construction of Green Volt Moderate-Minor (Not Significant) during operation of Green Volt Short term	Low reducing to Negligible	Moderate - minor (Not significant) reducing to Minor/Negligible (Not Significant) Long term
Viewpoint 4: Minor road near		Medium	Moderate (Not Significant) during		Minor (Not significant), Long term reducing to

Impact	Cumulative Magnitude (Construction)	Sensitivity of Receptor	Cumulative Significance (Construction)	Cumulative Magnitude (Operation)	Cumulative Significance (Operation)
Woodhead - Motorists			construction of Green Volt Minor (Not Significant) during operation of Green Volt Short term		Minor/Negligible (Not Significant) Long term
Viewpoint 5: Minor road near Upper Mains of Asleid - Residents	Medium during construction of Green Volt	Medium-high	Moderate (Significant) during construction of Green Volt Moderate (Significant) during operation of Green Volt Short term	Madium low raducing to	Moderate (Not significant) reducing to Moderate - minor (Not Significant) Long term
Viewpoint 5: Minor road near Upper Mains of Asleid - Motorists	Green Volt Medium during operation of Green Volt	Medium	Moderate (Not Significant) during construction of Green Volt Moderate (Not Significant) during operation of Green Volt Short term	- Medium-low reducing to Low	Moderate-minor (Not significant), reducing to Minor/Negligible (Not Significant) Long term
Viewpoint 6: Minor road near North Millbrex - Residents	Medium during construction of Green Volt	Medium	Moderate (Significant) during construction of Green Volt	Medium-low reducing to Low	Moderate -Minor (Not significant) reducing to Minor(Not Significant)

Impact	Cumulative Magnitude (Construction)	Sensitivity of Receptor	Cumulative Significance (Construction)	Cumulative Magnitude (Operation)	Cumulative Significance (Operation)
	Low during operation of Green Volt	'	Moderate (Significant) during operation of Green Volt Medium term		Long term
Viewpoint 6: Minor road near North Millbrex - Motorists		Medium	Moderate (Not Significant) during construction of Green Volt Moderate (Not Significant) during operation of Green Volt Medium term		Moderate-Minor (Not significant) reducing to Minor (Not Significant) Long term
Viewpoint 7: Minor road near Slacks of Cairnbanno – Residents	Medium-low during construction of Green Volt Low during operation of Green Volt	Medium-high	Moderate (Not Significant) during construction of Green Volt Moderate-minor (Not Significant) during operation of Green Volt Short term	Low reducing to Low/Negligible	Moderate-minor (Not significant), reducing to Minor/Negligible (Not Significant) Long term
Viewpoint 7: Minor road near Slacks of Cairnbanno - Motorists	Medium-low during construction of Green Volt	Medium	Moderate-Minor (Not Significant) during construction of Green Volt	Low reducing to Low/Negligible	Minor (Not significant), reducing to Minor/Negligible (Not Significant) Long term



Impact	Cumulative Magnitude (Construction)	Sensitivity of Receptor	Cumulative Significance (Construction)	Cumulative Magnitude (Operation)	Cumulative Significance (Operation)
	Low during operation of Green Volt		Minor (Not Significant) during operation of Green Volt Short term		
Viewpoint 8: Minor Road near Hillhead of Auchreddie - Motorists	Medium-Low during construction of Green Volt Low during operation of Green Volt	Medium	Moderate-Minor (Not Significant) during construction of Green Volt Minor (Not Significant) during operation of Green Volt Short term	Low reducing to Negligible	Minor (Not significant), reducing to Minor/Negligible (Not significant) Long term

4.12.1.3 Table 4-14 presents a summary of the significant cumulative effects in Cumulative Scenario 2 (the effects of adding the Proposed Development (Onshore) to a cumulative situation including the Greens Application substation, Stromar Application and Beauly Application) assessed within this EIAR.



Table 4-14: Summary of Cumulative Effects – Scenario 2

Impact	Cumulative Magnitude (Construction)	Sensitivity of Receptor	Cumulative Significance (Construction)	Cumulative Magnitude (Operation)	Cumulative Significance (Operation)				
Impacts on landsc	Impacts on landscape character within 3km of the Onshore Substations – Scenario 2								
Perceived changes to the landscape character of the Undulating Agricultural Heartland (LCT 20)	Medium-high, within approximately 600m of the Onshore Substations and Medium-Low to Low, beyond this area with No Change where there will be no visibility of the Onshore Substations	Medium-low	Moderate (Significant), within approximately 600m of the Onshore Substations and Moderate-Minor (Not Significant) beyond this area with No Effect where there will be no visibility of the Onshore Substations Medium term	Medium-high, within approximately 600m of the Onshore Substations and Medium-Low to Low, beyond this area with No Change where there will be no visibility of the Onshore Substations	Moderate (Significant), within approximately 600m of the Onshore Substations; Moderate- minor (Not Significant) beyond this area , reducing to Moderate to Minor or No Effect (Not Significant) after approximately 15 years Long term				
Impacts on visual	amenity within 3km	of the Onshore Su	bstations – Scenario 2						
Viewpoint 1: Minor road east of Deer's Hill – Residents	Medium during construction of Greens	Medium	Moderate (Significant) during construction of Greens Short term	Negligible/ No	No Effect				
Viewpoint 1: Minor road east of Deer's Hill – Motorists		Medium	Moderate (Not significant) during construction of Greens Short term	Change	No Effect				

Impact	Cumulative Magnitude (Construction)	Sensitivity of Receptor	Cumulative Significance (Construction)	Cumulative Magnitude (Operation)	Cumulative Significance (Operation)
Viewpoint 2: Minor road near Maryhill - Residents	Medium-low during construction of Greens Negligible/No Change during operation of Greens	Medium-high	Moderate (Not Significant) during construction of Greens Minor (Not Significant) during operation of Greens Short term	Negligible/No Change	No Effect
Viewpoint 2: Minor road near Maryhill - Motorists		Medium	Moderate-minor (Not Significant) during construction of Greens Minor (Not Significant) during operation of Greens Short term	Negligible/No Change	No Effect
Viewpoint 3: Minor road near Upperton - Residents	Medium-high during construction of Greens Medium during operation of Greens	Medium-high	Major-Moderate (Significant) during construction of Greens Moderate (Not Significant) during operation of Greens Short term	Medium to Medium- Low	Moderate (Significant) Medium term

Impact	Cumulative Magnitude (Construction)	Sensitivity of Receptor	Cumulative Significance (Construction)	Cumulative Magnitude (Operation)	Cumulative Significance (Operation)
Viewpoint 3: Minor road near Upperton - Motorists		Medium	Moderate (Not Significant) during construction of Greens Short term		Moderate (Not Significant) Medium term
Viewpoint 4: Minor road near Woodhead - Residents	Medium during	Medium-high	Moderate (Significant) during construction of Green Volt Short term	Medium to Low	Moderate (Significant) reducing to Moderate- minor (Not significant) Medium term
Viewpoint 4: Minor road near Woodhead - Motorists	Greens	Medium	Moderate (Not Significant) during construction of Green Volt Short term		Moderate (Not Significant) reducing to Minor (Not significant) Medium term
Viewpoint 5: Minor road near Upper Mains of Asleid - Residents	Medium-high during construction of Green Volt Medium during operation of Green Volt	Medium-high	Major-moderate (Significant) during construction of Green Volt Moderate (Significant) during construction of Green Volt Short term	Medium-high to Medium	Moderate (Significant) Medium term
Viewpoint 5: Minor road near Upper		Medium	Moderate (Not Significant) during		Moderate (Not Significant) Medium term

Impact	Cumulative Magnitude (Construction)	Sensitivity of Receptor	Cumulative Significance (Construction)	Cumulative Magnitude (Operation)	Cumulative Significance (Operation)
Mains of Asleid - Motorists			construction and operation of Green Volt Short term		
Viewpoint 6: Minor road near North Millbrex - Residents	Medium during construction of Green Volt	Medium	Moderate (Significant) during construction of Green Volt Short term	Medium	Moderate (Significant) reducing to Moderate- minor (Not Significant) Medium term
Viewpoint 6: Minor road near North Millbrex - Motorists		Medium	Moderate (Not Significant) during construction of Greens Short term		Moderate (Not significant) reducing to Moderate-minor (Not Significant) Medium term
Viewpoint 7: Minor road near Slacks of Cairnbanno - Residents	Medium-low during construction of Green Volt	Medium-high	Moderate (Not Significant) during construction of Green Volt Short term	Low	Minor (Not Significant) Medium term
Viewpoint 7: Minor road near Slacks of Cairnbanno - Motorists	Medium-low during construction of Green Volt	Medium	Moderate-Minor (Not Significant) during construction of Green Volt Short term	Low	Minor (Not Significant) Medium term



Impact	Cumulative Magnitude (Construction)	Sensitivity of Receptor	Cumulative Significance (Construction)	Cumulative Magnitude (Operation)	Cumulative Significance (Operation)
Viewpoint 8: Minor Road near Hillhead of Auchreddie - Motorists	Medium-Low during construction of Green Volt	Medium	Moderate-Minor (Not Significant) during construction of Green Volt	Low	Minor reducing to Negligible (Not Significant) Medium term
			Short term		

4.13 References

¹ Council of Europe (2000) 'Council of Europe Landscape Convention (ETS No. 176)'. Available at: <u>https://www.coe.int/en/web/conventions/full-list?module=treaty-</u> <u>detail&treatynum=176</u> (Accessed 01/10/2024).

² Scottish Government (2023) 'National Planning Framework 4'. Available at: <u>https://www.gov.scot/publications/national-planning-framework-4/</u> (Accessed 01/10/2024).

³ Aberdeenshire Council (2023) 'Aberdeenshire Local Development Plan 2023'. Available at: <u>https://www.aberdeenshire.gov.uk/planning/plans-and-policies/ldp-2023/</u> (Accessed 01/10/2024).

⁴ Landscape Character Assessment Guidance for England and Scotland (2002) 'Carys Swanwick Department of Landscape University of Sheffield and Land Use Consultants for The Countryside Agency and NatureScot'.

⁵ Landscape Institute and Institute of Environmental Management and Assessment (2013) 'Guidelines for Landscape and Visual Impact Assessment: Third Edition (GLVIA3)'. Routledge.

⁶ Landscape Institute (2019) 'Visual Representation of Development Proposals, Technical Guidance Note 06 / 19'. Available at:

https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstituteorg/2019/09/LI TGN-06-19 Visual Representation.pdf (Accessed 01/10/2024).

⁷ Landscape Institute (2021) 'Assessing landscape value outside national designations, Technical Guidance Note 02/21'. Available at: <u>https://www.landscapeinstitute.org/publication/tgn-02-21-assessing-landscape-value-outside-national-designations/</u>(Accessed 01/10/2024).

⁸ NatureScot (2021) 'Assessing the Cumulative Impact of Onshore Wind Energy Developments'. Available at: <u>https://www.nature.scot/doc/guidance-assessing-cumulative-</u> <u>landscape-and-visual-impact-onshore-wind-energy-developments</u> (Accessed 01/10/2024).

⁹ Scottish Government (2022) 'Guidance for applicants on using the design envelope for applications under Section 36 of the Electricity Act 1989'.

¹⁰ NatureScot (2019) 'National Landscape Character Assessment'. <u>https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions (Accessed 01/10/2024).</u>

¹¹ Historic Environment Scotland (2023) 'Scotland's Inventory of Gardens & Designed Landscapes'. Available at: <u>https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=7c365ace-e62d-46d2-8a10-a5f700a788f3</u> (Accessed 01/10/2024).

¹² Aberdeenshire Council (2023) 'Aberdeenshire Local Development Plan Appendix 13: Special Landscape Areas'.

¹³ Scottish Parliament (2017) 'The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. Available at: <u>https://www.legislation.gov.uk/ssi/2017/102/contents/made</u> (Accessed 01/10/2024).

¹⁴ Scottish Government (2017) 'Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017'. Available at:

https://www.legislation.gov.uk/ssi/2017/115/contents/made (Accessed 01/10/2024).

¹⁵ NatureScot (2021) 'Assessing the Cumulative Impact of Onshore Wind Energy Developments'.



¹⁶ Scottish Government (2022) 'Guidance for applicants on using the design envelope for applications under section 36 of the Electricity Act 1989'.

¹⁷ Landscape Institute (2019) 'Visual Representation of Development Proposals'.

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