XLINKS MOROCCO-UK POWER PROJECT

Preliminary Environmental Information Report

Volume 4, Chapter 2: Landscape, Seascape and Visual Resources

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Glossary

Term	Meaning
Access Land	The Countryside and Rights of Way Act 2000 gives a public right of access to land mapped as 'open country' (mountain, moor, heath and down) or registered common land. These areas are known as ‘access land'.
Characteristics	Elements, or combinations of elements, which make a contribution to distinctive landscape character.
Critical National Priority Infrastructure	A policy set out at Section 4.2 of EN-1 which applies a policy presumption that, subject to any legal Requirements (including under section 104 of the Planning Act 2008), the urgent need for CNP Infrastructure to achieving our energy objectives, together with the national security, economic, commercial, and net zero benefits, will in general outweigh any other residual impacts not capable of being addressed by application of the mitigation hierarchy.
Designated landscapes	Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in development plans or other documents.
Effect	The term used to express the consequence of an impact. The significance of effect is determined by correlating magnitude of the impact with the importance, or sensitivity, of the receptor or resource in accordance with defined significance criteria.
Feature	Prominent elements in the landscape, such as tree clumps, church towers or wooded skylines.
Green infrastructure	Networks of green spaces and watercourses and water bodies that connect rural areas, villages, towns and cities.
Impact	Change that is caused by an action/proposed development, e.g., land clearing (action) during construction which results in habitat loss (impact).
Landform	The shape and form of the land surface which has resulted from combinations of geology, geomorphology, slope, elevation and physical processes.
Landscape	An area, as perceived by people, the character of which is a result of the action and interaction of natural and/or human factors.
Landscape and Ecological Management Plan (LEMP)	An Outline Landscape and Ecological Management Plan will be prepared for the application. It will include details of the landscape and ecological mitigation and enhancement works required for the onshore elements (cable route and Converter Site) and the maintenance and management of the proposals.
Landscape character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
Landscape Character Areas	These are single unique areas which are the discrete geographical areas of a particular landscape type.
Landscape Character Assessment	The process of identifying and describing variation in the character of the landscape and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscape distinctive. The process results in the production of a Landscape Character Assessment.
Landscape Character Type	These are distinct types of landscape that are relatively homogeneous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation, historical land use, and settlement pattern.
Landscape quality (condition)	A measure of physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.

Term	Meaning
Landscape receptors	Defined aspects of the landscape resource that have the potential to be affected by the proposal.
Landscape value	The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons.
Photomontage	A visualisation which superimposes an image of a proposed development upon a photograph or series of photographs of the existing landscape.
Seascape	The visual and physical conjunction of land and sea which combines maritime, coast and hinterland character.
South West Coast Path (SWCP)	South West Coast Path part of the King Charles III England Coast Path
Special Qualities	A term usually used in relation to National Parks or National Landscapes (previously named Areas of Outstanding Natural Beauty). It is given to those qualities for which the area is designated.
Susceptibility	The ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences.
Tranquillity	A state of calm and quietude associated with peace, considered to be a significant feature in the landscape.
Visual amenity	The overall pleasantness of the views people enjoy in their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.
Visual effects	Effects on specific views and on general visual amenity experienced by people.
Visual receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal.
Visualisation	A computer simulation, photomontage or other technique illustrating the predicted appearance of a proposed development.
Zone of Theoretical Visibility	The areas of land within which, a development is theoretically visible.

Acronyms

Acronym	Meaning
AIA	Arboriculture Impact Assessment
AOD	Above Ordnance Datum
AONB	Areas of Outstanding Natural Beauty (now National Landscapes)
CEA	Cumulative Effects Assessment
On-CEMP	Onshore Construction Environmental Management Plan
CNP	Critical National Priority Infrastructure (project defined in NPS EN-1 glossary)
CRoW Act	Countryside Rights of Way Act 2000
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ELC	European Landscape Convention
GLVIA3	Guidelines for Landscape and Visual Impact Assessment: Third Edition
HDD	Horizontal Directional Drilling
IEMA	Institute of Environmental Management and Assessment
LCA	Landscape Character Area

Acronym	Meaning
LCT	Landscape Character Type
LEMP	Landscape and Ecological Management Plan
LI	Landscape Institute
LPA	Local Planning Authority
LSVIA	Landscape, seascape and Visual Impact Assessment
MCA	Marine Character Area
MDS	Maximum Design Scenario
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
MMO	Marine Management Organisation
NCA	National Character Area
NCR	National Cycle Route
NL	National Landscapes (previously Areas of Outstanding Natural Beauty)
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
PEIR	Preliminary Environmental Information Report
PRoW	Public Right of Way
RPZ	(Tree) Root Protection Zone
SCA	Seascape Character Area
TGN	Technical Guidance Note
ZTV	Zone of Theoretical Visibility

Units

Units	Meaning
%	Percentage
°	Degrees
km	Kilometres
km^2	Square kilometres
m	Metres
m^2	Square metres

2 LANDSCAPE, SEASCAPE AND VISUAL IMPACT ASSESSMENT

2.1 Introduction

2.1.1 This chapter of the Preliminary Environmental Information Report (PEIR) presents the preliminary findings of the Environmental Impact Assessment (EIA) work undertaken to date for the UK section of the Xlinks Morocco to UK Power Project. For ease of reference, the UK section of the Xlinks Morocco to UK Power Project is referred to in this chapter as the 'Proposed Development'.

2.1.2 The PEIR will inform pre-application consultation. Following consultation, comments on the PEIR and any refinements in design will be reviewed and taken into account, where appropriate, in preparation of the Environmental Statement (ES) that will accompany the application to the Planning Inspectorate for development consent.

Scope of this Chapter

2.1.3 This chapter considers the potential impacts and effects of the Proposed Development on landscape, seascape and visual resources, comprising a Landscape, Seascape and Visual Impact Assessment (LSVIA) (encompassing the small area of seascape included within the study area). Specifically, this chapter relates to the elements of the Proposed Development landward of Mean Low Water Springs (MLWS) during the construction, operation and maintenance and decommissioning phases. Specifically, this PEIR chapter:

- sets out the existing and future environmental baseline conditions, established from desk studies, surveys and consultation undertaken to date;
- presents the potential environmental impacts and effects on all aspects of landscape and visual resources arising from the Proposed Development, based on the information gathered and the analysis and assessments undertaken to date;
- identifies any assumptions and limitations encountered in compiling the environmental information; and
- highlights any necessary monitoring and/or mitigation measures that could prevent, minimise, reduce or offset the possible environmental effects identified in the EIA process.

2.1.4 This chapter also draws upon other information contained within Volume 4 of the PEIR, referenced as follows:

- Volume 4, Appendix 2.1: Landscape and Visual Resources Planning Policy Context
- Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report
- Volume 4, Appendix 2.3: Visual Baseline Technical Report
- Volume 4, Appendix 2.4: Landscape and Visual Resources Impact Assessment Methodology

- Volume 4, Appendix 2.5: Preliminary Landscape Visualisations (note: currently only a sample have been produced, from geographically diverse locations to inform the assessment, as the design of the Converter Site and associated landscape mitigation is ongoing. These will be completed for the ES.)

2.2 Legislative and Policy Context

Legislation

2.2.1 National government policy and underpinning legislation is summarised in **Table 2.1**, together with how it has been considered in this chapter.

Table 2.1: Summary of national government legislation and policy relevant to LSVIA

Summary of national legislation/policy	How and where considered in the PEIR
Primary Legislation	
National Parks and Access to the Countryside Act 1949 Relevance: Nationally designated landscapes fall within the Onshore HVDC Cable Corridor and converter station study areas.	The effect on the North Devon Coast National Landscape (NL) is assessed in sections **2.8** and **2.9** of this chapter.
Environment Act 1995 Relevance: Nationally designated landscapes fall within the Onshore HVDC Cable Corridor and converter station study areas.	The effect on the North Devon Coast NL is assessed in sections **2.8** and **2.9** of this chapter.
Countryside and Rights of Way Act (CRoW) 2000 Relevance: Access Land (mountain, moor, heath and down) is designated under the Act. There are areas of Access Land within the Onshore HVDC Cable Corridor and converter station study areas.	The effect on land within the LSVIA study area designated as Access Land is addressed in the impact assessment in sections **2.8** and **2.9** of this chapter.
The Marine and Coastal Access Act 2009 Relevance: Areas of the sea fall within the Onshore HVDC Cable Corridor and converter station study areas.	The effect on land adjacent to the coast within the LSVIA study area is addressed in the impact assessment in sections **2.8** and **2.9** of this chapter, where appropriate.
Environment Act 2021 Relevance: The Act mandated the preparation of Local Recovery Network Strategies ((LNRSs) across England. LNRSs are a new system of spatial strategies for nature recovery and will play a major role in providing detail on the best locations to create, enhance and restore nature and deliver wider environmental benefits. LNRSs will also agree priorities for nature recovery and map the most valuable existing areas for nature. They will be critical in delivering new government targets for species abundance and habitat creation commitments, as well as other pressing environmental outcomes for water and flood risk, carbon and tree planting and woodland creation. LNRSs will also drive the creation of a Nature Recovery Network (NRN), a major commitment in the government's 25 Year Environment Plan.	Opportunities will be taken to both mitigate and enhance the existing landscape, this will include areas of habitat creation. An Outline Landscape and Ecology Mitigation (LEMP) Plan will be designed with input from the following disciplines: Landscape architecture, arboriculture, ecology, hydrology, and historic environment. In addition to an Outline LEMP, proposals for Biodiversity Net Gain (BNG) will be prepared and submitted with the DCO application.

Planning Policy Context

2.2.2 The Proposed Development will be located within the UK Exclusive Economic Zone (EEZ) offshore waters (beyond 12 nautical miles (nm) from the English coast) and inshore waters, with the onshore infrastructure located wholly within Devon, England. As set out in Volume 1, Chapter 1: Introduction of the PEIR, the Secretary of State for the Department for Energy Security and Net Zero (DESNZ) has directed that elements of the Proposed Development are to be treated as development for which development consent is required under the Planning Act 2008, as amended.

National Policy Statements

2.2.3 There are currently six energy National Policy Statements (NPSs), three of which contain policy relevant to the Proposed Development, specifically:

- Overarching NPS for Energy (NPS EN-1) which sets out the UK Government's policy for the delivery of major energy infrastructure (DESNZ, 2024a);
- NPS for Renewable Energy Infrastructure (NPS EN-3) (DESNZ, 2024b); and
- NPS for Electricity Networks Infrastructure (NPS EN-5) (DESNZ, 2024c).

2.2.4 **Table 2.2** sets out key aspects from these three NPSs relevant to the Proposed Development, with particular reference to the need for and approach to consenting such infrastructure.

Table 2.2: Summary of relevant NPS policy

Summary of NPS Requirement	How and where considered in the PEIR
NPS EN-1 Provisions relevant to landscape and visual resources	
'*Energy NSIP proposals, whether onshore or offshore, should seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, or the wider environment where possible*.' [Paragraph 4.6.6 of NPS EN-1]	An Outline LEMP will be designed with input from the following disciplines: Landscape architecture, arboriculture, ecology, hydrology, and historic environment. Opportunities will be taken to both mitigate and enhance the existing landscape, this will include areas of habitat creation.

Summary of NPS Requirement	How and where considered in the PEIR
'*In addition to delivering biodiversity net gain, developments may also deliver wider environmental gains and benefits to communities relevant to the local area, and to national policy priorities, such as…* • *…landscape enhancement* • *increased access to natural greenspace, or* • *the enhancement, expansion or provision of trees and woodlands.* *The scope of potential gains will be dependent on the type, scale, and location of specific projects. Applicants should look for a holistic approach to delivering wider environmental gains and benefits through the use of nature-based solutions and Green Infrastructure*.' [Paragraph 4.6.13 NPS EN-1] '*The Environment Act 2021 mandated the preparation of Local Nature Recovery Strategies (LNRSs) across England. They are a new system of spatial strategies for nature recovery and will play a major role in providing detail on the best locations to create, enhance and restore nature and deliver wider environmental benefits. LNRSs will also agree priorities for nature recovery and map the most valuable existing areas for nature. They will be critical in delivering new government targets for species abundance and habitat creation commitments, as well as other pressing environmental outcomes for water and flood risk, carbon and tree planting and woodland creation. LNRSs will also drive the creation of a Nature Recovery Network (NRN), a major commitment in the government's 25 Year Environment Plan*.' [Paragraph 4.6.14 NPS EN-1] '*Applications for development consent should be accompanied by a statement demonstrating how opportunities for delivering wider environmental net gains considered, and where appropriate, incorporated into proposals as part of good design (including any relevant operational aspects) of the project*.' [Paragraph 4.6.15 NPS EN-1]	In addition to an Outline LEMP, proposals for BNG will be prepared. As set out above, opportunities will be taken to both mitigate and enhance the existing landscape, where engineering and landowner Requirements allow, this will include areas of habitat creation.
'*Where a project has a sterilising effect on land use (for example in some cases under transmission lines) there may be scope for this to be mitigated through, for example, using or incorporating the land for nature conservation or wildlife corridors or for parking and storage in employment areas*.'	No overhead lines are proposed as part of the Proposed Development. Proposed mitigation will be shown on an Outline LEMP and BNG proposals.

Summary of NPS Requirement	How and where considered in the PEIR
[Paragraph 5.11.29 of NPS EN-1]	
'*Public rights of way, National Trails, and other rights of access to land are important recreational facilities for example for walkers, cyclists and horse riders. The Secretary of State should expect applicants to take appropriate mitigation measures to address adverse effects on coastal access, National Trails, other rights of way and open access land and, where appropriate, to consider what opportunities there may be to improve or create new access. In considering revisions to an existing right of way, consideration should be given to the use, character, attractiveness, and convenience of the right of way*.' [Paragraph 5.11.30 of NPS EN-1]	No Access Land will be affected. The South West Coast Path National Trail will not be closed or diverted during the construction works at the landfall and the Onshore HVDC Cable Corridor, unless there is necessity to do so resulting from an emergency. No Access Land will be affected or Public Right of Way (PRoW) closed or diverted along the Onshore HVDC Cable Corridor. However, there will be a managed crossing at the two PRoW crossed by the Onshore HVDC Cable Corridor in a trenched crossing. No Access Land or PRoW will be affected or closed at the Converter Site. This chapter includes an assessment of the infrastructure associated with the Converter Site, set out in **Table 2.19** and assessed at sections **2.8** and **2.9**. An Outline LEMP will be developed to minimise, and mitigate the effects of the Proposed Development, as well as enhance the environment in and around the Onshore HVDC Cable Corridor and Converter Site, where possible. The landscape proposals are summarised in **Table 2.20** and section **2.7**, they will also be detailed in the Outline LEMP and the Design Code Document.
'*The Secretary of State should consider whether the mitigation measures put forward by an applicant are acceptable and whether Requirements or other provisions in respect of these measures should be included in any grant of development consent*.' [Paragraph 5.11.31 of NPS EN-1]	The Proposed Development comprises infrastructure that is a Critical National Priority (CNP) for the UK as defined in NPS EN-1. The landscape and ecological mitigation proposals will minimise adverse landscape and visual impacts as far as possible. There will be adverse residual impacts, which will diminish over time as the landscape mitigation becomes established and matures.
NPS EN-3 Provisions relevant to landscape and visual resources	
'*When considering applications for CNP Infrastructure in sites with nationally recognised designations (such as SSSIs, National Nature Reserves, National Parks, the Broads, Areas of Outstanding Natural Beauty, Registered Parks and Gardens, and World Heritage Sites), the Secretary of State will take as the starting point that the relevant tests in Sections 5.4 and 5.10 of EN-1 have been met, and any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by the urgent need for this type of infrastructure*.' [Paragraph 2.3.6 of NPS EN-3]	The Onshore HVDC Cable Corridor has direct effects on The North Devon Coast NL. Using both trenched and trenchless techniques to ensure there are no impacts to the woodland within the NL. This is detailed in Volume 1, Appendix 3.4: Crossing Schedule, of the PEIR. In theory parts of the Converter Site would be visible from the North Devon Coast NL (Volume 4, Figure 2.2). These areas have the potential to be indirectly affected. The effects on these landscapes are considered in sections **2.8** and **2.9**. The effects on the special

Summary of NPS Requirement	How and where considered in the PEIR
	qualities of the North Devon Coast NL are considered in sections **2.8** and **2.9**.
'*Proposals for renewable energy infrastructure should demonstrate good design, particularly in respect of landscape and visual amenity, opportunities for co-existence/co-location with other marine and terrestrial uses, and in the design of the project to mitigate impacts such as noise and effects on ecology and heritage*.' [Paragraph 2.5.2 of NPS EN-3]	A Design Code will detail the aims of and rationale behind the outline LEMP. The outline LEMP will set out long-term management objectives for the landscape and ecological proposals.
'*As part of the LSVIA, photomontages will be required. Viewpoints to be used for the LSVIA should be selected in consultation with the statutory consultees at the EIA Scoping stage*.' [Paragraph 2.8.210 of NPS EN-3]	Preliminary photomontages of the Converter Site and Alverdiscott Substation Development have been produced from agreed representative viewpoints. These are presented in Volume 4, Appendix 8.5: Landscape Visualisations of the PEIR.
'*Where appropriate, cumulative LSVIA should be undertaken in accordance with the policy on cumulative assessment outlined in Section 5.10.16-17 of EN-1*.' [Paragraph 2.8.212 of NPS EN-3]	A cumulative impact assessment has been undertaken and is presented in section **2.10** of this chapter.
NPS EN-5 Provisions relevant to landscape and visual resources	
'*Cumulative adverse landscape and visual impacts may arise where new overhead lines are required along with other related developments such as substations, wind farms, and/or other new sources of generation*.' [Paragraph 2.9.10 of NPS EN-5]	The cumulative effects of the Proposed Development are considered in section **2.10** of this chapter. No overhead lines are proposed as part of the Proposed Development. All electrical cabling will be underground. The mitigation and enhancement proposed within the Proposed Development will also assist in softening the views of the existing overhead powerlines and existing infrastructure. The landscape proposals will also increase connectivity and assist in enhancing landscape character, in line with the landscape character area management guidelines.
'*The Horlock Rules – guidelines for the design and siting of substations – were established by National Grid in 2009 in pursuance of its duties under Schedule 9 to the Electricity Act 1989. These principles should be embodied in applicants' proposals for the infrastructure associated with new overhead lines*.' [Paragraphs 2.9.18 of NPS EN-5] Paragraph 2.9.19 of NPS EN-5 lists the requirements of the Horlock Rules, which the applicants should consider.	An outline LEMP will be developed to mitigate and minimise the effects of the Proposed Development. Volume 1, Chapter 4: Need and alternatives of the PEIR includes an overview of the site selection process. This chapter includes an assessment of all the effects of the Proposed Development at sections **2.8** and **2.9** of this chapter. Ancient Woodland, veteran trees and their Root Protection Zones (RPZ) will be avoided by the direct impacts of the Onshore HVDC Cable Corridor and the Converter Site, e.g., Littleham Wood is crossed using trenchless techniques, such as HDD).
'*In addition to good design in accordance with the Holford and Horlock Rules (please see paragraphs 2.9.18 - 2.9.19), and the*	No overhead lines are proposed as part of the Proposed Development. All electrical cabling installed by the Applicant will be underground.

Summary of NPS Requirement	How and where considered in the PEIR
consideration of undergrounding or rerouting the line where possible, the principal opportunities for mitigating adverse landscape and visual impacts of electricity networks infrastructure are: *• consideration of network reinforcement options (where alternatives exist) which may allow improvements and/or extensions to an existing line rather than the building of an entirely new line;* *• selection of the most suitable type and design of support structure in order to minimise the overall visual impact on the landscape. In particular, ensuring that towers are of the smallest possible footprint and internal Volume; and* *• the rationalisation, reconfiguration, and/or undergrounding of existing electricity networks infrastructure in the vicinity of the proposed development.*' [Paragraph 2.10.5 of NPS EN-5]	However, existing overhead power lines that cross the Converter Site will require repositioning/undergrounding by the relevant statutory undertaker to make way for the Proposed Development. Details of any such repositioning of existing overhead power lines are not known at present. Additionally, bunding and woodland planting proposed as part of the outline LEMP may screen and soften the impact of existing pylons, by providing a backdrop to them, rather than seeing them in silhouette.
'*• Additionally, there are more specific measures that might be taken, and which the Secretary of State could mandate through DCO Requirements if appropriate, as follows:* *• landscape schemes, comprising off-site tree and hedgerow planting, are sometimes used for larger new overhead line projects to mitigate potential landscape and visual impacts, softening the effect of a new above ground line whilst providing some screening from important visual receptors. These may be implemented with the agreement of the relevant landowner(s), or the developer may compulsorily acquire the land or land rights in question. Advice from the relevant statutory authority may also be needed; and* *• screening, comprising localised planting in the immediate vicinity of residential properties and principal viewpoints can also help to screen or soften the effect of the line, reducing the visual impact from a particular receptor*.' [Paragraph 2.10.6 of NPS EN-5]	A summary of the Proposed Development, relevant to this chapter, is described in section **2.6** and **Table 2.19** of this chapter. A Design Code will detail the aims of and rationale behind both the Converter Site buildings architecture and the landscape proposals, which will be shown on an outline LEMP.

Table 2.3: Summary of NPS EN-1, NPS EN-3, NPS EN-5 policy on decision making relevant to landscape, seascape, and visual resources.

Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the PEIR
NPS EN-1 Policy on decision making relevant to landscape, seascape, and visual resources	
The duty to seek to further the purposes of nationally designated landscapes also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. In these locations, projects should be designed sensitively given the various siting,	No part of the Converter Site is located within any designated landscapes. A Zone of Theoretical Visibility (ZTV) has been generated for the tallest buildings to be constructed

Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the PEIR
operational, and other relevant constraints. The Secretary of State should be satisfied that measures which seek to further the purposes of the designation are sufficient, appropriate and proportionate to the type and scale of the development. [Paragraph 5.10.8 of NPS EN-1] The Secretary of State has a duty of to have regard to the statutory purposes of National Parks and AONBs in Wales when making decisions about development schemes within England which affect designated landscapes in Wales. Similar regard should also be had in relation to schemes in England which have impacts on National Parks and National Scenic Areas in Scotland. [Paragraph 5.10.9 of NPS EN-1] Outside nationally designated areas, there are local landscapes that may be highly valued locally. Where a local development document in England or a local development plan in Wales has policies based on landscape or waterscape character assessment, these should be paid particular attention. However, locally valued landscapes should not be used in themselves to refuse consent, as this may unduly restrict acceptable development. [Paragraph 5.10.12 of NPS EN-1]	at the Converter Site. This showed that parts of the Converter Site would be theoretically visible from the North Devon Coast NL (Volume 4, Figure 2.2). Without mitigation bunds a corner of one of the buildings is visible. An indicative example bund was used to test whether the building could be successfully screened from the NL and it was found to not be visible (see Figure 2.5.40, Representative viewpoint 40 of Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR). The direct impacts resulting from the Onshore HVDC Cable Corridor are summarised in sections **2.8** and **2.9**. A detailed study of the effects of the Proposed Development on the special qualities of the North Devon Coast NL has been undertaken in sections **2.8** and **2.9**.
All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. [Paragraph 5.10.13] The Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project. [Paragraph 5.10.14] Coastal areas are particularly vulnerable to visual intrusion because of the potential high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast. [Paragraph 5.10.15]	The visual assessment of the Proposed Development, including the Converter Site is in sections **2.8** and **2.9** of this chapter.
Adaptation measures should be required to be implemented at the time of construction where necessary and appropriate to do so. However, where they are necessary to deal with the impact of climate change, and that measure would have an adverse effect on other aspects of the project and/or	Once construction compounds are removed and remediation has taken place, the landscape and ecological mitigation/restoration can take place.

Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the PEIR
surrounding environment (for example coastal processes), the Secretary of State may consider requiring the applicant to keep the need for the adaptation measure under review, and ensure that the measure could be implemented should the need arise, rather than at the outset of the development (for example increasing height of existing, or requiring new, sea walls). [Paragraph 4.10.19 of NPS EN-1]	
The scale of energy projects means that they will often be visible across a very wide area. The Secretary of State should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project. [Paragraph 5.10.35 of NPS EN-1]	The effects of the temporary and permanent elements of the Proposed Development on the landscape are assessed in sections **2.8** and **2.9**. The visual effects of the project are assessed at sections **2.8** and **2.9** of this chapter.
In reaching a judgment, the Secretary of State should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the Secretary of State considers reasonable. [Paragraph 5.10.36 of NPS EN-1]	
The Secretary of State should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by appropriate mitigation. [Paragraph 5.10.37 of NPS EN-1]	An outline LEMP and Design Code will be developed.
The Secretary of State should consider whether Requirements to the consent are needed requiring the incorporation of particular design details that are in keeping with the statutory and technical Requirements for landscape and visual impacts. [Paragraph 5.10.38 of NPS EN-1]	An outline LEMP and Design Code will be developed.
NPS EN-3	
Assessment of environmental effects of transmission infrastructure and any proposed offshore or onshore substations should assess effects both alone and cumulatively with other existing and proposed infrastructure.[40] [Paragraph 2.8.72 of NPS EN-3]	The cumulative effects of the Proposed Development at the landfall, Onshore HVDC Cable Corridor, Converter Site and Alverdiscott Substation Site, on landscape and visual resources are considered in section **2.10**.
The applicant should assess the effects of the offshore transmission and any associated	The effects on landscape and visual resources of the work at the Landfall, Onshore HVDC Cable Corridor and Converter Site within the Proposed

Summary of NPS EN-1, EN-3 and EN-5 provision	How and where considered in the PEIR
infrastructure on the marine, coastal and onshore environment. [Paragraph 2.8.68 of NPS EN-3]	Development are considered in sections **2.8** and **2.9** of this chapter.
The Secretary of State should assess the proposal in accordance with the policy set out in the landscape and visual impacts (Section 5.10 of EN-1) [Paragraph 2.8.349 of NPS EN-3]	The assessment of the Proposed Development has considered the likely significance of effects, , considering each phase of the development process. The likely significance of effects will inform the design development of the scheme and is outlined in this chapter (refer to **Table 2.22** for the summary of potential landscape and visual effects).
NPS-EN5	
There will usually be a degree of flexibility in the location of the development's associated substations, and applicants should consider carefully their placement in the local landscape, as well as their design. [Paragraph 2.2.8 of NPS EN-5] In particular, the applicant should consider such characteristics as the local topography, the possibilities for screening of the infrastructure and/or other options to mitigate any impacts. (See Section 2.10 of NPS EN-5 and Section 5.10 in EN-1.) [Paragraph 2.2.9 of NPS EN-5]	Volume 1, Chapter 4: Need and Alternatives of the PEIR includes an overview of the site selection process and the environmental considerations taken into account.
When planning and evaluating the proposed development's contribution to environmental and biodiversity net gain, it will be important – for both the applicant and the Secretary of State – to supplement the generic guidance set out in EN-1 (Section 4.6) with recognition that the linear nature of electricity networks infrastructure can allow for excellent opportunities to: i. reconnect important habitats via green corridors, biodiversity stepping zones, and reestablishment of appropriate hedgerows; and/or ii. connect people to the environment, for instance via footpaths and cycleways constructed in tandem with environmental enhancements. [Paragraph 2.5.1 of NPS EN-5]	An outline LEMP will be developed to minimise, and mitigate the effects of the Onshore HVDC Cable Corridor and Converter Site, as well as enhance the environment in and around these areas, where possible. The landscape proposals are summarised in **Table 2.20** and will also be detailed in a Design Code.
The Secretary of State should be satisfied that the development, so far as is reasonably possible, complies with the Holford and Horlock Rules (please see paragraphs 2.9.16 - 2.9.19) or any updates to them. [Paragraph 2.11.2 of NPS EN-5]	Principles governing the design of the Converter Site and associated landscape mitigation will be set out in a Design Code. Details of the landscape and ecological mitigation and enhancement will be shown on the outline LEMP.

The National Planning Policy Framework

2.2.5 The National Planning Policy Framework (NPPF) was published in 2012 and was last updated in December 2023 (Department for Levelling Up, Housing and Communities, 2023). The NPPF sets out the Government's planning policies for

England. **Table 2.4** sets out a summary of the NPPF policies relevant to this chapter.

Table 2.4: Summary of NPPF Requirements relevant to this chapter

Policy	Key provisions	How and where considered in the PEIR
Section 2, paragraph 7	2. Achieving sustainable development 7. The purpose of the planning system is to contribute to the achievement of sustainable development, including the provision of homes, commercial development, and supporting infrastructure in a sustainable manner. At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.	The Project is a renewable energy project. The Proposed Development is an essential part of this critical national project, which meets the wider objective.
Section 2, paragraph 8	Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives), this includes an environmental objective: c) an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.	
Section 2, paragraph 10	So that sustainable development is pursued in a positive way, at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11).	
Section 2, paragraph 11	Plans and decisions should apply a presumption in favour of sustainable development. For decision-taking this means: d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless: i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed[7]; or ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole. [7] The policies referred to are those in this Framework (rather than those in development plans) relating to: …land designated an Area of Outstanding Natural Beauty [now National Landscape], or a National Park…	The Proposed Development makes landfall within the North Devon Coast NL. The Proposed Development is a Nationally Significant Infrastructure Project and a CNP for the UK.

Policy	Key provisions	How and where considered in the PEIR
	Note: other designations are either not of relevance to this project, or are not landscape designations.	
Section 12, paragraph 137	Design quality should be considered throughout the evolution and assessment of individual proposals. Early discussion between applicants, the local planning authority and local community about the design and style of emerging schemes is important for clarifying expectations and reconciling local and commercial interests. Applicants should work closely with those affected by their proposals to evolve designs that take account of the views of the community. Applications that can demonstrate early, proactive and effective engagement with the community should be looked on more favourably than those that cannot.	Early engagement with the landscape consultant working for Torridge District Council, as well as with the wider planning department at the council has been undertaken and is ongoing, (see **Table 2.7** for details).
Section 14, paragraph 157	The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.	The Proposed Development is a CNP for the UK. The coastal change will be minimal and temporary. The Offshore Cable Corridor will be installed beneath the rocky foreshore and beach. Once construction of the cable route has been completed the jointing bays will be covered with topsoil and returned to pasture. Green infrastructure in the form of restored and additional hedgerows, tree and woodland planting will be part of the outline LEMP.
Section 14, paragraph 159	New development should be planned for in ways that; a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure.	Proposals for BNG will have a positive outcome for the climate but they are not counted as part of the GHG emissions benefits that will accrue from the Proposed Development. BNG proposals may target watercourses for improvement that may have a knock-on benefit for flood risk.
Section 14, paragraph 160	To help increase the use and supply of renewable and low carbon energy and heat, plans should: a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, and their future re-powering and life	The Proposed Development is a CNP for the UK, delivering a large amount of renewable power to the

Policy	Key provisions	How and where considered in the PEIR
	extension, while ensuring that adverse impacts are addressed appropriately (including cumulative landscape and visual impacts); b) consider identifying suitable areas for renewable and low carbon energy sources and supporting infrastructure, where this would help secure their development.	GB national grid. There will be impacts on the landscape, views and visual amenity. However, the impacts will be kept to a minimum and adverse effects reduced at the Converter Site by using a 'cut and fill' technique that will allow the buildings to be largely screened from views together with the implementation of the outline LEMP. The Proposed Development is not suitable infrastructure to supply a decentralised energy supply
Section 14, paragraph 162	In determining planning applications, local planning authorities should expect new development to: a) comply with any development plan policies on local Requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and	
Chapter 14, paragraph 163	When determining planning applications for renewable and low carbon development, local planning authorities should: a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to significant cutting greenhouse gas emissions; b) approve the application if its impacts are (or can be made) acceptable. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas	
Chapter 14, paragraph 176	In coastal areas, planning policies and decisions should take account of the UK Marine Policy Statement and marine plans. Integrated Coastal Zone Management should be pursued across local authority and land/sea boundaries, to ensure effective alignment of the terrestrial and marine planning regimes.	The Proposed Development takes account of the UK Marine Policy Statement and marine plans where relevant to this LSVIA.
Chapter 14, paragraph 178	Development in a Coastal Change Management Area will be appropriate only where it is demonstrated that: a) it will be safe over its planned lifetime and not have an unacceptable impact on coastal change; b) the character of the coast including designations is not compromised; c) the development provides wider sustainability benefits; and d) the development does not hinder the creation and maintenance of a continuous signed and managed route around the coast.	The Offshore Cable Corridor of the Proposed Development will make landfall within the North Devon Coast NL. However, the temporary construction effects will be minimal, and the land returned to pasture once the cable construction is complete. An assessment of the effects on the special qualities of the NL is in

Policy	Key provisions	How and where considered in the PEIR
		sections **2.8** and **2.9** of this chapter. The South West Coast Path will not be closed or diverted during the construction work at the landfall. The reasons for the designation of the North Devon Coast NL will not be compromised.
Section 15, paragraph 180	Planning policies and decisions should contribute to and enhance the natural and local environment by: a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate; d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans.	The Offshore Cable Corridor makes landfall within the North Devon Coast NL. This will cause a temporary impact, with the land being returned to pasture once the construction is complete. An outline LEMP will be developed that will retain, restore and enhance hedgerows and woodlands, to connect and expand existing habitats. The proposals will also provide mitigation from the impacts on landscape character, views and visual amenity. A tree survey is ongoing and is being undertaken to BS5837. This will identify the most valuable trees, including any veteran trees and areas of Ancient Woodland. It will be completed and presented in the ES. Tree root protection zones (RPZ) will be mapped and the routeing of the cables and decisions of whether to use trenched or trenchless techniques will take account of the tree survey findings. Where work has to be undertaken within a RPZ

Policy	Key provisions	How and where considered in the PEIR
		of a tree that is to be retained a method statement will be agreed with the relevant tree officer. Where a tree cannot be retained, replacement trees will be planted as close to the original location as possible. Ancient Woodland, veteran trees and their RPZ will be avoided by the direct impacts of the Onshore HVDC Cable Corridor and the Converter Site, e.g., Littleham Wood is either crossed using trenchless techniques or avoided to the south. An outline LEMP will be developed, that restores and creates hedgerows, as well as planting areas of woodland, increasing connectivity of habitats and providing landscape and visual mitigation, to minimise adverse effects as much as possible.
Section 15, paragraph 181	Plans should: distinguish between the hierarchy of international, national, and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework, take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure. And plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.	The Proposed Development is a CNP for the UK. The Converter Site is not located within a nationally or locally designated landscape. The Offshore Cable Corridor makes landfall within a nationally designated landscape, but the impacts will be temporary and the land returned to pasture once the construction works are complete. An outline LEMP will show the landscape and ecological mitigation and enhancement used to
Section 15, paragraph 182.	Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty [now National Landscape] which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas and should be given great weight in National Parks and the Broads. The scale and extent of development within all these designated areas should be limited while development within their setting should	

Policy	Key provisions	How and where considered in the PEIR
	be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.	minimise adverse impacts.
Section 15, paragraph 183	When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty [now National Landscape] permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of: a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy. b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.	
Section 15, paragraph 184	Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 182), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.	Heritage Coast is not a landscape (or a heritage) designation and the effects on it are not considered in this chapter.
Section 15, paragraph 191	Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should: c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.	The night time effects on landscape and seascape character are considered in sections **2.8** and **2.9**. The night time effects on views and visual amenity are considered in sections **2.8** and **2.9**.

National Planning Practice Guidance

2.2.6 The NPPF is supported by the National Planning Practice Guidance (NPPG) (DCLG, 2014) a web-based guidance resource that was introduced in 2014 in order to bring together existing planning practice guidance for England in an accessible and useable way. The Natural Environment section was updated in July 2019 and the Light Pollution section was updated November 2019. Only those sections of relevance to the Proposed Development are discussed below.

Natural Environment – Landscape (21st July 2019)

2.2.7 The NPPG explains, at paragraph: 036 (Reference ID: 8-036-20190721) that the NPPF requires that *"plans should recognise the intrinsic character and beauty of*

the countryside, and that strategic policies should provide for the conservation and enhancement of landscapes. This can include nationally and locally-designated landscapes but also the wider countryside".

2.2.8 In the same paragraph, the NPPG requires that where landscapes have a particular, local, value planning policies should *"identify their special characteristics and be supported by proportionate evidence."* In addition, *"Plans can also include policies to avoid adverse impacts on landscapes and to set out necessary mitigation measures…"* Also "*The cumulative impacts of development on the landscape need to be considered carefully"*.

2.2.9 The NPPG explains at paragraph: 037 (Reference ID: 8-037-20190721) that *"For a designated landscape, the relevant management plan will contain further information on the area's particular character and beauty."* The relevant qualifying interests within the North Devon Coast AONB [now National Landscape] Management Plan is outlined in **Table 2.16** of this chapter, detailed in paragraphs **2.5.8** and **2.5.9**. The effects on the relevant special qualities are considered in sections **2.8** and **2.9** of this chapter.

2.2.10 In the same paragraph the NPPG refers to using Landscape and Visual Impact Assessments to demonstrate the likely effects of a proposed development on the landscape. The landscape and seascape character of the study areas are set out in Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report of the PEIR. The site-specific character of the Proposed Development is set out in paragraphs **2.5.13** to **2.5.48** of this chapter. The effects of the Proposed Development on landscape and seascape character are considered in sections **2.8** and **2.9** of this chapter.

2.2.11 Paragraph: 039 Reference ID: 8-039-20190721 notes that *"Section 11A(2) of the National Parks and Access to the Countryside Act 1949, section 17A of the Norfolk and Suffolk Broads Act 1988 and section 85 of the Countryside and Rights of Way Act 2000 require that 'in exercising or performing any functions in relation to, or so as to affect, land' in National Parks and Areas of Outstanding Natural Beauty, relevant authorities 'shall have regard' to their purposes for which these areas are designated"*.

2.2.12 Paragraph: 040 Reference ID: 8-040-20190721 notes that *"Management plans for National Parks, the Broads and Areas of Outstanding Natural Beauty do not form part of the statutory development plan, but they help to set out the strategic context for development. They provide evidence of the value and special qualities of these areas."* The special qualities of the North Devon Coast National Landscape are outlined in **Table 2.16** of this chapter and detailed in paragraphs **2.5.8** and **2.5.9**. The effects on the relevant special qualities are considered in sections **2.8** and **2.9** of this chapter.

2.2.13 Paragraph: 041 Reference ID: 8-041-20190721 explains that *"The National Planning Policy Framework makes clear that the scale and extent of development in these areas should be limited, in view of the importance of conserving and enhancing their landscapes and scenic beauty."*

2.2.14 Paragraph: 042 Reference ID: 8-042-20190721 explains that *"Land within the setting of these areas* [nationally designated landscapes] *often makes an important contribution to maintaining their natural beauty, and where poorly located or designed development can do significant harm. This is especially the case where long views from or to the designated landscape are identified as important, or where the landscape character of the land within and adjoining the designated area is complementary. Development within the settings of these*

areas will therefore need sensitive handling that takes these potential impacts into account". Long views from the closest nationally designated landscapes (North Devon Coast National Landscape and Exmoor National Park) have been considered as part of the assessment in sections **2.8** and **2.9** of this chapter.

Light Pollution (1 November 2019)

2.2.15 The NPPG explains in paragraph: 001 (Reference ID: 31-001-20191101) that *"artificial lighting needs to be considered when a development may increase levels of lighting or would be sensitive to prevailing levels of artificial lighting"*.

2.2.16 The NPPG notes, in the same paragraph, that *"Artificial light is not always necessary. It has the potential to become what is termed 'light pollution' or 'obtrusive light', and not all modern lighting is suitable in all locations. It can be a source of annoyance to people, harmful to wildlife and undermine enjoyment of the countryside or the night sky, especially in areas with intrinsically dark landscapes".* The Converter Site is not located in, or adjacent to, an area designated as a 'Dark Sky Area', but is located in a moderate to dark landscape, as described in paragraphs **2.5.45** and **2.5.46** of this chapter.

2.2.17 The NPPG at paragraph: 002 (Reference ID: 31-002-20191101) requires that consideration should be given to whether the proposed lighting significantly affects sensitive receptors, e.g., residents. The Converter Site is not located in an area that lies adjacent to residential development. The closest residential properties are noted in paragraph **2.5.65**.

2.2.18 The NPPG explains in paragraph: 003 Reference ID: 31-003-20191101, that light intrusion occurs *"when the light 'spills' beyond the boundary of the area being lit"* which can compromise an existing dark landscape, amongst other effects, and that *"these adverse effects can usually be avoided with careful lamp and luminaire selection and positioning"*. A preliminary assessment of the night time effects is set out in sections **2.8** and **2.9** of this chapter.

2.2.19 NPPG paragraph 004 Reference ID: 31-004-20191101 and paragraph: 005 Reference ID: 31-005-20191101 detail the factors to consider when and how much light shines.

Local Planning Policy

2.2.20 The Proposed Development is located within the administrative area of Torridge District Council. The relevant local planning policies applicable to LSVIA based on the extent of the study areas for this assessment are summarised in **Table 2.5**.

2.2.21 The relevant local planning policies applicable to LSVIA based on the extent of the study area for this assessment are summarised in Volume 4, Appendix 2.1: Landscape and Visual Resources Planning Policy Context, of the PEIR.

Table 2.5: Summary of local planning policy relevant to this chapter

Policy	Key provisions	How and where considered in the PEIR
North Devon & Torridge Local Plan (2011-2031) Adopted 2018		
Section 2 Spatial Planning Vision		
Paragraph 2.1	*"The overarching principle supporting the Local Plan in northern Devon is to contribute to the achievement of*	The Proposed Development lies within the North Devon Biosphere Reserve. The assessment of effects

Policy	Key provisions	How and where considered in the PEIR
	sustainable development. It is the intention of the Councils to enable the delivery of infrastructure, jobs, accessible local services and housing for future generations while supporting the world-class environment of the [North Devon] *Biosphere Reserve."*	on the North Devon Biosphere Reserve is in sections **2.8** and **2.9** of this chapter. An outline LEMP is being developed that includes restoration, enhancement and creation of hedgerows, as well as the creation of woodlands, to enhance and link habitats. This will assist minimising adverse effects as much as possible. The Proposed Development will transmit large amounts of renewable energy into the GB national grid and is therefore a CNP.
Paragraph 2.9	The spatial implications and opportunities arising from the North Devon Biosphere Reserve, include *"enhancing green infrastructure networks at a landscape scale."*	
Paragraph 2.21	Key Challenges – (i) is noted as *"Protecting the high quality natural environment and the coastal environment in particular, is vital and underpins tourism. Future development must be sensitive to the area's environmental assets and ensure that the local character, distinctiveness and environmental quality is not eroded but where possible enhanced as a consequence of development; (j) 'Delivering necessary development, while minimising the impact on the environment and responding to the implications of climate change."*	
ST02: Mitigating climate change	The policy requires that development makes a positive contribution to the environmental sustainability of northern Devon and minimise its environmental footprint, by *"(b) conserving and enhancing the natural, built and historic environment through the prudent use of key resources including land, buildings and energy, whilst protecting and enhancing the area's biodiversity, geodiversity, landscape, coastline, air, water, archaeology and culture."* Point (d) is also relevant as it refers to *"promoting opportunities for renewable and low-carbon energy generation whilst conserving and enhancing the natural and built environment"'*	The Proposed Development will transmit large amounts of renewable energy into the GB national grid and is therefore a CNP. An outline LEMP will be developed that includes restoration, enhancement and creation of hedgerows, as well as the creation of woodlands, to enhance and connect habitats. This will minimise adverse effects as much as possible.
ST03: Adapting to climate change	The policy requires that new development, be designed and constructed to take account of the impacts of climate change. This includes at point (j) conserving and enhancing landscapes, including cross-boundary infrastructure links, improving habitat connectivity. Paragraph 3.23 notes that the North Devon Biosphere Reserve Buffer Zone (essentially the NL in landscape terms) is a continuous area of conservation management, where only activities of	The Onshore HVDC Cable Corridor crosses North Devon Biosphere Reserve Buffer Zone. In the wider Transition Zone (of the North Devon Biosphere Reserve) in which the majority of the Onshore Infrastructure Area is located, a more sustainable use of the environment is promoted.

Policy	Key provisions	How and where considered in the PEIR
	compatible with the conservation objectives can take place. In the wider Transition Zone, a more sustainable use of the environment is promoted.	An outline LEMP will be developed that includes restoration, enhancement and creation of hedgerows, as well as the creation of woodlands, to enhance and connect habitats. This will help to minimise adverse effects.
ST04: Improving the quality of development	The policy requires that development will achieve high quality design, responding to the characteristics of the site, its wider connect and the surrounding area. The explanatory text requires that new development should be visually interesting and complement their landscape (paragraph 3.26). Within the North Devon Biosphere Transition Zone innovative approaches will be encouraged (paragraph 3.29).	The architectural objectives for the Converter Site will be set out in the Design Code. However, the design of the infrastructure is largely influenced by its functionality.
Section 4 Spatial Strategy		
ST09: Coast and estuary strategy	The spatial strategy map (Figure 4.2) identifies where Policy ST09: Coast and estuary strategy applies. Within the zone, new development *"will be supported where it does not detract from the unspoilt character, appearance and tranquillity of the area…and is required because it cannot reasonably be located outside the Undeveloped Coast and estuary"* (point (7)). The policy requires that the *"continuity of the South West Coast Path and Tarka Trail will be protected and a network of connecting routes be improved"* (point (11)). The explanatory text notes that the Marine Management Organisation is responsible for consenting offshore projects (paragraph 4.38). Paragraph 4.49 of the Local Plan refers specifically to renewable energy *"Impact on proposed mitigation on environmental and heritage assets from the landfall of offshore renewable energy generation will need to be balanced against potential social, environmental and economic benefits, recognising the national and/or international importance of some environmental assets."*	The Onshore HVDC Cable Corridor crosses the Coastal and Estuarine Zone, using trenchless techniques. This is the only possible way that the Offshore Cable Corridor can connect to the Onshore HVDC Cable Corridor and thence to the national grid. The South West Coast Path and the Tarka Trail will remain open as trenchless techniques will be used to make the landfall and go under the River Torridge, thus avoiding both PRoW. The Offshore Cable Corridor is not expected to have significant effects to the seascape. However, the LSVIA study area cover parts of the sea to reflect coastal receptors impacted by the Landfall works (both on and offshore) and the nearest parts of the Onshore Cable Corridor to the beach. Key characteristics of the seascape are set out in the North Devon and Exmoor Seascape Character Assessment (Land Use Consultants, 2015). The effects on these characteristics are considered in section **2.8** and **2.9** of this LSVIA. The planning balance consideration is undertaken in Volume 1, Chapter 4: Need and Alternatives, of the PEIR.

Policy	Key provisions	How and where considered in the PEIR
Section 6 A World Class Environment		
ST14: Enhancing environmental assets	The policy requires that the *"quality of northern Devon's natural environment will be protected and enhanced by ensuring that development contributes to: (e) conserving the setting and special character and qualities of the Northern Devon Coast Area of Outstanding Natural Beauty* [now National Landscape]…*"; "(f) ensuring development conserves and enhances northern Devon's local distinctiveness including its tranquillity, and the setting and special qualities of Exmoor National Park including its dark night skies; (g) protecting and enhancing local landscape and seascape character, taking into account the key characteristics, the historical dimension of the landscape and their sensitivity to change;"* and "*(h) recognising the importance of the undeveloped coastal, estuarine, and marine environments through supporting designations, plans and policies that aim to protect and enhance northern Devon's coastline…"* paragraph 6.2 also notes that Ancient Woodland and veteran trees are important environmental assets. As they are irreplaceable, they are deemed to be 'critical environmental capital' and should not be lost (paragraph 6.5). Paragraph 6.6 notes that the North Devon Coast NL is a nationally important landscape. The councils have a duty to conserve and enhance the NL's natural beauty (section 85 of the Countryside and Rights of Way (CRoW) Act). The same paragraph notes that the setting and inland areas of the NL contribute to its special qualities. The setting of these designated areas is also highlighted as important in paragraph 6.11. The tranquillity of the rural areas, away from the main towns is noted at paragraph 6.8. It is also noted that tranquillity is part of northern Devon's character, which includes dark night skies without light pollution. The North Devon Biosphere Reserve is described in paragraph 6.14.	The Offshore Cable Corridor makes landfall within the North Devon Coast NL. However, the effects of the construction works will be temporary. After construction the Onshore HVDC Cable Corridor, including jointing bays, will be returned to farmland. The impact of the construction at the landfall and the Onshore HVDC Cable Corridor within the North Devon Coast NL are assessed at sections **2.8** and **2.9** of this chapter. The direct effects of the Onshore HVDC Cable Corridor on the special qualities of the North Devon Coast NL are assessed in sections **2.8** and **2.9** of this chapter. The night time effects on landscape and seascape character are assessed at sections **2.8** and **2.9**. The night time effects on views and visual amenity are assessed at sections **2.8** and **2.9**. The Converter Site is approximately 6.4 km from the boundary of the North Devon Coast NL and 21.5 km from the boundary of the Exmoor National Park. Due to distance and lack of visibility, the impacts of the Converter Site do not have the potential to affect the special qualities of either nationally designated landscape or their settings and so are not assessed within this chapter. A tree survey is ongoing and is being undertaken to BS5837. This will identify the most valuable trees, including any veteran trees and areas of Ancient Woodland. It will be completed and presented I the ES. Tree RPZ will be mapped and the routeing of the cables and decisions of whether to use trenched or trenchless techniques will take account of the Tree Survey findings. Where work has to be undertaken within a RPZ of a tree that is to be retained, a method statement will be agreed with the relevant tree officer. Where a tree cannot be retained, replacement trees will be planted as

Policy	Key provisions	How and where considered in the PEIR
		close to the original location as possible. Ancient Woodland, veteran trees and their RPZ will be avoided by the direct impacts of the Onshore HVDC Cable Corrido and the Converter Site, e.g., Littleham Wood is crossed using trenchless techniques, such as HDD). The Proposed Development is located within the North Devon Biosphere Reserve buffer zone.
ST16: Delivering renewable energy	*"Renewable and low carbon energy"…"will be supported in the landscape character types where: (a) landscape sensitivity is best able to support them, assessed in accordance with the Councils' Landscape Sensitivity Assessments and by the landscape's sensitivity to accommodate the scale of development; (b) there is no significant effect on local amenities; and (c) the special qualities of nationally important landscape…designations and their settings are conserved or enhanced."* The policy also notes that *"renewable and low carbon energy will be supported where it can demonstrate that the cumulative impact of operational and proposed development on the landscape character does not become a significant or defining characteristic of the wider fabric, character and quality of the landscape."* Local Plan paragraph 6.28 notes that the landfall and onshore infrastructure impacts will also be considered.	Whilst the Proposed Development is not a renewable energy generating project, it is the infrastructure required for transmitting a nationally important amount of renewable energy. The Offshore Cable Corridor makes landfall within the North Devon Coast NL. The jointing bays and a length of the Onshore HVDC Cable Corridor will also be located within the NL. However, the impacts will be temporary (construction phase only) with the land being returned to farmland after construction. The effects on the North Devon Coast NL are assessed in sections **2.8** and **2.9**. The cumulative effects of the Proposed Development are assessed at section **2.10** of this chapter
Section 13 Development Management Policies		
DM01: Amenity considerations	Policy DM01 explains that development *"will be supported where (a) it would not significantly harm the amenities of any neighbouring occupiers or uses."* The explanatory text at Local Plan paragraph 13.3 (b) is concerned with light intrusion, explaining that *"poorly designed lighting can result in the spillage of light into the countryside, impact on residential amenities and increase sky glow."* The need to minimise unnecessarily obtrusive lighting by design, is highlighted.	The night time effects of the Proposed Development on landscape and seascape character are assessed at sections **2.8** and **2.9**. The night time effects of the Proposed Development on views and visual amenity are assessed at sections **2.8** and **2.9**. The Proposed development is located within a rural area, but is not located in or near the North Devon Coast NL or Exmoor National Park or the Dark Sky Reserve.
DM02: Environmental protection	The prevention of light pollution is also raised in this development management policy. Point (2) (d) explains that development will be supported if it does	

Policy	Key provisions	How and where considered in the PEIR
	not result in unacceptable impacts to *"light pollution (sky glow, light intrusion, and light spillage), where light overspills on to areas not intended to be lit. Areas particularly sensitive to light pollution include tranquil areas of open countryside, in particular areas of nature conservation value and Exmoor National Park's Dark Sky Reserve."*	
DM04: Design principles	This policy explains that good design should: (a) be sympathetic to setting in terms of scale, density, massing height, layout and landscape features; (b) reinforce the key characteristics and special qualities of the area in which the development is proposed; (d) contribute positively to local distinctiveness; and, (f) retain and integrate existing landscape features.	The Applicant is working with architects to achieve a high-quality design of the Converter Site. However, the design of these is largely influenced by their functionality. A landscape and ecological strategy will be developed that includes restoration, enhancement and creation of hedgerows, as well as the creation of woodlands, to enhance and connect habitats. This will help to minimise adverse effects.
DM08A: Landscape and seascape character	The policy requires development to be: (1) *"of an appropriate scale, mass and design that recognises and respects the landscape character of both designated and undesignated landscapes and seascapes; it should avoid adverse landscape and seascape impacts and seek to enhance the landscape and seascape assets wherever possible."* The sensitivity and capacity of the landscape/seascape asset should be considered, using the Landscape and seascape Character Assessment for North Devon and Torridge, and should include cumulative impacts. Point (2) of the policy is concerned with development within or affecting the setting of the North Devon Coast NL or affecting the setting of the Exmoor National Park. While the proposed development is outside the Exmoor National Park and its setting, the Onshore HVDC Cable Corridor passes through the North Devon Coast NL, albeit underground. The policy requires that new development in these areas should have regard to its statutory purposes, including the conservation and enhancement of landscape character and natural beauty. Development will not be permitted where it conflicts with or compromises the statutory purposes of the landscape designation.	The dimensions of the Converter Site are dictated by their function, as is the width of the Onshore HVDC Cable Corridor. The cumulative effects of the Proposed Development together with relevant projects are considered in section **2.10**, of this chapter. The Onshore HVDC Cable Corridor crosses the North Devon Coast NL using trenched and trenchless techniques. Once construction is complete the land will be returned to farmland. The Converter Site is not visible/too far from the North Devon Coast NL and Exmoor National Park to affect their settings. The Proposed Development will not conflict with or compromise the statutory purposes of the national landscape designations.

Policy	Key provisions	How and where considered in the PEIR
	Point (3) is concerned specifically with development within or affecting the setting of the NL, noting that development should not compromise the NL Management Plan. Major development within the NL will be refused, unless it can be demonstrated that the development is in the public interest as set out in national policy.	
DM09: Safeguarding green infrastructure	The policy states that development involving the loss of green infrastructure will only be supported where (a) equivalent, alternative green infrastructure is provided, or (b) the existing network of green infrastructure can be retained or enhanced.	There will be a temporary loss of hedgerows where the Onshore HVDC Cable Corridor crosses hedgerows/other environmental assets in trenches rather than using trenchless techniques. The hedgerows/other environmental assets will be reinstated once the Onshore HVDC Cable Corridor has been installed. The Converter Site will be in agricultural fields. Existing vegetation and landscape features around the boundaries of the fields will be retained and additional planting is proposed, both in the immediate vicinity of the Converter Site, and in the adjacent fields, as part of the landscape mitigation, connecting with and enhancing existing landscape features, e.g., woodland adjacent to the site boundaries.

2.3 Consultation and Engagement

2.3.1 In January 2024, the Applicant submitted a Scoping Report to the Planning Inspectorate, which described the scope and methodology for the technical studies being undertaken to provide an assessment of any likely significant effects for the construction and operational phases of the Proposed Development. It also described those topics or sub-topics which are proposed to be scoped out of the EIA process and provided justification as to why the Proposed Development would not have the potential to give rise to significant environmental effects in these areas.

2.3.2 Following consultation with the appropriate statutory bodies, the Planning Inspectorate (on behalf of the Secretary of State) provided a Scoping Opinion on 7 March 2024. Key issues raised during the scoping process specific to landscape and visual resources are listed in **Table 2.6**, together with details of how these issues have been addressed within the PEIR.

Table 2.6: Summary of Scoping Responses

Comment	How and where considered in the PEIR
Planning Inspectorate	
'*The Scoping Report does not at this stage identify whether there are any ancient woodland or veteran tree habitats present in the study area that could be affected by the Proposed Development. The ES should include an assessment of the effects of the Proposed Development on ancient woodland and veteran trees, where significant effects are likely to occur, and explain the effort made to avoid effects on ancient woodland and veteran trees, and increased fragmentation of these habitats. Measures to fully mitigate direct and indirect effects of the Proposed Development on ancient woodland, veteran trees, or other irreplaceable habitats should be clearly described and appropriately secured*.'	At the PEIR stage, the arboricultural (tree) surveys have not been completed across the Onshore Infrastructure Area. The tree surveys will be completed and incorporated within the assessment at ES. Mitigation measures are detailed in **Table 2.20**.
'*Table 9.3.2 of the Scoping Report proposes to scope this matter out for the operation and decommissioning phases of the Proposed Development, stating that the ZTV production shows where the Proposed Development may influence seascape and landscape character. However, it is noted that summary Table 12.1.3 scopes this matter in for operation and decommissioning. The proposed scope is therefore unclear in this regard. Considering the nature of the operational development, the Inspectorate agrees that changes in character from offshore activities during operation can be scoped out. However, the Inspectorate does not consider that sufficient evidence is provided to scope this matter out from onshore activities during operation, in the absence of the ZTV and information regarding operational lighting, for example. Changes to character from onshore activities during operation, including the use of lighting, should be assessed and reported in the ES, where likely significant effects could occur.* *With respect to decommissioning, the Scoping Report does not contain sufficient evidence to explain why likely significant effects would not occur from either offshore or onshore activities. The ES should include an assessment of this matter or evidence to confirm that likely significant effects would not arise*.'	Only the impacts on character arising as a result of the Offshore and Onshore HVDC Cable Corridors during operation and maintenance and decommissioning have been scoped out. This is because the cables would be buried underground and existing habitats and features will be reinstated once construction is complete, with no significant changes in visual amenity likely to persist post-construction. However, the impacts on character arising from the Converter Site and Alverdiscott Substation Connection Development during operation and decommissioning have been scoped in. A summary description of lighting at the Converter Site is in **Table 2.19.** Night time lighting effects are assessed at section **2.9.** The decommissioning phase is effectively the construction process in reverse for the Converter Site (also short-term in duration) albeit taking place within an established and maturing landscape. Note this is not the case with the Onshore HVDC Cable Corridor where the cable ducts will be left *in situ* with only the cables and link boxes being removed. Therefore, the decommissioning phase is not assessed in this LSVIA.
Potentially significant effects on publicly accessible views as a result of offshore and onshore activity (including lighting) and use of construction compounds - operation and decommissioning. The Inspectorate notes that this matter is repeated in two separate rows of Table 9.3.2, one appears to scope in construction stage effects only, the other scopes in all stages of the Proposed Development. Summary Table 12.1.3	The chapter makes clear that it is only the assessment of the Onshore HVDC Cable Corridor which has been scoped out for the operational and decommissioning phases and provides evidence as to why that has been done. The Converter Site will not be scoped out during operations and maintenance, as it is recognised that there is the

Comment	How and where considered in the PEIR
also identifies this matter as being scoped in for all stages. For the avoidance of doubt, the Inspectorate considers that this matter should be scoped in for all stages of the Proposed Development, where likely significant effects could occur.	potential for significant visual effects. The impact of night time lighting is assessed at section **2.9**.
All construction phase impacts on landscape, seascape and visual resources and receptors at far distance from the Offshore Cable Corridor and Onshore HVDC Cable Corridor study areas – construction. Given the nature of the offshore works, the Inspectorate agrees to scope out effects during construction on seascape beyond 1km from the Offshore Cable Corridor. However, the Inspectorate does not agree that onshore visual effects during construction at a distance of beyond 1km from the Onshore HVDC Cable Corridor can be scoped out of the ES. A ZTV has not been provided with the Scoping Report to support the statement that there would be no significant visual effects beyond 1km from the Onshore HVDC Cable Corridor during construction. The ES should include an assessment of construction phase impacts on landscape, seascape and visual resources and receptors beyond 1km from the onshore HVDC cable, where likely significant effects could occur. The Applicant is encouraged to seek to agree the sensitive receptors/resources with relevant consultation bodies, such as the Local Authorities.	The LVIA onshore study area is defined as a 1 km radius extending from the Onshore HVDC Cable Corridor. It was defined on the basis of the short-term, temporary duration and expected scale of the construction works required for the installation of the linear underground development, also taking into account the underlying topography and vegetated nature of the surrounding landscape. A ZTV has not been produced for the Onshore HVDC Cable Corridor construction phase. The ZTV is considered as not being effective for such a low-lying development by using 5 m DTM data, also it does not take into account the effect of distance. Therefore, professional experience and judgement has been applied.
All impacts on landscape and visual resources and receptors outside the Converter Site study area – Construction and Operational. The Scoping Report states that distances greater than 10km are not anticipated to experience significant effects. A ZTV is not provided with the Scoping Report and therefore it is not clear why a 10km study area has been applied. In the absence of justification, the Inspectorate is not content to scope this matter out, an assessment of impacts on landscape and visual resources and receptors beyond 10km from the converter sites should be included in the ES, where likely significant effects could occur. The ES should include an assessment of impacts on sensitive landscape and visual resources/receptors due to the construction of the converter station and Alverdiscott Substation Connection Development, where likely significant effects could occur.	The 10 km study area for the Converter Site has already been agreed with Torridge District Council's landscape consultant. The extent of the study area was defined by the visual envelope of the proposed development, based on the ZTV. As the effect of distance cannot be modelled in the ZTV, this was verified through the field survey. The assessment of construction effects is provided in section **2.8**, operational effects in section **2.9** and cumulative effects in section **2.10**, of this chapter. Alverdiscott Substation Connection Development falls within the study area, as it lies adjacent to the Converter Site.
All impacts of the Offshore Cable Corridor and Onshore HVDC Cable Corridor on landscape, seascape and visual resources and receptors – operation. The Inspectorate agrees to scope out this matter for the Offshore Cable Corridor. The Inspectorate	The Onshore HVDC Cable Corridor assessment has been scoped out for operational and decommissioning phases. The Onshore HVDC Cable Corridor is underground and the existing habitats and features will be reinstated once construction is

Comment	How and where considered in the PEIR
however does not agree to scope out this matter with regards to the Onshore HVDC Cable Corridor during operation. No details are provided regarding mitigation landscape planting and how long it would take to be established. It is unclear whether there would be planting restrictions over the cable corridor during operation. The Inspectorate considers that effects from the Onshore HVDC Cable Corridor during operation on landscape, visual resources and receptors should be assessed in the ES, where likely significant effects could occur.	complete, with no significant changes in visual amenity likely to persist post-construction.
Cumulative impacts of the Offshore Cable Corridor and Onshore HVDC Cable Corridor on seascape, landscape and visual resources - operation and decommissioning: The Inspectorate agrees to scope this matter out for the Offshore Cable Corridor. As the cumulative effects assessment has not yet been undertaken, the cable route is not finalised and the ZTV not yet been produced, the Inspectorate does not agree to scope out cumulative effects at this stage and these should be assessed in the ES.	The cumulative projects selected for consideration within this chapter are listed at Volume 4, Appendix 2.4: Landscape and Visual Impact Assessment Methodology of the PEIR and are shown on Figure 2.4.1. The specific projects, plans and activities scoped into the CEA, are outlined in **Table 2.21** and illustrated on Volume 4, Figure 2.7. Cumulative effects have been assessed for LSVIA in section **2.10**.
Viewpoints: Effort should be made to agree the number and location of viewpoints with relevant consultation bodies, such as the host and neighbouring local authorities, the North Devon National Landscapes team, and other stakeholders such as the North Devon UNESCO Biosphere Strategy and the Exmoor National Park Authority. The Inspectorate advises that the ES should include confirmation of the consultation undertaken, together with evidence of agreement about the final viewpoints selected. Where any disagreement remains, an explanation as to how the final selection was made should be provided. Viewpoint locations should be identified on a plan within the ES and viewpoints should include night-time views to identify any effects from lighting Requirements. Baseline viewpoint photography for summer and winter should be provided.	The viewpoints have been agreed with Torridge District Council's landscape consultant, which includes viewpoints within Torridge District and North Devon District, as well as the North Devon Biosphere Reserve and the North Devon Coast NL. The Exmoor National Park lies outside the study area and is too distant for any potential significant effects to be experienced from within the Park and therefore Exmoor National Park Authority has not been consulted. The chapter details all consultations to date with Torridge District Council in **Table 2.7**. Viewpoint locations are shown on the ZTV overlay on Volume 4, Figures 2.5a to 2.5e. The baseline panoramas from the agreed representative viewpoints for the Landfall, Onshore HVDC Cable Corridor and Converter Site are presented in Figures 2.3.1 to 2.3.47 of Volume 4, Appendix 2.3: Visual baseline. The figures are baseline summer and winter photography of all representative viewpoints listed in **Table 2.18** of Volume 4, Chapter 2: Landscape, Seascape and Visual Resources of the PEIR, to date. However, some winter/summer photographs are still to be taken and are waiting the correct season. These will be presented in the ES. The representative viewpoint locations are illustrated on Volume 4, Figure 2.5a to 2.5e. Volume 4, Appendix 2.3: Visual Baseline of the PEIR, contains all the photographs taken, that have informed the assessment. This appendix includes photographs of the Onshore HVDC Cable Corridor (Volume 4, Appendix 2.3, Figures 2.3.1 to 2.3.20 of the PEIR,

Comment	How and where considered in the PEIR
	the viewpoint location plan is Figure 2.3.49) and a local views study, which has helped to inform the mitigation strategy (Volume 4, Appendix 2.3, Figures 2.3.49 to 2.3.54 of the PEIR, the viewpoint location plan is Figure 2.3.55)
Effects on sensitive receptors: Part of the cable corridor route goes through the North Devon National Landscapes and the Hartland Heritage Coast. The Inspectorate considers that effects on these receptors should be included within the assessment, where likely significant effects could occur.	The effects on the NL, including North Devon, are assessed in sections **2.8** and **2.9** of this chapter. Heritage Coast is not a landscape (or a heritage) designation. It is a local authority designation promoting tourism, and is covered within Volume 4, Chapter 4: Socioeconomics and Tourism of the PEIR.
Mitigation measures. Section 4 of the Scoping Report makes reference to the need for landscape and ecological planting for the Converter Sites. No mitigation measures appear to be discussed for the cable corridor. The ES should explain the types of mitigation proposed to avoid/reduce adverse effects on landscape and how they would be secured. The ES should include a masterplan and visualisations/ illustrations, where possible, to demonstrate the effectiveness of landscape mitigation.	Mitigation measures adopted as part of the Proposed Development are described in section 2.7 and will be shown on the Illustrative Landscape and Ecology Strategy proposals plan of the ES. The Outline Ecology and Landscape Management Plan (Outline LEMP) will be prepared to present details of the management of the proposed mitigation planting at the Converter Site and along the Onshore HVDC Cable Corridor, including the location, species and details as well as maintenance and management of planting.
The Inspectorate agrees that likely significant effects arising from residues and emissions (e.g. dust, pollutants, light, noise, vibration) are to be assessed in the relevant aspect chapters of the ES and a standalone aspect chapter for residues and emissions is not required. The Applicant's attention is however directed to the Inspectorate's comments in the relevant aspect chapters above with regards to residue and emission matters, for example lighting.	Light pollution/night time effects are considered at a high level within the text of the chapter. Once the Proposed Development is finalised a more accurate assessment of the effects of the permanent lighting, e.g., at the Converter Site, will be provided, at the ES stage.
Alverdiscott and Huntshaw Parish Council	
The security and lighting aspects of the Alverdiscott site which are included in sections 4.6.13, 14 & 23, are felt to require further detail. The area, although not a designated Dark Sky area, does enjoy a high degree of night-time darkness at present. The council feels that both these aspects are to a greater or lesser extent connected, and therefore would enquire as to what extent the lighting would impinge upon this (we note that measures to prevent light spill would be considered), and to what extent the security fencing would be lit.	Light pollution/night time effects are considered at a high level within the text of the chapter. Further assessment will be possible when details of the lighting strategy (inclusive of mitigation) at the Converter Site become available.
Devon County Council	
It is recommended that the application assesses any impingement from light pollution, and directional lighting, on local properties and communities. It is not clear if the effects from	Light pollution/night time effects are considered at a high level within the text of the chapter. Further assessment will be possible when details of the

Comment	How and where considered in the PEIR
lighting would be significant and should be scoped into the Environmental Statement, but it is likely that any significant effects could be mitigated to an acceptable level through the application process.	lighting strategy (inclusive of mitigation) at the Converter Site become available.
The Environmental Statement should acknowledge that the proposal will affect a number of Public Rights of Way (PRoW) in the area and should therefore subsequently provide a detailed assessment of how each PRoW is likely to be impacted and what mitigation will be put in place to ensure minimal disruption.	The LSVIA considers the visual effects on users of PRoW. Volume 2, Chapter 7: Land Use and Recreation of the PEIR (and others) considers other effects on users.
Exmoor National Park	
Lighting has potential to impact on Exmoor National Park through the creation of light domes above the construction and operational sites. Lighting has been scoped into the EIA but is not specific on how this will be measured/assessed or from where. Para 4.6.23 does mention mitigation but quite how many lights will be required, at what output and height and for what duration at night time is something that could have wide ranging effects. Hinckley lies at just over 14km distance and the light dome is impacting on the quality of the night sky seen from the National Park, especially from the elevated ground in the eastern parts of the National Park and the south Wales coast is between 18-c40 miles and produces light domes affecting the night sky seen from Exmoor. Consequently, we would request that potential effects of construction and operational lighting on the National Park is provided in the ES, given the status of the National Park as an international dark sky reserve. Locations such as the elevated ridge running along the south-west and west of the National Park and the high coast cliffs may potentially be affected.	Light pollution/night time effects are considered at a high level within the text of the chapter. Further assessment will be possible when details of the lighting strategy (inclusive of mitigation) at the Converter Site become available.
Forestry Commission	
7.2.21 – A reference to Ancient Woodland and Veteran Trees would be needed, as this will require significantly more surveying capacity and as referenced below to appropriately assess Root Protection Area's.	The tree survey will be completed for the ES - for PEIR, the arborist team did not have access to the whole of the route.
Regarding Biodiversity Net Gain – There are key opportunities in the Eastern areas of the site maps, South of Gammaton Moor for Woodland expansion. This could extend from the screening required around the substation site and enhance the scale and connectivity of the relatively fragmented woodland habitats situated in that area. This could be key as it would be enhancing areas of Grade 4 agricultural land bringing significant biodiversity improvements.	The landscape mitigation strategy is to link various small copses/woodlands in the area, to increase connectivity. The project recognises that may be an opportunity to expand woodland cover in the area.
We note that in this application, there is potential impacts on the northern limits of the Pixey Copse. This site is a recognised and mapped Ancient	

Comment	How and where considered in the PEIR
Semi-Natural Woodland (ASNW). As stated previously with the several references to how essential ancient woodland is as an 'irreplaceable habitat'.	The tree survey will be completed for the ES - for PEIR the arborist team did not have access to the whole of the route.
With section 9.2.15 within the scoping report referring to impacts to woodland, the project should look to avoid the ancient woodland situated at Pixey Copse, Pillmouth Wood, and Thorne Wood/Bidd Copse, considering more significantly the irreplaceable ecology represented in the site rather than just GHG.	
4.9.18 – As stated, HDD or similar trenchless methods should be used to mitigate significant impacts and disturbance to the ground flora and fauna. When using this method, we would hope a Root Protection Area (RPA) would be appropriately calculated and executed to ensure minimal impact on the woodland. The Ancient Tree Forum, Woodland Trust and other literature suggests ancient woodlands and veteran trees need the have larger RPA's. The consensus suggest it should be whichever is greater of: • an area with a radius which is 15 times the diameter of the tree, with no cap • 5m beyond the crown. This is informed and underpinned from the guidance from the Forestry Commission and Natural England. This can be specifically identified using radar technologies that can detect woody roots around 2cm thick from above ground. This doesn't include the fine roots and wider mycorrhizal networks that would extend even further. For sites where there are ancient woodland and veteran trees and alternative routes for cable can't be done this method would be suggested next and trenchless methods placed appropriately below the identified Root Protection Area.	The tree survey will be completed for the ES - for PEIR the arborist team did not have access to the whole of the route. Tree RPZ will be calculated according to the tree height etc., for the ES.
With this in mind, and particularly in the context of the Climate Emergency being declared throughout the country, we believe that this is a landscape that could absorb and benefit from more woodland creation, for both conservation and production, with good landscape design and according to the principles of the UK Forestry Standard.	The landscape mitigation strategy is to link various small copses/woodlands in the area, to increase connectivity. The Proposed Development recognises that may be an opportunity to expand woodland cover in the area.
Monitoring would be essential in all aspects of the project and a commitment to continued monitoring to ensure woodland establishment, with appropriate restocking regimes each year. Establishing Woodland Management Plans for any woodland creation would be expected.	An outline LEMP will be submitted with the ES.
Natural England	
Natural England does not hold local information on local sites, local landscape character, priority	Noted - we understand that Natural England do not hold local landscape character information.

Comment	How and where considered in the PEIR
habitats and species or protected species. Local environmental data should be obtained from the appropriate local bodies. This may include the local environmental records centre, the local wildlife trust, local geo-conservation group or other recording society.	We use local (county and district level) landscape studies for such information.
The ES should assess the impacts of the proposal on the ancient woodland and any ancient and veteran trees, and the scope to avoid and mitigate for adverse impacts. It should also consider opportunities for enhancement.	The tree survey will be completed for the ES - for PEIR the arborist team did not have access to the whole of the Onshore HVDC Cable Corridor. To date no ancient woodland is affected by the Proposed Development. Tree RPZ will be calculated according to the tree height etc., for the ES. The landscape mitigation strategy is to link various small copses/woodlands in the area, to increase connectivity. The Proposed Development recognises that may be an opportunity to expand woodland cover in the area.
The proposal is within or may impact on a nationally designated landscape, namely North Devon Coast National Landscape (defined in legislation as an Area of Outstanding Natural Beauty). The development site is also within or may impact on the Hartland Heritage Coast.	The chapter considers both direct and indirect effects on the NL, its special qualities and the purposes of its designation.
The EIA should include a full assessment of the potential impacts of the development on local landscape character using landscape assessment methodologies. We encourage the use of Landscape Character Assessment (LCA), based on the good practice guidelines produced jointly by the Landscape Institute and Institute of Environmental Assessment in 2013. LCA provides a sound basis for guiding, informing, and understanding the ability of any location to accommodate change and to make positive proposals for conserving, enhancing or regenerating character.	This chapter uses the local landscape character assessments. The method for assessing effects on landscapes is the LI and IEMA Guidelines for Landscape and Visual Impact Assessment: Third Edition, 2013.
A landscape and visual impact assessment should also be carried out for the proposed development and surrounding area. Natural England recommends use of the methodology set out in Guidelines for Landscape and Visual Impact Assessment 2013 ((3rd edition) produced by the Landscape Institute and the Institute of Environmental Assessment and Management.	
Management. For National Parks and AONBs, we advise that the assessment also includes effects on the 'special qualities' of the designated landscape, as set out in the statutory management plan for the area. These identify the particular landscape and related characteristics which underpin the natural beauty of the area and its designation status.	This chapter considers both direct and indirect effects on the NL, its special qualities and the purposes of its designation
We would also recommendation discussing appropriate view point locations with the AONB partnership.	We have discussed and agreed representative viewpoints with Torridge District Council's landscape consultant this includes viewpoints of

Comment	How and where considered in the PEIR
	the landfall, Onshore HVDC Cable Corridor and Converter Site from within the NL.
The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. This should include an assessment of the impacts of other proposals currently at scoping stage.	This chapter includes an assessment of cumulative effects (see section **2.10**)
To ensure high quality development that responds to and enhances local landscape character and distinctiveness, the siting and design of the proposed development should reflect local characteristics and, wherever possible, use local materials. Account should be taken of local design policies, design codes and guides as well as guidance in the National Design Guide and National Model Design Code.	Landscape mitigation is described in section **2.7** of this chapter. It responds to local management guidelines where possible.
The ES should set out the measures to be taken to ensure the development will deliver high standards of design and green infrastructure. It should also set out detail of layout alternatives, where appropriate, with a justification of the selected option in terms of landscape impact and benefit.	
The ES should consider potential impacts on access land, common land, public rights of way and, where appropriate, the England Coast Path and coastal access routes and coastal margin in the vicinity of the development, in line with NPPF paragraph 104 and there will be reference in the relevant National Policy Statement. It should assess the scope to mitigate for any adverse impacts. Rights of Way Improvement Plans (ROWIPs) can be used to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.	The impacts on the views of people using PRoW, Access Land, etc. are considered in the chapter. Other impacts of the Proposed Development on the PRoW network are covered in other chapters.
The proposal is adjacent to the South West Coast Path National Trail and the Tarka Trail. We therefore also advise you to seek the advice of the National Trail Officer and/or the Coast Path Officer for Northern Devon to ensure adequate mitigation is secured to avoid adverse effects on the Trail. Their knowledge of the location and wider landscape setting of the development should help to confirm whether it would impact significantly on the trail. The National Trails website provides information including contact details for the National Trail Officers.	
Measures to help people to better access the countryside for quiet enjoyment and opportunities to connect with nature should be considered. Such measures could include reinstating existing footpaths or the creation of new footpaths, cycleways, and bridleways. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the	The landscape mitigation will respond to local management guidelines where possible.

Comment	How and where considered in the PEIR
creation of wider green infrastructure, including the role that natural links have in connecting habitats and providing potential pathways for movements of species.	
Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate.	
National Grid Electricity Transmission plc.	
If a landscaping scheme is proposed as part of the proposal, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.	No planting is proposed beneath overhead lines.
North Devon Council	
Although the development falls to be considered by Torridge District Council, given the scoping zone is in close proximity to the North Devon District Council (NDDC) border, there is moderate probability that the substation building may be viewed within NDDC district, with subsequent landscape impact, and effect on any public receptors within the zone or beyond, as identified below.	The LSVIA study area includes North Devon and direct and indirect effects on landscape and visual resources in both Torridge and North Devon Districts are assessed within this chapter at sections **2.8** and **2.9**.
There is moderate to high potential for cumulative impacts with other renewable projects in NDDC, which must be either discounted or taken into account in the determination. It is necessary to examine the transboundary and cumulative effects of the substation when/if seen within the NDDC area and cumulating with any existing or approved renewable projects within the NDDC area (as well as those in TDC)."	The cumulative assessment at section 10 of this chapter includes all relevant projects within the LSVIA study area. A long list of projects is provided in Appendix 2.4: Landscape, Seascape and Visual Impact Assessment Methodology.
North Devon District Council would therefore ask for the following suggested cumulative impacts, viewpoints and properties to be taken into consideration in informing the EA: Statutory protected areas: Taw and Torridge SSSI, and County Wildlife Sites. List of established renewable energy projects in NDDC area: • Application 71708 - Land at Litchardon Cross Newton Tracey EX31 3QE • Application 54884 – Land at Hollamoor Farm Eastacombe EX31 3NY • Application 54349 – Horsacott Farm Lydacott EX31 2PD • Application 58715 – Collacott Farm Newton Tracey EX31 3QF Suggested Localised viewpoints: • Hiscott, • Newton Tracey, • Horwood/Lovacott,	The updated ZTV has been reviewed and where there was a lack of photographic coverage, additional photography has been undertaken. The list of viewpoints is at **Table 2.18** of this chapter. The viewpoint descriptions and baseline photography are in Volume 2, Appendix 2.3: Visual baseline, and Figures 2.3.1 to 2.3.47 of the appendix. The long list of cumulative projects is within Appendix 2.4: Landscape, Seascape and Visual Impact Assessment Methodology of the PEIR and Figure 2.4.1 of the appendix. The short list of projects considered within the cumulative effects assessment are in section **2.10** and illustrated on Volume 4, Figure 2.7.

Comment	How and where considered in the PEIR
• Eastleigh Suggested wider elevated viewpoints: • Codden Hill (east) • Ashford (North)	
Suggested localised properties to take into consideration at consultation phase: within NDDC area: • West Ashridge • Little Ashridge • Mutton Hall • Eastleigh • Oxenpark • Horwood • Newton Tracey (west) • Higher Lovacott • Lower Lovacott • Higher Broomfield Coppice • East Barton • Properties around Potters Nod • Harefield • Marsh Farm • Boskins • West Barton House • Park Farmhouse • The Granary • West Barton Barn • The Orchard • Parsonage Farm • Old Parsonage	Private views are not a planning matter, unless the effects have the potential to be over and above substantial adverse. It is judged that this is not the case with the Proposed Development.
The site is elevated within the local landscape and is therefore subject to long-distance views. In addition, there could be moderate to high cumulative impacts due to the proposals relationship with other consented and implemented renewable projects in TDC. Furthermore, the consultation response by North Devon Council (NDC) is noted which argues for greater consideration of longer distance landscape impacts (i.e. from areas within NDC parishes). In this regard, it is suggested that the suggested 10km ZTV / study area may not be extensive enough to take into consideration the sensitive landscape receptors identified by NDC given some of these sit just outside of the ZTV.	The assessment considers direct and indirect effects on landscape and visual receptors within the 10 km LSVIA study area. Having visited long distance receptors, e.g. Codden Hill and north of the Taw estuary, it is judged that there is no potential for significant effects beyond 10 km.

2.3.3 A summary of the key issues raised during consultation activities undertaken to date is presented in **Table 2.7,** together with how these issues have been considered in the production of this PEIR chapter.

Table 2.7: Summary of consultation relevant to this chapter

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
6 to 13 October 2022	Telephone call and emails between Torridge District Council's and applicant's landscape consultants to agree candidate representative viewpoints using the ZTV of the Converter Site.	Torridge District Council's landscape consultant stated that the candidate viewpoints appeared to be fairly representative of the range of areas from where the buildings may be visible. Two additional viewpoints were suggested (from the B3232 south of Alverdiscott and the A388 between Monkleigh and Landcross). Torridge District Council's landscape consultant also advised that there was a cluster of plant and infrastructure centred on the Alverdiscott Substation, in various stages of development and that these should be included in the cumulative effects section of the assessment.	Photography from the suggested additional representative viewpoints was taken, these are presented as Viewpoint 30 Figure 2.3.30 and Viewpoint 41, Figure 2.3.41 of Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR. The cumulative effects assessment includes those relevant existing and proposed projects in the vicinity of the Converter Site, that are in the public domain, in line with The Planning Inspectorate Advice note seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects.
10 to 14 February 2023	Emails between Torridge District Council's planning officer and landscape consultant and applicant's landscape consultant, to agree/change candidate representative viewpoints, due to change of location for the Converter Site.	Torridge District Council's landscape consultant advised that of viewpoints in general, that in much of rural Devon quiet local lanes are used as part of the footpath network, so that people often stop and take panoramic viewpoints from gateways to fields – views towards the Converter Site, from roads, should be taken from gateways. Torridge District Council's landscape consultant advised that the chosen viewpoints are representative of the areas selected – exact locations to be decided on site, to ensure best visibility. Torridge District Council's landscape consultant marked up the revised ZTV (for	The photographs from the additional viewpoints have been taken and the locations added to Volume 4, Figures 2.5a to 2.5e. The baseline panoramas are Figures 2.3.1 to 2.3.40 of Volume 4, Appendix 2.3: Visual baseline technical report of the PEIR.

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
		the Converter Site at the new location) and suggested four additional viewpoints: • Codden Hill (popular destination) • Rickard's Down (within North Devon Coast NL) • Lovatt Green (gateways with long views south) • Road at Huntshaw Woods (potential visibility from lane)	
28 February 2023	Meeting at Torridge District Council offices, Bideford – Torridge District Council planning team, the Applicant and planning consultant.	Converter Site drawings were tabled: • Torridge District Council's landscape consultant had concerns over elevation of site and long views. Could tree planting be expedited in the landscape proposals? • The potential of light pollution was raised. The Applicant explained that it would only be on when needed (not permanently on). There would probably be one week per year when the maintenance would be carried out 24/7, as part of a shut down. The rest of the year it would be very quiet and low key. • There was concern that the images show the embankments as having straight edges, they need to be softened to fit into the landscape, as does the screening material (which currently looks quite unnatural). Later comments – the bunds should be shallower on the public-facing side (at the moment they are the wrong way round). Materials are acceptable, but would prefer natural appearance. Suggestion to make them look like rural barns? Torridge District	Volume 1, Chapter 4: Need and Alternatives of the PEIR, details the process of site selection. The relevant, published landscape character assessments have been used in the assessment, these are in Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report of the PEIR. The assessment of the impacts on the various landscape and seascape character areas is in sections **2.8** and **2.9** of this chapter. The assessment of the impacts of the Proposed Development on the special qualities of the North Devon Coast NL are in sections **2.8** and **2.9** of this chapter. Night time effects on landscape character are assessed at sections **2.8** and **2.9**. Night time effects on views and visual amenity are assessed at sections **2.8** and **2.9**. The Applicant is working with architects to achieve a high-quality design of the Converter

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
		Council's landscape consultant preferred sloped roof – better than pitched. • Have to demonstrate that new site creates less visual harm to the landscape than the original site. Photomontages of the Converter Site: • Could the applicant's landscape consultant provide A3 versions of the visualisations to Torridge District Council's landscape consultant for site visit. • Noted ridges of land to north where there is visibility – typical Devon landscape – difficult to fit development in. Wants to agree baseline landscape character with applicant's landscape consultant. • It was explained that cut and fill solution was being proposed – calculation ongoing. • Photomontages would be key, as landscape and visual impact is the biggest consideration at this site. However, the significant benefits could outweigh the harm. Alternative cable routes around Abbotsham: • Torridge District Council's landscape consultant had concern over impact of landfall structures on the North Devon Coast National Landscape. Explained that there would only be a tiny box above ground – all other structures would be buried. • Requested photographs of haul routes	Site. However, the design of these is largely influenced by their functionality.

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
		• Concern over loss of hedgerows and woodland and when hedgerows would be replanted. Explained that it would take two years, but would be in sections. TDC interested in what reinstatement / remediation would look like. AONB: • Torridge District Council's landscape consultant confirmed that he'd already agreed viewpoints with the Applicant's landscape consultant	
28 February 2023	Email from Torridge District Council landscape consultant reporting on a meeting with other Xlinks project team members, to applicant's landscape consultant.	Follow-up request, from meeting of the 28th February 2023 (above) to consider the following within the LSVIA: • Landscape character baseline studies, ensure the following are included: – Devon LCA (Devon Character Areas) – Torridge and North Devon Landscape Character Assessment (Landscape Character Types) – North Devon and Exmoor Seascape Character Assessment – North Devon Coast AONB [now NL] Management Plan (special qualities) • Visualisations: – Two received so far, appear to be to Landscape Institute *Technical Guidance Note 06/19 Visual representation of Development Proposals*, 'Type 4' standard, which is what they would expect – Visualisations to include Year 1 and Year 15 – Requested A3 versions for site work.	

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
		The email notes that the Torridge and North Devon LCA is being reviewed/revised, but that a consultation draft is not available as yet.	
27 March 2023	Landscape Note 1: Review of visualisations from TDC's landscape consultant	Visual effects: The note reviewed the ZTV and the candidate representative viewpoint locations. It confirmed that a broadly representative range viewpoints had been selected and that the landscape consultant had requested four others. The note understood that the visualisations were not fully rendered and that no allowance had been made for mitigating plant growth. The note observed that the new site location was on a high spot so that the mitigation has to work harder to reduce visual impacts. The note also observed that the extent of the site, and scale of the structures is out of context with the local landscape and buildings within the landscape, e.g. farmsteads. Existing mature trees in the hedgerow south of the site are lower than the roofline of the westerly converter station (Bipole 2) building. Development appears on the skyline or approaching the skyline in some views. Increased mounding and planting could help to reduce skyline influence. However, judgement is needed as to how high the	The natural slope of the land will be used to ameliorate visual effects by using cut and fill to dig the proposed buildings into the hillside, reducing impacts from the north and west. Carefully designed earth-modelling will be used to build up land to screen views from these directions, as well as used in creating softened forms to the bunding to the south and east of the Converter Site. Discussions are ongoing as the exact locations of the Converter Site within the parameters shown in the visualisations in Volume 4, Appendix 2.5: Landscape Visualisations of the PEIR. The landscape proposals will include planting on and/or around the earth-modelling, which will assist in softening and integrating the newly created landform. The potential for significant landscape impacts from the Converter Site are recognised. While the management strategies for the LCA and LCT cannot be applied to the area of the built development itself, due to the nature and functionality of the infrastructure, the need to integrate the buildings into the landscape, as far as it possible is recognised. The management strategies can be applied to the land surrounding the buildings and to

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
		mounding could go before it becomes an obtrusive landscape element itself. Landscape Effects: The note sets out the LCA and LCT that the Converter Site are located within. It notes the landscape strategies for the LCA include the protection of open skylines and protect/enhance rural character. These characteristics are diluted somewhat by the substation and solar farm. Nevertheless, the nature, scale and extent of the proposed development are likely to lead to large-scale change on site and effects will have an influence on the special qualities of the surrounding landscape. Effects will be most noticeable to the east and south, diminishing with distance from the site. Effects on the more sensitive landscape of the NL and Coast and Estuary Zone are mitigated by siting on the southeast facing slopes and by the mounding proposed to the north and west. Factors likely to contribute to greater scale of effects include: • The bulk and size of buildings, without much context in the local area. • Siting on high ground, prominent in views from the south and east. Mounding to the north and west helps to reduce skyline effects - but the buildings are likely to appear as skyline development in views.	areas outside the location of the Converter Site. A mitigation strategy (outline LEMP) is being developed and will be submitted with the ES. It will include enhancement of hedgerows and woodlands, as well as restoration/creation of hedgerows and woodlands, which will link/be linked to existing landscape elements.

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
		• At a local scale, the mounding as shown does not reflect the gentle undulations of local landform. • Lack of mitigating measures to reduce the influence of the proposals on landscape to the south and east. It is hoped that further design development can address these issues, resulting in lesser adverse landscape and visual effects.	
29 March 2023	Meeting with Torridge District Council, Bideford: Torridge District Council planning officers and landscape consultant, Applicant's project team and Applicant's planning consultant. Applicant's landscape consultant joined by Teams link.	Torridge District Council's planning officers still concerned that this site is not as good as the original site. Large buildings on a ridgeline/hill. Next iteration should include mitigation planting with 15-year growth. Concern that earthworks on north and south, but not shown to south and east. Applicant's landscape consultant explained that cut and fill proposed in field to north. Room to manoeuvre. There has been no landscape input to the plans to date. Could move Bipole 2 to the north west – softer gradient to mounding. Would create more room to the east for landscaping and tree planting. Eastern converter station (Bipole 1) – move to the north and create more space to the south of the building – however, we are constrained by the Alternating Current (AC) cables. Northern field could be planted with native conifers.	Volume 1, Chapter 4: Need and Alternatives of the PEIR, details the process of site selection. The Applicant is taking a parameter lead approach showing an indicative siting and design of the Proposed Development, including the Converter Site. This shows less detail than previously discussed with Torridge District Council at the meeting on 29 March 2023. However, as part of the DCO Application, there will be Outline Management Plans and Requirements within the Order, where the Applicant will need to consult the Local Authority post-consent. Cut and fill techniques remain a key approach at the Converter Site. A landscape and ecology strategy (outline LEMP) is being developed and will be submitted with the ES. It will include enhancement of hedgerows and woodlands, as well as restoration/creation of hedgerows and woodlands, which will link/be linked to existing landscape elements.

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
		Torridge District Council's landscape consultant agreed that the plan was worth developing. Interested in creating new focal point to the north. Visualisations – proposal are out of context and scale with surroundings – something close to buildings that reflects scale would be helpful. They won't look like big agricultural buildings – but give the impression of rural landscape, not industrial. Public will have views to south east – planting would break up profile and corners of buildings. Materials – could be used to break up outline of buildings. Noted later that retaining walls acceptable/not noticeable behind buildings. Applicant's landscape consultant explained that the project would look at the existing colours in landscape. A façade study needed. Understood that the corners and profiles should be broken up. Torridge District Council's landscape consultant requested that in designing the building and the landscape do what can be done to break up edges. Going to end up with large-scale effects – noticeable from distance. Accept this and provide mitigation. Play around with roofscapes and earth mounding – try to prevent the buildings appearing on skyline. If they break the skyline they will be much more obvious. Torridge District Council's planning consultant was concerned that the sloped roof didn't follow shape of land. It should follow contours to reduce the impact.	

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
		Applicant's landscape consultant confirmed that architects would look at this. Explained that bunding over the AC cables would not be possible, so would look at moving Bipole 1 and planting tree belts. Torridge District Council planning consultant explained that the area was valued as it was underdeveloped. Acknowledged that there was solar farm development and other energy infrastructure in the pipeline. Torridge District Council's landscape consultant stated that the solar farm development was lower and of less impact than the Converter Site. Torridge District Council would like an LSVIA comparison for the two sites	
15 May 2023	Site visit to the location of the Converter Site, with Torridge District Council's landscape consultant.	Access to the Converter Site had not been granted at this stage, so the visit was to the land surrounding the site and views towards site. This allowed the character of the Converter Site to be assessed. Torridge District Council's landscape consultant suggested views from local roads should be explored.	Views from local roads were taken on the 16 May 2023 and are in PEIR Volume 4, Appendix 2.3: Visual baseline technical report, Figures 2.3.49 to 2.3.54. The viewpoint location plan is Figure 2.3.55 of the same appendix
16 May 2023	Meeting at Torridge District Council's offices in Bideford, meeting of Xlinks team, including RPS consultants, with planning officers and Torridge District Council's landscape consultant.	Torridge District Council requested that the ES includes an explanation of why previous site was rejected by applicant's team. It was noted by both parties that the Alverdiscott Substation Connection Development was attracting energy related infrastructure. If this concentration of infrastructure was to take place in this	PEIR Volume 1, Chapter 4: Need and alternatives, details the process of site selection. A landscape and ecology strategy (outline LEMP) is being developed and will be submitted with the ES. It will include enhancement of hedgerows and woodlands, as well as restoration/creation of hedgerows

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
		location, a strategic landscape-scale landscape plan should be considered. This would include strategic planting, including woodland blocks linking to existing woodland, with advance planting where possible. The aim would be to filter views and potentially mitigate existing views, some of which are channelled along the corridors/rides created by the overhead power lines, which can't be planted. There should be co-ordination with the ecology team, to ensure the biodiversity net gain Requirements are met. Concern was raised over the length of time the management of the proposed landscape and ecological proposals would be maintained/managed and how that might be secured. Having reviewed the architects' proposals in the photomontages, Torridge District Council requested that the colours of the building should be toned down further – suggested darker greys. Torridge District Council confirmed a number of the cumulative projects in the vicinity. Torridge District Council's main areas of concern are: Landscape and visual impact; and, construction management.	and woodlands, which will link/be linked to existing landscape elements.

Date	Consultee and type of response	Issues raised	How and where considered in the PEIR
		Torridge District Council is expecting to see adverse impacts, however, what mitigation can be done, should be done.	
24 and 26 May 2023	Emails between Torridge District Council's landscape consultant and the applicant's landscape consultant.	Sending the stitched panoramic photography (character, local roads study and additional representative viewpoint photographs) undertaken on the 15 and 16 May2023 to Torridge District Council's landscape consultant.	The character photography is included within Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report, of the PEIR. The additional representative viewpoint photography and the views from local roads are included within Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR.
30 May 2023	Email to Torridge District Council's landscape consultant.	Sending latest layout from architects.	-

2.4 Methodology

Relevant Guidance

2.4.1 The LSVIA has been undertaken based on the guidance on landscape and visual impact assessment within GLVIA3 (Landscape Institute and Institute of Environmental Management and Assessment, 2013), and draws on other, relevant best practice guidance including the following:

- Technical Guidance Note 02/21: Assessing landscape value outside national designations (Landscape Institute, 2021)
- Technical Guidance Note 06/19: Visual Representation of Development Proposals (Landscape Institute, 2019)
- Topic Paper 6: Techniques and Criteria for judging Capacity and Sensitivity (Countryside Agency and Scottish Natural Heritage [now NatureScot] 2004)
- An Approach to Landscape Character Assessment, Natural England, 2014)
- Landscape Character Assessment: Guidance for England and Scotland (The Countryside Agency [now Natural England] and Scottish Natural Heritage [now NatureScot] 2002)
- Representation of Wind Farms – Guidance: Version 2.2 (Scottish Natural Heritage [now NatureScot] 2017).

2.4.2 In addition, the LSVIA has considered the relevant legislative and policy framework as identified in **Table 2.1** and as detailed in Volume 4, Appendix 2.1: Landscape, Seascape and Visual Resources Planning Policy Context of the PEIR.

2.4.3 A detailed LSVIA methodology based on GLVIA3 is provided in Volume 4, Appendix 2.4: Landscape and Visual Impact Assessment Methodology of the PEIR.

Scope of this Chapter

2.4.4 The scope of this PEIR has been developed in consultation with relevant statutory as detailed in **Table 2.6** and **Table 2.7**.

2.4.5 Taking into account the scoping and consultation process, **Table 2.8** summarises the issues considered as part of this assessment.

Table 2.8: Issues considered within this assessment

Activity	Potential effects scoped into the assessment
Construction Phase	
Installation of the Offshore Cable Corridor within seascape areas of study areas	• Effects on seascape character, views and visual amenity (seascape and visual effects) • Effects on landscape character, views and visual amenity (landscape and visual effects) • Effects on the special qualities of the North Devon Coast NL
Installation of the Offshore Cable Corridor at landfall (including barge, related to trenchless technique used to drill under the coastline, such as HDD)	
Installation of HVDC Cables	

Activity	Potential effects scoped into the assessment
Construction of Converter Site	• Cumulative landscape, seascape and visual effects on character and views and visual amenity.
Installation of HVAC cables	
Construction and other compounds associated with the construction phase	
Operation and Maintenance	
Converter stations	• Landscape and visual effects • Effects on the special qualities of the North Devon Coast NL • Cumulative landscape and visual effects.
Decommissioning	
Converter stations	• Landscape and visual effects • Effects on the special qualities of the North Devon Coast NL • Cumulative landscape and visual effects.
Decommissioning compounds	

2.4.6 Effects which are not considered likely to be significant have been scoped out of the assessment. A summary of the effects scoped out is presented in **Table 2.9**.

Table 2.9: Issues scoped out of the assessment

Impact	Justification
Construction Phase	
No impacts scoped out	-
Operation and Maintenance	
Offshore HVDC Cable Corridor	As the cables, Transition Joint Bays (TJBs) and Joint Bays will be buried, there is no potential for significant effects on the following resources/receptors: • Landscape and seascape character • Views and visual amenity • The special qualities of the North Devon Coast NL • Cumulative landscape, seascape and visual resources and receptors
Landfall	
Onshore HVDC Cable Corridor	
Onshore HVAC Cable Corridor	
Construction and other compounds	
Decommissioning	
Offshore HVDC Cable Corridor	As the cable ducts and joint bays (including the TJBs) will be left *in situ*, there is no potential for significant effects on the following resources/receptors: • Landscape and seascape character • Views and visual amenity • The special qualities of the North Devon Coast NL • Cumulative landscape, seascape and visual resources and receptors.
Landfall	
Onshore HVDC Cable Corridor	
Onshore HVAC Cable Corridor	

2.4.7 The decommissioning phase is effectively the construction process in reverse for the Converter Site (also short-term in duration) albeit taking place within an established and maturing landscape. Note this is not the case with the Onshore

HVDC Cable Corridor where it is the assumption that the cable ducts will be left *in situ* with only the cables and link boxes being removed.

Study Areas

2.4.8 The LSVIA study area (Volume 4, Figure 2.1) comprises the areas of sea and land to be temporarily and permanently occupied during the construction and operation and maintenance of the Proposed Development, and including the following:

- 1 km buffer from the landfall and Onshore HVDC Cable Corridor
- 10 km buffer from the Converter Site.

2.4.9 These LSVIA study area extents are formulated in accordance with relevant best practice guidance and were discussed and agreed as a basis for locating representative viewpoints with Torridge District Council's landscape consultant, as documented in **Table 2.7**.

2.4.10 While it will be theoretically possible to see the proposed development outside the LSVIA study area, given the site locations and nature of development at those locations, there is no scope for significant effects to arise beyond these distances. Sensitive landscape seascape and visual receptors within the LSVIA study area, have been included for assessment in the LSVIA.

Methodology for Baseline Studies

Desk Studies

2.4.11 For this LSVIA, a desktop review of published information, including landscape character assessments, OS data, online mapping data, aerial photography and local planning documents was undertaken. To further inform the LSVIA, representative views looking towards the Converter Site were selected. Figures (see Volume 4, Figures) have been produced to support the LSVIA, including:

- Figure 2.1: Location plan and LSVIA study area
- Figure 2.2: International and nationally designated landscapes with Zone of Theoretical Visibility (ZTV) of Converter Site
- Figure 2.3: Devon landscape character areas with ZTV of Converter Site
- Figure 2.4: North Devon and Torridge landscape and seascape character types with ZTV of Converter Site
- Figure 2.5a to 2.5e: Representative viewpoint locations with ZTV of Converter Site
- Volume 4, Appendix 2.5: Landscape visualisations (preliminary visualisations).

2.4.12 The data sources that have been collected and used to inform this LSVIA are summarised in **Table 2.10** below.

Table 2.10: Desk study sources used to inform the LSVIA

Title	Source	Year	Author
National Character Area (NCA) 149: The Culm	Natural England website: (Accessed 2022)	2013	Natural England

Title	Source	Year	Author
The Devon Landscape – An appraisal of Devon's landscape at the beginning of the 21st Century	Devon County Council	2002	Devon County Council
Devon's landscape character assessment	Devon County Council website: https://www.devon.gov.uk/planning/planning-policies/landscape/devons-landscape-character-assessment/ and interactive map (Accessed 2022)	Ongoing	Devon County Council
Joint landscape character assessment for North Devon and Torridge Districts	North Devon and Torridge District Councils, Devon County Council and Natural England	2023	Land Use Consultants
North Devon and Exmoor Seascape Character Assessment	National Trust, North Devon Coast AONB [now NL], Exmoor National Park Authority, North Devon Council, Torridge District Council and Natural England	2015	Land Use Consultants
North Devon Coast AONB Management Plan 2019-2024	North Devon Coast AONB [now NL]	2019	North Devon Coast AONB [NL] Partnership

2.4.13 In addition, the visual assessment is based on analysis of OS mapping of the site and surrounding area, as well as site surveys (see below).

2.4.14 A record and summary description of the desk study activities is provided in Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report and Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR.

Site-Specific Surveys

Representative Viewpoints

2.4.15 Photography was undertaken at the landfall and along the Onshore HVDC Cable Corridor, at publicly accessible locations. Candidate representative viewpoints towards the proposed Converter Site were sent to the Planning Officer at Torridge District Council on the 4 March 2022, as being representative of a range of views from publicly accessible locations within the ZTV. Photography was undertaken on the 15, 17 and 18 March 2022. Whilst undertaking the fieldwork, additional viewpoints were identified, and photography undertaken at these locations. Additionally, the landscape consultant appointed by Torridge District Council suggested further viewpoints that were undertaken on 11 and 20 October 2022. Latterly additional photography was undertaken on the 13 and 14 February 2023, with additional viewpoints, suggested by the council's landscape consultant on the 19 February and the 15 and 16 May 2023. A site visit was undertaken with Torridge District Council's landscape consultant, for which access to the land surrounding the site was granted, but not to the site itself. Landscape character photographs were taken during the visit, views towards the site from local roads were also undertaken on the 16 May 2023, to inform micro-siting and design, including landscape mitigation proposals.

2.4.16 The locations of panoramic baseline photographs looking towards the landfall, Onshore HVDC Cable Corridor and Converter Site are shown on Figures 2.5a to 2.5e (see Volume 4, Figures). The locations of character photographs are shown on Figure 2.2.9 of Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline of the PEIR. The locations of those photographs taken from local roads are shown on Figure 2.3.55 of Volume 4, Appendix 2.3: Visual Baseline of the PEIR. From the site work, it was evident that people at some of the locations would not experience a significant effect, primarily due to distance, but also due to the Converter Site being substantially obscured by landform or vegetation, or due to the activity of the receptor.

2.4.17 The viewpoint photography has been broken down into those at the location of the landfall, the Onshore HVDC Cable Corridor and the Converter Site (which includes the HVAC cable route connection to Alverdiscott Substation Connection Development).

2.4.18 A full set of the photographs and description of each viewpoint are included in PEIR, Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR. The site character photographs are included as PEIR, Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report, Figures 2.2.8a to 2.2.8q. However, in the interests of proportionality, only those viewpoints that represent the views of those people likely to experience significant effects have been included below. Viewpoints where there is no potential for receptors in the vicinity to experience significant effects, due to factors, which may include the location and siting of the Proposed Development, the screening of intervening vegetation, built structures or landform, have not been taken forward to the assessment stage. Site visits to the land surrounding the Converter Site were undertaken on 15 May 2023 to record views from these and other publicly accessible locations, as well as to gain an understanding of the local landscape character. Fieldwork assisted in the assessment of the potential effects on the landscape character of the Converter Site and surrounding landscape, as well as on visual receptors.

2.4.19 A summary of the site-specific surveys undertaken is provided in **Table 2.11**.

Table 2.11: Summary of site-specific surveys

Title	Extent of survey	Overview of survey	Date	Reference to further information
Site photography at and around the previous (Huxhill) Converter Site.	Site photography at landfall and Converter Site.	Photography of landfall, Onshore HVDC Cable Corridor, Converter Site and associated construction compounds. 'Winter' photography	4 March 2022	Original Converter Site photography not included in PEIR. Onshore HVDC Cable Corridor and construction compound photography, as well as relevant candidate and additional representative viewpoint photography included at Volume 4, Appendix 2.3: Visual
Site and candidate representative viewpoint photography of and towards original Converter Site.	Site photography at landfall and Converter Site. Photography within the 10 km buffer area of Converter Site .	Site photography and representative viewpoint photography of cable corridor and associated compounds, as well as Converter Site from candidate representative viewpoints.	15, 17 and 18 March 2022	

Title	Extent of survey	Overview of survey	Date	Reference to further information
		'Winter' photography		Baseline Technical Report of the PEIR.
Representative viewpoint photography of original Converter Site.	Photography within the 10 km buffer area of Converter Site.	Additional representative viewpoint photography suggested by Torridge District Council's landscape consultant. 'Summer' photography	11 and 20 October 2022	
Representative viewpoint photography of Converter Site.	Photography within the 10 km buffer area of Converter Site.	Additional representative viewpoint photography suggested by Torridge District Council's landscape consultant. 'Winter' photography	13 and 14 February 2023	
Representative viewpoint photography of Converter Site and surrounding area (character) photography.	Photography within the 10 km buffer area of Converter Site, as well as character photography from adjacent fields and local roads.	Additional representative viewpoint photography suggested by Torridge District Council's landscape consultant. As well as site character photography and views from local roads to inform local visual screening study. No access to the site was possible at this stage. 'Summer' photography	15 and 16 May 2023	
Representative viewpoint photography of Converter Site following requests in the Scoping Opinion	Photography within the 10 km buffer area of Converter Site.	Additional representative viewpoint photography suggested by North Devon District Council 'Winter' photography	21 March 2024	

Impact Assessment Methodology

Overview

2.4.20 The LSVIA has followed the methodology set out in Volume 4, Appendix 2.4: Landscape, Seascape and Visual Impact Assessment Methodology of the PEIR, a summary of which is reproduced below in this section.

2.4.21 Specific to the LSVIA, the following document provides key guidance:

- Guidelines for Landscape and Visual Impact Assessment: Third Edition, 2013, Landscape Institute (LI) and Institute of Environmental Management (GLVIA3).

2.4.22 In addition, the LSVIA has considered the relevant legislative and policy framework as summarised in section **2.2**, and detailed in Volume 4, Annex 2.1:

Landscape, Seascape and Visual Resources Planning Policy Context of the PEIR.

2.4.23 For the purposes of this LSVIA, the standard criteria wording has been refined to accord with GLVIA3 best practice guidelines. There are some differences between the Landscape Institute's criteria as set out in GLVIA3 and that set out in Volume 1, Chapter 5: Environmental Impact Assessment (EIA) Methodology of the PEIR. Where there are differences, the LSVIA methodology has followed GLVIA3, as industry specific guidance.

Impact Assessment Criteria

2.4.24 The criteria for determining the significance of effects is a two-stage process that involves defining the magnitude of the impacts and the sensitivity of the receptors. This section describes the criteria applied in this chapter to assign values to the magnitude of potential impacts and the sensitivity of the receptors. More detail on the LSVIA methodology is contained within Volume 4, Appendix 2.4: Landscape, Seascape and Visual Impact Assessment Methodology of the PEIR.

Magnitude

2.4.25 The criteria for defining magnitude in this chapter are outlined in **Table 2.12.** Note that in LSVIA, there are three criteria determining the magnitude of an impact. These are: Size or scale of proposed change; geographical extent; and duration and reversibility of the change.

2.4.26 Of these three factors the size/scale of change has the most influence on the overall judgement of magnitude. Size or scale of change is assessed on a number of criteria: Distance; size; scale; field of view; contrast; consistency of image; skyline/background; number; and nature of visibility. These criteria are explained in Volume 4, Appendix 2.4: Landscape, Seascape and Visual Impact Assessment Methodology of the PEIR.

Table 2.12: Definition of terms relating to the magnitude of an impact

Magnitude of impact	Definition
Large	Landscape/seascape Total loss, or/very substantial loss or addition of, key elements/features/patterns of the baseline (i.e. pre-development landscape/seascape) and/or introduction of dominant, uncharacteristic elements compared with the attributes of the receiving landscape/seascape.
	Visual Complete or very substantial visual change involving complete or very substantial obstruction of existing view or complete change in character and composition of visual baseline (i.e. pre- development view) (e.g. through removal of key elements).
Medium	Landscape/seascape Partial loss or addition of, or moderate alteration to, one or more key elements/features/patterns of the baseline (i.e. pre-development landscape/seascape) and/or introduction of elements that may be prominent but would not be substantially uncharacteristic in comparison to the attributes of the receiving landscape/seascape.

Magnitude of impact	Definition
	Visual moderate visual change, which may involve partial obstruction of existing view or partial change in character and composition of visual baseline (i.e. pre-development view) through the introduction of new elements or removal of existing elements. Change may be prominent but would not substantially alter the scale and character of the surroundings and the wider setting. Composition of views would alter. View character may be partially changed through the introduction of features which, although uncharacteristic, may not necessarily be visually discordant.
Small	Landscape/seascape minor loss or addition of, or alteration to, one or more key elements/features/patterns of the baseline (i.e. pre-development landscape/seascape and/or introduction of elements that may not be uncharacteristic compared with the surrounding landscape/seascape).
	Visual minor change to the visual baseline (i.e. pre-development view) – change would be distinguishable from the surroundings whilst view composition and character would be similar to the pre-change circumstances.
Negligible	Landscape/seascape Very minor loss or addition of, or alteration to, one or more key elements/features/patterns of the baseline (i.e. pre-development landscape/seascape) and/or introduction of elements that are not uncharacteristic in comparison to the surrounding landscape/seascape; approximating to a 'no-change' situation.
	Visual Very slight change in visual baseline (i.e. pre-development view) – change barely distinguishable from the surroundings. Composition and character of view substantially unaltered.
No change	No loss, alteration, or addition to the receiving landscape/seascape resource. No alteration to the existing view.

2.4.27 Where the magnitude of impact is judged to fall in between the above categories it is expressed as negligible to small, small to medium, or medium to large.

Sensitivity

2.4.28 The criteria for defining sensitivity in this chapter are outlined in **Table 2.13**. Note that, in LSVIA, the sensitivity of landscape/seascape and of visual receptors is determined by an assessment of two separate factors: the value of the receptor; and the receptor's susceptibility to the development proposed.

Table 2.13: Definition of term relating to the sensitivity of the receptor

Sensitivity	Definition	
Landscape/seascape resource and receptors	**Resource/receptor susceptibility**	**Resource/receptor value**
Very High	Exceptional landscape/seascape quality; absence of landscape/seascape detractors; no or limited potential for substitution. Key	Internationally/nationally designated landscapes, or key elements, or features of internationally/nationally designated landscapes.

Sensitivity	Definition	
	elements/features well known to the wider public.	
High	Strong/distinctive landscape character; relatively free of landscape detractors.	Nationally/regionally designated landscape areas or features.
Medium	Some distinctive landscape/seascape characteristics; presence of landscape/seascape detractors.	Regionally/locally designated/valued landscape/seascape areas and features.
Low	Absence of distinctive landscape/seascape characteristics; unavoidable presence of landscape/seascape detractors.	Undesignated landscape/seascape areas and features.
Negligible	Absence of positive landscape/seascape characteristics. Significant presence of landscape/seascape detractors.	Undesignated/non-valued landscape/seascape and features.
Visual receptors	**Receptor susceptibility**	**Receptor value**
Very High	Observers, drawn to a particular view, including those who have travelled from around Britain and overseas to experience the views.	Judgements made about the value of views should take account of: *'recognition of the value attached to particular views, for example in relation to heritage assets, or through planning designations; and, indicators of value attached to views by visitors, for example through appearances in guidebooks or on tourist maps, provision of facilities for their enjoyment (such as parking places, sign boards or interpretive material) and references to them in literature or art…'* (GLVIA3, para 6.37)
High	Observers on the public rights of way network in the countryside are more sensitive to visual change.	
Medium	Observers enjoying the countryside from vehicles on quiet/promoted routes or pedestrians on less scenic/urban rights of way are moderately sensitive to visual change.	
Low	Observers in vehicles or people involved in outdoor activities where attention is not focused on landscape are less sensitive to visual change.	
Negligible	Observers in vehicles or people involved in frequent or frequently repeated activities are less sensitive to visual change.	

2.4.29 Where the sensitivity of a particular receptor is judged to be in between the above categories, or it varies with location it is expressed as negligible to low, low to medium, medium to high or high to very high.

Significance of Effect

2.4.30 Significance of the effect upon landscape, seascape and visual resources is determined by correlating the magnitude of the impact and the sensitivity of the receptor. The method employed for this assessment is presented in **Table 2.14**. Where a range of significance of effect is presented, the final assessment for each effect is based upon professional judgement.

2.4.31 For the purposes of this assessment, any effects with a significance level of substantial or major have been deemed significant in terms of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. In general, any effects with a significance level of moderate or less have been judged as not significant. However, an example of where moderate might be considered significant, is in the judgements of effects on landscape and visual resources and receptors within/of nationally designated areas, where a moderate effect may be judged as significant in some circumstances. GLVIA3 explains at paragraph 3.32 that *"Some practitioners use the phrase 'not significant in EIA terms' to describe those effects considered to fall below a 'threshold' of significance but this can potentially confuse since the phrase has no specific meaning in relation to the EIA Regulations (IEMA,2011)."* All judgements of significance of effect have been made by qualified and experienced landscape professionals.

2.4.32 Effects are assessed as being adverse, neutral, or positive. The judgements regarding the significance of effect and that relating to whether an effect is beneficial or adverse are entirely separate. The assessment of whether an effect is positive, neutral or adverse is based on professional judgement having regard to the relevant objective factors.

Table 2.14: Matrix used for the assessment of the significance of the effect

Sensitivity of receptor	Magnitude of impact				
	No Change	**Negligible**	**Small**	**Medium**	**Large**
Negligible	None	Negligible	Negligible to minor	Negligible to minor	Negligible to minor
Low	None	Negligible to minor	Negligible to minor	Minor	Minor to moderate
Medium	None	Negligible to minor	Minor	Moderate	Moderate to major
High	None	Negligible to minor	Minor to moderate	Moderate to major	Major
Very High	None	Minor	Moderate to major	Major	Substantial

2.4.33 **Table 2.15** provides definitions for significance of effect levels recorded in the LSVIA.

Table 2.15: Definitions of LSVIA significance criteria

Level of significance	Typical descriptors	
	Landscape/seascape resource	**Visual resource**
Substantial	Where proposed changes would be uncharacteristic and/or would significantly alter a landscape of exceptional landscape quality (e.g. internationally designated landscapes) or key elements known to the wider public of nationally designated landscapes (where there is no or limited potential for substitution nationally).	Where proposed changes would be uncharacteristic and/or would significantly alter a view of remarkable scenic quality, within internationally designated landscapes or key features or elements of nationally designated landscapes that are well known to the wider public.
Major	Where proposed changes would be uncharacteristic and/or would significantly alter a valued aspect of (or a high quality) landscape/seascape.	Where proposed changes would be uncharacteristic and/or would significantly alter a valued view or a view of high scenic quality.
Moderate	Where proposed changes would be demonstrably out of scale or at variance with the character of an area.	Where proposed changes to views would be demonstrably out of scale or at variance with the existing view.
Minor	Where proposed changes would be at slight variance with the character of an area.	Where proposed changes to views, although discernible, would only be at slight variance with the existing view.
Negligible	Where proposed changes would have an indiscernible effect on the character of an area.	Where proposed changes would have a barely noticeable effect on views/visual amenity.
No Change	No discernible loss or alteration to landscape/seascape character, features or elements.	No part of the Proposed Development is discernible.

Assumptions and Limitations of the Assessment

2.4.34 The exact locations and massing of the buildings to be constructed within the Converter Site and the details of the proposed bunding and other landscape mitigation has not been finalised at this stage. The assessment has assumed that bunding and planting will take place to assist in mitigating the effects of the operational development as built from the most sensitive landscape receptors such as the NL. However, the extent of this is uncertain at this stage.

2.4.35 The assessment has been undertaken based upon the maximum design scenario approach, based on the parameters contained within **Table 2.19**. Photography was undertaken in both summer and winter conditions. Winter conditions (no deciduous vegetation in leaf) provide the worst-case, i.e., most visible conditions to be assessed. All visits were undertaken in good visibility.

2.4.36 Regarding the approach taken in the LSVIA to the assessment of the different development phases of the Proposed Development, the following assumption/limitation should be noted. For developments of this type and scale, landscape, seascape, and visual impacts arising will increase in magnitude on a continuum from the start of construction through to completion of works and commencement of operations and maintenance in the short-term, remaining fairly constant during operations and maintenance in the long-term.

2.5 Baseline Environment

2.5.1 The LSVIA baseline environment comprises two distinct but connected aspects, described in the following separate technical reports.

- Landscape and seascape character, including special qualities of nationally designated landscapes (Volume 4, Appendix 2.2: Landscape and seascape character baseline technical report).
- Views and visual amenity (Volume 4, Appendix 2.3: Visual baseline technical report).

2.5.2 Summaries of the baseline landscape and visual environments of the LSVIA study area are provided below. This section should be read in conjunction with the technical reports (above) which also contain baseline environment figures:

Landscape and Seascape Character Baseline

Identification of designated sites

2.5.3 All designated sites within the study area and qualifying interest features that could be affected by the construction, and operation and maintenance phases of the Proposed Development are set out in **Table 2.16**.

Table 2.16: Designated sites and relevant qualifying interests

Designated Site	Distance to the Proposed Development Site	Relevant Qualifying Interest
North Devon UNESCO World Biosphere Reserve	Proposed development is within the Biosphere Reserve: Landfall and part of Onshore HVDC Cable Corridor are within the Buffer Zone. Converter stations are within the Transition Zone.	• Characteristic landscapes such as Culm grasslands and Devon hedgerows • Dramatic coastal landscapes of North Devon Coast NL • Special western oak woodlands with a plethora of pollution-sensitive lichens • High level of tranquillity and nocturnal darkness in the area.
North Devon Coast NL	Landfall and part of Onshore HVDC Cable Corridor are within NL. Converter Site is 6.4 km from the NL.	• Diversity of scenery contained within a small area, including some of the finest cliff scenery in the country • Panoramic seascape, with seaward views to Lundy within Atlantic Ocean, across the Bristol Channel to Wales and along the coastline. Views are of landscape and seascape devoid of human influence • Panoramic views of a rolling landscape of pastoral farmland wooded combes and valleys from elevated inland areas • Wild coastal scenery – in the south high, rugged cliffs, dramatic rock

Designated Site	Distance to the Proposed Development Site	Relevant Qualifying Interest
		formations, exposed headlands, wave cut platforms and rocky coves • A strong sense of tranquillity and remoteness where coastal road is located away from the coastline • Dark night skies.

North Devon UNESCO World Biosphere Reserve

2.5.4 No part of the proposed development lies within the Core Area of the Biosphere Reserve (North Devon Biosphere Strategy for Sustainable Development 2014-2024, page 2) (Volume 4, Figure 2.2). The location of all parts of Proposed Development and study area for the Converter Site lie within the Biosphere Reserve Transition Zone, which covers "*the whole of the catchments of the Rivers Taw and Torridge and the offshore marine areas stretching out to Lundy and beyond*" (Biosphere Strategy, page 4). It is not clear whether the Proposed Development lies within the Buffer Zone to the Core Area. The definition of a Buffer Zone in this context is understood to include adjoining areas with supporting designations. We presume that the National Landscape is a supporting designation and therefore, since the Onshore HVDC Cable Corridor is routed through the National Landscape it is treated as falling with the Biosphere Buffer Zone. Biospheres have three primary functions: Conservation; sustainable development; and knowledge generation/sharing. The designation does not prohibit development.

2.5.5 The special features of the North Devon Biosphere Reserve include a number of features under the collective term Diverse wildlife and landscape (Biosphere Strategy, page 5). Of these those that have the potential to be affected by the proposed development are:

- Characteristic landscapes such as Culm grasslands and Devon hedgerows.
- Dramatic coastal landscapes of North Devon Coast NL.
- Special western oak woodlands with a plethora of pollution-sensitive lichens.
- High level of tranquillity and nocturnal darkness in the area.

2.5.6 The Onshore HVDC Cable Corridor (inclusive of Landfall) lies within the Biosphere Buffer Zone and therefore, it has the potential for significant effects during the construction phase i.e. temporary. The effect on the designated landscape is considered in the North Devon Coast National Landscape (formally AONB) section below.

Exmoor National Park

2.5.7 The National Park lies 21.4 km from the Converter Site. Due to distance, there is no potential for the Exmoor National Park to experience significant landscape or visual effects. The National Park is not taken forward to the assessment stage.

North Devon Coast National Landscape (formally AONB)

2.5.8 The North Devon Coast NL was designated under the 1949 National Parks and Access to the Countryside Act. The primary purpose of the NL designation is "*To conserve and enhance natural beauty*". The Countryside and Rights of Way (CRoW) Act 2000, expands on this. Section 85, of the CRoW Act, requires that public bodies "*have regard to the purpose of conserving and enhancing natural beauty*" of NLs when coming to any decisions or carrying out activities relating to or affecting the designated area (North Devon Coast AONB Management Plan 2019-2024, page 13).

2.5.9 The study area includes the North Devon Coast NL (Volume 4, Figure 2.2). The landfall and part of the Onshore HVDC Cable Corridor would fall within the NL. The Converter Site lies 6.4 km to the east of the NL. The HVAC Cables and Alverdiscott Substation Connection Development immediately east of the Converter Site. The special qualities are set out in the North Devon Coast AONB Management Plan 2019-2024, pages 9 to 12. The Special Qualities, of relevance to the Proposed Development, are:

- Diversity of scenery contained within a small area, including some of the finest cliff scenery in the country (as mentioned at designation).
- Panoramic seascape, with seaward views to Lundy within the Atlantic Ocean, across the Bristol Channel to Wales and along the coastline. Views are of a landscape and seascape devoid of human influence.
- Panoramic views across a rolling landscape of pastoral farmland, wooded combes and valleys from elevated inland areas.
- Wild coastal scenery. In the north, hogsback cliffs of varying heights; in the south high, rugged cliffs, dramatic rock formations, exposed headlands, wavecut platforms and rocky coves.
- A strong sense of tranquillity and remoteness where the coast road is located away from the coastline.
- Dark night skies.

National, County and District Character Areas

2.5.10 National Character Areas (NCAs) and relevant regional landscape and seascape character areas within the study area have been identified.

2.5.11 The characteristics with potential to be affected have been identified and described in Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report of the PEIR, Figures 2.2.2 to 2.2.4.

2.5.12 **Table 2.17** below lists the character types/areas scoped into the assessment.

Table 2.17: Landscape and seascape character types/areas assessed in the LSVIA

Character type/area reference	Title	Administrative level	Jurisdiction	Source
North Devon Coast National Landscape, Landscape Character Type (LCT)				
LCT 5B	Coastal undulating farmland	National	UK	North Devon Coast AONB [now NL] Management Plan 2019-2024 (North Devon

Character type/area reference	Title	Administrative level	Jurisdiction	Source
				Coast AONB Partnership, 2019)
North Devon and Exmoor Seascape Character Areas (SCA) – Directly affected by the Proposed Development				
SCA 21	Abbotsham Coast	County	Devon County	North Devon and Exmoor Seascape Character Assessment (LUC, 2015)
North Devon and Exmoor SCAs – Indirectly affected by the Proposed Development				
SCA 18	Braunton Burrows and Saunton Coast	County	Devon County	North Devon and Exmoor Seascape Character Assessment (LUC, 2015)
SCA 19	Taw-Torridge Estuary			
SCA 20	Northam Burrows and Westward Ho!			
No indirectly affected SCAs have been taken forward to the assessment stage, due to distance from the Converter Site, lack of visibility, or the temporary nature of the works (in relation to the offshore cable works and work at the landfall).				
NCA – Directly affected by the Proposed Development				
NCA 149	The Culm	National	England	Natural England
Devon County Landscape Character Areas (LCA) – Directly affected by the Proposed Development				
Bideford Bay Coast		County	Devon County	Devon County Council website and interactive map (Accessed 2022)
Torridge Valley				
High Culm Ridges				
All directly affected county LCAs taken forward to assessment				
North Devon and Torridge District Landscape Character Types (LCT) – Directly affected by Proposed Development				
LCT 4H	Cliffs	Local	Torridge District	Joint North Devon and Torridge Landscape Character Assessment (LUC, 2023)
LCT 5B	Coastal undulating farmland			
LCT 3H	Secluded valleys			
LCT 4A	Estuaries			
LCT 3G	River valley slopes and combes			
LCT 5A	Inland elevated undulating land			
LCT 3A	Upper farmed and wooded valley slopes			

Character type/area reference	Title	Administrative level	Jurisdiction	Source
LCT 1F	Farmland lowland moorland and Culm grassland			
All directly affected district LCTs taken forward to assessment				
North Devon and Torridge District Landscape Character Types (LCT) – Indirectly affected (i.e., within the ZTV of the Converter Site)				
LCT 1D	Estate wooded ridges and hilltops	Local	North Devon and Torridge Districts	Joint North Devon and Torridge Landscape Character Assessment (LUC, 2023)
LCT 4E	Extensive inter-tidal sands			
LCT 4F	Dunes			
LCT 5D	Estate wooded farmland			
LCT 7	Main cities and towns			
None of the LCTs within the ZTV of the Converter Site lie close enough to the Proposed Development to have the potential to be significantly affected. Therefore, none of the indirectly affected LCTs are taken forward to the assessment stage.				

Site-specific Landscape and Seascape Character

Landfall and Onshore HVDC Cable Corridor

2.5.13 Access to the Onshore HVDC Cable Corridor was not agreed prior to the PEIR being submitted and so the site-specific assessment of the character of the land crossed by the Onshore HVDC Cable Corridor was conducted from publicly accessible areas and will be supplemented for the ES.

Converter Stations Site Description

2.5.14 Whilst local plans often provide values for LCTs or LCAs (set out in Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report, of the PEIR) they sometimes do not reflect the particular character of areas within the wider LCT/LCA. The location of the Converter Site is such an area.

2.5.15 In addition to the published landscape and seascape character assessments a site-specific survey was undertaken from accessible locations adjoining the Converter Site, in May 2023, as access to the site itself was not permitted at that stage. The paragraphs below provide a brief overview of the landscape character of the Converter Site. Site character photographs are in Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report of the PEIR, Figures 2.2.8a to 2.2.8q. Figure 2.2.9 shows the location of the character viewpoints .

Location, Land Use and Development Context

2.5.16 The Converter Site lies approximately 2.5 km from the outskirts of East-the-Water, on the eastern side of the River Torridge. It lies in an area of farmland bounded by four minor roads, to the south of the hamlet of Webbery Barton and north of the hamlet of Gammaton Moor. The Converter Site adjoins a field containing Alverdiscott Substation. To the south is a recently constructed solar farm.

Access and Infrastructure

2.5.17 Access to the Converter Site is from a minor road linking Webbery Barton with Gammaton Moor. The existing access road to the Alverdiscott Substation provides access to the two fields where the Converter Site would be located.

2.5.18 Built infrastructure in adjacent land includes the Alverdiscott Substation and the solar farm. Additionally multiple overhead power lines cross the landscape on pylons of varying sizes, to and from Alverdiscott Substation.

Topography

2.5.19 The Alverdiscott Substation and the recently constructed solar farm lie on locally lower ground (approximately 115 m to 120 m Above Ordnance Datum (AOD) surrounded by higher land on all sides, which rises to high points of 144 m and 150 m AOD along the minor road between Webbery Barton and to Gammaton Moor. The higher land extends round to the north and south.

2.5.20 The field in which Bipole 1 will be located is land that broadly slopes northwest to southeast, from a high point of approximately 145 m AOD on the north-western side of the field to a low point of approximately 127.5 m AOD in the south.

2.5.21 The field in which Bipole 2 will be located is similarly broadly northwest to southeast. However, it is a spur of high land and the northernmost part of the field slopes down to the northeast. Although the top of this field is very gently sloping, the highest part of the field is just below 135 m AOD on the western boundary and the lowest point is just above 120 m AOD at the south-eastern corner.

2.5.22 An overview of the topography in which the Proposed Development is located is illustrated on Figure 2.2.5, of Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report of the PEIR.

Hydrology and Drainage

2.5.23 Ditches/small watercourses run southeast, from the eastern boundary and close to the southern boundary of the fields in which Bipole 1 will be located. They join a small stream, which runs southwest to join the River Torridge, to the south of Weare Giffard.

Vegetation at the Converter Site

2.5.24 The Converter Site is a farmed landscape. The northern field where Bipole 2 is to be located is laid to pasture and has sparsely vegetated field boundaries.

2.5.25 The boundaries of the field in which Bipole 1 is to be located are in better condition, with hedgebanks marking the boundary with the minor road between Webbery Barton and Gammaton Moor. This is an arable field.

Vegetation in the Area Surrounding the Converter Site

2.5.26 The northern field where Bipole 1 is to be located has sparsely vegetated field boundaries, with overhead lines and an electricity pylon within it. The eastern boundary of the field in which Bipole 1 is located is partly formed by a mature line of trees, planted as part of the Alverdiscott Substation.

2.5.27 The boundaries of the field in which Bipole 2 is to be located are in better condition, with hedgebanks marking the boundary with the minor road between Webbery Barton and Gammaton Moor. The southern hedgerow has mature trees within it, as does the northern boundary (along the access road to the Alverdiscott Substation). The eastern boundary is marked by a hedgerow with an established wood adjoining it towards the southern boundary. The landscape quality of the field in which Bipole 2 is located is higher than the field in which Bipole 1 is located.

Converter Site Landscape Value

2.5.28 As with every landscape, whilst the Converter Site is undesignated it has a value. Landscape Institute *Technical Guidance Note 02/21: Assessing landscape value outside national designations*, Table 1 (published May 2021) provides a range of factors that are to be considered when identifying landscape value. Broadly, they fit into the categories outlined in GLVIA3 at Box 5.1, which are summarised below.

2.5.29 As with the Onshore HVDC Cable Corridor, access to the Converter Station was not obtained prior to the submission of the PEIR. Therefore, site specific characterisations have been undertaken from adjoining land.

Landscape Quality

2.5.30 Landscape quality, or condition, measures the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, how intact the landscape is and the condition of individual elements.

2.5.31 The Converter Site is a farmed landscape, with the access road to the Alverdiscott Substation dividing the land. The northern field where Bipole 1 is to be located has sparsely vegetated field boundaries, with overhead lines and an electricity pylon within it. The eastern boundary of the field in which Bipole 1 is located is partly formed by a mature line of trees, planted as part of the Alverdiscott Substation.

2.5.32 The boundaries of the field in which Bipole 2 is to be located are in better condition, with hedgebanks making the boundary with the minor road between Webbery Barton and Gammaton Moor. The southern hedgerow has mature trees within it, as does the northern boundary (along the access road to the Alverdiscott Substation). The eastern boundary is marked by a hedgerow with an established wood adjoining it towards the southern boundary. The landscape quality of the field in which Bipole 2 (southwest converter station) is located is higher than the field in which Bipole 1 (northeast converter station) is located.

Scenic Quality

2.5.33 This measures the degree to which the landscape appeals primarily to the visual senses.

2.5.34 As with landscape quality and for the reasons given in paragraphs 2.5.17 and 2.5.18, the scenic quality of the fields in which Bipole 2 is located is higher than the field in which Bipole 1 is located.

Rarity and Representativeness

2.5.35 Rarity is concerned with the presence of rare features and elements in the landscape or the presence of a rare character type or elements within a site and its surroundings which are considered particularly important examples, which are worthy of retention.

2.5.36 There are no rare character elements or characteristics at the Converter Site. However, the southern boundary of field in which Bipole 2 is located contains some mature oak trees. There is a mature copse to the north of the Bipole 1 field, associated with the existing Alverdiscott Substation. An established woodland lies adjacent to the eastern boundary. In addition, landscape features at the Converter Site includes Devon Hedgerows, and streams with wooded banks.

Conservation Interests

2.5.37 This considers the presence of features of wildlife, earth science, historical and cultural interest that can add value to a landscape.

2.5.38 There are no rare features of wildlife, earth science, historical or cultural interest associated with the Converter Site that add value to it.

2.5.39 Ecological and landscape features of interest include all Devon Hedgerows, and all streams with wooded banks.

Recreational Value

2.5.40 This considers any evidence that the landscape is valued for recreational activity where experience of the landscape is important.

2.5.41 There is no public access to the Converter Site.

Perceptual Aspects

2.5.42 A landscape may be valued for its perceptual qualities, notably wildness and/or tranquillity.

2.5.43 Tranquillity, a perceptual aspect of landscapes, is defined differently by different organisations. The Landscape Institute defines it as *"a state of calm and quietude associated with peace"* (Glossary, GLVIA3). The Countryside Agency (now Natural England) and Scottish Natural Heritage described it as *"a composite feature related to low levels of built development, traffic, noise and artificial lighting"* (paragraph 7.23, Landscape Character Assessment: Guidance for England and Scotland, 2002). The Campaign to Protect Rural England (CPRE) prefers to define it as *'undisturbed land'*.

2.5.44 The CPRE have produced a Tranquillity Map for England. The tranquillity map for the Converter Site and surrounding areas is at Figure 2.2.6 of Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report of the PEIR. The Converter Site lies within an area that is in roughly the middle range of the spectrum.

2.5.45 The CPRE have also produced Dark Skies mapping for England. The mapping for the Converter Site is illustrated at Figure 2.2.7, of Volume 4, Appendix 2.2:

Landscape and seascape character baseline report to this chapter. The Converter Site is situated in an area that experiences light levels at the lower end of the spectrum (0.25 to 1 NanoWatts/cm2/sr) which corresponds to observations in the field.

2.5.46 There are very low levels of lighting and noise, in the location of the Converter Site (apart from the noise associated with the overhead power lines). However, this is a working agricultural landscape, rather than undisturbed land. The 400 kV and 132 kV overhead power lines and pylons cross through the landscape and these together with views of the Alverdiscott Substation, and the recently installed solar farm compromise visual tranquillity.

Associations

2.5.47 This considers any evidence of artistic endeavours and historic events that contribute to the perceptions of the natural beauty of an area.

2.5.48 No artistic endeavours or historic events that contribute to the perceptions of natural beauty have been found to be associated with the Converter Site. Information on the historic environment/history of the site and its surroundings is detailed in Volume 2, Chapter 2: Historic Environment of the PEIR.

Visual Baseline

Visual Receptor Groups

People using Public Rights of Way and Access Land

2.5.49 The sensitivity of the people using the local PRoW network and Access Land for informal recreation is **high** because appreciation of the surrounding environment is a primary concern. However, those users of the South West Coast Path National Trail, as it crosses the North Devon Coast NL are considered to have a **very high** sensitivity to change.

Landfall and Onshore HVDC Cable Corridor

2.5.50 Within 1 km of the landfall and Onshore HVDC Cable Corridor there are a number of PRoW including the South West Coast Path National Trail and the Tarka Trail promoted path. Both of these paths will remain open during construction, operation and decommissioning of the Proposed Development. As the Onshore HVDC Cable Corridor will cross these paths using trenchless techniques, such as HDD. Only an emergency would require temporary closure. The Onshore HVDC Cable Corridor crosses a public footpath to the east of Shamland, to the south of Rickards Down and the most southerly part of an Other Route with Public Access, to the southwest of Ashridge. These are likely to be trenched crossings and some form of management will have to be implemented at these points. No other PRoW lie within the Proposed Development Draft Order Limits. People using all PRoW are of a **high** sensitivity, while those people using the South West Coast Path within the North Devon Coast NL are of a **very high** sensitivity.

Converter Site, Onshore HVAC Cable Corridor and Alverdiscott Substation Connection Development

2.5.51 The closest public rights of way (PRoW) to the Converter Site, that lie within the ZTV are:

- Eastern section of Newton Tracey Footpath 56, to the east of Bartridge (1.3 km to the northeast of the Converter Site) (Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figure 2.3.26, representative viewpoint 26)
- Southern section of Alverdiscott Footpath 1, to the east of Webbery Barton (490 m to the north of the Converter Site)
- Alverdiscott Footpath 2, to the southeast of Alverdiscott (2.3 km to the east of the Converter Site)
- Southern section of Alverdiscott Bridleway 5, to the north of Bulworthy (960 m to the northeast of the Converter Site)
- 'Other route with public access', northwest of Huntshaw Water (1 km to the southeast of the Converter Site) (Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figure 2.3.31, representative viewpoint 31)
- Higher section of Huntshaw Footpath 4, to the south of Huntshaw Water (1.6 km to the southeast of the Converter Site (Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figure 2.3.37, representative viewpoint 37).

Dynamic Receptors

2.5.52 People within vehicles using roads are considered to have a **low** sensitivity to change. However, people in vehicles crossing the NL are deemed to have **medium** sensitivity to the construction works associated with the Onshore HVDC Cable Corridor, and cyclists and people walking along minor roads within the NL are considered to have a **high** sensitivity as people within the NL are deemed to be more aware of their surroundings. On roads in non-designated landscapes, cyclists have a **medium** sensitivity as they are not enclosed within a vehicle and are raised above level that people within standard vehicles and are travelling more slowly (in general). People walking along minor roads have varied sensitivities to the Proposed Development, depending on which element of the Proposed Development they are looking and the context of the view, the sensitivity of these receptors would usually be **medium**.

Landfall and Onshore HVDC Cable Corridor

2.5.53 People using the road network around and crossing the Onshore HVDC Cable Corridor would only be affected during the construction phase. Any maintenance work following completion of the construction would not result in significant effects and so the effects of the Onshore HVDC Cable Corridor during the operation and maintenance and the decommissioning phases are not assessed in this LSVIA.

Converter Site

2.5.54 As attention tends to be focused on the road or within the vehicle itself, people travelling in motor vehicles, through the landscape around the Converter Site, are considered to have **low** sensitivity to the development proposals. Cyclists have a

slightly raised sensitivity to the proposals, namely **medium**, as they are not enclosed within a vehicle, are raised above the level that people within standard vehicles and are travelling more slowly (in general).

2.5.55 People using the roads within the NL will not experience significant effects from the development of the Converter Site, due to distance, as well as intervening topography and vegetation. These facts, combined with the **medium** sensitivity of the receptors, would not result in significant effects and so these people are not taken forward when assessing the effects of the Converter Site on visual receptors located within the NL.

2.5.56 Pedestrians using the roads local to Converter Site, as part of the PRoW network have a **medium** to **high** sensitivity to the Proposed Development, dependent on context.

2.5.57 Barring the minor road that runs between Gammaton Moor and Webbery Cross/Webbery Barton which forms the western boundary of the Converter Site, there are few roads that are close to the Converter Site. The closest roads are:

- Minor road from Gammaton Moor to Webbery Cross adjacent to the western boundary of the Converter Site (representative viewpoint 33, Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figure 2.3.33). The northern section of this road does not lie within the ZTV.
- Minor road from Webbery Cross to Alverdiscott to the northeast of the Converter Site (representative viewpoint 35, Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figure 2.3.35). Only the eastern section (furthest from the Converter Site) of this road is elevated enough to gain views of the Converter Site. The western end of the road will have views of the earth bunds and mitigation planting.
- Minor road from Alverdiscott to Haddacott Cross to the east of the Converter Site (the northern part of this route is the B3232). The majority of this route lies within the ZTV (representative viewpoint 29, Volume 4, Appendix 2.3: Visual baseline technical report, Figure 2.3.29).
- Minor road from Haddacott Cross to Gammaton Moor, to the southeast of the Converter Site (representative viewpoint 28, Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figure 2.3.28). Only the eastern section of this road (furthest from the Converter Site) lies within the ZTV.

2.5.58 These roads form a rough square around the Converter Site and are the closest publicly accessible routes (roads or PRoW) to the Converter Site. People using these minor roads as part of the PRoW network have a **high** sensitivity to the Proposed Development.

2.5.59 It is unlikely that people using the roads further from the Converter Site will be significantly affected, due to distance, as well as intervening topography and vegetation (e.g., representative viewpoint 21, representative viewpoint 22, representative viewpoint 30, representative viewpoint 40 and representative viewpoint 44, Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.21, 2.3.22, 2.3.30, 2.3.40 and 2.3.44). For this reason, people using such roads are not taken forward to the assessment stage.

People at work

2.5.60 People at their places of work are considered to have a **low** sensitivity to the Proposed Development because the focus of attention is on their work not on the surroundings.

Landfall and Onshore HVDC Cable Corridor

2.5.61 Most working people that have views towards the Onshore HVDC Cable Corridor are involved in the agricultural sector. People at their places of work are considered to have a **low** sensitivity to the Proposed Development because the focus of attention is on their work not on the surroundings.

Converter Site

2.5.62 Most working people that have views towards the Converter Site are involved in the agricultural sector. Those with close views of proposed Converter Site are National Grid employees and those people working on the adjacent solar farm. These people are considered to have a **low** sensitivity to the Proposed Development.

Private Views

2.5.63 In the planning system no individual has the right to a view. The Landscape Institute has provided guidance on point in Landscape Institute Technical Guidance Note 2/19 Residential Visual Amenity Assessment (LI TGN 2/19).

2.5.64 Views of the Proposed Development would neither overwhelm existing properties within the study area, nor render these properties so "*unattractive a place to live that planning permission should be refused*" (Inspector Kingaby, Burnthouse Farm Wind Farm, APP/D0515/A/10/2123739, Inspector's Report, paragraph 119) (also at paragraph A1.6 of LI TGN 2/19). Inspector Kingaby noted that "*There needs to be a degree of harm over and above identified substantial effect to take a case into the category of refusal in the public interest. Changing the outlook from a property is not sufficient*" (Inspector's Report, paragraph 120) (also at paragraph A1.7, LI TGN 2/19). The Inspector, in the Langham Wind Farm decision, noted that *"The planning system controls development in the public interest, and not in the private interest. The preservation of open views is a private interest"* (Langham Wind Farm Appeal Decision APP/D2510/A/10/2130539) (also at LI TGN 2/19, paragraph A1.11).

2.5.65 The distance to the closest residential properties within the ZTV of the Converter Site are set out below:

- Higher Kingdon – approximately 315 m west of the Converter Site (not within the ZTV)
- Moorland Cottage – approximately 415 m southwest of the Converter Site(not within the ZTV)
- Webbery Barton (closest occupied building) – approximately 435 m north of the Converter Site(not within the ZTV)
- Rice Mill Cottage – approximately 505 m northeast of the Converter Site(not within the ZTV)
- Lower Kingdon – approximately 610 m south of the Converter Site(within ZTV, but potentially screened by woodland).

2.5.66 As such, no residential properties have the potential to experience a degree of harm over and above substantial (as set out in paragraph 2.5.52) to make considering private views a public interest matter. Consequently, private views are not considered further in this LSVIA.

Representative Viewpoints

2.5.67 Photography was undertaken at the landfall and along the cable route, at publicly accessible locations. Candidate representative viewpoints of the proposed Converter Site were sent to the Planning Officer at Torridge District Council on the 4 March 2022, as being representative of a range of views from publicly accessible locations within the ZTV. Whilst undertaking the fieldwork, additional viewpoints were identified, and photography undertaken at these locations. Additionally, the landscape consultant appointed by the Council suggested further viewpoints that were undertaken on the 11 and 20 October 2022. Additional photography was undertaken on the 13 and 14 February 2023, with further viewpoints, suggested by the council's landscape consultant on the 19 February 2023. Summer photography was taken from additional viewpoints suggested by Torridge District Council's landscape consultant on the 15 and 16 May 2023. Latterly, on the 21 March 2024, winter photography was undertaken from the publicly accessible locations suggested by North Devon District Council in its response in the Scoping Opinion.

2.5.68 The locations of panoramic baseline photographs looking towards the landfall, cable route, construction compounds and Converter Site are shown in Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.1 to 2.3.47. Viewpoint locations are shown on Volume 4, Figures 2.5a to 2.5e. From the site work, it was evident that people at some of the locations would not experience a significant effect, primarily due to distance, but also due to the Converter Site being substantially obscured by landform or vegetation, or due to the activity of the receptor.

2.5.69 The viewpoint photography has been divided into those focussed on the location of the landfall, those of the Onshore HVDC Cable Corridor and compounds and those of the Converter Site and HVAC Cables.

2.5.70 A full description of each viewpoint is included with the baseline photography at Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR. Some viewpoints, where there is little to no potential for receptors in the vicinity to experience significant effects (due to factors, which may include the location and siting of the Proposed Development, the screening of intervening vegetation, built structures or landform) have not been taken forward to the assessment stage, but have been included in the visual baseline, for completeness or to demonstrate a point. **Table 2.18** Identifies the representative viewpoints identified for assessment. Those not taken forward to assessment have been noted.

Table 2.18: Representative viewpoints identified as part of the assessment

Representative viewpoint reference	Description	Receptor
Representative viewpoints towards the Landfall		
1 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.1a and 2.3.1b	View southwest from the South West Coast Path at Cornborough Cliff 265 m from the landfall	People walking along the South West Coast Path
2 Volume 4, Appendix 2.3: Visual Baseline Technical Report of	View east from beach between Abbotsham Cliff and Cornborough Cliff 20 m from the landfall	People accessing the beach

Representative viewpoint reference	Description	Receptor
the PEIR, Figures 2.3.2a and 2.3.1b		
3 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.3a and 2.3.3b	View southeast from beach/South West Coast Path, north of Abbotsham Court 20 m from the landfall	People accessing the beach
4 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.4a and 2.3.4b	View west-northwest from beach, between Abbotsham Cliffs and Cornborough Cliffs 55 m from the landfall	People accessing the beach
5 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.5a and 28.3.5b	View northeast to landfall site from the South West Coast Path, north of Abbotsham Court 65 m from the landfall	People walking along the South West Coast Path
6 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.6a and 28.3.6b	View northwest from field gate on minor road east of Abbotsham Court, Rickard's Down 685 m from the landfall	People using the minor road
Representative viewpoints towards the Onshore HVDC Cable Corridor		
7 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.7a and 2.3.7b	View south from junction of PRoW Abbotsham Footpath 5, with minor road to the north of Rickard's Down 0 m from the Onshore HVDC Cable Corridor	People using the public footpath and people using the minor road
8 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.8a and 2.3.8b	View south from Public Right of Way Abbotsham Footpath 6, west of Pusehill 620 m from the Onshore HVDC Cable Corridor	People using the public footpath
9 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.9a and 2.3.9b	View south from PRoW Abbotsham Footpath 2, at junction with Other Route with Public Access, to the south of Rickard's Down 20 m from the Onshore HVDC Cable Corridor	People using the public footpath and Other Route with Public Access
10 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.10a and 2.3.10b	View west from minor road south of Bowood at Abbotsham Cross 0 m from the Onshore HVDC Cable Corridor	People using the minor road
11 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.11a and 2.4.11b	View northeast from PRoW Alvington Footpath 3 routed along a private access road to the north of Winscott Barton 0 m from the Onshore HVDC Cable Corridor	People using the public footpath

Representative viewpoint reference	Description	Receptor
12 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.12a and 2.3.12b	View northeast from the junction of PRoW Alvington Bridleway 12, with a minor road, east of Winscott Barton 15 m from the Onshore HVDC Cable Corridor	People using the public bridleway and the minor road
13 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.13a and 2.3.13b	View east from minor road to the west of Littleham Cross 0 m from the Onshore HVDC Cable Corridor	People using the minor road
14 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.14a and 2.3.14b	View northwest from minor road south of Ashridge 0 m from the Onshore HVDC Cable Corridor	People using the minor road
15 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.15a and 2.3.15b	View southeast from car park and picnic area, opposite Seven Oaks Nature Reserve, River Torridge 330 m from the Onshore HVDC Cable Corridor	People using the car park and picnic area
16 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.16a and 2.3.16b	View east-southeast from junction of A388 with minor road to Littleham, River Torridge 0 m from the Onshore HVDC Cable Corridor	People using the A388 and the minor road
17 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.17a and 2.3.17b	View northwest from the Tarka Trail on bridge over the River Torridge, north of Pillmouth 0 m from the Onshore HVDC Cable Corridor	People using the Tarka Trail
18 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.18a and 2.3.18b	View north from the Tarka Trail on bridge over the River Torridge, north of Pillmouth 0 m from the Onshore HVDC Cable Corridor	People using the Tarka Trail
19 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.19a and 2.3.19b	View west from the Tarka Trail, on the eastern boundary of the Seven Oaks Nature Reserve 0 m from the Onshore HVDC Cable Corridor	People using the Tarka Trail
20 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.20a and 2.3.20b	View south from minor road, close to Woodville Farm 0 m from the Onshore HVDC Cable Corridor	People using the minor road
Representative viewpoints towards the Converter Site		
21 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.21a to 2.3.21d	View south from minor road between Fullingcott Cross and Huish Moor, north of the A39 4.5 km from the Converter Site	People using the minor road

Representative viewpoint reference	Description	Receptor
Not taken forward – no potential for significant effects, due to distance.		
22 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.22a to 2.3.22d Not taken forward – no potential for significant effects, due to distance and vegetation.	View southwest from minor road to the west of Fire Beacon Cross 5.3 km from the Converter Site	People using the minor road
23 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.23a to 2.3.23d	View south from public right of way Newton Tracey Footpath 4 to the south of Horwood 1.5 km from the Converter Site	People using the public footpath
24 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.24a to 2.3.24d	View southwest from public right of way Newton Tracey 52 to the southwest of Newton Cross 2.8 km from the Converter Site	People using the public footpath
25 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.25a to 2.3.25d	View southwest from Other Route with Public Access to the south of Higher Lovacott 2.4 km from the Converter Site	People using the Other Route with Public Access
26 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.26a to 2.3.26d	View west-southwest from public right of way Newton Tracey 56 to the east of Bartridge 2.1 km from the Converter Site	People using the PRoW
27 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.27a to 2.3.27d	View west from junction of minor road with B3232 at Alverdiscott 1.7 km from the Converter Site	People using the B3232 and minor road
28 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.28a to 2.3.28d	View northwest from minor road to the west of Brownscombe Farm 790 m from the Converter Site	People using the minor road
29 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.29a to 2.3.29d	View west-northwest from minor road to the south of Alverdiscott 1.6 km from the Converter Site	People using the minor road
30 Volume 4, Appendix 2.3: Visual Baseline Technical Report of	View west-northwest from junction of the B3232 with a minor road at Lashingcott Lane End 3.4 m from the Converter Site	People using the B3232 and minor road

Representative viewpoint reference	Description	Receptor
the PEIR, Figures 2.3.30a to 2.3.30d		
31 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.31a to 2.3.31d	View north-northwest from Other Route with Public Access to the northwest of Huntshaw Water 940 m from the Converter Site	People using the Other Route with Public Access
32 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.32a to 2.3.32d	View northwest from public right of way Footpath 1 to the east of Huntshaw 2.3 km from the Converter Site	People using the public footpath
33 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.33a to 2.3.33d	View north-northeast from minor road to the north of Gammaton Moor 325 m from the Converter Site	People using the minor road
34 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.34a to 2.3.34d	View south from minor road between Gammaton Moor and Webbery Barton 8 m from the Converter Site	People using the minor road
35 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.35a to 2.3.35d	View south from minor road to the east of Webbery Cross 460 m from the Converter Site	People using the minor road
36 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.36a to 2.3.36d	View south from junction of minor road with public right of way Westleigh Footpath 7 to the southwest of Holmacott 3.2 km from the Converter Site	People using the public footpath and minor road
37 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.37a to 223.37d	View north-northwest from public right of way Huntshaw Footpath 4 south of Huntshaw Water 1.7 k m from the Converter Site	People using the public footpath
38 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.38a to 8.3.38d	View north-northwest from field gate on Other Route with Public Access to the west of Delve's Grave 3.3 km from the Converter Site	People using the Other Route with Public Access
39 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.39a to 2.3.39d Viewpoint not taken forward to assessment as no potential for significant effects, due to distance from Converter Site.	View southwest from Codden Beacon, Codden Hill 9.0 km from the Converter Site	People using public footpath and accessing the beacon and monument

Representative viewpoint reference	Description	Receptor
40 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.40a to 2.3.40d Viewpoint not taken forward to assessment as no potential for significant effects, due to distance from Converter Site and intervening topography/hedgebanks.	View east from minor road at Rickard's Down, within the North Devon Coast National Landscape 7.5 km from the Converter Site	People using minor road
41 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.41a to 2.3.41b	View northeast from A388 to the north of Monkleigh 5.6 km from the Converter Site	People using the A388
42 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.42a to 2.3.42b	View southeast from minor road/track north of Syncock's Cross on Old Barnstaple Road 2.6 km from the Converter Site	People using minor road
43 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.43a to 2.3.43b	View south-southeast from farm track to the southeast of Eastleigh 1.8 km from the Converter Site	People using track
44 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.44a to 2.3.44b Viewpoint not taken forward to assessment as no potential for significant effects, due to distance from Converter Site and intervening topography.	View south from public footpath, east of Limekiln Lane 9.9 km from the Converter Site	People using footpath
45 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.45a to 2.3.45b Viewpoint not taken forward to assessment as no potential for significant effects, due to distance from Converter Site and intervening topography.	View south from Eastcombe Lane, Heanton Punchardon 9.8 km from the Converter Site	People using minor road
46 Volume 4, Appendix 2.3: Visual Baseline Technical Report of	View southwest from minor road to the southwest of Harracott 5.5 km from the Converter Site	People using minor road

Representative viewpoint reference	Description	Receptor
the PEIR, Figures 2.3.46a to 2.3.46b		
47 Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR, Figures 2.3.47a to 2.3.47b	View southwest from minor road, to the east of Newton Tracey 3 km from the Converter Site	People using minor road

Future Baseline Conditions

2.5.71 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires that an Environmental Statement includes *"an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge"*. If the Proposed Development does not come forward, an assessment of the future baseline conditions has been carried out and is described within this section.

Future Landscape and Seascape Character and Visual Baseline

2.5.72 Landscape and adjacent seascapes are constantly evolving. Evolution is an intrinsic attribute of landscapes which are in constant flux. The forces driving landscape and seascape change are both human and natural, predominantly the former within the LSVIA study area. Building and infrastructure development, intensive agriculture and minerals exploitation is changing the character of both urban and rural landscapes. Climate change driven by human activity has the potential to alter vegetation patterns and landscape character in the longer term, although to what extent and over what timeframe is a matter of conjecture.

2.5.73 Volume 4, Chapter 1: Climate Change of the PEIR, presents an assessment of predicted changes in the climate relating to the LSVIA study area between 2040-2069 and 2070-2099 including those resulting from extreme weather events of heat, cold, rainfall, drought and wind. It is predicted that mean temperatures will increase, winter precipitation will increase; and summer precipitation will decrease. Overall, the frequency of hot days, dry spells and heavy rainfall is predicted to increase.

2.5.74 The current landscape and seascape character baseline situation is described in Volume 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report of the PEIR. The climate change predictions recorded in Volume 4, Chapter 1: Climate Change of the PEIR, are unlikely to be sufficient to lead to an appreciable change in the baseline vegetation and character within the LSVIA study area, although the types of crops grown might change and the areas grazed may decrease, i.e., a change in farming practices. The underlying landscape and seascape characteristics are predicted to remain broadly constant for the period assessed in Volume 4, Chapter 1: Climate Change of the PEIR. Consequently, excluding building/infrastructure development, the future landscape and seascape character baseline, and the related visual baseline, would be essentially the same as the current baseline situation summarised above in this LSVIA and presented

in more detail in Volume 4, Appendix 2.2: Seascape and Landscape Character Baseline Technical Report of the PEIR.

2.5.75 Regarding future building/infrastructure development, it is not possible to accurately predict future change. The cumulative effects assessment, detailed in section **2.10** of this chapter, includes existing energy infrastructure (the cumulative baseline) and proposed energy infrastructure. It also identifies other relevant existing infrastructure projects (part of the cumulative baseline) and proposed major development projects for the LSVIA study area for the immediate future. In the light of the climate emergency and related government policy/legislation, an intensification of energy-related development within the LSVIA study area is likely in the future.

2.6 Key Parameters for Assessment

Maximum Design Scenario

2.6.1 The maximum design scenarios identified in Table 2.19 have been selected as those having the potential to result in the greatest effect on an identified receptor or receptor group. These scenarios have been selected from the maximum design scenario provided in Volume 1, Chapter 3: Project Description of the PEIR. Effects of greater adverse significance are not predicted to arise should any other development scenario, based on details within the maximum design scenario (e.g., different infrastructure layout) to that assessed here be taken forward in the final design scheme. Therefore, this comprises a conservative assessment of maximum design scenario parameters.

Table 2.19: Maximum design scenario considered for the assessment of potential impacts

Potential Impact	Phase[1]			Maximum Design Scenario	Justification
	C	O	D		
Offshore HVDC Cable Corridor, Landfall and Onshore HVDC Cable Corridor					
The LSVIA considers the likely significant impacts of the Proposed Development on landscape and seascape character as well as views and visual amenity within the LSVIA study area, resulting from its construction, operations and maintenance and decommissioning	✓	×	×	**Construction phase: Landfall/Offshore Cable Corridor** • Mermaid's Pool to Rowden Gut crossed by horizontal directional drill (HDD) (or other trenchless crossing technique) • Landfall HDD compound (1 no. 10,000 m^2) • The maximum number of transition joint bays would be two. • Duration of landfall installation would be 18 months initially, with a further six months following a gap in works. **Construction phase of Onshore HVDC Cable Corridor** • Secondary construction compound (A39 compound) (1 no., 48,000 m^2 for 36 months • HDD compounds (16 no., 10,000 m^2 for 36 months/12 months per HDD run concurrently, includes 2 no. HDD compounds at landfall) • Length of Onshore HVDC Cable Corridor (14.5 km) • Maximum number of HVDC cables (4 no.) • Maximum number of fibre-optic cables (6 no.) • Maximum number of cable trenches (2 no.) • Joint bays (34 no.): Width 20 m; length 5 m; depth 1.4 m. Area of joint bay below ground 100 m2. Nominal distance between joint bays 800 to 1,100 m. • Link boxes (34 no.): Width 1.5 m; length 1.5 m; depth 1.4 m. Nominal distance between link boxes 800 to 1,100 m. Manhole covers to access link boxes. **Operation and Maintenance phase of the landfall** • Link boxes manhole covers	Greatest number of structures and maximum length of cables resulting in greatest extent of impact on the following landscape and seascape character areas/designated landscapes: • North Devon Biosphere Reserve Impact of the Offshore Cable Corridor, landfall, Onshore HVDC Cable Corridor and Converter Site • North Devon Coast National Landscape Impact of Impact of the Offshore Cable Corridor, landfall, Onshore HVDC Cable Corridor and Converter Site • National Character Area 149: The Culm Impact of landfall, Onshore HVDC Cable Corridor and Converter Site • North Devon Seascape Character Area Impact of the Offshore Cable Corridor and landfall • County Landscape Character Areas Impact of the Offshore Cable Corridor, landfall, Onshore HVDC Cable Corridor and Converter Site • North Devon and Torridge District LCTs Impact of landfall, Onshore HVDC Cable Corridor and Converter Site. Greatest number of structures and maximum length of cables resulting in greatest extent of impact on views and visual amenity.

Potential Impact	Phase[1]			Maximum Design Scenario	Justification
	C	O	D		
				Operation and Maintenance phase of Onshore HVDC Cable Corridor • Link boxes manhole covers • Above ground markers at road crossings etc.	
				Decommissioning phase of the landfall • Cable ducts will remain *in situ*.	
				Decommissioning phase of Onshore HVDC Cable Corridor • Cable ducts will remain *in situ*.	
Xlinks Converter Site (Bipole 1 and Bipole 2) and HVAC cable corridor to Alverdiscott Substation Connection Development					
The LSVIA considers the likely significant impacts of the Proposed Development on landscape character as well as views and visual amenity within the 10 km buffer study area from the Converter Site, resulting from their construction, operations and maintenance and decommissioning	✓	✓	✓	**Construction phase of Converter Site** • Main construction compound (Gammaton Road) area (63,000 m^2, for 72 months). • Converter compound area (20,000 m^2, for 72 months), includes working and laydown area (excludes permanent Converter Site footprint). • Duration of construction, 72 months. • Lighting: During the construction phase of the Proposed Development, task specific lighting would be used to reduce the illumination of areas beyond the construction areas. In addition, to prevent light spill, light shield guards would be used.	Greatest number of structures and maximum length of cables resulting in greatest extent of impact on the following landscape character areas/designated landscapes: • North Devon Biosphere Reserve Impact of HVAC Cables and Converter Site • North Devon Coast NL Impact of HVAC Cables and Converter Site • National Character Area 149: The Culm Impact of HVAC Cables and Converter Site • County Landscape Character Areas Impact of HVAC Cables and Converter Site • North Devon and Torridge District LCTs Impact of HVAC Cables and Converter Site Greatest number of structures and maximum length of cables resulting in greatest extent of impact on views and visual amenity.
				Construction phase of HVAC Cables • Length of HVAC cable connection route (1.2 km) • Maximum number of HVAC cables (12 no.) • Maximum number of cable trenches (4 no.) • Temporary construction corridor width (65 m, 32.5 m for each Bipole)	
				Operation and Maintenance phase of Converter Site • Number of Converter Site (2 no.) • Height of converter buildings (excluding lightning protection, aerials, etc.) (26 m)	

Potential Impact	Phase[1]			Maximum Design Scenario	Justification
	C	O	D		
				• Footprint of converter buildings (130,000 m^2) • Height of lightning protection (30 m) • Each converter station would comprise of – control building; – harmonic filter; – AC switch yard; – transformers; – valve hall and reactor building; and – DC switch yard. • Permanent footprint of Converter Site (combined) (373,000 m^2), including converter buildings, landscape bunding, planting and drainage. • Site Access: The Converter Site would be accessed via the existing Alverdiscott Substation site entrance from the minor road running north south between Gammaton Crossroads and Webbery Barton. The current arrangement of the internal access road would need to be altered to provide a junction and access into the Converter Site and independent access to the National Grid site. Other access Requirements such as for farming or solar arrays would also be accommodated out with the Converter Site security cordon. • The Proposed Development would also include a replacement NGET access road that would run along the north of the Converter Site boundary. • The proposed Converter Site would comprise internal service roads, which would have a typical width of 6 m. • There would be access for traffic required during normal operation, as the proposed Converter Site are likely to be operated 24/7 by staff on-site through shifts. The converter site is anticipated to provide approximately 30 full time-equivalent (FTE) jobs, with up to 15 staff on-site at any one time in the day, reducing to approximately five overnight. • Security fencing: To *Securing critical national infrastructure: an introduction to UK capability* (UK Defence and Security	

Potential Impact	Phase[1]			Maximum Design Scenario	Justification
	C	O	D		
				Exports and Department for Business and Trade, 2023) and Guidance set out by the National Protective Security Authority (NPSA, 2024). Additionally, both Converter Site would be separated via a second layer of security fencing as complete electrical separation of each Bipole would be required. • Lighting: The security fence would be monitored with security cameras and lighting. Operational lighting would be designed to avoid illumination of areas beyond the operational site. Operational outdoor lighting at the Converter Site boundary would normally be restricted to motion-activated security lighting. • Operational access for the Converter Site will be via the site access control building to ensure site security.	
				Operation and Maintenance phase of HVAC Cables • Permanent cable corridor width (30 m, 15 for each Bipole) • Maintenance checks via manhole covers to link boxes.	
				Decommissioning phase of Converter Site • Lighting: During the decommissioning phase of the Proposed Development, task specific lighting would be used to reduce the illumination of areas beyond the construction areas. In addition, to prevent light spill, light shield guards would be used.	
				Decommissioning phase of HVAC Cables • Cable ducts will remain *in situ*.	
Alverdiscott Substation Connection Development					
The LSVIA considers the likely significant impacts of the extension to	✓	✓	×	**Construction** • It is anticipated that NGET would utilise land within the existing footprint of the Alverdiscott Substation site to provide this.	Greatest number of structures resulting in greatest extent of impact on the following landscape character areas/designated landscapes:

Potential Impact	Phase[1]			Maximum Design Scenario	Justification
	C	O	D		
the Alverdiscott substation on landscape character as well as on views and visual amenity within the 10 km buffer study area from the Converter Site, resulting from their construction, operations and maintenance.				• There would be potential diversions of the existing 132 kV and 11 kV OHLs connecting to the existing Alverdiscott Substation. • Duration of construction: 24 months. **Operation and Maintenance** • The substation would occupy a footprint of approximately 2.8 ha, with a maximum height of 15 m, excluding connecting tower structures.	• North Devon Biosphere Reserve Impact of Alverdiscott Substation Connection Development • North Devon Coast NL Impact of Alverdiscott Substation Connection Development • National Character Area 149: The Culm Impact of Alverdiscott Substation Connection Development • County LCA Impact of Alverdiscott Substation Connection Development • North Devon and Torridge District LCTs Impact of Alverdiscott Substation Connection Development. Greatest number of structures resulting in greatest extent of impact on views and visual amenity.

[1] C=construction, O=operational and maintenance, D=decommissioning

2.7 Mitigation Measures Adopted as Part of the Proposed Development

2.7.1 For the purposes of the EIA process, the term 'Measures adopted as part of the Proposed Development is used to include the following types of mitigation measures (adapted from IEMA, 2016). These measures are set out within Volume 1, Appendix 3.1: Draft Mitigation Schedule of the PEIR.

- Primary (inherent) mitigation – measures included as part of the project design. IEMA describes these as 'modifications to the location or design of the development made during the pre-application phase that are an inherent part of the project and do not require additional action to be taken'. This includes modifications arising through the iterative design process. These measures will be secured through the consent itself through the description of the project and the parameters secured in the Development Consent Order (DCO). For example, a reduction in footprint or height.
- Secondary (foreseeable) mitigation. IEMA describes these as 'actions that will require further activity in order to achieve the anticipated outcome'. These include measures required to reduce the significance of environmental effects (such as lighting limits) and may be secured through an environmental management plan.
- Tertiary (inexorable) mitigation. IEMA describes these as 'actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative Requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects'. It may be helpful to secure such measures through a Onshore Construction Environmental Management Plan (On-CEMP) or similar.

2.7.2 In addition, where relevant, measures have been identified that may result in enhancement of environmental conditions. Such measures are clearly identified within the draft mitigation schedule (see Volume 1, Appendix 3.1: Draft Mitigation Schedule, of the PEIR). The measures relevant to this chapter are summarised in Table 2.20.

Table 2.20: Mitigation measures adopted as part of the Proposed Development

Measure Adopted	How the Measure Will be Secured
The Onshore HVDC Cables and HVAC Cables would be completely buried underground for the entire length.	An Illustrative outline LEMP will be agreed with Torridge District Council. The submission of this plan will form a Requirement of the DCO and will be secured through an Outline LEMP.
The Converter Site will be constructed using a cut and fill technique to reduce visibility of buildings in the landscape.	
Land-modelling will be employed to create higher areas of land around the Converter Site where space allows.	
Planting will be provided at the Converter Site to assist with softening and screening the buildings. These measures will be set out in an Outline LEMP that will be prepared and submitted with the	

Measure Adopted	How the Measure Will be Secured
application for consent. The Outline LEMP will include: • Strengthening and enhancement of existing hedgerow field boundaries within the vicinity of the Converter Site and at replacement hedgerows along the Onshore HVDC Cable Corridor. • Using native and locally appropriate plant species around Converter Site and at replacement hedgerows along the Onshore HVDC Cable Corridor. • Identifying areas where it may be possible to achieve advance planting	
Converter station building design to include the following: • Architectural design of converter station buildings. • Use of appropriate materials/colours/finishes for the façades of the converter station buildings.	A Design Principles Document will be secured as a Requirement of the DCO.

2.7.3 An outline LEMP and Design Principles Document will set out in detail the landscape measures that will be used to integrate the Proposed Development into the existing landscape and mitigate the landscape and visual effects. In summary these will be:

- Following the landscape management guidelines for the LCT/LCA – broadly to maintain the existing character, conserve the vegetation that is present, increase broadleaved woodlands and restore/maintain hedgerows and hedgebanks – as far as possible
- Earth-modelling surrounding the Converter Site where space allows. This will involve raising the levels of the land to provide screening of the upper parts of the largest buildings particularly focused on viewpoints from the north and west. Also part screening of the lower structures to the east and south, such as the perimeter fence, from the closest receptors. The earth-modelling will also provide higher land on which to plant the woodland proposed for the land surrounding the Converter Site. When finalised, the proposed earth-modelling would not form a prominent skyline feature and will blend in with the topographical features of the existing site context.
- Extend areas of existing woodland in the adjacent farmland, connecting habitats with hedgerows. This will provide further screening of some elements of the Converter Site and link smaller areas of woodland together.
- If possible restore historic hedgerows where practicable, to restore the structure of the landscape.
- Where the cable is buried and crosses a hedgerow, the hedgerow will be replanted without tree species. If hedgerow trees cannot be avoided and are removed, they will be replaced in the replanted hedgerow, as close to their original location as possible.
- Create wildflower meadows in areas that cannot be used for woodland creation.
- Use of locally native seed/plants grown from locally native seed.

- Develop a long-term LEMP based on an outline LEMP.
- Working with the architects, determine the most appropriate colour treatment to be set out within a Design Code.

2.7.4 At winter Year 1 (the first planting season after the construction of the Proposed Development) the planting proposed in **Table 2.20** and adopted as part of the Proposed Development will not have had time to fully mitigate impacts of the constructed infrastructure. Any advance planting, away from the main construction areas (e.g., on the earth-modelling in the northern fields, as well as any strengthening and enhancing of field boundaries) could take place before construction is complete and would have had some time to establish by Year 1. However, the assessment has been undertaken on the basis that no advance planting has been implemented. Any earth-modelling, closer to the Converter Site will have an immediate effect of softening the impact of any built structures. By Year 15 the planting undertaken after the completion of the Converter Site and any ancillary structures (e.g., access roads) will have had time to establish. The impact of such structures will be reduced further as a result of the softening effect of the maturing vegetation.

2.7.5 It is anticipated that closer to decommissioning a restoration plan would be agreed. This would most likely include the retention of established woodland planted as part of the mitigation proposals.

2.8 Assessment of Construction Effects

2.8.1 The impacts of the construction of the Proposed Development have been assessed. The potential impacts arising from the construction phase of the Proposed Development are listed in **Table 2.22**, along with the maximum design scenario against which each impact has been assessed (**Table 2.19**). Mitigation that forms part of the Proposed Development has been detailed in **Table 2.20**.

2.8.2 A description of the potential effect on receptors caused by each identified impact is given below.

Assessment of Construction Effects - Landscape and Seascape Character

2.8.3 The effects of the construction of the Proposed Development on the special feature/special qualities of the North Devon Biosphere Reserve and the North Devon Coast National Landscape are considered below. The landfall and Onshore HVDC Cable Corridor cross the buffer zone of the North Devon Biosphere Reserve, which is contiguous with the boundary of the North Devon Coast National Landscape in this location. The Converter Site lies inside the Biosphere Transition Zone (described at paragraphs 2.5.4 and 2.5.5, above) but do not lie within the North Devon Coast National Landscape.

North Devon Biosphere Reserve (Non-statutory Designation)

2.8.4 The special features of the UNESCO North Devon Biosphere Reserve, relevant to this chapter are:

- *Characteristic landscapes such as Culm grasslands and Devon hedgerows.*

- *Dramatic coastal landscapes of North Devon Coast* National Landscape.
- *Special western oak woodlands with a plethora of pollution-sensitive lichens.*
- *High level of tranquillity and nocturnal darkness in the area.*

Landfall, Onshore HVDC Cable Corridor and Converter Stations

2.8.5 The construction work at the landfall and along the Onshore HVDC Cable Corridor passes through the North Devon Biosphere Reserve Buffer Zone and Transition Zone. The Converter Site lies within the Transition Zone.

Sensitivity of the Receptor

2.8.6 The special features of the North Devon Biosphere Reserve are considered to be of high susceptibility and high value. The overall sensitivity of the special features is **high**.

Magnitude of Impact

2.8.7 The direct impacts of the landfall, Onshore HVDC Cable Corridor and Converter Site on the special features within the Buffer Zone and Transition Zone of the North Devon Biosphere Reserve varies:

- Characteristic landscapes such as Culm grasslands and Devon hedgerows. The Onshore HVDC Cable Corridor does not cross any Culm grasslands and the Converter Site are not located on Culm grassland. There would be **no change** on this aspect of the special feature. In general trenching would be used to cross hedgerows and Devon hedgebanks. During the construction phase there would be a direct **medium** impact locally
- Dramatic coastal landscapes of North Devon Coast NL. The construction works at the Converter Site would not have any impact on this special feature. There would be a temporary visual impact as the construction works at the landfall take place from the barge located in the sea and the works at the landward side, at the TJBs and construction compounds would also be visible. The impacts on views of the landscape would be of small geographical extent, direct, short-term and temporary. The impact will be **small**. There would be no direct effects on the coastline, as the Onshore HVDC Cable Corridor would cross it using a trenchless technique, such as HDD. The impact on the coastal landscape itself would be **no change**
- Special western oak woodlands with a plethora of pollution-sensitive lichens. Littleham Wood, which is the closest example, being quite wet and having some lichens, would not be affected, as the wood would be crossed using a trenchless technique, such as HDD. All other examples of such woodlands are avoided. The magnitude of impact on this special feature would be **no change**
- High level of tranquillity and nocturnal darkness in the area. There would be a temporary impact on tranquillity as the construction works at the landfall take place from the barge located in the sea and the works at the landward side, at the TJBs and construction compounds would also be visible. The direct impact on tranquillity of the wider Biosphere Transition Zone would be of medium geographical extent, short-term and temporary. The impact on tranquillity would be **medium**. As no works will take place during the hours of darkness, unless in an emergency and potentially lights on the marine vessels, the impact on nocturnal darkness during the construction phase will be **negligible**.

Significance of the Effect

2.8.8 The significance of effects for the four special features relevant to this assessment are as follows:

- *Characteristic landscapes such as Culm grasslands and Devon hedgerows:* The magnitude of impact to the Culm grasslands would be no change and the sensitivity of the receptors would be high, therefore the significance of effects is **none**. The magnitude of impact to the hedgerows and Devon hedgebanks would be medium and the sensitivity of the receptors would be high therefore a **moderate adverse**, which is locally significant, but not significant in the wider area of the Biosphere Reserve.
- *Dramatic coastal landscapes of North Devon Coast NL:* The magnitude of the impact on the views of the coastal landscape would be small and the sensitivity would be high therefore the significance of the temporary effect on this aspect of the special feature is judged to be **minor adverse**, which is not significant. The impact on the fabric of the coastal landscape itself would be no change, the temporary effect on this high sensitivity receptor is judged to be **none**
- *Special western oak woodlands with a plethora of pollution-sensitive lichens:* There would be no change to a high sensitivity receptor therefore the significance of effects would be **none.**
- *High level of tranquillity and nocturnal darkness in the area:* The temporary impact on tranquillity, a high sensitivity resource is medium, the temporary effect is judged to be **moderate adverse**, which is locally significant, but not significant in the wider area of the Biosphere Reserve. The impact magnitude on nocturnal darkness would be negligible. It is judged that this high sensitivity landscape resource would experience a temporary **negligible adverse** effect, locally which is not significant.

North Devon Coast National Landscape

2.8.9 The special qualities, of the North Devon Coast NL, relevant to this assessment, are:

- *Diversity of scenery contained within a small area, including some of the finest cliff scenery in the country (as mentioned at designation)*
- *Panoramic seascape, with seaward views to Lundy within the Atlantic Ocean, across the Bristol Channel to Wales and along the coastline. Views are of a landscape and seascape devoid of human influence*
- *Panoramic views across a rolling landscape of pastoral farmland, wooded combes and valleys from elevated inland areas*
- *Wild coastal scenery. In the north, hogsback cliffs of varying heights; in the south high, rugged cliffs, dramatic rock formations, exposed headlands, wavecut platforms and rocky coves*
- *A strong sense of tranquillity and remoteness where the coast road is located away from the coastline*
- *Dark night skies.*

Landfall and Onshore HVDC Cable Corridor

2.8.10 The construction work at the landfall and along the Onshore HVDC Cable Corridor would pass through the North Devon Coast NL. The Converter Site lies 6.4 km to the east of the North Devon Coast NL and the construction works would not significantly affect its setting or the special qualities listed in paragraph 2.8.9.

Sensitivity of the Receptor

2.8.11 The special qualities of the North Devon Coast NL are considered to be of high susceptibility and high value. The overall sensitivity of the special qualities is **high**.

Magnitude of Impact

2.8.12 The direct impacts of the construction of the landfall and Onshore HVDC Cable Corridor on the special qualities of the North Devon Coast NL varies:

- *Diversity of scenery contained within a small area, including some of the finest cliff scenery in the country (as mentioned at designation):* No fabric of the coastal landscape would be impacted, as the coastal area would be crossed using trenchless techniques, such as HDD. There would be a temporary impact on coastal views, as the construction works at the landfall would, in part, take place from the barge located in the sea. The direct impact on coastal views would be of local geographic extent, short-term and temporary. The impact on diversity of scenery would be **negligible.**
- *Panoramic seascape, with seaward views to Lundy within the Atlantic Ocean, across the Bristol Channel to Wales and along the coastline. Views are of a landscape and seascape devoid of human influence:* There would be a temporary impact on seaward views, as the construction works at the landfall would, in part, take place from the barge located in the sea. The direct impact on coastal views would be of local geographic extent, short-term and temporary. The impact on panoramic seaward views would be **negligible.**
- *Panoramic views across a rolling landscape of pastoral farmland, wooded combes and valleys from elevated inland areas:* There would be a temporary impact of views from elevated land towards the landfall and Onshore HVDC Cable Corridor within the NL. The direct impact on inland views would be of local geographic extent, short-term and temporary. The impact on the views of the landscape would be **small.**
- *Wild coastal scenery. In the north, hogsback cliffs of varying heights; in the south high, rugged cliffs, dramatic rock formations, exposed headlands, wavecut platforms and rocky coves:* No fabric of the coast would be impacted, as the coastal area would be crossed using trenchless techniques, such as HDD. There would be a temporary impact on coastal views, as the construction works at the landfall would, in part, take place from the barge located in the sea. The direct impact on coastal views would be of local geographic extent, short-term and temporary. The impact on wild coastal scenery would be **negligible.**
- *A strong sense of tranquillity and remoteness where the coast road is located away from the coastline:* There would be a temporary impact on tranquillity as the construction works at the landfall take place from the barge located in the sea and the works at the landward side, at the TJBs and construction compounds would also be visible. The direct impact on tranquillity would be of

local geographical extent, short-term and temporary. The impact on tranquillity would be **small.**

- *Dark night skies:* As no works would take place during the hours of darkness, unless in an emergency and potentially lights on the marine vessels, the impact on dark night skies during the construction phase would be **negligible**.

Significance of the Effect

2.8.13 The significance of effects for the special qualities relevant to this assessment are as follows:

- *Diversity of scenery contained within a small area, including some of the finest cliff scenery in the country (as mentioned at designation):* This high sensitivity resource would experience a negligible magnitude of impact. The temporary effect would be **negligible adverse**, which is not significant.
- *Panoramic seascape, with seaward views to Lundy within the Atlantic Ocean, across the Bristol Channel to Wales and along the coastline. Views are of a landscape and seascape devoid of human influence:* This high sensitivity resource would experience a negligible magnitude of impact. The temporary effect would be **negligible adverse**, which is not significant.
- *Panoramic views across a rolling landscape of pastoral farmland, wooded combes and valleys from elevated inland areas:* This high sensitivity resource would experience a small impact. The temporary effect would be **minor adverse**, which is not significant.
- *Wild coastal scenery. In the north, hogsback cliffs of varying heights; in the south high, rugged cliffs, dramatic rock formations, exposed headlands, wavecut platforms and rocky coves:* This high sensitivity resource would experience a negligible impact. The temporary effect would be **negligible adverse**, which is not significant.
- *A strong sense of tranquillity and remoteness where the coast road is located away from the coastline:* This high sensitivity resource would experience a small impact. The temporary effect would be **minor adverse**, which is not significant.
- *Dark night skies:* This high sensitivity resource would experience a negligible impact. The temporary effect would be **negligible adverse**, which is not significant.

National Character Area

Landfall, Onshore HVDC Cable Corridor and Converter Stations

2.8.14 The Proposed Development is located wholly within NCA 149: The Culm (Volume, 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report of the PEIR, Figure 2.2.2). The key characteristics are set out within the same Appendix. The NCA's key characteristics relevant to this chapter are:

- *Rolling, open plateaux…wide views across a remote landscape;*
- *Little tree cover on the plateau, except for occasional wind-sculpted hedgerow and farmstead trees, and conifer blocks. Woodland is more frequent in the shelter of valleys and combes running to the sea, and where associated with estates;*

- *mosaic of field patterns reflecting the historic land use of the Culm, surrounded by characteristic hedgebanks; and*
- *spectacular coastline of high cliffs and estuarine features, nationally important geological features, and narrow wooded combes.*

Sensitivity of the Receptor

2.8.15 The key characteristics of NCA 149: The Culm are considered to be of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the Devon hedgebanks and the coastline of high cliffs etc., which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**.

Magnitude of Impact

2.8.16 The direct impacts of the landfall, Onshore HVDC Cable Corridor and Converter Site on the key characteristics of NCA 149: The Culm varies:

- *Rolling, open plateaux…wide views across a remote landscape:* The eastern part of the Onshore HVDC Cable Corridor and the Converter Site would be located in this area of the NCA. There would be a temporary impact of views from elevated land towards the Converter Site and the eastern part of the Onshore HVDC Cable Corridor. The direct impact on views would be of local geographic extent, short-term and temporary. The impact on the views of the landscape would be **small.**
- *Little tree cover on the plateau, except for occasional wind-sculpted hedgerow and farmstead trees, and conifer blocks. Woodland is more frequent in the shelter of valleys and combes running to the sea:* The construction works at the landfall, along the Onshore HVDC Cable Corridor and at the Converter Site would not remove woodlands, as woodlands would be avoided, or crossed using trenchless techniques. There would be **no change** to this key characteristic.
- *Mosaic of field patterns reflecting the historic land use of the Culm, surrounded by characteristic hedgebanks:* Where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method would usually be trenched. Where they would be close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method would require temporary removal of part of the hedgerow or hedgebank. The direct impact on these features would be of local geographical extent, short-term and temporary, with an overall impact of **medium** magnitude.
- *Spectacular coastline of high cliffs and estuarine features, nationally important geological features, and narrow wooded combes:* The area of the landfall and western part of the Onshore HVDC Cable Corridor contain some of these key characteristics. There would be no impact on the landscape elements themselves as the coastline as would be crossed using trenchless techniques, such as HDD and woodland areas would be avoided. Views of the construction works within this landscape would be local in extent, short-term and temporary. The impact is considered to be **small**.

Significance of the Effect

2.8.17 The significance of effects of the Proposed Development on the relevant key characteristics of NCA 149: The Culm, are as follows:

- *Rolling, open plateaux…wide views across a remote landscape:* There would be a small impact on this medium sensitivity landscape resource. The temporary effects are judged to be **minor adverse**, which are not significant.
- *Little tree cover on the plateau, except for occasional wind-sculpted hedgerow and farmstead trees, and conifer blocks. Woodland is more frequent in the shelter of valleys and combes running to the sea:* There would be no change to this medium sensitivity landscape receptor. The significance of effects is **none** .
- *Mosaic of field patterns reflecting the historic land use of the Culm, surrounded by characteristic hedgebanks:* There is a medium impact experienced by the hedgebanks, which are high sensitivity landscape receptors. The temporary effects are judged to be **moderate adverse**, which are locally significant, but more widely not significant.
- *Spectacular coastline of high cliffs and estuarine features, nationally important geological features, and narrow wooded combes:* There would be a small impact experienced by this high sensitivity landscape resource. The temporary effects are judged to be **minor adverse**, which are not significant.

2.8.18 The overall temporary effect on NCA 149: The Culm is judged to be **minor adverse**, which is not significant.

County Landscape Character Areas

Landfall, Onshore HVDC Cable Corridor and Converter Stations

2.8.19 The Proposed Development is located within Devon LCA Bideford Bay Coast, Torridge Valley and High Culm Ridges (Volume, 4, Appendix 2.2: Landscape and Seascape Character Baseline technical report, Figure 2.2.3). The key characteristics for the LCAs are set out within the same Appendix.

2.8.20 The landfall and western part of the Onshore HVDC Cable Corridor lie within the Bideford Bay Coast LCA. The Onshore HVDC Cable Corridor would cross through all three LCAs. The Converter Site and Onshore HVDC Cable Corridor would be located in the High Culm Ridges LCA.

Bideford Bay Coast LCA

2.8.21 The key characteristics of the Bideford Bay Coast LCA relevant to this assessment are:

- *a relatively sheltered bay, with gentler, more rounded coastal scenery than elsewhere along the coast;*
- *extensive coastal oak woodlands, containing important lichens, ferns and ground flora within the sheltered combes; bluebells a dominant feature in spring;*
- *southern and eastern areas dominated by agriculture with rolling, irregularly-shaped pastoral and arable fields extending to the cliff tops;*

- *fields divided by hedgerows and banks with wind-sculpted hedgerow trees; field boundaries less frequent in the north-east around Abbotsham;*
- *semi-natural habitats include road verges and species-rich hedgerows and hedgebanks;*
- *historic railway linking Bideford, Westward Ho! and Appledore (1904-1917) through the Abbotsham cliff area, today forming part of the coastal path out of Westward Ho!;*
- *sunken rural lanes with exceptionally high hedgebanks connecting villages, contrasting with the A39 which runs through the area;*
- *attractive landscape with pleasing compositions of woodland, farmland and coastal scenery; and*
- *open seascapes, including views of Lundy Island and across Bideford Bay to the Taw-Torridge estuary.*

Sensitivity of the Receptor

2.8.22 The key characteristics of Bideford Bay Coast LCA are considered to be of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the species-rich Devon hedgebanks and extensive oak woodlands, as well as the coastline of high cliffs and the South West Coast Path which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**.

Magnitude of Impact

2.8.23 The direct impacts of the landfall, Onshore HVDC Cable Corridor and Converter Site on the relevant key characteristics of the Bideford Bay Coast LCA varies:

- *A relatively sheltered bay, with gentler, more rounded coastal scenery than elsewhere along the coast:* The construction work at the landfall and the construction of the TJBs would be visible in a localised area of the coastal scene. There would be a temporary impact on coastal views, as the construction works at the landfall would, in part, take place from the barge located in the sea. The direct impact on coastal views would be of local geographic extent, short-term and temporary. The impact on coastal scenery would be **negligible.**
- *Extensive coastal oak woodlands, containing important lichens, ferns and ground flora within the sheltered combes; bluebells a dominant feature in spring:* Littleham Wood, which is the closest example of coastal oak woodland, is not affected, as the wood would be crossed using a trenchless technique, such as HDD. All other examples of such woodlands are avoided. The magnitude of impact on this special feature would be **no change.**
- *Southern and eastern areas dominated by agriculture with rolling, irregularly shaped, pastoral and arable fields extending to the cliff tops:* The field pattern would not be changed during the construction phase. However, the field boundaries would be temporarily altered to allow trenched crossings. The direct impact on field patterns would be of local geographical extent, short-term and temporary, with an overall impact of **small** magnitude.
- *Fields divided by hedgerows and banks with wind-sculpted hedgerow trees; field boundaries less frequent in the north-east around Abbotsham:* Where the

Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method would usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method would require temporary removal of part of the hedgerow or hedgebank. The direct impact on these features would be of local geographical extent, short-term and temporary, with an overall impact of **medium** magnitude.

- *Semi-natural habitats include road verges and species-rich hedgerows and hedgebanks:* Where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method would usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method would require temporary removal of part of the hedgerow or hedgebank. The direct impact on these features would be of local geographical extent, short-term and temporary, with an overall impact of **medium** magnitude.
- *Historic railway linking Bideford, Westward Ho! and Appledore (1904-1917) through the Abbotsham cliff area, today forming part of the coastal path out of Westward Ho! :*The route of the historic railway, now part of the South West Coast Path would not be affected during the construction works, as it would not be diverted or closed. The impact is **no change.**
- *Sunken rural lanes with exceptionally high hedgebanks connecting villages, contrasting with the A39 which runs through the area:* Where the Onshore HVDC Cable Corridor crosses hedgebanks as boundaries to fields the crossing method would usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD, sunken lanes maybe one such feature. The trenched method would require temporary removal of part of the hedgebank. Where a trenched method is used, the direct impact on these features would be of local geographical extent, short-term and temporary, with an overall impact of **medium** magnitude.
- *Attractive landscape with pleasing compositions of woodland, farmland and coastal scenery:* The construction works at the landfall and Onshore HVDC Cable Corridor would temporarily form part of the view. This impact would be local in geographic extent and short-term. The impact would be **negligible**.
- *Open seascapes, including views of Lundy Island and across Bideford Bay to the Taw-Torridge estuary:* The construction works at the landfall and Onshore HVDC Cable Corridor would not block the views of the open seascape or of the Torridge estuary. However, the works would temporarily form part of the view. This impact would be local in geographic extent and short-term. The impact would be **negligible**.

Significance of the Effect

2.8.24 The significance of effects of the Proposed Development on the relevant key characteristics of the Bideford Coast LCA, are as follows:

- *A relatively sheltered bay, with gentler, more rounded coastal scenery than elsewhere along the coast:* This high sensitivity landscape characteristic would experience a negligible impact due to the construction works. The localised, temporary effect is judged to be **minor adverse** and not significant.

- *Extensive coastal oak woodlands, containing important lichens, ferns and ground flora within the sheltered combes; bluebells a dominant feature in spring:* This high sensitivity receptor would experience no change. The effect would be **none.**
- *Southern and eastern areas dominated by agriculture with rolling, irregularly-shaped pastoral and arable fields extending to the cliff tops:* This medium sensitivity receptor would experience a small impact. The localised, temporary effect is judged to be **minor adverse**, which is not significant.
- *Fields divided by hedgerows and banks with wind-sculpted hedgerow trees; field boundaries less frequent in the north-east around Abbotsham:* The field pattern is of medium sensitivity, the hedgebanks are of high sensitivity. The hedgebanks, where they would be crossed by trenched techniques would experience a medium impact. The localised, temporary effect is judged to be **moderate adverse** and not significant.
- *Semi-natural habitats include road verges and species-rich hedgerows and hedgebanks:* The hedgebanks are of high sensitivity, where they would be crossed by trenched techniques would experience a medium impact. The localised, temporary effect is judged to be **moderate adverse** and not significant.
- *Historic railway linking Bideford, Westward Ho! and Appledore (1904-1917) through the Abbotsham cliff area, today forming part of the coastal path out of Westward Ho!:* The route of the historic railway, now part of the South West Coast Path, a characteristic of high sensitivity would not be affected during the construction works, as it would not be diverted or closed. The impact is no change. The significance of effect is **none.**
- *Sunken rural lanes with exceptionally high hedgebanks connecting villages, contrasting with the A39 which runs through the area:* Where a trenched method is used, there would be a medium impact on these high sensitivity features. The temporary effect is judged to be **moderate adverse** and significant, due to the nature of the feature.
- *Attractive landscape with pleasing compositions of woodland, farmland and coastal scenery:* This medium sensitivity landscape characteristic would experience a negligible impact. The localised, temporary effect would be **negligible adverse,** which is not significant.
- *Open seascapes, including views of Lundy Island and across Bideford Bay to the Taw-Torridge estuary:* The impact on this high sensitivity characteristic would be negligible. The localised temporary effect is judged to be **minor adverse**, which is not significant.

2.8.25 The overall temporary effect on the Bideford Coast LCA is judged to be **moderate adverse** and not significant.

Torridge Valley LCA

2.8.26 The key characteristics of the Torridge Valley LCA relevant to this chapter are:

- *Main River Torridge deep and fast flowing, with a convoluted course and tightly meandering channel, with mud flats exposed at low tide.*
- *Small tributary valley south of Bideford dominated by Jennetts Reservoir.*

- *Valley sides well-clothed in deciduous woodland which dominates skylines; some conifer plantations, particularly in the middle and upper reaches of the main valley.*
- *Valley floor generally used for pastoral agriculture, with a mixture of pastoral and arable agriculture on higher land.*
- *Fields generally semi-regular in shape comprising a mixture of medieval, post-medieval and modern enclosures based on earlier medieval fields; mainly enclosed by hedgerows or hedgebanks, but some loss of field boundaries in arable areas.*
- *Numerous historic features associated with the river, including weirs, mills, bridges, disused canal and railway line (now the 'Tarka Trail').*
- *Major roads and transport routes (e.g., A386 and the former Okehampton-Bideford railway line) generally follow the main valley floor, while upper reaches and tributary valleys have winding hedge-banked lanes with narrow stone bridges.*

Sensitivity of the Receptor

2.8.27 The key characteristics of the Torridge Valley LCA are considered to be of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the River Torridge and associated mud flats, the Tarka Trail, deciduous woodland, Devon hedgebanks and hedge-banked lanes which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**.

Magnitude of Impact

2.8.28 The direct impacts of the landfall, Onshore HVDC Cable Corridor and Converter Site on the relevant key characteristics of the Torridge Valley LCA varies:

- *Main River Torridge deep and fast flowing, with a convoluted course and tightly meandering channel, with mud flats exposed at low tide:* There would be **no change** to this key characteristic, as the river would be crossed in a trenchless crossing, such as HDD
- *Small tributary valley south of Bideford dominated by Jennetts Reservoir:* There would be **no change** to this key characteristic, as the valley would be crossed using a trenchless crossing, such as HDD
- *Valley sides well-clothed in deciduous woodland which dominates skylines; some conifer plantations, particularly in the middle and upper reaches of the main valley:* All woodland would be avoided, due to routeing, or would be crossed using trenchless crossing, such as HDD. There would be **no change** to this key characteristic
- *Valley floor generally used for pastoral agriculture, with a mixture of pastoral and arable agriculture on higher land:* The Onshore HVDC Cable Corridor and some construction compounds would be located within fields in this LCA. The impact on this key characteristic would be localised in geographical extent, small-scale and temporary. The impact would be **small**
- *Fields generally semi-regular in shape comprising a mixture of medieval, post-medieval and modern enclosures based on earlier medieval fields; mainly enclosed by hedgerows or hedgebanks, but some loss of field boundaries in*

arable areas: The field pattern would not be affected. However, where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method would usually be trenched, which would require temporary removal of part of the hedgerow or hedgebank. The direct impact on these features would be of local geographical extent, short-term and temporary, with an overall impact of **medium** magnitude

- *Numerous historic features associated with the river, including weirs, mills, bridges, disused canal and railway line (now the 'Tarka Trail'):* There would be **no change** to the historic features associated with the river. The Tarka Trail would remain open throughout the construction phase.
- *Major roads and transport routes (e.g., A386 and the former Okehampton-Bideford railway line) generally follow the main valley floor, while upper reaches and tributary valleys have winding hedge-banked lanes with narrow stone bridges:* The major roads and transport routes would be crossed using trenchless techniques, such as HDD. Where lanes with high hedgebanks are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD, a sunken lanes may be one such feature. If a trenched method is used it would require temporary removal of part of the hedgebank. Where a trenched method is used, the direct impact on these features would be of local geographical extent, short-term and temporary, with an overall impact of **medium** magnitude.

Significance of the Effect

2.8.29 The significance of effects of the Proposed Development on the relevant key characteristics of the Torridge Valley LCA, are as follows:

- *Main River Torridge deep and fast flowing, with a convoluted course and tightly meandering channel, with mud flats exposed at low tide:* This high sensitivity receptor would experience no change during the construction phase. The significance of effect would be **none**
- *Small tributary valley south of Bideford dominated by Jennetts Reservoir:* This medium sensitivity receptor would experience no change during the construction phase. The significance of effect would be **none**
- *Valley sides well-clothed with deciduous woodland which dominates skylines; some conifer plantations, particularly in the middle and upper reaches of the main valley:* This high sensitivity receptor would experience no change during the construction phase. The significance of effect would be **none**
- *Valley floor generally used for pastoral agriculture, with a mixture of pastoral and arable agriculture on higher land:* This medium sensitivity receptor would experience a small impact. The localised, temporary effect would be **minor adverse**, which is not significant
- *Fields generally semi-regular in shape comprising a mixture of medieval, post-medieval and modern enclosures based on earlier medieval fields; mainly enclosed by hedgerows or hedgebanks, but some loss of field boundaries in arable areas:* The fields are a medium sensitivity receptor, while the hedgebanks are a high sensitivity receptor. The hedgebanks would experience a medium impact. The localised, temporary effect would be **moderate adverse**, which is not significant
- *Numerous historic features associated with the river, including weirs, mills, bridges, disused canal and railway line (now the 'Tarka Trail'):* This high

sensitivity receptor would experience no change during the construction phase. The significance of effect would be **none**

- *Major roads and transport routes (e.g., A386 and the former Okehampton-Bideford railway line) generally follow the main valley floor, while upper reaches and tributary valleys have winding hedge-banked lanes with narrow stone bridges:* Where a trenched method is used to cross the high-banked lanes, there would be a medium impact on these high sensitivity features. The temporary effect is judged to be **moderate adverse** and significant, due to the nature of the feature

2.8.30 The overall temporary effect on the Torridge Valley LCA is judged to be **minor adverse**, which is not significant.

High Culm Ridges LCA

2.8.31 The key characteristics of the High Culm Ridges LCA relevant to this assessment are:

- *Ridges divided by small spring-fed tributary streams, flowing into the Torridge (to the west).*
- *Extensive linear deciduous woodlands and some orchards in valleys; occasional windswept trees and hilltop clumps of beech; and blocks of coniferous plantation on higher ground.*
- *Farmland generally in pastoral use, with some areas of arable on better-quality land.*
- *Complex pattern of fields, generally with smaller, irregular fields around villages and on valley sides, and larger, more regular fields (suggesting more recent enclosure) on areas of higher land.*
- *Fields generally divided by hedgerows or hedgebanks in variable condition: some well-managed, others grown-out or closely flailed.*
- *Long views from high ground across the Torridge valleys, and to Exmoor, as well as views of the sea.*

Sensitivity of the Receptor

2.8.32 The key characteristics of the High Culm Ridges LCA are considered to be of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the deciduous woodland, Devon hedgebanks and long views from high ground, which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**.

Magnitude of Impact

2.8.33 The direct impacts of the landfall, Onshore HVDC Cable Corridor and Converter Site on the relevant key characteristics of the High Culm Ridges LCA varies:

- *Ridges divided by small spring-fed tributary streams, flowing into the Torridge (to the west):* The Converter Site would be located to the east and south of a ridge of high ground. The cut and fill techniques and the earth-modelling would be of local geographical extent, short-term and temporary, with an overall impact of **large** magnitude on this aspect of the key characteristic. There are

two watercourses/ditches that flow west to east outside the Converter Site and join a small stream, that flows west to the River Torridge. However, these watercourses/ditches would not be impacted by the Proposed Development. There would be **no change** to this key characteristic

- *Extensive linear deciduous woodlands and some orchards in valleys; occasional windswept trees and hilltop clumps of beech; and blocks of coniferous plantation on higher ground:* The Onshore HVDC Cable Corridor would be routed in such a way as to avoid woodlands and orchards or would use trenchless techniques, such as HDD where routeing is not an option. There would be **no change** to this key characteristic
- *Farmland generally in pastoral use, with some areas of arable on better-quality land:* During construction there would be impacts on the farmland along the Onshore HVDC Cable Corridor, where trenched techniques are used and construction compounds are located. The impact of the Onshore HVDC Cable Corridor on this key characteristic would be of local geographical extent, short-term and temporary, with an overall impact of **medium**. At the Converter Site the impact would be of **large** magnitude.
- *Complex pattern of fields, generally with smaller, irregular fields around villages and on valley sides, and larger, more regular fields (suggesting more recent enclosure) on areas of higher land:* The field pattern would not be changed during the construction phase. However, the field boundaries would be temporarily altered to allow trenched crossings. The direct impact on field patterns would be of local geographical extent, short-term and temporary, with an overall impact of **small** magnitude
- *Fields generally divided by hedgerows or hedgebanks in variable condition: some well-managed, others grown-out or closely flailed:* Where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method would usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method would require temporary removal of part of the hedgerow or hedgebank. The direct impact on these features would be of local geographical extent, short-term and temporary, with an overall impact of **medium** magnitude
- *Long views from high ground across the Torridge valleys, and to Exmoor, as well as views of the sea:* There would be a temporary impact of views from elevated land towards the Converter Site and the eastern part of the Onshore HVDC Cable Corridor. The direct impact on views would be of local geographic extent, short-term and temporary. The impact on the views of the landscape would be **small**.

Significance of the Effect

2.8.34 The significance of effects of the Proposed Development on the relevant key characteristics of the High Culm Ridges LCA, are as follows:

- *Ridges divided by small spring-fed tributary streams, flowing into the Torridge (to the west):* The ridges of the High Culm are a medium sensitivity characteristic. There would be a localised, but large impact on this key characteristic at the Converter Site. The temporary effect would be **major adverse**, which is significant. The effect on the water courses would be **none**

- *Extensive linear deciduous woodlands and some orchards in valleys; occasional windswept trees and hilltop clumps of beech; and blocks of coniferous plantation on higher ground:* No woodland or orchards would be removed as a result of the construction works of the Proposed Development. The significance of effect is **none**
- *Farmland generally in pastoral use, with some areas of arable on better-quality land:* Along the Onshore HVDC Cable Corridor the impact on this medium sensitivity receptor is medium, the effect is **moderate adverse** and not significant. At the Converter Site the temporary, localised impact is large, the effect is judged to be **major adverse**, which is significant
- *Complex pattern of fields, generally with smaller, irregular fields around villages and on valley sides, and larger, more regular fields (suggesting more recent enclosure) on areas of higher land:* The impact on this medium sensitivity receptor is small, the localised effect is judged to be **minor adverse**, which is not significant
- *Fields generally divided by hedgerows or hedgebanks in variable condition:* some well-managed, others grown-out or closely flailed: The Devon hedgebanks are a high sensitivity landscape receptor. Where the hedgebanks are in good condition the impact would be medium, where they are in poor condition the impact would be less. Overall, the localised, temporary effect on this receptor would be **moderate adverse** and not significant
- *Long views from high ground across the Torridge valleys, and to Exmoor, as well as views of the sea:* The long views are a high sensitivity key characteristic, the impact of the construction works on long views would be small and localised. The effect on this key characteristic is judged to be **minor adverse**, which is not significant.

2.8.35 Taking into account the small area of this large LCA that is affected by the construction works of the Proposed Development, the overall temporary effect on the High Culm Ridges LCA is judged to be **moderate adverse** and not significant.

North Devon Seascape Character Area

Landfall

2.8.36 The landfall of the Proposed Development is located within Seascape Character Area (SCA) 21: Abbotsham Coast (Volume, 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report of the PEIR, Figure 2.2.3). The key characteristics for the SCA are set out within the same Appendix.

SCA 21: Abbotsham Coast

2.8.37 The key characteristics of the SCA 21 Abbotsham Coast relevant to this assessment are:

- *Undulating coastline with steep cliffs rising to over 90 m in the south west of the SCA, but dropping to a lower and more rounded profile in the north east, backed by undulating coastal farmland.*
- *Pastoral and arable fields extending to and between the cliff tops in places, including unimproved grasslands.*

- *Characteristic fine pebble ridge at cliff bases, fronted by a wide rocky foreshore (wave cut platform), with beds trending seawards to form biogenetic reefs.*
- *Gradual transition from a remote, rugged seascape in the south-west to gentler, more undulating and pastoral coastal scenery where the cliffs drop to shore level in places.*

Sensitivity of the Receptor

2.8.38 The key characteristics of SCA 21: Abbotsham Coast are considered to be of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the steep cliffs, the pebble ridge and wave-cut platform and the coastal scenery, which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**.

Magnitude of Impact

2.8.39 The direct impacts of the landfall, on the relevant key characteristics of SCA 21: Abbotsham Coast varies:

- *Undulating coastline with steep cliffs rising to over 90 m in the south west of the SCA, but dropping to a lower and more rounded profile in the north east, backed by undulating coastal farmland:* There would be **no change** to the coastal cliffs or coastline as the coastline would be crossed using a trenchless techniques, such as HDD. However, there would be a direct, localised, short-term, temporary **small** impact to the coastal farmland, where the construction compounds close to the TJBs would be located
- *Pastoral and arable fields extending to and between the cliff tops in places, including unimproved grasslands:* There would be a direct, localised, short-term, temporary **small** impact to the coastal farmland, where the construction compounds close to the TJBs would be located
- *Characteristic fine pebble ridge at cliff bases, fronted by a wide rocky foreshore (wave cut platform), with beds trending seawards to form biogenetic reefs:* There would be **no change** to the pebble ridge or the rocky foreshore as they would be crossed using a trenchless techniques, such as HDD
- *Gradual transition from a remote, rugged seascape in the south-west to gentler, more undulating and pastoral coastal scenery where the cliffs drop to shore level in places:* The key characteristic pastoral coastal scenery would experience a direct, local, short-term and temporary **small** impact.

Significance of the Effect

2.8.40 The significance of effects of the Proposed Development on the relevant key characteristics of SCA 21: Abbotsham Coast, are as follows:

- *Undulating coastline with steep cliffs rising to over 90 m in the south west of the SCA, but dropping to a lower and more rounded profile in the north east, backed by undulating coastal farmland:* The high sensitivity cliffs would experience no change, the significance of effects would be **none**. The medium sensitivity coastal farmland would experience a small impact. The localised, temporary effects are judged to be **minor adverse**, which are not significant

- *Pastoral and arable fields extending to and between the cliff tops in places, including unimproved grasslands:* This medium sensitivity characteristic would experience a small impact. The localised temporary effect is judged to be **minor adverse**, which is not significant
- *Characteristic fine pebble ridge at cliff bases, fronted by a wide rocky foreshore (wave cut platform), with beds trending seawards to form biogenetic reefs:* The high sensitivity receptor, would experience no change. The significance of effect would be **none**
- *Gradual transition from a remote, rugged seascape in the south-west to gentler, more undulating and pastoral coastal scenery where the cliffs drop to shore level in places:* This high sensitivity characteristic would experience a small impact. The localised, temporary effect is judged to be **minor adverse,** which is not significant.

2.8.41 The overall temporary effect on SCA 21: Abbotsham Coast is judged to be **minor adverse** and not significant.

North Devon and Torridge District Landscape Character Types – directly affected

2.8.42 The North Devon District and Torridge District LCT that would be directly affected by the Proposed Development during the construction, phases of the proposed development are (from the west/landfall):

- 4H: Cliffs;
- 5B: Coastal Undulating Farmland;
- 3H: Secluded Valleys;
- 4A: Estuaries;
- 3G: River Valley Slopes and Combes;
- 5A: Inland Elevated Undulating Land; and
- 1F: Farmed Lowland Moorland and Culm Grassland.

LCT 4H: Cliffs

2.8.43 The key characteristics of the LCT 4H: Cliffs relevant to this chapter are:

- *A largely undeveloped coastline of steep rocky or vegetated cliffs of varying height often punctuated by dramatic features such as waterfalls, rocky coves and features such as stacks and sea arches.*
- *Distinctive and internationally renowned exposed rock stratifications often clearly visible.*
- *Extensive and dramatic views, reaching out to sea (often to Lundy), along the coastline.*
- *Occasional minor combes draining to the sea often lined by ancient sessile oak woodland.*
- *Rough grazing land on sloping cliff tops, with field boundaries of post-and-wire fencing or stone-faced hedgebanks.*

- *A 'wild' and remote landscape with high levels of tranquillity. Access is largely restricted to the South West Coast Path.*

Sensitivity of the Receptor

2.8.44 The key characteristics of LCT 4H: Cliffs are considered to be of high susceptibility and high value. The overall sensitivity of the key characteristics is **high**. The exceptions to this are the minor coombes and rough grazing land, which have a medium susceptibility and a medium value. The overall sensitivity of these key characteristics is **medium**.

Magnitude of Impact

2.8.45 The direct impacts of the landfall, on the relevant key characteristics of LCT 4H: Cliffs varies:

- *A largely undeveloped coastline of steep rocky or vegetated cliffs of varying height…:* There would be no physical impact on the coastline as the cables would cross the coast using a trenchless crossing technique, such as HDD. However, there would be views of the barge used during the construction works. The direct impact would be local in geographical extent, short-term and temporary. The impact on this key characteristic would be **negligible**
- *Distinctive and internationally renowned exposed rock stratifications often clearly visible:* There would be **no change** to the coastline as the cables would cross the coast using a trenchless crossing technique, such as HDD
- *Extensive and dramatic views, reaching out to sea (often to Lundy), along the coastline:* The views out to sea would not be compromised. However, some views may include the barge used during the construction works. The direct impact would be local in geographical extent, short-term and temporary. The impact on this key characteristic would be **negligible**
- *Occasional minor combes draining to the sea often lined by ancient sessile oak woodland:* No woodland would be affected by the construction works. The TJBs and construction at the landfall would take place in a small coombe. The direct impact would be local in geographical extent, short-term and temporary. The impact on this key characteristic would be **small**
- *Rough grazing land on sloping cliff tops, with field boundaries of post-and-wire fencing or stone-faced hedgebanks:* The TJBs and construction at the landfall would take place in a rough-grazed pasture. There are no hedgebanks affected in this location. The direct impact would be local in geographical extent, short-term and temporary. The impact on this key characteristic would be **small**
- *A 'wild' and remote landscape with high levels of tranquillity. Access is largely restricted to the South West Coast Path:* The part of this LCT, situated within the LSVIA study area is not particularly wild or remote. There would be a temporary impact on tranquillity as the construction works at the landfall take place from the barge located in the sea and the works at the landward side, at the TJBs and construction compounds would also be visible. The direct impact on tranquillity would be of local geographical extent, short-term and temporary. The impact on tranquillity would be **small**.

Significance of the Effect

2.8.46 The significance of effects of the Proposed Development on the relevant key characteristics of LCT 4H: Cliffs, are as follows:

- *A largely undeveloped coastline of steep rocky or vegetated cliffs of varying height…:* This high sensitivity characteristic would experience a negligible impact. The localised, temporary effect is judged to be **minor adverse**, which is not significant.
- *Distinctive and internationally renowned exposed rock stratifications often clearly visible:* This high sensitivity receptor would experience no change. The significance of effect is **none.**
- *Extensive and dramatic views, reaching out to sea (often to Lundy), along the coastline:* This high sensitivity characteristic would experience a negligible impact. The localised, temporary effect is judged to be **minor adverse**, which is not significant.
- *Occasional minor combes draining to the sea often lined by ancient sessile oak woodland:* This medium sensitivity receptor would experience a small impact. The localised, temporary effect is judged to be **minor adverse**, which is not significant.
- *Rough grazing land on sloping cliff tops, with field boundaries of post-and-wire fencing or stone-faced hedgebanks:* This medium sensitivity receptor would experience a small impact. The localised, temporary effect is judged to be **minor adverse**, which is not significant.
- *A 'wild' and remote landscape with high levels of tranquillity. Access is largely restricted to the South West Coast Path:* This part of the LCT is not wild or remote. However, tranquillity is a high sensitivity characteristic and would experience a small impact. The localised, temporary effect on tranquillity is judged to be **moderate adverse**, but not significant.

2.8.47 The overall temporary effect on LCT 4H: Cliffs is judged to be **minor adverse** and not significant.

LCT 5B: Coastal Undulating Farmland

2.8.48 The key characteristics of the LCT 5B: Coastal Undulating Farmland relevant to this chapter are:

- *Strongly rolling landscape with prominent ridges and hilltops, influenced by the close proximity of the sea.*
- *Pervading maritime influence with long coastal views, including to coastal settlements and to the north-west peninsula of the north Devon coastline.*
- *Linear bands of broadleaved woodland, occasional small mixed woods, ornamental parklands and blocks of conifer plantation combined with a strong network of hedges resulting in a well-treed appearance.*
- *Strong pattern of regular medium-large fields of post-medieval and modern origin, interspersed with significant areas of smaller curving or medieval strip fields (e.g. around Rickard's Down).*
- *Fields bounded by Devon hedges of mixed species with flower-rich banks and some sections of stone facing. The use of hawthorn, hazel, elm and/or beech is locally characteristic. Patches of gorse reinforce a sense of exposure*

- *Predominantly pastoral land use, with occasional arable fields and patches of rough grazing land.*
- *Settlement and farms linked by a network of rural roads enclosed by high hedgebanks. The main A39 cuts through the area.*

Sensitivity of the Receptor

2.8.49 The key characteristics of LCT 5B: Coastal Undulating Farmland are considered to be of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the long coastal views, broadleaved woodland and Devon hedgebanks, which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**.

Magnitude of Impact

2.8.50 The direct impacts of the landfall and the Onshore HVDC Cable Corridor (part) on the relevant key characteristics of LCT 5B: Coastal Undulating Farmland varies:

- *Strongly rolling landscape with prominent ridges and hilltops, influenced by the close proximity of the sea:* The landfall and eastern part of the Onshore HVDC Cable Corridor passes through this landscape. The TJBs and the Onshore HVDC Cable Corridor would be buried but there would be construction compounds and haul roads within this LCT in the interim. The direct impact would be local in geographical extent, short-term and temporary. The impact on this key characteristic would be **small**.
- *Pervading maritime influence with long coastal views, to coastal settlements and to the north-west peninsula of the North Devon coastline:* The long coastal views would not be obstructed in any way. However, the construction works along the Onshore HVDC Cable Corridor might be visible from some inland locations. The direct impact would be local in geographical extent, short-term and temporary. The impact on this key characteristic would be **negligible**.
- *Linear bands of broadleaved woodland, occasional small mixed woods, ornamental parklands and blocks of conifer plantation combined with a strong network of hedges resulting in a well-treed appearance:* The Onshore HVDC Cable Corridor has either been routed around woodland or would cross underneath, using a trenchless technique, such as HDD. There would be **no change** to this key characteristic.
- *Strong pattern of regular medium-large fields of post-medieval and modern origin, interspersed with significant areas of smaller curving or medieval strip fields (e.g. around Rickard's Down):* There would be no alteration to field boundaries. However, during the construction works the field boundaries may be temporarily removed to allow trenched crossings and the fields may have construction works or compounds located within them. The direct impact would be local in geographical extent, short-term and temporary. The impact on this key characteristic would be **small**.
- *Fields bounded by Devon hedges of mixed species with flower-rich banks and some sections of stone facing. The use of hawthorn, hazel, elm and/or beech is locally characteristic. Patches of gorse reinforce a sense of exposure:* Where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method would usually be trenched. Where they are close to, or part of, larger features, they may be

crossed using a trenchless technique, such as HDD. The trenched method would require temporary removal of part of the hedgerow or hedgebank. The direct impact on these features would be of local geographical extent, short-term and temporary, with an overall impact of **medium** magnitude

- *Predominantly pastoral land use, with occasional arable fields and patches of rough grazing land:* During the construction phase, some fields would have the cable route or construction compounds located within them. The direct impact would be local in geographical extent, short-term and temporary. The impact on this key characteristic would be **small**
- *Settlement and farms linked by a network of rural roads enclosed by high hedgebanks. The main A39 cuts through the area:* The A39 would be crossed using a trenchless technique, such as HDD and would not be affected. Where lanes with high hedgebanks are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD, sunken lanes may be one such feature. If a trenched method is used it would require temporary removal of part of the hedgebank. Where a trenched method is used, the direct impact on these features would be of local geographical extent, short-term and temporary, with an overall impact of **medium** magnitude.

Significance of the Effect

2.8.51 The significance of effects of the Proposed Development on the relevant key characteristics of LCT 5B: Coastal Undulating Farmland, are as follows:

- *Strongly rolling landscape with prominent ridges and hilltops, influenced by the close proximity of the sea:* This medium sensitivity receptor would experience a small impact. The localised, temporary effect would be **minor adverse**, which is not significant.
- *Pervading maritime influence with long coastal views, including westwards towards Clovelly and eastwards to development at Bideford, Westward Ho! and the north-west peninsula (including Baggy Point):* This high sensitivity characteristic would experience a negligible impact. The localised, temporary effect is judged to be **minor adverse**, which is not significant.
- *Linear bands of broadleaved woodland, occasional small mixed woods and blocks of conifer plantation combined with a strong network of hedges resulting in a well-treed appearance:* The broadleaved woodlands are high sensitivity receptors and conifer plantations medium sensitivity receptors. However, there would be no change to woodlands. The significance of effect is **none**.
- *Strong pattern of regular medium-large fields of post-medieval and modern origin, interspersed with significant areas of smaller curving or medieval strip fields (e.g. around Rickard's Down):* This medium sensitivity receptor would experience a small impact. The localised, temporary effect is judged to be **minor adverse**, which is not significant.
- *Fields bounded by mixed species Devon hedges with flower-rich banks and some sections of stone facing. The use of hawthorn, hazel, elm and/or beech is locally characteristic. Patches of gorse reinforce a sense of exposure:* The Devon hedgebanks are a high sensitivity receptor, that would experience a medium impact. The localised, temporary effect is judged to be **moderate adverse**, but not significant.

- *Predominantly pastoral land use, with occasional arable fields and patches of rough grazing land:* This medium sensitivity receptor would experience a small impact. The localised, temporary effect is judged to be **minor adverse**, which is not significant.
- *Settlement and farms linked by a network of rural roads enclosed by high hedgebanks. The main A39 cuts through the area:* The A39 is not affected. The hedgebanks are a high sensitivity receptor that would experience a medium impact. The localised, temporary effect is judged to be **moderate adverse**, but not significant.

2.8.52 The overall temporary effect on LCT 5B: Coastal Undulating Farmland is judged to be **moderate adverse**, but not significant.

LCT 3H: Secluded Valleys

2.8.53 The key characteristics of the LCT 3H: Secluded Valleys relevant to this chapter are:

- *Steep-sided, incised valleys with fast-flowing streams and rivers carving through the landscape, crowned by rounded hill summits.*
- *Includes the main tributary valleys of the River Torridge.*
- *Dense tree cover cloaking valley sides, including ancient semi-natural oak woodlands with a colourful ground flora, beech-dominated broadleaved woodlands, and conifer blocks. Patches of wet woodland tracing river/stream courses.*
- *Mixture of field sizes and shapes – often smaller, irregular medieval enclosures on lower slopes, with upper slopes merging into larger post-medieval and modern fields, often retaining earlier curving boundaries.*
- *Species-rich Devon hedges on wildflower-rich banks, with bank-side ferns and frequent hedgerow trees associated with lower valley locations.*
- *Steep valley sides dominated by pasture grazed by sheep and cattle, with patches of rough grazing land on upper slopes and rushy meadows fringing watercourses.*
- *High levels of peace and tranquillity frequently defined by sounds of rushing water echoing out from the valley bottoms, though locally impacted by main roads in some valleys.*

Sensitivity of the Receptor

2.8.54 The key characteristics of LCT 3H: Secluded valleys are considered to be of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the steep-sided valleys, the ancient semi natural woodland/broadleaved woodland, rushy meadows, Devon hedgebanks and tranquillity, which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**.

Magnitude of Impact

2.8.55 The direct impacts of the Onshore HVDC Cable Corridor (part) on the relevant key characteristics of LCT 3H: Secluded Valleys varies:

- *Steep-sided, incised valleys with fast-flowing streams and rivers carving through the landscape, crowned by rounded hill summits:* The steep sided valleys would be crossed using trenchless techniques, such as HDD. There would be **no change** to these key characteristics.
- *Includes the main tributary valleys of the Torridge:* The tributary valleys would be crossed using trenchless techniques, such as HDD. There would be **no change** to these key characteristics.
- *Dense tree cover cloaking valley sides, including ancient semi-natural oak woodlands with a colourful ground flora, beech-dominated broadleaved woodlands, and conifer blocks. Patches of wet woodland tracing river/stream courses:* The Onshore HVDC Cable Corridor has been routed to avoid areas of woodland. Where this is not possible trenchless techniques, such as HDD, would be used to go under the woodland. There would be **no change** to these key characteristics.
- *Mixture of field sizes and shapes – often smaller, irregular medieval enclosures on lower slopes, with upper slopes merging into larger post-medieval and modern fields, often retaining earlier curving boundaries:* There would be no alteration to field boundaries. However, during the construction works sections of the field boundaries may be temporarily removed to allow trenched crossings and the fields may have construction works or compounds located within them. The direct impact would be local in geographical extent, short-term and temporary. The impact on this key characteristic would be **small.**
- *Species-rich Devon hedges on wildflower-rich banks, with bank-side ferns and frequent hedgerow trees associated with lower valley locations:* Where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method would usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method would require temporary removal of part of the hedgerow or hedgebank. The direct impact on these features would be of local geographical extent, short-term and temporary, with an overall impact of **medium** magnitude.
- *Steep valley sides dominated by pasture grazed by sheep and cattle, with patches of rough grazing land on upper slopes and rushy meadows fringing watercourses:* During the construction works sections of the field boundaries may be temporarily removed to allow trenched crossings and the fields may have construction works or compounds located within them. The direct impact would be local in geographical extent, short-term and temporary. The impact would be **small.**
- *High levels of peace and tranquillity frequently defined by sounds of rushing water echoing out from the valley bottoms, though locally impacted by main roads in some valleys:* Along the Onshore HVDC Cable Corridor there would be a reduction in tranquillity, however, as it only crosses a small part of this LCT, the direct impact would be local in geographical extent, short-term and temporary. The impact on this key characteristic would be **small**.

Significance of the Effect

2.8.56 The significance of effects of the Proposed Development on the relevant key characteristics of LCT 3H: Secluded Valleys, are as follows:

- *Steep-sided, incised valleys with fast-flowing streams and rivers carving through the landscape, crowned by rounded hill summits:* This high sensitivity receptor would experience no change. The significance of effects is **none.**
- *Includes the main tributary valleys of the Torridge:* This high sensitivity receptor would experience no change. The significance of effects is **none**.
- *Dense tree cover cloaking valley sides, including ancient semi-natural oak woodlands with a colourful ground flora, beech-dominated broadleaved woodlands, and conifer blocks. Patches of wet woodland tracing river/stream courses:* This high sensitivity receptor would experience no change. The significance of effects is **none**.
- *Mixture of field sizes and shapes – often smaller, irregular medieval enclosures on lower slopes, with upper slopes merging into larger post-medieval and modern fields, often retaining earlier curving boundaries:* This medium sensitivity receptor would experience a small impact. The localised, temporary effect is judged to be **minor adverse**, which is not significant.
- *Species-rich Devon hedges on wildflower-rich banks, with bank-side ferns and frequent hedgerow trees associated with lower valley locations:* This high sensitivity receptor would experience a medium impact. The localised, temporary effect is judged to be **moderate averse**, but not significant.
- *Steep valley sides dominated by pasture grazed by sheep and cattle, with patches of rough grazing land on upper slopes and rushy meadows fringing watercourses:* This is a medium sensitivity receptor which would experience a small impact. The localised, temporary effect is judged to be **minor adverse**, which is not significant.
- *High levels of peace and tranquillity frequently defined by sounds of rushing water echoing out from the valley bottoms, though locally impacted by main roads in some valleys:* This high sensitivity characteristic would experience a small impact. The localised, temporary effect is judged to be **minor adverse**, which is not significant.

2.8.57 The overall temporary effect on LCT 3H: Secluded Valleys is judged to be **minor adverse**, which is not significant.

LCT 4A: Estuaries

2.8.58 The Onshore HVDC Cable Corridor would cross this LCT in a trenchless crossing and so would not affect any of its key characteristics.

LCT 3G: River Valley Slopes and Combes

2.8.59 The Onshore HVDC Cable Corridor would cross this LCT in a trenchless crossing and so would not affect any of its key characteristics.

LCT 5A: Inland Elevated Undulating Land

2.8.60 The key characteristics of the LCT 5A: Inland Elevated Undulating Land relevant to this chapter are:

- *Elevated land cut by a series of tributaries forming folds in the landform.*

- *Tributary valleys lined by broadleaved and wet woodland providing contrasting shelter and texture. Small farm woods, occasional conifer blocks and avenues of mature beech on hill summits and along roadsides.*
- *Medium-scale regular fields of recent enclosure, with pockets of smaller fields of medieval origin on valley slopes and tracts of unenclosed rough grazing along valley bottoms.*
- *Fields enclosed by mixed species hedges (predominantly thorn) with flower-rich banks and frequent hedgerow trees in sheltered locations. Some locally distinctive hedges topped with gorse and beech. Occasional amalgamated fields bounded by fences.*
- *Strong farmed character with pasture fields grazed by cattle and sheep a frequent occurrence en-route, occasional fields of arable cultivation and rough grazing of rushy meadows along valleys although mostly rather improved grassland.*

Sensitivity of the Receptor

2.8.61 The key characteristics of LCT 5A: Inland Elevated Undulating Land are of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the tributary valleys, the broadleaved and wet woodland, Devon hedgebanks and rushy meadows, which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**.

Magnitude of Impact

2.8.62 The direct impacts of the Onshore HVDC Cable Corridor (part) and the Converter Site, on the relevant key characteristics of LCT 5A: Inland Elevated Undulating Land varies:

- *Elevated land cut by a series of tributaries forming folds in the landform:* The Onshore HVDC Cable Corridor would cross these tributaries using trenchless techniques, such as HDD. There would be **no change** to these key characteristics from the Onshore HVDC Cable Corridor. At the Converter Site, the elevated land would experience a **large** direct, localised, short-term and temporary impact during the construction phase
- *Tributary valleys lined by broadleaved and wet woodland providing contrasting shelter and texture. Small farm woods, occasional conifer blocks and avenues of mature beech on hill summits and along roadsides:* There would be **no change** to these key characteristics from the Proposed Development, as the Onshore HVDC Cable Corridor and Converter Site would be routed/located to avoid these features. Where the Onshore HVDC Cable Corridor cannot avoid valleys or woodland, it would cross them using trenchless techniques, such as HDD
- *Medium-scale regular fields of recent enclosure, with pockets of smaller fields of medieval origin on valley slopes and tracts of unenclosed rough grazing along valley bottoms:* There would be no alteration to field boundaries, due to the construction of the Onshore HVDC Cable Corridor. However, during the construction works sections of the field boundaries may be temporarily removed to allow trenched crossings and the fields may have construction works or compounds located within them. The direct impact on this characteristic from the construction of the Onshore HVDC Cable Corridor

would be local in geographical extent, short-term and temporary. The impact on this key characteristic from the Onshore HVDC Cable Corridor would be **small**. The Converter Site would be located in larger fields, of more recent enclosure. The direct impacts would be local in geographical extent, short-term and temporary. The impact of the construction of the Converter Site on these fields would be **large.**

- *Fields enclosed by mixed species hedges (predominantly thorn) with flower-rich banks and frequent hedgerow trees in sheltered locations. Some locally distinctive hedges topped with gorse and beech. Occasional amalgamated fields bounded by fences:* Where the HVDC and HVAC cable corridors cross hedgerows and hedgebanks as boundaries to fields the crossing method would usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method would require temporary removal of part of the hedgerow or hedgebank. The direct impact on these features would be of local geographical extent, short-term and temporary, with an overall impact of **medium** magnitude. The construction of the Converter Site would not require the removal of hedgebanks.
- *Strong farmed character with pasture fields grazed by cattle and sheep a frequent occurrence en-route, occasional fields of arable cultivation and rough grazing of rushy meadows along valleys although mostly rather improved grassland:* During the construction works sections of the field boundaries may be temporarily removed to allow trenched crossings and the fields may have construction works or compounds located within them. There is one area of rushy/wet meadow close to Bipole 2, which would be crossed using a trenched crossing. The direct impact on the rushy/wet meadow and associated mature wet oak woodland field boundaries from the construction of the Onshore HVDC Cable Corridor would be local in geographical extent, short-term and temporary and **medium**. The Converter Site would be located in larger fields, of more recent enclosure. The direct impacts would be local in geographical extent, short-term and temporary. The impact of the construction of the Converter Site on the farmed characteristic would be **large**.

Significance of the Effect

2.8.63 The significance of effects of the Proposed Development on the relevant key characteristics of LCT 5A: Inland Elevated Undulating Land, are as follows:

- *Elevated land cut by a series of tributaries forming folds in the landform:* This high sensitivity receptor would experience no change from the construction of the Onshore HVDC Cable Corridor. The significance of effects is **none**. The construction of the Converter Site would have a large effect on the elevated land. The temporary direct effects would be **major adverse**, which is significant
- *Tributary valleys lined by broadleaved and wet woodland providing contrasting shelter and texture. Small farm woods, occasional conifer blocks and avenues of mature beech on hill summits and along roadsides:* There would be no change to this high sensitivity receptor. The significance of effect would be **none**
- *Medium-scale regular fields of recent enclosure, with pockets of smaller fields of medieval origin on valley slopes and tracts of unenclosed rough grazing along valley bottoms:* The construction of the Onshore HVDC Cable Corridor

on this medium sensitivity characteristic would have a small impact. The localised, temporary effect is judged to be **minor adverse** and not significant. The construction of the Converter Site on this characteristic would have a large impact. The localised, temporary effect is judged to be **moderate adverse**, but not significant.

- *Fields enclosed by mixed species hedges (predominantly thorn) with flower-rich banks and frequent hedgerow trees in sheltered locations. Some locally distinctive hedges topped with gorse and beech. Occasional amalgamated fields bounded by fences:* The HVDC and HVAC Cables may cross field boundaries of high sensitivity, the impact would be medium. The localised, temporary effect is judged to be **moderate adverse**, but not significant
- *Strong farmed character with pasture fields grazed by cattle and sheep a frequent occurrence en-route, occasional fields of arable cultivation and rough grazing of rushy meadows along valleys although mostly rather improved grassland:* The HVDC and HVAC Cables would have a medium impact on the high sensitivity rushy/wet meadow with its associated mature species-rich (wet oak) field boundaries. The localised, temporary effect would be **moderate adverse** and significant. The construction of the Converter Site would have a large impact on this medium sensitivity receptor. The localised, temporary significance of effects would be **moderate adverse** and significant.

2.8.64 The overall temporary effect on LCT 5A: Inland Elevated Undulating Land is judged to be **moderate adverse**, but not significant.

LCT 3A Upper Farmed and Wooded Valley Slopes

2.8.65 This LCT lies within the Proposed Development Draft Order Limits, and it abuts the northern field of the Converter Site. While it does not host the Converter Site or the Onshore HVDC Cable Corridor, it would be affected by the movement of pylons and overhead lines within it, to the south of the minor road from Webbery Cross/Webbery Barton to Alverdiscott.

2.8.66 The key characteristics that have the potential to be affected by the Proposed Development are:

- *A pastoral landscape, with some fields of arable cultivation on higher slopes, forming a strong mosaic with copses, interlinking Devon hedges and small woodlands as well as occasional small blocks of coniferous plantation.*
- *Some areas of intensive arable cultivation in larger, regular fields found on more elevated land. Villages and tributary valleys often characterised by smaller, historic field patterns.*
- *Nature conservation interest provided by areas of species-rich Culm grassland, rich valley mire, wet woodland and damp meadows associated with tributary valleys and springs. Patches of gorse on higher slopes give some areas an upland feel.*
- *Main roads prominent pylon lines and the influence of modern development at Bideford and East the Water erode levels of tranquillity locally – although overall this is a peaceful and highly rural landscape.*
- *Square church towers form strong local landmark features peeping through the rolling hills.*

Sensitivity of the Receptor

2.8.67 The key characteristics of LCT 3A: Upper Farmed and Wooded Valley Slopes are of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the broadleaved copses and wet woodland, Devon hedgebanks, Culm grassland and damp meadows, as well as the views of the church towers, which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**. The infrastructure (main roads and electrical infrastructure) have a low susceptibility and low value, the sensitivity of which is **low**.

Magnitude of Impact

2.8.68 The direct impacts of the realignment of the overhead lines and pylons on the key characteristics varies:

- *A pastoral landscape, with some fields of arable cultivation on higher slopes, forming a strong mosaic with copses, interlinking Devon hedges and small woodlands as well as occasional small blocks of coniferous plantation:* There would be **no change** to these elements and character, as the pylons would be realigned, but would not remove existing landscape elements.
- *Some areas of intensive arable cultivation in larger, regular fields found on more elevated land. Villages and tributary valleys often characterised by smaller, historic field patterns:* There would be **no change** to these elements and character, as the pylons would be realigned, but would not remove existing landscape elements.
- *Nature conservation interest provided by areas of species-rich Culm grassland, rich valley mire, wet woodland and damp meadows associated with tributary valleys and springs. Patches of gorse on higher slopes give some areas an upland feel…:* There would be **no change** to these elements and character, as the pylons would be realigned, but would not remove existing landscape elements.
- *Main roads prominent pylon lines and the influence of modern development at Bideford and East the Water erode levels of tranquillity locally – although overall this is a peaceful and highly rural landscape:* There would be **no change** to these elements and character, as the pylons would be realigned, but would not remove existing landscape elements. The realignment works might have a any peace and tranquillity that might exist in the land to the north of the Converter Site.
- *Square church towers form strong local landmark features peeping through the rolling hills…:* The realignment works of the pylons and overhead lines might have a localised, short-term and reversible temporary **small** impact on views of church towers.

Significance of the Effect

2.8.69 The significance of effects of the Proposed Development on the relevant key characteristics are:

- *A pastoral landscape, with some fields of arable cultivation on higher slopes, forming a strong mosaic with copses, interlinking Devon hedges and small woodlands as well as occasional small blocks of coniferous plantation:* This key characteristic has a mix of medium and high sensitivity resources and

receptors. As there would be no change to these, the significance of effect is judged to be **none.**

- *Some areas of intensive arable cultivation in larger, regular fields found on more elevated land. Villages and tributary valleys often characterised by smaller, historic field patterns:* The sensitivity of the landscape characteristics are medium. However, as there would be no impact, the significance of effect is judged to be **none**.
- *Nature conservation interest provided by areas of species-rich Culm grassland, rich valley mire, wet woodland and damp meadows associated with tributary valleys and springs. Patches of gorse on higher slopes give some areas an upland feel….:* The sensitivity of these resources is high. However, as there would be no impact, the effect is judged to be **none**.
- *Main roads prominent pylon lines and the influence of modern development at Bideford and East the Water erode levels of tranquillity locally – although overall this is a peaceful and highly rural landscape:* The realignment works of the pylons and overhead lines have a small impact on a high sensitivity receptor, which is judged to have a temporary **minor adverse** effect, which is not significant.
- *Square church towers form strong local landmark features peeping through the rolling hills….:* The realignment works of the pylons and overhead lines have a small impact on a high sensitivity receptor, which is judged to have a temporary **minor adverse** effect, which is not significant.

2.8.70 The overall significance of temporary effect on this large LCT is judged to be **negligible adverse**, which is not significant.

LCT 1F: Farmed Lowland Moorland and Grassland

2.8.71 This LCT lies adjacent to the LCT that the Converter Site are located within (LCT 5A: Inland Elevated Undulating Land) approximately 325 m from the Proposed Development. No development is proposed within LCT 1F, however, it is taken forward to the assessment stage, as it lies within the Proposed Development Draft Order Limits. The relevant perceptual key characteristics to consider are:

- *Pastoral character including rough cattle/sheep grazing on expanses of Culm grassland and heath. More intensive farming, including occasional arable fields, poultry units and localised pony paddocks on the fringes of the 'moors'.*
- *Wind turbines visually influence parts of the landscape, notably a large wind farm in north Devon and several small wind farm developments in Torridge.*
- *Golf courses, fishing lakes, caravan parks, equestrian centres, disused airfields, industrial land uses and main roads dilute perceptions of tranquillity and remoteness locally.*
- *Elevation affording long views across the landscape and beyond - e.g. to the contrasting lush green fields of the surrounding farmland and the high moorland landscapes of Dartmoor and Exmoor.*

2.8.72 This is an extensive LCT that covers various parts of North Devon. One section lies to the southeast of the Converter Site, which is located at its most north-westerly point.

2.8.73 The perceptual qualities that have the potential to be affected by the proposed development are: Long views from elevated land, e.g., to Exmoor and Dartmoor;

and, high levels of tranquillity and remoteness, although it is also noted that the perceptions of tranquillity and remoteness are diluted by modern development and recreational land uses.

Sensitivity of the Receptor

2.8.74 Long views, tranquillity and remoteness are high value perceptual qualities, of high susceptibility. The sensitivity of these qualities is **high**.

Magnitude of Impact

2.8.75 The indirect impacts on these qualities varies:

- *Long views:* The Proposed Development lies to the west of the majority of this LCT and does not lie between the LCT and views of Exmoor and Dartmoor. However, the construction works may feature at the periphery of some long views. The indirect impact of this temporary localised, short-term, reversible effect would be **small**
- *Tranquillity and remoteness:* The part of the LCT that lies within the ZTV of the Converter Site is not remote, the construction works may affect some aspects of tranquillity. The indirect impact of this temporary localised, short-term, reversible effect would be **small**.

Significance of the Effect

2.8.76 The significance of indirect effects of the Proposed Development on the perceptual qualities

- *Long views:* There would be a small impact on this high sensitivity receptor. The temporary effect is judged to be **minor adverse**, which is not significant
- *Tranquillity and remoteness:* There would be a small impact on this high sensitivity receptor. The temporary effect is judged to be **minor adverse**, which is not significant.

2.8.77 The overall temporary significance of effect, experienced by the LCT is judged to be **negligible adverse**, which is not significant.

North Devon and Torridge District Landscape Character Types - Indirectly Affected

2.8.78 None of the North Devon District and Torridge District LCT indirectly affected by the construction of the Proposed Development, have been taken forward to the assessment stage, as there is no potential for these LCTs to experience significant effects.

Assessment of Construction Effects on Views and Visual Amenity

Visual Receptor Groups

People using Public Rights of Way and Access Land

Landfall and Onshore HVDC Cable Corridor – Construction Effects

2.8.79 Within 1 km of the proposed landfall and Onshore HVDC Cable Corridor there are a number of PRoW including the South West Coast Path National Trail and the Tarka Trail promoted path. Both of these paths would remain open during construction as the Onshore HVDC Cable Corridor would cross these paths using trenchless techniques, such as HDD. The Onshore HVDC Cable Corridor crosses a public footpath to the east of Shamland, to the south of Rickards Down and the most southerly part of an Other Route with Public Access, to the southwest of Ashridge. These are likely to be trenched crossings and some form of management would have to be implemented at these points. No other PRoW lie within the footprint of the Onshore Infrastructure Area. People using all PRoW are of a **high** sensitivity, while those people using the South West Coast Path within the North Devon Coast NL are of a **very high** sensitivity. Those people accessing the beach and those people accessing the sea from the beach, within 1 km of the landfall are also considered to have a **very high** sensitivity, due to the location within the NL.

2.8.80 As the Onshore HVDC Cable Corridor would be underground, the effects experienced by visual receptors would be temporary and almost exclusively during the construction phase. However, while construction is ongoing, people using the PRoW within 1 km are likely to have some views of the construction works. The largest impacts would be where people have views of the construction compounds containing the plant used in the major crossing points, i.e. people using the South West Coast Path and those using the Tarka Trail. Those people using the wider PRoW network would experience a **negligible to small** direct impact. People using the two PRoW where managed crossings would be put in place would experience a **medium to large** direct impact. The people using the South West Coast Path would experience a constricted and short sequential view of the construction works, which is considered to be a **medium** direct impact. People using the Tarka Trail would have a longer sequential view and they would experience a **large** direct visual impact. People access in the beach and the sea from the beach at the landfall would experience a **large** direct visual effect.

2.8.81 The temporary effects of the construction works experienced by those people using the PRoW network within the 1 km study area of the Onshore HVDC Cable Corridor varies. Those people using the non-National Trail/promoted path routes not crossed by the Onshore HVDC Cable Corridor would experience temporary localised effects varying from **negligible** to **moderate adverse** and not significant. Those people using the two PRoW where there would be a managed crossing would have a temporary **moderate adverse** effect, which are significant. People using the South West Coast Path and the Tarka Trail would experience temporary **major adverse** effects, which are significant. People using the beach and accessing the sea via the beach would also experience a temporary **major adverse** and significant effect.

Converter Site, HVAC Cables and Alverdiscott Substation Connection Development – Construction Effects

2.8.82 People using the public rights of way network are considered to have a **high** sensitivity, unless on a designated route. The impact on people using the PRoW network during construction would be **negligible to small**, due primarily to distance from the Converter Site. The temporary effects of the construction works experienced by people using the public rights of way network would be **negligible to moderate adverse** and not significant.

Dynamic receptors

2.8.83 Recreational sailors within 1 km of the landfall are considered to have a **high** sensitivity, as although their concentration is primarily on sailing, they would be within 1 km of the NL and an undeveloped section of coast.

2.8.84 People within vehicles using roads are considered to have a **low** sensitivity to change. However, people in vehicles crossing the NL are deemed to have **medium** sensitivity to the construction works associated with the Onshore HVDC Cable Corridor, and cyclists and people walking along minor roads within the NL are considered to have a **high** sensitivity as people within the NL are deemed to be more aware of their surroundings. On roads in non-designated landscapes, cyclists have a **medium** sensitivity as they are not enclosed within a vehicle and are raised above level that people within standard vehicles and are travelling more slowly (in general). People walking along minor roads have varied sensitivities to the Proposed Development, depending on which element of the project they are looking and the context of the view, the sensitivity of these receptors would usually be **medium**.

Landfall and Onshore HVDC Cable Corridor – Construction Effects

2.8.85 Recreational sailors would experience a **medium** impact due to the construction works at the landfall, decreasing with distance from the landfall. These sailors would experience temporary **moderate adverse** effect, which would be significant, but only close to the landfall, it would decrease with distance.

2.8.86 Road users in vehicles would experience **negligible** to **medium** impacts, depending on distance from the Onshore HVDC Cable Corridor, as well as intervening buildings, hedgebanks or vegetation. The construction phase of the Onshore HVDC Cable Corridor would have a **small** to **medium** impact on cyclists and people walking along the roads.

2.8.87 Road users in vehicles within the NL would experience temporary **negligible** to **moderate adverse** effects, which would not be significant. Cyclists and people walking along the minor roads within the NL would experience temporary **minor** to **moderate adverse** effects, which are not significant to significant.

2.8.88 People using roads outside the North Devon Coast NL would experience the same impacts as those within the NL, but due to their situation in a non-designated landscape the effects are lower. For people in vehicles the temporary effects would be **negligible** to **minor adverse** and not significant. The temporary effects experienced by cyclists and people walking along minor roads would be **minor** to **moderate adverse**, but not significant.

2.8.89 Those people using the road network around and crossing the Onshore HVDC Cable Corridor would only be affected during the construction phase. Any

maintenance work following completion of the construction would not result in significant effects and so the effects of the Onshore HVDC Cable Corridor during the operation and maintenance and the decommissioning phases are not assessed in this LSVIA.

Converter Site, HVAC Cables and Alverdiscott Substation Connection Development – Construction Effects

2.8.90 People in vehicles using the roads within the NL would experience a **negligible** impact from the construction works at the Converter Site, due to distance, as well as intervening topography and vegetation. These facts, combined with the **medium** sensitivity of the receptors, would result in a temporary **minor adverse** effect, which is not significant. Cyclists and people walking along minor roads within the NL are considered to have a **high** sensitivity as these visual receptors are deemed to be more aware of their surroundings. These people would also experience a **negligible** to **small** impact, resulting in temporary **negligible** to **minor adverse** effects, which are not significant. As the impact experienced by these receptors would be less at operation and decommissioning, these visual receptors are not taken further in this LSVIA.

2.8.91 In areas outside designated landscapes road users in vehicles have a **low** sensitivity to the construction of the Proposed Development at the Converter Site. Cyclists and pedestrians using the roads local to Converter Site, as a right of way also have a **medium** sensitivity to the Proposed Development, dependent on context. Barring the minor road that runs between Gammaton Moor and Webbery Cross/Webbery Barton which forms the western boundary of the Converter Site, there are few roads that are close to the Converter Site. People in vehicles, those on bicycles, as well as people walking along the Gammaton Moor to Webbery Cross road would experience a localised **large** visual impact when close to the Converter Site. People in vehicles would experience a temporary **moderate adverse** effect, which is not significant. Cyclists and walkers using the minor road would experience a localised temporary **major adverse** effect, which is significant.

2.8.92 It is unlikely that people using the roads further from the proposed Converter Site would be significantly affected, due to distance, as well as intervening topography and vegetation (e.g., representative viewpoint 21, representative viewpoint 22, representative viewpoint 30, representative viewpoint 40 and representative viewpoint 44, Volume 4, Appendix 2.3: Visual baseline technical report, Figures 2.3.21, 2.3.22, 2.3.30, 2.3.40 and 2.3.44). For this reason, people using such roads are not taken further in this LSVIA.

People at work

2.8.93 People at their places of work are considered to have a **low** sensitivity to the Proposed Development because the focus of attention is on their work not on the surroundings.

Landfall and Onshore HVDC Cable Corridor – Construction Effects

2.8.94 Most working people that have views towards the Onshore HVDC Cable Corridor are involved in the agricultural or fishing sector. The impact of the construction works along the Onshore HVDC Cable Corridor would vary from **negligible to large**, depending primarily on distance from the construction operations and the

type of works being undertaken. The temporary effects would vary between **negligible** to **moderate adverse** and not significant.

Converter Site, HVAC Cables and Alverdiscott Substation Connection Development – Construction Effects

2.8.95 Most working people that have views towards the Converter Site are involved in the agricultural sector. Those with close views of proposed Converter Site are National Grid employees and those people working on the adjacent solar farm. The impact of the construction works at the Converter Site is **large**, reducing with distance from the site of the works. The temporary effects would be **moderate adverse** and significant.

Representative Viewpoints

2.8.96 Preliminary visualisations have been undertaken for a limited number of representative viewpoints, to inform the LSVIA for the PEIR. The visualisations are a first step to developing the landscape mitigation proposals. These would be modified and finalised for the submission of the ES.

2.8.97 The locations of the chosen representative viewpoints, shown on Volume 4, Figure 2.5a to 2.5e, are geographically diverse and/or from sensitive viewpoints. Descriptions from all of the viewpoint locations are in Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR.

Representative Viewpoint 23: View South From Public Right of Way Newton Tracey Footpath 4, to the South of Horwood

2.8.98 The people using this public right of way have a **high** sensitivity. During the construction phase the plant used to construct the Converter Site and the Alverdiscott Substation Connection Development, install the HVAC Cables and form the earth-modelling mitigation would be visible on the skyline. The impact of the construction work would be **large**. The temporary effect experience by people at this location would be **major adverse**, which is significant.

Representative Viewpoint 27: View West From Junction of Minor Road With B3232, at Alverdiscott

2.8.99 The sensitivity of people using this minor road vary between **low** (people in vehicles) and **medium** (cyclists and people walking). During the construction phase the plant used to construct the Converter Site and the Alverdiscott Substation Connection Development, install the HVAC Cables and form the earth-modelling mitigation would be visible on the skyline. The impact of the construction work would be **large**. The temporary effect experience by people at this location would be **minor** to **major adverse**, which is significant.

Representative Viewpoint 29: View West-Northwest From Minor Road, to the South of Alverdiscott

2.8.100 The sensitivity of people using this minor road vary between **low** (people in vehicles) and **medium** (cyclists and people walking). During the construction phase the plant used to construct the Converter Site and the Alverdiscott Substation Connection Development, install the HVAC Cables and form the earth-

modelling mitigation would be visible on the skyline. The impact of the construction work would be **large**. The temporary effect experience by people at this location would be **minor** to **major adverse**, which is significant.

Representative Viewpoint 32: View Northwest From Public Right of Way Footpath 1, to the East of Huntshaw

2.8.101 The people using this public right of way have a **high** sensitivity. During the construction phase the plant used to construct the Converter Site and the Alverdiscott Substation Connection Development, install the HVAC Cables and form the earth-modelling mitigation would be visible on the skyline. The impact of the construction work would be **large**. The temporary effect experience by people at this location would be **major adverse**, which is significant.

Representative Viewpoint 33: View North-Northeast From Minor Road, to the North of Gammaton Moor

2.8.102 The sensitivity of people using this minor road vary between **low** (people in vehicles) and **medium** (cyclists and people walking). During the construction phase the plant used to construct the Converter Site and the Alverdiscott Substation Connection Development, install the HVAC Cables and form the earth-modelling mitigation would be visible from this field gate. The impact of the construction work would be **large**. The temporary effect experience by people at this location would be **moderate** to **major adverse**, and significant.

Representative Viewpoint 40: View East-Southeast From Minor Road at Rickard's Down, North of Abbotsham, Within the North Devon Coast National Landscape

2.8.103 The sensitivity of people using this minor road, within the North Devon Coast NL varies. People within vehicles have a **medium** sensitivity, whilst cyclists and pedestrians have a **high** sensitivity. The impact of the construction works on visual receptors at this location would be **negligible to small**, due largely to distance, but also due to the screening effects of topography and intervening hedgebanks. The temporary significance of effects experienced by visual receptors would vary between **negligible adverse** and **moderate adverse**, both of which are not significant.

Representative Viewpoint 44: View South From Public Footpath, East of Limekiln Lane

2.8.104 The sensitivity of people using this public footpath is **high**. The impact of the construction works on visual receptors at this location would be **negligible**, due largely to distance, but also due to the screening effects of topography. The temporary significance of effects experienced by visual receptors would **negligible adverse** which are not significant.

Night Time Effects on Landscape and Seascape Receptors During the Construction Phase

2.8.105 As the location of the Proposed Development is in an area of medium to darker skies the sensitivity of the landscape and seascape to artificial lighting is **high**.

2.8.106 During the construction phase there would be lighting associated with the construction works. This would be limited as far as possible, as work would not normally take place during hours of darkness. However, in some locations there would be 24-hour lighting, such as lights on marine vessels and at the location of trenchless crossings, such as HDD compounds. Such operations would require safety lighting for the duration of this work. The impact of the temporary lighting is **negligible**. The outline On-CEMP would follow best practice for lighting.

2.8.107 The impact on nocturnal darkness would be negligible. It is judged that this high sensitivity landscape resource would experience localised, temporary **negligible adverse** effects, which are not significant.

Further Mitigation

2.8.108 There is no further mitigation proposed during the construction phase of the Proposed Development.

Future Monitoring

2.8.109 Other than compliance with the Outline On-CEMP no monitoring is proposed during the construction phase of the Proposed Development.

2.9 Assessment of Operational Effects

2.9.1 The potential impacts arising from the operation and maintenance phase of the Proposed Development are listed in **Table 2.19**, along with the maximum design scenario against which each impact has been assessed.

2.9.2 To summarise the impact that the Converter Site would have on landscape character and views, the context of the structures has to be assessed. While there is an amount of electrical infrastructure already at the Converter Site (the Alverdiscott Substation and the overhead lines and latterly a solar farm) this is largely ‘at grade’ and there is intervisibility through the existing structures, with the land around the substation. The Converter Site would introduce solid mass. However, they would be cut into the hillside, which would reduce their impact. Bunding/earth-modelling is also proposed to reduce the mass. The bunds would be planted simply to minimise the perception of scale. The buildings themselves are being designed by architects to achieve the best outcome possible, given the function of the Converter Site.

2.9.3 A description of the potential effect on receptors caused by each identified impact is given below.

Assessment of Operational and Maintenance Effects on Landscape and Seascape Character

2.9.4 Once the construction at the landfall and the Onshore HVDC Cable Corridor and HVAC Cables have been completed, the cables and the TJBs and Joint Bays would be buried. There would be manhole covers to access the link boxes and markers at field edges noting the route of the cables. All buried infrastructure would have a final layer of topsoil over other protective layers of fill. Hedgerows and hedgebanks would be restored, using suitable species and trees planted as close to the original position as possible. As the planting becomes established little trace of the Onshore HVDC Cable Corridor and HVAC Cables would remain. The potential effects on those characteristics and character areas directly affected by the Onshore HVDC Cable Corridor and HVAC Cables during the operation and maintenance phase are not likely to be significant and so are not assessed further in this chapter.

2.9.5 The assessment of the Proposed Development during the operational and maintenance phase is focussed on the impacts of the Proposed Development at and around the Converter Site.

2.9.6 The impacts of the of the Proposed Development, during operation have been assessed. The potential impacts arising from the operation phase of the Proposed Development are listed in **Table 2.22**, along with the maximum design scenario against which each impact has been assessed (**Table 2.19**). Mitigation that would form part of the project has been detailed in **Table 2.20**.

2.9.7 A description of the potential effect on receptors caused by each identified impact is given below.

Designated Landscapes and Seascapes

North Devon Biosphere Reserve (Non-Statutory Designation)

2.9.8 The area within the Proposed Development Draft Order Limits at the Converter Site, lies within the Transition Zone of the UNESCO North Devon Biosphere Reserve. Special features of the North Devon Biosphere Reserve, relevant to the operation and maintenance is chapter are:

- *characteristic landscapes such as Culm grasslands and Devon hedgerows;*
- *special western oak woodlands with a plethora of pollution-sensitive lichens; and*
- *high level of tranquillity and nocturnal darkness in the area.*

Sensitivity of the Receptor

2.9.9 The special features of the North Devon Biosphere Reserve are considered to be of high susceptibility and high value. The overall sensitivity of the special features is **high**.

Magnitude of Impact

2.9.10 The direct impacts of the Converter Site, associated buildings and realignment of pylons and overhead lines on the special features within the Buffer Zone and Transition Zone of the North Devon Biosphere Reserve varies:

- *Characteristic landscapes such as Culm grasslands and Devon hedgerows:* The Onshore HVDC Cable Corridor does not cross any Culm grasslands and the Converter Site are not located on Culm grassland. There would be **no change** on this aspect of the special feature, as there is no Culm grassland within the Converter Site, or within the Proposed Development Draft Order Limits at the Converter Site. The Devon hedgerows/hedgebanks within the Proposed Development Draft Order Limits would be reconstructed where the Onshore HVDC Cable Corridor has passed through them, so although in the short-term there would be a direct **negligible** impact this would reduce once these features become established
- *Special western oak woodlands with a plethora of pollution-sensitive lichens:* There is a small oak woodland to the north of the minor road between Gammaton Moor and Webbery Cross/Webbery Barton which is the closest example, being quite wet and having some lichens, is not affected, as the wood would be avoided. The magnitude of impact on this special feature would be **no change.** The wet oak woodland extends, in the form of mature oak hedgerows either side of the wet meadow, to the east of the minor road. These field boundaries would be replanted with shrub species, as the field would be crossed in a trenched crossing. There would be a direct **medium** impact on this feature/characteristic.
- *High level of tranquillity:* There would be an impact on visual tranquillity from the Converter Site, as the land would change from agricultural fields to an area containing large built forms. The local impact would be **large** scale, long-term, but time-limited/reversible (in the case of the Converter Site themselves – the 'cut' in the hillside would be sensitively treated/finished, the planted earth-modelling would remain in place at decommissioning). Once the earth-modelling and planting has become established, the direct impact on the visual tranquillity of the wider Biosphere Transition Zone would be **small**.
- *Nocturnal darkness:* The Converter Site would have some lighting at night – as CNP infrastructure, there is security lighting. They would also be manned 24 hours a day. The lighting is described in **Table 2.19**. However, all necessary methods of reducing light pollution would be taken. The earth-modelling would assist with minimising light pollution and when the planting becomes established it would further help to prevent light pollution. The direct, local impact on nocturnal darkness would be **small**, reducing over time as the proposed planting becomes established.

Significance of the Effect

2.9.11 The significance of effects for the four special features relevant to this chapter are as follows:

- *Characteristic landscapes such as Culm grasslands and Devon hedgerows:* No change to the Culm grasslands, a high sensitivity receptor the significance of effects is **none**. The medium impact to the hedgerows and Devon hedgebanks, high sensitivity receptors, would be **moderate adverse**, which is

locally significant, but not significant in the wider area of the Biosphere Reserve

- *Special western oak woodlands with a plethora of pollution-sensitive lichens:* No change to a high sensitivity receptor the significance of effects is **none**. Once the earth-modelling has been completed, it would be planted with native woodland species and would add to the broadleaved woodland in the area. It would take many years to replicate the existing wet woodland, but given the proposed planting is a first step.
- *High level of tranquillity:* The impact on tranquillity, a high sensitivity resource is medium, the effect is judged to be **moderate adverse**, which is locally significant, but not significant in the wider area of the Biosphere Reserve. Once the earth-modelling has been completed, the bunding at the Converter Site would be planted with native woodland species and the broadleaved woodland would help to integrate the Converter Site into the area. As the woodland becomes established it would reduce to **minor adverse**, which is not significant
- *Nocturnal darkness:* The impact on nocturnal darkness, a high sensitivity resource is medium, the effect is judged to be **moderate adverse**, which is locally significant, but not significant in the wider area of the Biosphere Reserve. As with tranquillity, the earth-modelling and planting would reduce this over time to **minor adverse**, which is not significant.

North Devon Coast National Landscape

2.9.12 The special qualities, of the North Devon Coast NL, relevant to this section of the chapter, are:

- *Panoramic views across a rolling landscape of pastoral farmland, wooded combes and valleys from elevated inland areas.*

Sensitivity of the Receptor

2.9.13 This special quality of the North Devon Coast NL is considered to be of high susceptibility and high value. The overall sensitivity of this special quality is **high**.

Magnitude of Impact

2.9.14 The direct impacts of the Converter Site on panoramic views, that might be affected during the operation and maintenance phase is:

- *Panoramic views across a rolling landscape of pastoral farmland, wooded combes and valleys from elevated inland areas:* There would be an impact of views from elevated land within the NL, towards the Converter Site. The direct impact on inland views would be of local geographic extent, long-term, but time-limited. The impact on the views of the landscape would be **negligible**, due to the distance from the Converter Site and the intervening topography and vegetation.

Significance of the Effect

2.9.15 The significance of effects for the special quality relevant to this section of the assessment is:

- *Panoramic views across a rolling landscape of pastoral farmland, wooded combes and valleys from elevated inland areas:* This high sensitivity resource would experience a negligible impact. The effect would be **negligible adverse**, which is not significant.

2.9.16 The overall effect on the relevant special quality of the North Devon Coast NL is judged to be **negligible adverse**, which is not significant.

National Character Area

Converter Stations

2.9.17 The Proposed Development is located wholly within NCA 149: The Culm (Volume, 4, Appendix 2.2: Landscape and Seascape Character Baseline Technical Report, Figure 2.2.2). The key characteristics are set out within the same Appendix. The NCA's key characteristics relevant to this chapter are:

- *Rolling, open plateaux…wide views across a remote landscape.*
- *Little tree cover on the plateau, except for occasional wind-sculpted hedgerow and farmstead trees, and conifer blocks. Woodland is more frequent in the shelter of valleys and combes running to the sea, and where associated with estates.*
- *Mosaic of field patterns reflecting the historic land use of the Culm, surrounded by characteristic hedgebanks.*

Sensitivity of the Receptor

2.9.18 The key characteristics of NCA 149: The Culm are considered to be of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the Devon hedgebanks, which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**.

Magnitude of Impact

2.9.19 The direct impacts of the Converter Site on the key characteristics of NCA 149: The Culm varies:

- *Rolling, open plateaux…wide views across a remote landscape:* The Converter Site is located in this area of the NCA. There would be an impact of views from elevated land towards the Converter Site. The direct impact on views would be of local geographic extent, long-term, but time-limited. The impact on the views of the wider landscape would be **small**, reducing over time, as the proposed woodland planting becomes established
- *Little tree cover on the plateau, except for occasional wind-sculpted hedgerow and farmstead trees, and conifer blocks. Woodland is more frequent in the shelter of valleys and combes running to the sea:* No woodlands are present at the Converter Site. However, there would be a **small** positive impact to this key characteristic, as once the earth-modelling has been completed, it would be planted with native woodland species and would add to the broadleaved woodland in the area.
- *Mosaic of field patterns reflecting the historic land use of the Culm, surrounded by characteristic hedgebanks:* The fields in which the Converter Site are to be

located are large, smaller fields having been subsumed to allow for more efficient agriculture. This farmed landscape has also had the track to the Alverdiscott Substation imposed on it. These more recent boundaries are marked by mature hedgerows and hedgerow trees, sometimes associated with ditches. These older hedgerows are not affected by the Converter Site. The direct impact on field patterns would be of local geographical extent, with an overall impact of **small** magnitude.

Significance of the Effect

2.9.20 The significance of effects of the Proposed Development on the relevant key characteristics of NCA 149: The Culm, are as follows:

- *Rolling, open plateaux…wide views across a remote landscape:* There is a small impact on this medium sensitivity landscape resource. The effects are judged to be **minor adverse**, which are not significant
- *Little tree cover on the plateau, except for occasional wind-sculpted hedgerow and farmstead trees, and conifer blocks. Woodland is more frequent in the shelter of valleys and combes running to the sea:* There would be an addition to this feature. The significance of effects is **minor beneficial**, which is not significant.
- *Mosaic of field patterns reflecting the historic land use of the Culm, surrounded by characteristic hedgebanks:* There is a medium impact experienced by the hedgebanks, which are high sensitivity landscape receptors. The effects are judged to be **minor adverse**, which are not significant.

2.9.21 The overall effect on NCA 149: The Culm is judged to be **minor adverse**, which is not significant.

County Landscape Character Areas

2.9.22 The Converter Site and HVAC Cables are located in the High Culm Ridges LCA.

High Culm Ridges LCA

2.9.23 The key characteristics of the High Culm Ridges LCA relevant to this section of the assessment are:

- *Ridges divided by small spring-fed tributary streams, flowing into the River Torridge (to the west).*
- *Extensive linear deciduous woodlands and some orchards in valleys; occasional windswept trees and hilltop clumps of beech; and blocks of coniferous plantation on higher ground.*
- *Farmland generally in pastoral use, with some areas of arable on better-quality land.*
- *Complex pattern of fields, generally with smaller, irregular fields around villages and on valley sides, and larger, more regular fields (suggesting more recent enclosure) on areas of higher land.*
- *Fields generally divided by hedgerows or hedgebanks in variable condition: some well-managed, others grown-out or closely flailed.*
- *Long views from high ground across the Torridge valleys, and to Exmoor, as well as views of the sea.*

Sensitivity of the Receptor

2.9.24 The key characteristics of the High Culm Ridges LCA are considered to be of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the deciduous woodland, hedgebanks and long views from high ground, which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**.

Magnitude of Impact

2.9.25 The direct impacts of the landfall, Onshore HVDC Cable Corridor and Converter Site on the relevant key characteristics of the High Culm Ridges LCA varies:

- *Ridges divided by small spring-fed tributary streams, flowing into the Torridge (to the west):* The Converter Site are located to the east and south of a ridge of high ground. The change in the topography at the Converter Site would be of local geographical extent, long-term and permanent, with an overall impact of **large** magnitude on this aspect of the key characteristic. There are two watercourses/ditches that flow west to east outside/on the boundaries of the Converter Site, which join a small stream, that flows west to the River Torridge. However, these watercourses/ditches are not impacted by the Proposed Development. There would be **no change** to this key characteristic
- *Extensive linear deciduous woodlands and some orchards in valleys; occasional windswept trees and hilltop clumps of beech; and blocks of coniferous plantation on higher ground:* The Converter Site would not require the removal of these features, there would be **no change** to the existing features. Woodland planting on the earth-modelling/bunds forms part of the landscape and ecological mitigation. This would have a **small** positive impact
- *Farmland generally in pastoral use, with some areas of arable on better-quality land:* The **large** impact of the Converter Site on this characteristic would be local in geographical extent, long-term and permanent
- *Complex pattern of fields, generally with smaller, irregular fields around villages and on valley sides, and larger, more regular fields (suggesting more recent enclosure) on areas of higher land:* The direct impact on field patterns would be of local geographical extent, long-term and permanent, with an overall impact of **small** magnitude, as the fields within which the Converter Site are located are already large (the combination of several smaller fields) and the pattern compromised by the National Grid development.
- *Fields generally divided by hedgerows or hedgebanks in variable condition: some well-managed, others grown-out or closely flailed:* The direct impact on these features, during the operation and maintenance phase of the Converter Site would be of local geographical extent, long-term and permanent, with an overall impact of **small** magnitude, as some internal field boundaries may have to be changed
- *Long views from high ground across the Torridge valleys, and to Exmoor, as well as views of the sea*: There would be an impact of views from elevated land towards the Converter Site. This direct impact on views would be of local geographic extent, long-term, but time-limited. The impact on the views of the landscape would be **small**.

Significance of the Effect

2.9.26 The significance of effects of the Proposed Development on the relevant key characteristics of the High Culm Ridges LCA, are as follows:

- *Ridges divided by small spring-fed tributary streams, flowing into the Torridge (to the west):* The ridges of the High Culm are a medium sensitivity characteristic. There would be a localised, but large impact on this key characteristic at the Converter Site. The effect would be **major adverse**, which is significant. The effect on the tributary streams is **none.**
- *Extensive linear deciduous woodlands and some orchards in valleys; occasional windswept trees and hilltop clumps of beech; and blocks of coniferous plantation on higher ground:* No woodland or orchards are removed as a result of the operation of the Proposed Development. The significance of effect on the existing woodland is **none**. As the proposed mitigation includes woodland planting there is a **minor beneficial** impact on this element of the landscape overall, which is not significant.
- *Farmland generally in pastoral use, with some areas of arable on better-quality land:* At the Converter Site the localised impact is large, the effect is judged to be **major adverse**, which is significant.
- *Complex pattern of fields, generally with smaller, irregular fields around villages and on valley sides, and larger, more regular fields (suggesting more recent enclosure) on areas of higher land:* The impact on this medium sensitivity receptor is small, the localised effect is judged to be **minor adverse**, which is not significant.
- *Fields generally divided by hedgerows or hedgebanks in variable condition: some well-managed, others grown-out or closely flailed:* During the operations and maintenance phase no hedgebanks would be affected, however, some hedgerows might be. Where the hedgerows are in good condition the impact would be medium, where they are in poor condition the impact would less. Overall, the localised, effect on this receptor is judged to **moderate adverse**, but not significant.
- *Long views from high ground across the Torridge valleys, and to Exmoor, as well as views of the sea:* The long views are a high sensitivity key characteristic, the impact of the Converter Site on long views would be small and localised. The effect on this key characteristic is judged to be **minor adverse**, which is not significant.

2.9.27 Taking into account the small area of this large LCA that is affected by the Proposed Development during the operations and maintenance phase, the overall temporary effect on the High Culm Ridges LCA is judged to be **moderate adverse** and not significant.

North Devon and Torridge District Landscape Character Types – Directly Affected

2.9.28 The North Devon District and Torridge District LCT that are directly affected by the Proposed Development during the operation phase are (from the west):

- LCT 5A: Inland Elevated Undulating Land
- LCT 3A: Upper Farmed Wooded Valley Slopes

- LCT 1F: Farmed Lowland Moorland and Culm Grassland.

LCT 5A: Inland Elevated Undulating Land

2.9.29 The key characteristics of the LCT 5A: Inland Elevated Undulating Land relevant to this part of the assessment are:

- Elevated land cut by a series of tributaries forming folds in the landform.
- Tributary valleys lined by broadleaved and wet woodland providing contrasting shelter and texture. Small farm woods, occasional conifer blocks and avenues of mature beech on hill summits and along roadsides.
- Medium-scale regular fields of recent enclosure, with pockets of smaller fields of medieval origin on valley slopes and tracts of unenclosed rough grazing along valley bottoms.
- Fields enclosed by mixed species hedges (predominantly thorn) with flower-rich banks and frequent hedgerow trees in sheltered locations. Some locally distinctive hedges topped with gorse and beech. Occasional amalgamated fields bounded by fences.
- Strong farmed character with pasture fields grazed by cattle and sheep a frequent occurrence en route, occasional fields of arable cultivation and rough grazing of rushy meadows along valleys although mostly rather improved grassland.

Sensitivity of the Receptor

2.9.30 The key characteristics of LCT 5A: Inland Elevated Undulating Land are of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the tributary valleys, the broadleaved and wet woodland, Devon hedgebanks and rushy meadows, which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**.

Magnitude of Impact

2.9.31 The direct impacts of the Proposed Development at the Converter Site, on the relevant key characteristics of LCT 5A: Inland Elevated Undulating Land varies:

- Elevated land cut by a series of tributaries forming folds in the landform: At the Converter Site, the elevated land would experience a **large** direct, localised, long-term and permanent impact during the operations and maintenance phase.
- Tributary valleys lined by broadleaved and wet woodland providing contrasting shelter and texture. Small farm woods, occasional conifer blocks and avenues of mature beech on hill summits and along roadsides: There would be **no change** to these existing key characteristics from the Proposed Development, as the Converter Site are located to avoid these features. The proposed woodland planting as part of the proposed landscape and ecological mitigation would have a **small** positive impact.
- Medium-scale regular fields of recent enclosure, with pockets of smaller fields of medieval origin on valley slopes and tracts of unenclosed rough grazing along valley bottoms: The Converter Site are located in larger fields, of more recent enclosure. The direct impacts would be local in geographical extent,

long-term and permanent. The impact of the Converter Site on these fields would be **large.**

- Fields enclosed by mixed species hedges (predominantly thorn) with flower-rich banks and frequent hedgerow trees in sheltered locations. Some locally distinctive hedges topped with gorse and beech. Occasional amalgamated fields bounded by fences: The HVAC Cables and Converter Site may cross hedgerows, but not hedgebanks. The exact location of the Converter Site is not yet decided and they may be avoided. The direct impact on these features would be of local geographical extent, long-term and permanent, with an overall impact of **medium** magnitude.
- Strong farmed character with pasture fields grazed by cattle and sheep a frequent occurrence en route, occasional fields of arable cultivation and rough grazing of rushy meadows along valleys although mostly rather improved grassland: The Converter Site are located in large fields, of recent enclosure. The direct impacts would be local in geographical extent, long-term and time-limited. The impact of the Converter Site on the farmed characteristic would be **large**.

Significance of the Effect

2.9.32 The significance of effects of the Proposed Development on the relevant key characteristics of LCT 5A: Inland Elevated Undulating Land, are as follows:

- Elevated land cut by a series of tributaries forming folds in the landform: This high sensitivity receptor would experience no change from the operation of the HVDC Cables. The significance of effects is **none**. The operation of the Converter Site would have a large, localised effect on the elevated land. These direct effects would be **major adverse**, which is significant.
- Tributary valleys lined by broadleaved and wet woodland providing contrasting shelter and texture. Small farm woods, occasional conifer blocks and avenues of mature beech on hill summits and along roadsides: There would be no change to this high sensitivity receptor. The significance of effect on the existing features would be **none**. The proposed woodland planting as part of the proposed landscape and ecological mitigation would have a **minor beneficial** effect, which is not significant.
- Medium-scale regular fields of recent enclosure, with pockets of smaller fields of medieval origin on valley slopes and tracts of unenclosed rough grazing along valley bottoms: Although the Converter Site are located within larger fields/agglomerations of smaller fields, the change from farmland to Converter Site on this characteristic would have a large impact. The localised, effect is judged to be **moderate adverse**, but not significant
- Fields enclosed by mixed species hedges (predominantly thorn) with flower-rich banks and frequent hedgerow trees in sheltered locations. Some locally distinctive hedges topped with gorse and beech. Occasional amalgamated fields bounded by fences: The Converter Site might cross field boundaries but these would be hedgerows and post and wire fences, rather than hedgebanks of high sensitivity. If hedgerows are crossed, the impact would be medium. The localised, effect is judged to be **moderate adverse**, but not significant
- Strong farmed character with pasture fields grazed by cattle and sheep a frequent occurrence en route, occasional fields of arable cultivation and rough grazing of rushy meadows along valleys although mostly rather improved

grassland: The Converter Site would have a large impact on this medium sensitivity receptor. The localised, significance of effects would be **moderate adverse**, but not significant.

2.9.33 The overall effect on LCT 5A: Inland Elevated Undulating Land is judged to be **moderate adverse**, but not significant.

LCT 3A: Upper Farmed and Wooded Valley Slopes

2.9.34 This LCT lies within the Proposed Development Draft Order Limits, and it abuts the northern field of the Converter Site. While it does not host the Converter Site, the Onshore HVDC Cable Corridor or HVAC Cables, it would be affected by the realigned pylons and overhead lines within it, to the south of the minor road from Webbery Cross/Webbery Barton to Alverdiscott.

2.9.35 The key characteristics that have the potential to be affected by the Proposed Development are:

- A pastoral landscape, with some fields of arable cultivation on higher slopes, forming a strong mosaic with copses, interlinking Devon hedges and small woodlands as well as occasional small blocks of coniferous plantation.
- Some areas of intensive arable cultivation in larger, regular fields found on more elevated land. Villages and tributary valleys often characterised by smaller, historic field patterns.
- Nature conservation interest provided by areas of species-rich Culm grassland, rich valley mire, wet woodland and damp meadows associated with tributary valleys and springs. Patches of gorse on higher slopes give some areas an upland feel…
- Main roads prominent pylon lines and the influence of modern development at Bideford and East the Water erode levels of tranquillity locally – although overall this is a peaceful and highly rural landscape.
- Square church towers form strong local landmark features peeping through the rolling hills…

Sensitivity of the Receptor

2.9.36 The key characteristics of LCT 3A: Upper Farmed and Wooded Valley Slopes are of medium susceptibility and medium value. The overall sensitivity of the key characteristics is **medium**. The exceptions to this are the broadleaved copses and wet woodland, Devon hedges/hedgebanks, Culm grassland and damp meadows, as well as the views of the church towers, which have a high susceptibility and a high value. The overall sensitivity of these key characteristics is **high**. The infrastructure (main roads and electrical infrastructure) which have a low susceptibility and low value, the sensitivity of which is **low**.

Magnitude of Impact

2.9.37 The direct impacts of the realigned overhead power lines and pylons on the key characteristics varies:

- A pastoral landscape, with some fields of arable cultivation on higher slopes, forming a strong mosaic with copses, interlinking Devon hedges and small woodlands as well as occasional small blocks of coniferous plantation: There

would be **no change** to these elements and character, as the pylons would be realigned, but would not remove existing landscape elements.

- Some areas of intensive arable cultivation in larger, regular fields found on more elevated land. Villages and tributary valleys often characterised by smaller, historic field patterns: There would be **no change** to these elements and character, as the pylons would be realigned, but would not remove existing landscape elements.
- Nature conservation interest provided by areas of species-rich Culm grassland, rich valley mire, wet woodland and damp meadows associated with tributary valleys and springs. Patches of gorse on higher slopes give some areas an upland feel…: There would be **no change** to these elements and character, as the pylons would be realigned, but would not remove existing landscape elements.
- Main roads prominent pylon lines and the influence of modern development at Bideford and East the Water erode levels of tranquillity locally – although overall this is a peaceful and highly rural landscape: The realigned pylons would be better positioned than the current locations and remove pylons from crossing ridgelines, this would have a direct, long-term, permanent **negligible** beneficial impact on visual tranquillity in the land to the north of the Converter Site, which is not significant.
- Square church towers form strong local landmark features peeping through the rolling hills…: The realigned pylons would be better positioned than the current locations and remove pylons from crossing ridgelines, this would have a direct, long-term, permanent **negligible** beneficial impact on views of church towers, which is not significant.

Significance of the Effect

2.9.38 The significance of effects of the Proposed Development on the relevant key characteristics are:

- A pastoral landscape, with some fields of arable cultivation on higher slopes, forming a strong mosaic with copses, interlinking Devon hedges and small woodlands as well as occasional small blocks of coniferous plantation: This key characteristic has a mix of medium and high sensitivity resources and receptors. As there would be no change to these, the significance of effect is judged to be **none.**
- Some areas of intensive arable cultivation in larger, regular fields found on more elevated land. Villages and tributary valleys often characterised by smaller, historic field patterns: The sensitivity of the landscape characteristics are medium. However, as there would be no impact, the significance of effect is judged to be **none**.
- Nature conservation interest provided by areas of species-rich Culm grassland, rich valley mire, wet woodland and damp meadows associated with tributary valleys and springs. Patches of gorse on higher slopes give some areas an upland feel…: The sensitivity of these resources is high. However, as there would be no impact, the effect is judged to be **none**.
- Main roads prominent pylon lines and the influence of modern development at Bideford and East the Water erode levels of tranquillity locally – although overall this is a peaceful and highly rural landscape: The realigned pylons and overhead lines are judged to have a positive negligible impact on a high

sensitivity receptor, which is judged to have a **negligible beneficial** effect, which is not significant.

- Square church towers form strong local landmark features peeping through the rolling hills…: The realigned pylons and overhead lines have a positive negligible impact on a high sensitivity receptor, which is judged to have a **negligible beneficial** effect, which is not significant.

2.9.39 The overall significance of the effect of the realigned pylons and overhead lines on this large LCT is judged to be **negligible beneficial**.

LCT 1F Farmed Lowland Moorland and Culm Grassland

2.9.40 This LCT lies close to the eastern field of the Converter Site. It is a long LCT that extends to the southeast of the Converter Site, which is located at its most north-westerly point.

2.9.41 The perceptual qualities that have the potential to be indirectly affected by the Proposed Development are: Long views from elevated land, e.g., to Exmoor and Dartmoor; and, high levels of tranquillity and remoteness, although it is also noted that the perceptions of tranquillity and remoteness are diluted by modern development and recreational land uses.

Sensitivity of the Receptor

2.9.42 Long views, tranquillity and remoteness are high value perceptual qualities, of high susceptibility. The sensitivity of these qualities is **high**.

Magnitude of Impact

2.9.43 The indirect impacts on these qualities varies:

- Long views: The Proposed Development lies to the west of the majority of this LCT and does not lie between the LCT and views of Exmoor and Dartmoor. However, the Converter Site and the realigned pylons and overhead power lines may feature at the periphery of some long views. The indirect impact of this localised, long-term, permanent effect would, on balance, be **negligible**
- Tranquillity and remoteness: The part of the LCT that lies within the ZTV of the Converter Site is not remote, the operation may affect some aspects of tranquillity. The indirect impact of this localised, short-term, reversible effect would, on balance, be **negligible**.

Significance of the Effect

2.9.44 The significance of indirect effects of the Proposed Development on the perceptual qualities

- Long views: There would be a negligible impact on this high sensitivity receptor. The effect is judged to be **negligible adverse**, which is not significant.
- Tranquillity and remoteness: There would be a negligible impact on this high sensitivity receptor. The effect is judged to be **negligible adverse**, which is not significant.

2.9.45 The overall significance of effect, experienced by the LCT is judged to be **negligible adverse**, which is not significant.

North Devon and Torridge District Landscape Character Types - Indirectly Affected

2.9.46 None of the North Devon District and Torridge District LCT indirectly affected by the operation of the Proposed Development, have been taken forward to the assessment stage, as there is no potential for these LCTs to experience significant effects.

Assessment of Effects on Views and Visual Amenity During the Operation and Maintenance Phase

2.9.47 As the location of the Converter Site and the proposed mitigation has not been finalised, only a limited number of visualisations have been produced for PEIR. These have been selected from the list of representative viewpoints in **Table 2.18** of this chapter. The viewpoints represent a geographical spread of sensitive receptors. A set of visualisations from all representative viewpoints taken forward to assessment would be submitted with the ES.

2.9.48 The impacts of the operation and maintenance phase of the Proposed Development have been assessed. The potential impacts arising from the operation and maintenance phase of the Proposed Development are listed in **Table 2.19**, along with the maximum design scenario against which each impact has been assessed.

2.9.49 A description of the potential effect on visual receptors caused by each identified impact is given below.

Visual Receptor Groups

People using Public Rights of Way and Access Land

2.9.50 The sensitivity of the people using the local PRoW network and Access Land for informal recreation is **high** because appreciation of the surrounding environment is a primary concern. However, those users of the South West Coast Path National Trail, as it crosses the North Devon Coast National Landscape (NL) are considered to have a **very high** sensitivity to change.

Landfall and Onshore HVDC Cable Corridor – Operational and Decommissioning Effects

2.9.51 During the operation and maintenance phase the impacts would be **negligible**, as the cables would be underground and the construction compounds and the elements crossed using trenched techniques would be reinstated. The effects would vary from negligible to **minor adverse**, reducing over time and not significant. At the decommissioning phase the impact would be **no change to negligible adverse**, as the cable ducts are left in situ, only temporary access to the TJBs and the Joint Bays is required. For this reason, visual receptors along the Onshore HVDC Cable Corridor are not taken forward to this section of the assessment, as there is no possibility for them to experience significant effects.

Converter Stations, HVAC Cables and Alverdiscott Substation Connection Development – Operational Effects

2.9.52 People using the PRoW network are considered to have a **high** sensitivity, unless on a designated route. The impact on people using the PRoW network during the operation of the infrastructure at the Converter Site would be **negligible** to **small**, due primarily to distance from the Converter Site. The effects experienced by people using the PRoW network would be **negligible** to **moderate adverse** and not significant.

Converter Stations, HVAC Cables and Alverdiscott Substation Connection Development – Decommissioning Effects

2.9.53 The Converter Site would be removed at decommissioning and although some of the operations are the same but the reverse of those at construction, the decommissioning would take place within an established landscape, which would screen most activities. The impact on people using the PRoW network would be **negligible**. The temporary effects of decommissioning would be **minor adverse**, which is not significant. The Alverdiscott Substation Connection Development would remain *in situ*.

Dynamic Receptors

2.9.54 People within vehicles using roads are considered to have a **low** sensitivity to change. However, people in vehicles crossing the NL are deemed to have **medium** sensitivity to the Proposed Development during the operation phase, while cyclists and people walking along minor roads within the NL are considered to have a **high** sensitivity as people within the NL are deemed to be more aware of their surroundings. On roads in non-designated landscapes, cyclists have a **medium** sensitivity. People walking along minor roads have varied sensitivities to the Proposed Development, depending on the context of the view, the sensitivity of these receptors would usually be **medium**.

Landfall and Onshore HVDC Cable Corridor – Operational Effects

2.9.55 Those people using the road network around and crossing the Onshore HVDC Cable Corridor would only be affected during the construction phase. Any maintenance work following completion of the construction would not result in significant effects and so the effects of the cable corridor during the operation and maintenance and the decommissioning phases are not assessed in this LSVIA.

Converter Stations, HVAC Cables and Alverdiscott Substation Connection Development – Operational Effects

2.9.56 As the impact experienced by people travelling along minor roads within the NL, these receptors would be less at operation and decommissioning than at construction, these visual receptors are not taken further in this LSVIA.

2.9.57 In areas outside designated landscapes road users in vehicles have a **low** sensitivity to the construction of the Proposed Development at the Converter Site. Cyclists and pedestrians using the roads local to Converter Site, as a right of way also have a **medium** sensitivity to the Proposed Development, dependent on context. Barring the minor road that runs between Gammaton Moor and Webbery Cross/Webbery Barton which forms the western boundary of the Converter Site,

there are few roads that are close to the Converter Site. People in vehicles, those on bicycles, as well as people walking along the Gammaton Moor to Webbery Cross road would experience a localised **medium** visual impact when close to the Converter Site. People in vehicles would experience a **minor adverse** effect, which is not significant. Cyclists and walkers using the minor road would experience a localised **moderate adverse** effect, which is significant.

2.9.58 These effects would reduce over time as the proposed landscape mitigation becomes established. The effects would reduce to a level that is not significant.

People at Work

2.9.59 People at their places of work are considered to have a **low** sensitivity to the Proposed Development because the focus of attention is on their work not on the surroundings.

Landfall and Onshore HVDC Cable Corridor – Operational and Decommissioning Effects

2.9.60 Those people using working in and around the landfall and the Onshore HVDC Cable Corridor would only be affected during the construction phase. Any maintenance work following completion of the construction would not result in significant effects and so the effects of the Onshore HVDC Cable Corridor during the operation and maintenance and the decommissioning phases are not assessed in this LSVIA.

Converter Stations, HVAC Cables and Alverdiscott Substation Connection Development – Operational Effects

2.9.61 Most working people that have views towards the Converter Site are involved in the agricultural sector. Those with close views of the Proposed Development would be people working at the Converter Site, National Grid employees and those people working on the adjacent solar farm. The impact of the Proposed Development once constructed would be **medium**, reducing with distance from the site of the works. The visual effects experienced by these receptors would be **moderate adverse** and significant. The effects would reduce over time, as the proposed planting becomes established, to become not significant.

Representative Viewpoints

2.9.62 Preliminary visualisations have been undertaken for a limited number of representative viewpoints, to inform the LSVIA for the PEIR. The visualisations are a first step to developing the landscape mitigation proposals. These would be modified and finalised for the submission of the ES.

2.9.63 The locations of the chosen representative viewpoints, shown on Volume 4, Figure 2.5a to 2.5e, are geographically diverse and/or from sensitive viewpoints. Descriptions from all of the viewpoint locations are in Volume 4, Appendix 2.3: Visual Baseline Technical Report of the PEIR. Preliminary visualisations from the selected representative viewpoints are submitted in Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR.

Representative Viewpoint 23: View South From Public Right of Way Newton Tracey Footpath 4, to the South of Horwood (Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR, Figure 2.5.1)

2.9.64 The people using this public right of way have a **high** sensitivity. During the operation phase the Converter Site and the Alverdiscott Substation Connection Development are screened by proposed earth-modelling from this viewpoint. However, the mitigation itself breaks the skyline and before the proposed planting becomes established would form a new part of the skyline. The impact of the proposed mitigation measures would be **medium**, reducing to **negligible**, as the planting becomes established and integrates with the surrounding landscape. People on this footpath would experience **moderate adverse** effects, reducing to **negligible adverse** over time, both of which are not significant.

Representative Viewpoint 27: View West From Junction of Minor Road with B3232, at Alverdiscott (Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR, Figure 2.5.2)

2.9.65 The sensitivity of people using this minor road vary between **low** (people in vehicles) and **medium** (cyclists and people walking). During the operation phase the Converter Site and the Alverdiscott Substation Connection Development are screened in part by proposed earth-modelling and earth-modelling forms a backdrop to those parts of the buildings that might not be screened. However, the mitigation itself breaks the skyline and before the proposed planting becomes established would form the new skyline. The impact of the proposed mitigation measures would be **medium**, reducing to **small**, as the planting becomes established and integrates with the surrounding landscape. People using the minor road would experience **minor** to **moderate adverse** effects, which are not significant to significant, reducing to **negligible** to **minor adverse** over time, effects which are not significant.

Representative Viewpoint 29: View West-Northwest From Minor Road, to the South of Alverdiscott (Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR, Figure 2.5.3)

2.9.66 The sensitivity of people using this minor road vary between **low** (people in vehicles) and **medium** (cyclists and people walking). During the operation phase the Converter Site and the Alverdiscott Substation Connection Development are screened in part by proposed earth-modelling and earth-modelling forms a backdrop to those parts of the buildings that might not be screened. However, the mitigation itself breaks the skyline and before the proposed planting becomes established would form the new skyline. The impact of the proposed mitigation measures would be **medium**, reducing to **small**, as the planting becomes established and integrates with the surrounding landscape. People using the minor road would experience **minor** to **moderate adverse** effects, which are not significant to significant, reducing to **negligible** to **minor adverse** over time, effects which are not significant.

Representative Viewpoint 32: View Northwest From Public Right of Way Footpath 1, to the East of Huntshaw (Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR, Figure 2.5.4)

2.9.67 The people using this public right of way have a **high** sensitivity. During the operation phase the Converter Site and the Alverdiscott Substation Connection Development are screened in part by proposed earth-modelling and earth-modelling forms a backdrop to those parts of the buildings that might not be screened. However, the mitigation itself breaks the skyline and before the proposed planting becomes established would form the new skyline. The impact of the proposed mitigation measures would be **medium**, reducing to **small**, as the planting becomes established and integrates with the surrounding landscape. People using the public footpath would experience **major adverse** effects, which are significant, reducing to **minor adverse** over time, effects which are not significant.

Representative Viewpoint 33: View North-Northeast From Minor Road, to the North of Gammaton Moor (Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR, Figure 2.5.5)

2.9.68 The sensitivity of people using this minor road vary between **low** (people in vehicles) and **medium** (cyclists and people walking). During the operation phase, the Converter Site will be screened in part by proposed earth-modelling. However, the Alverdiscott Substation Connection Development would not be screened by the applicant albeit that it will benefit from some of the screening designed for the Converter Site. The mitigation for the Converter Site breaks the skyline and before the proposed planting becomes established would form the new skyline. The impact of the proposed mitigation measures would be **large**, reducing to **medium**, as the planting becomes established helps in integrating the earth-modelling with the surrounding landscape. People using the minor road would experience **moderate** to **major adverse** effects, which are significant, reducing to **minor** to **moderate adverse** over time, effects which are not significant.

Representative Viewpoint 40: View East Southeast From Minor Road at Rickard's Down, North of Abbotsham, Within the North Devon Coast National Landscape (Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR, Figure 2.5.6)

2.9.69 The sensitivity of people using this minor road, within the North Devon Coast NL varies. People within vehicles have a **medium** sensitivity, whilst cyclists and pedestrians have a **high** sensitivity. The impact of the Proposed Development on visual receptors at this location would be **negligible**, due largely to distance, but also due to the screening effects of topography and intervening hedgebanks. The Converter Site would be screened by the earth-modelling. The significance of effects experienced by visual receptors during the operation phase would be **negligible adverse**, which are not significant.

Representative Viewpoint 44: View South From Public Footpath, East of Limekiln Lane (Volume 4, Appendix 2.5: Preliminary Visualisations, Figure 2.5.7)

2.9.70 The sensitivity of people using this public footpath is **high**. The impact of the Proposed Development on visual receptors at this location would be **negligible**, due largely to distance. The Converter Site would be screened by the earth-modelling. The significance of effects experienced by visual receptors during the operation phase would be **negligible adverse**, which are not significant.

Night Time Effects During the Operation and Maintenance Phase

2.9.71 As the location of the Converter Site and the proposed mitigation has not been finalised, a lighting strategy has not been produced for PEIR. As such, only a high-level overview has been possible at this stage.

2.9.72 As the Onshore HVDC Cable Corridor would not be lit once constructed the only source of artificial lighting would be at the Converter Site. The sensitivity of the landscape to artificial lighting is **high**.

2.9.73 As the Proposed Development is CNP infrastructure there would be a certain amount of lighting associated with security and safety at the Converter Site. However, it is recognised that this is in an area of darker skies and the lighting strategy would follow best practice and the guidance contained within the NPPG (summarised at paragraphs 2.2.6 to 2.2.19 of this chapter) to minimise light pollution. The direct localised impact on nocturnal darkness would be small, reducing over time as the proposed planting becomes established.

Further Mitigation

2.9.74 There is no further mitigation proposed during the operation and maintenance phase of the Proposed Development.

Future Monitoring

2.9.75 Other than compliance with the Outline LEMP and the standard 5-year Defects Liability Clause (replacement of plant stock that is dead or dying) no monitoring is proposed during the operation and maintenance phase of the Proposed Development.

2.10 Cumulative Environmental Assessment

2.10.1 The Cumulative Effects Assessment (CEA) considers the impact associated with the Proposed Development together with other projects and plans. The projects and plans selected as relevant to the CEA presented within this chapter are based upon the results of a screening exercise (see Volume 1, Appendix 5: CEA screening matrix) and a further landscape, seascape and visual resources screening in Volume 2, Appendix 2.4: Landscape and Visual Impact Assessment Methodology of the PEIR, Table 1.16. Each project has been considered on a case-by-case basis for screening in or out of this chapter's assessment based

upon data confidence, effect-receptor pathways and the spatial/temporal scales involved.

2.10.2 The landscape, seascape and visual resources CEA methodology has followed the methodology set out in Chapter 5: EIA Methodology of the PEIR. As part of the assessment, all projects and plans considered alongside the Proposed Development have been allocated into 'tiers' reflecting their current stage within the planning and development process, as set out in The Planning Inspectorate Advice note seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects (2015) (Advice Note 17).

- Tier 1,
  - Under construction
  - Permitted application
  - Submitted application
  - Those currently operational that were not operational when baseline data were collected, and/or those that are operational but have an ongoing impact
- Tier 2
  - Scoping report has been submitted
- Tier 3
  - Scoping report has not been submitted
  - Identified in the relevant Development Plan
  - Identified in other plans and programmes.

2.10.3 This tiered approach is adopted to provide a clear assessment of the cumulative effects of the Proposed Development together with other projects, plans and activities. Note - there are no relevant Tier 2 or Tier 3 projects at the time of submission of the PEIR.

2.10.4 The full list of cumulative projects is at Volume 1, Appendix 5.3: CEA Screening Matrix of this PEIR. Potentially relevant cumulative projects within 10 km Converter Site study area are listed at Volume 4, Appendix 2.4: Landscape and Visual Impact Assessment Methodology, Table 1.16 and Figure 2.4.1 of the PEIR.

2.10.5 Most of the cumulative developments in Table 1.16 of Volume 4, Appendix 2.4: Landscape and Visual Impact Assessment Methodology of the PEIR are applications for residential developments (49 out of 53 developments) and only three on the list are electricity infrastructure developments (three solar farms and one substation). Therefore, most of the residential developments are located in the proximity of existing settlements, such as Fremington and Bickington, 7 km to the north/northeast, Bideford, 2.5 km to the west and Great Torrington 5 km to the south of the proposed Converter Site. The majority of the cumulative developments are located outside of the ZTV. The known residential developments would only generate additional cumulative construction effects, if developed at the same time as the Proposed Development, which there is little potential for, as the residential development will most likely be completed before the construction of the Proposed Development starts.

2.10.6 The cumulative electricity transmission developments, which are excluded from the cumulative assessment due to the distance, where significant effects would be unlikely to occur, the East Yelland substation (5), associated with the White Cross

Offshore Wind Farm, which lies approximately 7 km to the north west of the Converter Site and does not fall within the ZTV, and solar farm (11) at Litchardon Cross, which falls within the ZTV approximately 5 km to the north of the Converter Site.

2.10.7 The electrical infrastructure projects scoped into the CEA, are outlined in **Table 2.21** and their locations shown on Volume 4, Figure 2.7.

Table 2.21: List of cumulative developments considered within the CEA

Project (with Reference ID)	Status	Distance from Proposed Development (nearest point, km)	Description	Dates of Construction (if available)	Dates of Operation (if available)	Overlap with the Proposed Development?
Tier 1						
(32) 1/1130/2020/FULM	Operational (also part of baseline)	Webbery Barton and Cleave Farms, Gammaton, EX39 4QQ Adjacent to the Proposed Development Draft Order Limits	Construction of photovoltaic (PV) solar array and associated works (Variation of condition 3 of planning permission 1/0997/2012/FULM) - Extension to operational life			• Potential temporal overlap • In ZTV of Converter Site • In host LCT of Converter Site and cable corridor
(33) 1/1057/2021/FULM	Permitted	Land At Webbery Barton And Cleave Farm Bideford Devon Partially within Proposed Development Draft Order Limits	Installation and operation of a solar farm together with all associated works, equipment and infrastructure (Further Information)			• Potential temporal overlap • In ZTV of Converter Site • In LCT of Converter Site and cable corridor

Cumulative Effects Assessment

Types of cumulative landscape and seascape effects

2.10.8 The cumulative assessment considers the likely effects on landscape, seascape and visual resources and receptors against the baseline conditions current at the time of publication of the PEIR (April 2024). The baseline includes relevant Tier 1 existing and operational projects, within the LVIA study area, the locations of which are indicated on Volume 4, Figure 2.7. The LSVIA findings and conclusions thus had regard to these major development factors and the influence they exert on existing landscape and seascape character as well as on views and visual amenity. This section provides a brief review of these findings and conclusions, in the light of GLVIA3 guidance on CEA, in particular the following recommendations:

- The 'filling' of an area with either the same or a different type of development, which may substantially alter the landscape or seascape resource, views or visual amenity.
- Incremental change resulting from successive individual developments such that the combined landscape, seascape or visual effect is significant even though the individual effects may not be (GLVIA3, paragraph 7.17).

2.10.9 GLVIA3 identifies the likely potential cumulative landscape/seascape effects as including:

- Effects on the fabric of the landscape/seascape resulting from the removal of, or changes in, individual elements or features of the landscape, and/or the introduction of new elements or features in the landscape/seascape.
- Effects on the aesthetic aspects of the landscape/seascape, e.g., scale, sense of enclosure, sense of naturalness, remoteness or tranquillity.
- Effects on the overall character of the landscape/seascape, resulting from the above, leading to modification of key characteristics and possible creation of new landscape/seascape character.

2.10.10 A description of those landscape and seascape effects that have the potential to be significant in terms of cumulative effects upon landscape and seascape resources and receptors arising from each identified impact is given below.

2.10.11 The aesthetic aspects of landscape and seascape resources are expressed in their overall character, their distinctive characteristics and qualities, and the value attached to them by people/society. Regarding aesthetic aspects, GLVIA3 states: *"Character is not just about the physical elements and features that make up a landscape, but also embraces the aesthetic, perceptual and experiential aspects of the landscape that make different places distinctive" (*GLVIA3, paragraph 2.19 – a similar statement is made with respect to seascape at paragraph 5.6). When defining them GLVIA3 states: *"…the aesthetic aspects of the landscape – for example its scale, sense of enclosure, diversity, pattern and colour, and/or on its perceptual or experiential attributes, such as a sense of naturalness, remoteness or tranquillity"* (GLVIA3, paragraph 7.25).

2.10.12 GLVIA 3 adds that regarding the assessment of landscape/seascape value: *"Scenic quality may also be relevant and will need to reflect factors such as sense of place and aesthetic and perceptual qualities"* (GLVIA3, paragraph 5.29).

Types of Cumulative Visual Effects

2.10.13 GLVIA3 identifies two types of cumulative visual effects as follows:

- Combined – where the observer is able to see two or more developments from one viewpoint. The subsets of combined visual effects are:
  - In combination, where two or more developments are or would be within the observer's arc of vision at the same time, without turning their head.
  - In succession, where the observer has to turn their head to see the various developments, both existing and proposed.
- Sequential – where the observer has to move to another viewpoint to see the same or different developments. Sequential effects may occur along routes or roads and/or public rights of way. The subsets of sequential effects are:
  - Frequently sequential, where the features appear regularly and with short time lapses between instances (dependant on speed and distance).
  - Occasionally sequential, where longer time lapses between appearances occur, due to speed of the observer and/or longer distances between viewpoints.

Overview

2.10.14 The cumulative impact will be caused by both static and moving (predominantly at the construction phase) elements of the development components of the cumulative projects, in combination with those of the Proposed Development. Together these will potentially affect the characteristics and perceptions of the landscape and visual resource of the LSVIA study area.

2.10.15 A description of the significance of cumulative effects of the Proposed Development, within the LSVIA study area upon landscape, seascape and visual resources and receptors arising from each identified impact is given below.

2.10.16 For a cumulative effect to occur, an additional effect must arise over and above the likely effect of implementing the Proposed Development on its own, measured against baseline conditions.

2.10.17 The assessment of cumulative landscape and visual effects is presented in two stages as follows:

- Effects resulting from the Proposed Development in conjunction with existing developments of a similar nature as listed in **Table 2.21**.
- Effects arising from the Proposed Development in conjunction with proposed/permitted major developments as listed in **Table 2.21** (Tier 1 only, as there are currently no Tier 2 and Tier 3 projects identified).

2.10.18 The Tier 1 cumulative projects which are considered for the cumulative assessment are (in Reference ID no. order):

- (32) 1/1130/2020/FULM - operational solar farm at land of Webbery Barton And Cleave Farm, adjacent to the Proposed Development Draft Order Limits; and
- (33) 1/1057/2021/FULM - – permitted solar farm at land of Webbery Barton And Cleave Farm, partially within Proposed Development Draft Order Limits.

2.10.19 The locations of the cumulative developments are shown on Volume 4, Figure 2.7, also showing the North Devon and Torridge LCTs overlayed by the Converter Site ZTV.

Construction and Decommissioning

Cumulative Effects on Landscape Fabric and Character

2.10.20 Based on the ZTV and fieldwork verification the following landscape resources would be potentially affected by cumulative effects:

- LCT 5A: Inland Elevated Undulating Land; and
- LCT 1F: Farmed Lowland Moorland and Culm Grassland.

LCT 5A: Inland Elevated Undulating Land LCT

2.10.21 The cumulative developments and the Converter Site are located within the same LCT (5A) where direct effects are expected on the landscape fabric due to the change in land use of the existing agricultural land. The same LCT (LCT 5A: Inland Elevated Undulating Land) currently accommodates other electrical development.

2.10.22 The overall sensitivity of LCT 5A: Inland Elevated Undulating Land to the type of the development proposed is assessed as **medium** in section 2.8 above. The magnitude of impact of the construction phase of the proposed Converter Site was considered to be **large** on farmland characteristics, resulting in **moderate adverse** and significant effects on this key characteristic of the LCT. These effects are localised, medium term and temporary.

2.10.23 The permitted solar farm development approximately 300 m to the south of the Converter Site would essentially form an extension to the existing solar farm, which lies immediately to the south of the Converter Site.

2.10.24 The permitted and proposed developments would extend the developed nature of the existing agricultural land, being sited in the proximity of the existing substation and solar farm. However, this clustering approach is preferrable to a random scattering of individual developments, which would have a higher level cumulative effect on the landscape fabric of the LCT and overall landscape character.

2.10.25 The earthworks, removal of hedgerows, the presence of construction compounds, fencing and temporary spoil heaps, and the emerging Proposed Development would result in direct permanent changes to the existing landscape fabric.

2.10.26 The movement of heavy machinery, temporary lighting and noise, would be intrusive in a relatively tranquil landscape and temporarily alter how the local area is perceived.

2.10.27 Together, these would be of a **large** magnitude of impact to the Converter Site itself and the immediate local landscape, resulting in temporary **moderate to major adverse** and significant effects locally. The development would not affect the perception of the character of the LCT 5A: Inland Elevated Undulating Land within the wider character area.

2.10.28 Due to the siting and low-lying nature of the permitted solar farm and fragmented ZTV pattern (Figure 2.4.1) of the converter stations indicating limited effects on the perception of the wider LCT 5A: Inland Elevated Undulating Land, the additional cumulative effects upon the wider landscape of Inland elevated

undulating land LCT would be perceived as a **small** magnitude of impact resulting in temporary **minor adverse** and not significant effects.

LCT 1F: Farmed Lowland Moorland and Culm Grassland

2.10.29 The adjacent LCT 1F: Farmed Lowland Moorland and Culm Grassland has the potential to experience limited indirect additional cumulative effects upon the perception of the Inland Elevated Undulating Land (LCT 5A) as presented in representative viewpoints 29 and 32 (Figures 2.3.29 and 2.3.32 of Volume 4, Appendix 2.3: Visual Baseline of the PEIR. It is considered that the cumulative developments would not affect how the character of LCT 1F: Farmed Lowland Moorland and Culm Grassland would be perceived, appearing in the distance, and in elevated views the Proposed Development, at the Converter Site, including the proposed earth-modelling would not form a prominent skyline feature and when finalised will blend in with the topographical features of the existing. landform. The permitted solar farm would slightly extend the slope beneath the solar farm development. Therefore, it is considered that indirect additional cumulative construction effects upon the LCT 1F: Farmed Lowland Moorland and Culm Grassland of **medium** sensitivity would be perceived as a **small** magnitude of impact resulting in temporary **minor adverse** and not significant effects.

Decommissioning

2.10.30 At the decommissioning phase, it is assumed that all cable ducts will be left underground, therefore there will be no perceivable effects on the landscape character. The effects attributable to the decommissioning impact of the developments cumulatively with the Proposed Development would be similar in scale to the effects during the construction phase, or even lower at the Converter Site, as decommissioning will take place within the recently established wooded environment, the additional cumulative decommissioning effects on landscape, seascape and visual resources and receptors will be lower than during the construction phase. It is anticipated that closer to decommissioning a restoration plan would be agreed. However, this would most likely include the retention of established woodland planted as part of the mitigation proposals.

Cumulative Effects on Visual Amenity

2.10.31 Based on the ZTV and fieldwork verification the following visual receptors would potentially experience significant cumulative effects:

- road users of local road to the south of Alverdiscott;
- road users local road between Huntshaw and Knockworthy Cross;
- road users of the local road between Gammaton Moor to Webbery Barton; and
- residential properties adjacent to local road between Gammaton Moor to Webbery Barton.

Local Road Users

2.10.32 Only those visual receptors at publicly accessible locations that lie within the ZTV of the Converter Site have the potential to experience additional cumulative effects, over and above those of the converter stations themselves.

2.10.33 The actual visibility of the construction related to the cumulative developments would be relatively well contained within the wider study area, due to the topography and intervening vegetation. The permitted solar farm has further reduced visual influence due to its location on the north eastwards sloping landform, on a lower elevation than the converter stations. Therefore, the developments would be perceivable simultaneously only in a limited number of views from the east and southeast, such as the local road to the south of Alverdiscott (representative viewpoint 29), approximately 1.8 km to the east and local road between Huntshaw and Knockworthy Cross (representative viewpoint 32) Figures 2.5.3 and 2.5.4 of Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR) approximately 2 km southeast. The sensitivity of the visual receptors using the local roads in the vicinity of the Converter Site varies from **low** to **medium** and the magnitude of impact is considered to be **small** to **medium** due to the distance and limited extent, resulting in temporary **minor** to **moderate adverse** and not significant additional cumulative effects during the construction and decommissioning stages.

2.10.34 In respect of the users of the local road between Gammaton Moor to Webbery Barton, next to the Converter Site, then assuming a worst-case scenario where the construction and decommissioning stages of the permitted solar farm and the Converter Stations are simultaneous, there may be an increase in traffic and movement experienced from the road/by road users. The sensitivity of the receptor is classed as **low** to **medium** and the magnitude of impact is considered to be **large**, resulting in temporary **moderate** to **major adverse** and significant additional cumulative effects over a greater length of the road during the construction and decommissioning stages.

Residential Receptors

2.10.35 Several residential receptors adjacent to this local road would experience potential cumulative effects due to the increase in traffic volume, as none of the properties have views overlooking the sites simultaneously. The permitted solar farm would be well contained in views, being sited on a slope, at an elevation approximately 20 m lower than the local road and residential properties. The sensitivity of the receptor is classed as **high** and the magnitude of impact attributable to the increased traffic of heavy machinery is considered **large** to **medium**, resulting in temporary **major** to **moderate adverse** and significant additional cumulative effects during the construction and decommissioning phases (major adverse effects during construction and moderate adverse effects during decommissioning).

Operation and Maintenance

Cumulative Effects on Landscape Character

2.10.36 Based on the ZTV and fieldwork verification the following landscape resources would be potentially affected by cumulative effects:

- LCT 5A: Inland Elevated Undulating Land; and
- LCT 1F: Farmed Lowland Moorland and Culm Grassland.

LCT 5A: Inland Elevated Undulating Land

2.10.37 The overall sensitivity of the LCT 5A: Inland Elevated Undulating Land to the type of the development proposed is assessed as **medium** in sections **2.8** and **2.9** of this chapter. The magnitude of impact of the operational phase of the Converter Site was considered to be **large** on farmland characteristics, resulting in **moderate adverse**, but not significant due to the embedded mitigation.

2.10.38 The permitted solar farm development approximately 300 m to the south of the Converter Site, would essentially form an extension to the existing solar farm, which lies immediately to the south of the Converter Site.

2.10.39 The permitted and proposed developments would extend the developed nature of the existing agricultural land, being sited in the proximity of the existing substation and solar farm. However, this clustering approach in terms of land use is considered preferrable to the random scatter of individual developments, which would have a higher-level cumulative effect on the perception of the landscape character of LCT 5A: Inland Elevated Undulating Land.

2.10.40 Due to the smaller scale and nature of the permitted solar farm developments the perceived change upon landscape character would be mostly attributable to the proposed converter stations. Due to the embedded mitigation measures, as described in section 2.7 and illustrated in representative viewpoints 29 and 32 (Figures 2.5.3 and 2.5.4 of Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR) the proposed Converter Site would be fully integrated into the local landscape alongside the solar developments. The magnitude of cumulative impact is considered to be **medium**, resulting in **moderate adverse** additional cumulative effects which are locally significant.

2.10.41 Due to the siting and low-lying nature of the permitted solar farm and fragmented ZTV pattern of the proposed Converter Site (Volume 4, Figures 2.5 a to 2.5e) indicating limited effects on the perception of the wider LCT 5A: Inland Elevated Undulating Land, the additional cumulative effects upon the wider character of LCT 5A would be perceived as a **small** magnitude of impact resulting in **minor adverse** and not significant effects on LCT 5A as a whole.

LCT 1F: Farmed Lowland Moorland and Culm Grassland

2.10.42 The adjacent LCT 1F: Farmed Lowland Moorland and Culm Grassland has the potential to experience limited indirect additional cumulative effects as presented in representative viewpoints 29 and 32 (Figures 2.5.3 and 2.5.4 of Volume 4, Appendix 2.5: Preliminary Visualisations of PEIR). However, at assessment, it is considered that the cumulative developments would not affect how the character of LCT 1F would be perceived, as they appear for the most part in the distance, and in elevated views the Proposed Development, at the Converter Site, including the proposed earth-modelling would not form a prominent skyline feature and when finalised will blend in with the topographical features of the existing landform. The permitted solar farm would appear to slightly extend the sloping landform beneath the existing solar farm development. Therefore, the indirect cumulative effects on LCT 1F: Farmed Lowland Moorland and Culm Grassland of **medium** sensitivity would be perceived as a **negligible** to **small** magnitude of impact resulting in **negligible** to **minor adverse** and not significant additional cumulative effects.

Cumulative Effects on Views and Visual Amenity

2.10.43 Based on the ZTV and fieldwork verification the following visual receptors would potentially experience additional cumulative effects:

- road users of local road to the south of Alverdiscott;
- road users local road between Huntshaw and Knockworthy Cross;
- road users of the local road between Gammaton Moor to Webbery Barton; and
- residential properties adjacent to local road between Gammaton Moor to Webbery Barton.

Local Road Users

2.10.44 The simultaneous visibility of the three developments would be relatively well contained within the wider study area, due to the topography and intervening vegetation. The permitted solar farm would have even more of a reduced visual influence due to its location on the north eastwards sloping landform, on a lower elevation than the Converter Site. Therefore, the developments would be perceived simultaneously only in a limited number of places from the east and southeast, such as the local road to the south of Alverdiscott (representative viewpoint 29, Figure 2.5.3 of Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR), approximately 1.8 km to the east and local road between Huntshaw and Knockworthy Cross (representative viewpoint 32, Figure 2.5.4 of Volume 4, Appendix 2.5: Preliminary Visualisations of the PEIR), approximately 2 km to the southeast of the Converter Site. The sensitivity of the receptor is **medium** and the magnitude of impact is **small**, due to the distance and limited extent, resulting in **minor** to **moderate adverse** and not significant additional cumulative effects.

2.10.45 With respect to the users of the local road between Gammaton Moor to Webbery Barton, next to the Converter Site, due to the proximity to the three developments, the converter stations would appear in transient and filtered views primarily through field gates/entrances, due to the roadside vegetation in hedgerows, on hedgebanks and small copses. The sensitivity of the receptor is classed as **low** to **medium** and the magnitude of impact is considered of a **medium**, resulting in **minor** to **moderate adverse** and not significant additional cumulative effects for users of limited sections of the road.

Residential Receptors

2.10.46 Due to the intervening vegetation/topography then most of the residential receptors lie outside areas covered by the ZTV of the converter stations. Only a few properties, adjacent to the local road between Gammaton Moor and Webbery Barton are expected to have filtered views of the proposed converter stations, although not in combined views with the permitted and proposed solar farms. The permitted solar farm would be well contained in views, being sited on a slope, at an elevation approximately 20 m lower than the local road and residential properties. The sensitivity of the residential receptor is classed as **high** and the magnitude of impact attributable to the cumulative effects is considered **small**, resulting in **minor** to **moderate adverse** and not significant additional cumulative effects.

2.11 Transboundary Effects

2.11.1 A screening of transboundary impacts has been carried out and has identified that there was no potential for significant transboundary effects with regard to Landscape and visual resources from the Proposed Development upon the interests of other states.

2.12 Inter-related Effects

2.12.1 Inter-relationships are the impacts and associated effects of different aspects of the Proposed Development on the same receptor. These are as follows.

- Project lifetime effects: Assessment of the scope for effects that occur throughout more than one phase of the Proposed Development (construction, operation and maintenance), to interact to potentially create a more significant effect on a receptor than if just assessed in isolation in these three phases (e.g., indirect effects on landscape character of the removal of vegetation).
- Receptor led effects: Assessment of the scope for all effects (including inter-relationships between environmental topics) to interact, spatially and temporally, to create inter-related effects on a receptor. As an example, all effects on landscape and visual resources and receptors, such as direct vegetation, direct effect on views experienced by sensitive visual receptors, may interact to produce a different, or greater effect on this receptor than when the effects are considered in isolation. Receptor-led effects may be short term, temporary or transient effects, or incorporate longer term effects.

2.12.2 A description of the likely interactive effects arising from the Proposed Development on landscape and visual resources and receptors is provided in Volume 4, Chapter 5: Inter-Related effects of the PEIR.

2.12.3 The inter-related effects (project lifetime effects) that are predicted to arise during the construction, operational and maintenance phases of the Proposed Development, and also the inter-related effects (receptor-led effects that are predicted to arise for landscape and visual resources and receptors are listed below:

- The impact of noise and traffic during construction can affect the tranquillity of a character area.
- The impact of traffic during construction can affect the views and visual amenity of visual receptors.
- The impact of lighting and noise during operation can affect the dark skies and tranquillity of a character area.
- The impact on historic assets can affect the perceptual qualities of character areas.

2.13 Summary of Impacts

Landscape and Seascape Character

2.13.1 Information on LSVIA within the study area was collected through a desktop review of published landscape and seascape character assessments, site surveys and photography during summer and winter.

2.13.2 **Table 2.22** presents a summary of the potential impacts and effects in respect of landscape, seascape and visual resources and receptors. Regarding designated landscapes (statutory and non-statutory) - the effects of the construction of the Proposed Development on the special feature/special qualities of the North Devon Biosphere Reserve and the North Devon Coast NL have been considered. The Landfall and Onshore HVDC Cable Corridor cross the buffer zone of the North Devon Biosphere Reserve, which is contiguous with the boundary of the North Devon Coast NL in this location. The Converter Site and Alverdiscott Substation Site lie inside the Biosphere Transition Zone, but approximately 6.4 km from the North Devon Coast NL.

2.13.3 National and county landscape character areas impacted by the Proposed Development are National Character Area 149: The Culm and Devon County Landscape Character Areas: Bideford Bay Coast, Torridge Valley and High Culm Ridges.

2.13.4 The landfall lies within North Devon Seascape Character Area 21: Abbotsham Coast. The North Devon District and Torridge District Landscape Character Types directly impacted by the Onshore Infrastructure Area are 4H: Cliffs, 5B: Coastal Undulating Farmland, 3H: Secluded Valleys, 4A: Estuaries, 3G: River Valley Slopes and Combes, 5A: Inland Elevated Undulating Land and 1F Farmed Lowland Moorland and Culm Grassland.

2.13.5 None of the North Devon District and Torridge District Landscape Character Types indirectly affected by the Proposed Development, were taken forward to the assessment stage, as there was no potential for these to experience significant effects.

Landfall and Onshore HVDC Cable Corridor

2.13.6 Potentially significant effects will only occur during the construction phase of this part of the development, as the installed cables will be underground during the operation and maintenance phase. Following construction existing landscape features along the Onshore HVDC Cable Corridor (including sections of Devon hedgebanks) will be fully restored. The cable ducts and joint bays will remain in place at decommissioning, with only cables cut and removed.

2.13.7 During the construction phase, potentially significant temporary effects on landscape and seascape character will occur locally on:

- North Devon Biosphere Reserve special features - hedgerows and Devon hedgebanks and tranquillity and nocturnal darkness
- National Character 149 The Culm key characteristic - hedgebanks
- Devon County Landscape Character Area Bideford Bay Coast key characteristic - sunken rural lanes

- Devon County Landscape Character Area Torridge Valley key characteristic - high-banked lanes.
- North Devon and Torridge District Landscape Character Type 5A Inland Elevated Undulating Land key characteristic - rushy/wet meadow with its associated mature species-rich (wet oak) field boundaries.

Converter Site, Onshore HVAC Cable Corridor and Alverdiscott Substation Connection Development

2.13.8 Potentially significant effects will occur during both the construction and operation and maintenance phases of the Converter Site, Onshore HVAC Cable Corridor and Alverdiscott Substation Connection Development. Initial impacts at the of these developments in the first year of operation will reduce as the proposed planting becomes established.

2.13.9 During the construction phase, potentially significant temporary effects on landscape and seascape character will occur locally on:

- North Devon Biosphere Reserve special features - hedgerows and Devon hedgebanks and tranquillity and nocturnal darkness
- National Character 149 The Culm key characteristic - hedgebanks
- Devon County Landscape Character Area High Culm Ridges key characteristic - topography (ridges) and farmland
- North Devon and Torridge District Landscape Character Type 5A Inland Elevated Undulating Land key characteristics - elevated land and rushy/wet meadow with its associated mature species-rich (wet oak) field boundaries.

2.13.10 During the operations and maintenance phase potentially significant effects on landscape and seascape character will occur locally on:

- North Devon Biosphere Reserve special features - hedgerows and Devon hedgebanks and tranquillity and nocturnal darkness
- National Character 149 The Culm key characteristic - hedgebanks
- Devon County Landscape Character Area High Culm Ridges key characteristic - topography (ridges) and farmland
- North Devon and Torridge District Landscape Character Type 5A Inland Elevated Undulating Land key characteristics - elevated land.

Views and Visual Amenity Resources and Receptors

2.13.11 There are three main visual receptor groups (people) who have the potential to be affected by the Proposed Development in publicly accessible locations as follows: People using public rights of way, Access Land or equivalent landscape with public access: Dynamic visual receptors, people using roads and the sea; and people at work. Private views are not a planning matter unless over and above substantially adversely affected which, due to distance or lack of visibility, no properties are.

2.13.12 Representative viewpoints have been agreed with Torridge District Council's landscape consultant and also taken from publicly accessible locations suggested

by North Devon Council in the Scoping Opinion. Further photographic work is planned for post PEIR submission.

Landfall and Onshore HVDC Cable Corridor

2.13.13 During the construction phase potentially significant temporary effects on views and visual amenity will be experienced by visual receptor groups, as follows:

- People using public rights of way and Access Land - users of the South West Coast Path National Trail, the Tarka Trail, two public rights of way that are crossed by the Onshore HVDC Cable Corridor where open trenching is used, as well as people using the beach and accessing the sea at the landfall
- Dynamic receptors - recreational sailors, as well as cyclists and walkers using local (minor roads).

Converter Site, Onshore HVAC Cable Corridor and Alverdiscott Substation Connection Development

2.13.14 During the construction phase potentially significant temporary effects on views and visual amenity will be experienced by visual receptor groups:

- Dynamic receptors - cyclists and walkers using local (minor roads); and people at work.

2.13.15 During the operations and maintenance phase potentially significant effects on views and visual amenity will be experienced by visual receptor groups:

- Dynamic receptors - cyclists and walkers using local (minor roads); and people at work.

Night time effects

2.13.16 As the Proposed Development is a CNP to the UK, there will be a certain amount of lighting associated with security and safety at the converter stations site. However, it is recognised that this is in an area of darker skies and the lighting strategy will follow best practice and the guidance to minimise light pollution. At this preliminary stage of the design process, the direct localised impact on nocturnal darkness is not anticipated to be significant, either during construction phase or at the operation and maintenance phase.

Cumulative Landscape, Seascape and Visual Impacts

2.13.17 There are two electricity infrastructure projects scoped into the cumulative effects assessment, both within or adjacent to the Proposed Development.

2.13.18 **Table 2.23** presents a summary of the potential cumulative impacts and effects resulting from the Proposed Development alongside other projects/plans in respect of landscape, seascape and visual resources and receptors.

2.13.19 During the construction and operational phases there will be potentially significant effects on:

- North Devon and Torridge District Landscape Character Type 5A Inland Elevated Undulating Land from the Proposed Development at the Converter Site.

2.13.20 There will also be potentially significant visual effects experienced by:

- Cyclists and pedestrians on local (minor) roads.

Transboundary Impacts

2.13.21 No potential transboundary impacts have been identified in regard to effects of the Proposed Development.

Table 2.22: Summary of potential effects on landscape character

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Construction phase							
North Devon Biosphere Reserve							
Characteristic Landscapes	High	Trenching of hedgerows and Devon hedgebanks	Short term	Culm grasslands: No change	Culm grasslands: None	Culm grasslands: Not significant	An Outline On-CEMP will be a Requirement of the DCO
				Hedgerows and Devon hedgebanks: Medium	Hedgerows and Devon hedgebanks: Moderate adverse	Hedgerows and Devon hedgebanks: Locally significant	
Dramatic Coast Landscapes	High	Construction at the landfall from the barge to landward	Short term	Views of coastal landscape: Small	Views of coastal landscape: Minor adverse	Not significant	
				Direct effects on the coastline: No Change	Direct effects on the coastline: None		
Special Western Oak Woodlands	High	None	Short term	No Change	None	Not Significant	
High Level of Tranquillity	High	Construction at the landfall from the barge to landward	Short term	Medium	Moderate adverse	Locally significant	
Nocturnal Darkness	High	No works to take place after night fall except for in an emergency	Short term	Negligible	Negligible adverse	Not significant	
North Devon Coast National Landscape							
Diversity of Scenery	High	coastal area will be crossed using trenchless techniques	Short term	Negligible	Negligible adverse	Not significant	An Outline On-CEMP will be a Requirement of the DCO
Panoramic Seascapes	High	Construction at the landfall from the barge to landward	Short term	Negligible	Negligible adverse	Not significant	
Panoramic Views	High	temporary impact of views from elevated land towards the landfall and cable corridor within the NL	Short term	Small	Minor adverse	Not significant	
Wild Coastal Scenery	High	a temporary impact on coastal views, as the construction works at the landfall will, in part, take place from the barge located in the sea	Short term	Negligible	Negligible adverse	Not significant	
Strong Sense of Tranquillity	High	temporary impact on tranquillity as the construction works at the landfall take place from the barge located in the	Short term	Small	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
		sea and the works at the landward side, at the TJBs and construction compounds will also be visible					
Dark Night Skies	High	No works to take place after night fall except for in an emergency	Short term	Negligible	Negligible adverse	Not significant	
National Character Area 149: The Culm							
Rolling Open Plateaux	Medium	temporary impact of views from elevated land towards the Converter Site and the eastern part of the Onshore HVDC Cable Corridor	Short term	Small	Minor adverse	Not Significant	An Outline On-CEMP will be a Requirement of the DCO
Little tree cover on the plateau, except for occasional wind-sculpted hedgerow and farmstead trees, and conifer blocks	Medium	construction works at the landfall, along the cable corridor and at the Converter Site will not remove woodlands, as woodlands will be avoided, or crossed using trenchless techniques	Short term	No change	None	Not significant	
Mosaic of field patterns reflecting the historic land use of the Culm, surrounded by characteristic hedgebanks	High	Where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method will usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method will require temporary removal of part of the hedgerow or hedgebank	Short term	Medium	Moderate adverse	Locally significant but not significant overall	
Spectacular coastline of high cliffs and estuarine features, nationally important geological features, and narrow wooded combes.	High	The area of the landfall and western part of the Onshore HVDC Cable Corridor contain some of these key characteristics. There is no impact on the landscape elements themselves as the	Short term	Small	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
		coastline is crossed using trenchless techniques, such as HDD as woodland areas will be.					
County Landscape Character Areas - Bideford Bay Coast LCA							
A relatively sheltered bay, with gentler, more rounded coastal scenery than elsewhere along the coast	High	temporary impact on coastal views, as the construction works at the landfall will, in part, take place from the barge located in the sea	Short term	Negligible	Minor adverse	Not significant	An Outline On-CEMP will be a Requirement of the DCO
Extensive coastal oak woodlands, containing important lichens, ferns and ground flora within the sheltered combes	High	Littleham Wood, which is the closest example of coastal oak woodland, is not affected, as the wood would be crossed using a trenchless technique, such as HDD	Short term	No change	None	Not significant	
Southern and eastern areas dominated by agriculture with rolling, irregularly shaped, pastoral and arable fields extending to the cliff tops	Medium	The field boundaries will be temporarily altered to allow trenched crossings	Short term	Small	Minor adverse	Not significant	
Fields divided by hedgerows and banks with wind-sculpted hedgerow trees; field boundaries less frequent in the north-east around Abbotsham:	High	Where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method will usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method will require temporary removal of part of the hedgerow or hedgebank	Short term	Medium	Moderate adverse	Not significant	
Semi-natural habitats include road verges and species-rich hedgerows and hedgebanks:	High	Where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method will usually be trenched.	Short term	Medium	Moderate adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
		Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method will require temporary removal of part of the hedgerow or hedgebank					
Historic railway linking Bideford, Westward Ho! and Appledore (1904-1917) through the Abbotsham cliff area, today forming part of the coastal path out of Westward Ho!	Medium	The route of the historic railway, now part of the South West Coast Path will not be affected during the construction works, as it will not be diverted or closed.	Short term	No change	None	Not significant	
Sunken rural lanes with exceptionally high hedgebanks connecting villages, contrasting with the A39 which runs through the area:	High	Where the Onshore HVDC Cable Corridor crosses hedgebanks as boundaries to fields the crossing method will usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD, sunken lanes maybe one such feature. The trenched method will require temporary removal of part of the hedgebank.	Short term	Medium	Moderate adverse	Significant	
Attractive landscape with pleasing compositions of woodland, farmland and coastal scenery:	Medium	The construction works at the landfall and Onshore HVDC Cable Corridor will temporarily form part of the view	Short term	Negligible	Negligible adverse	Not significant	
Open seascapes, including views of Lundy Island and across Bideford Bay to the Taw-Torridge estuary.	High	The construction works at the landfall and Onshore HVDC Cable Corridor will not block the views of the open seascape or of the Torridge estuary	Short term	Negligible	Minor adverse	Not significant	
County Landscape Character Areas – Torridge Valley LCA							

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Main River Torridge deep and fast flowing, with a convoluted course and tightly meandering channel, with mud flats exposed at low tide	High	the river will be crossed in a trenchless crossing, such as HDD	Short term	No change	None	Not significant	An Outline On-CEMP will be a Requirement of the DCO
Small tributary valley south of Bideford dominated by Jennetts Reservoir:	Medium	As the valley will crossed using a trenchless crossing, such as HDD	Short term	No change	None	Not significant	
Valley sides well-clothed in deciduous woodland which dominates skylines; some conifer plantations, particularly in the middle and upper reaches of the main valley:	High	All woodland will be avoided, due to routeing, or will be crossed using trenchless crossing, such as HDD	Short term	No change	None	Not significant	
Valley floor generally used for pastoral agriculture, with a mixture of pastoral and arable agriculture on higher land:	Medium	The Onshore HVDC Cable Corridor and some construction compounds will be located within fields in this LCA	Short term	Small	Minor adverse	Not significant	
Fields generally semi-regular in shape comprising a mixture of medieval, post-medieval and modern enclosures based on earlier medieval fields; mainly enclosed by hedgerows or hedgebanks, but some loss of field boundaries in arable areas:	High	The field pattern will not be affected. However, where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method will usually be trenched, which will require temporary removal of part of the hedgerow or hedgebank.	Short term	Medium	Moderate adverse	Not significant	
Numerous historic features associated with the river, including weirs, mills, bridges, disused canal and railway line (now the 'Tarka Trail')	High	The Tarka Trail will remain open throughout the construction phase	Short term	No change	None	Not significant	
Major roads and transport routes (e.g., A386 and the former Okehampton-Bideford railway line) generally follow the main valley floor, while upper reaches and tributary	High	The major roads and transport routes will be crossed using trenchless techniques, such as HDD. Where lanes with high hedgebanks are close to, or part of, larger features,	Short term	Medium	Moderate adverse	Significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
valleys have winding hedge-banked lanes with narrow stone bridges:		they may be crossed using a trenchless technique, such as HDD, a sunken lanes may be one such feature. If a trenched method is used it will require temporary removal of part of the hedgebank.					
County Landscape Character Areas – High Culm Ridges LCA							
Ridges divided by small spring-fed tributary streams, flowing into the Torridge (to the west):	Ridges: High	The Converter Site are located to the east and south of a ridge of high ground.	Short term	Ridges: Large	Ridges: Major adverse	Ridges: Significant	An Outline On-CEMP will be a Requirement of the DCO
	Watercourses: Medium	There are two watercourses/ditches that flow west to east outside the Converter Site and join a small stream, that flows west to the River Torridge. However, these watercourses/ditches are not impacted by the Proposed Development.		Watercourses: No change	Watercourses: None	Watercourses: Not significant	
Extensive linear deciduous woodlands and some orchards in valleys; occasional windswept trees and hilltop clumps of beech; and blocks of coniferous plantation on higher ground:	High	The cable corridors will be routed in such a way as to avoid woodlands and orchards or will use trenchless techniques, such as HDD where routeing is not an option	Short term	No change	None	Not significant	
Farmland generally in pastoral use, with some areas of arable on better-quality land:	Medium	During construction there will be impacts on the farmland along the cable corridor, where trenched techniques are used and construction compounds are located	Short term	Cable corridor: Medium	Cable corridor: Moderate adverse	Cable corridor: Not significant	
				Converter Stations: Large	Converter Statins: Major adverse	Converter Stations: Significant	
Complex pattern of fields, generally with smaller, irregular fields around villages and on valley sides, and larger, more regular fields (suggesting more recent enclosure) on areas of higher land:	Medium	The field pattern will not be changed during the construction phase. However, the field boundaries will be temporarily altered to allow trenched crossings	Short term	Small	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Fields generally divided by hedgerows or hedgebanks in variable condition: some well-managed, others grown-out or closely flailed:	High	Where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method will usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method will require temporary removal of part of the hedgerow or hedgebank.	Short term	Medium	Moderate adverse	Not significant	
Long views from high ground across the Torridge valleys, and to Exmoor, as well as views of the sea:	High	There will be a temporary impact of views from elevated land towards the Converter Site and the eastern part of the Onshore HVDC Cable Corridor.	Short term	Small	Minor adverse	Not significant	
North Devon Seascape Character Area - SCA 21 Abbotsham Coast							
Undulating coastline with steep cliffs rising to over 90m in the south-west of the SCA, but dropping to a lower and more rounded profile in the north-east, backed by undulating coastal farmland:	High	There will be no change to the coastal cliffs or coastline as the coastline will be crossed using a trenchless techniques, such as HDD. There will be a direct, localised, short-term, temporary small impact to the coastal farmland, where the construction compounds close to the TJBs will be located	Short term	Coastal Cliffs/Coastline: No change Coastal Farmland: Small	Coastal Cliffs/Coastline: None Coastal Farmland: Minor adverse	Not significant	An Outline On-CEMP will be a Requirement of the DCO
Pastoral and arable fields extending to and between the cliff tops in places, including unimproved grasslands	Medium	Impact to the coastal farmland, where the construction compounds close to the TJBs will be located	Short term	Small	Minor adverse	Not significant	
Characteristic fine pebble ridge at cliff bases, fronted by a wide rocky foreshore (wave cut platform), with	High	There will be no change to the pebble ridge or the rocky foreshore as they will be crossed using a	Short term	No change	None	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
beds trending seawards to form biogenetic reefs:		trenchless techniques, such as HDD					
Gradual transition from a remote, rugged seascape in the south-west to gentler, more undulating and pastoral coastal scenery where the cliffs drop to shore level in places:	High		Short term	Small	Minor adverse	Not significant	
North Devon and Torridge District Landscape Character Types - Directly Affected – 4H Cliffs							
A largely undeveloped coastline of steep rocky or vegetated cliffs of varying height	High	There will be no physical impact on the coastline as the cables will cross the coast using a trenchless crossing technique, such as HDD. However, there will be views of the barge used during the construction works	Short term	Negligible	Minor adverse	Not significant	An Outline On-CEMP will be a Requirement of the DCO
Distinctive and internationally renowned exposed rock stratifications often clearly visible:	High	There will be no change to the coastline as the cables will cross the coast using a trenchless crossing technique, such as HDD	Short term	No change	None	Not significant	
Extensive and dramatic views, reaching out to sea (often to Lundy), along the coastline:	High	The views out to sea will not be compromised. However, some views may include the barge used during the construction works.	Short term	Negligible	Minor adverse	Not significant	
Occasional minor combes draining to the sea often lined by ancient sessile oak woodland.	Medium	No woodland will be affected by the construction works. The TJBs and construction at the landfall will take place in a small coombe.	Short term	Small	Minor adverse	Not significant	
Rough grazing land on sloping cliff tops, with field boundaries of post-and-wire fencing or stone-faced hedgebanks:	Medium	The TJBs and construction at the landfall will take place in a rough-grazed pasture. There are no hedgebanks affected in this location.	Short term	Small	Minor adverse	Not significant	
A ‘wild’ and remote landscape with high levels of tranquillity. Access is largely restricted to the	High	The part of this LCT, situated within the LSVIA study area is not particularly wild or remote.	Short term	Small	Moderate adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
South West Coast Path and rights of way within combes:		There will be a temporary impact on tranquillity as the construction works at the landfall take place from the barge located in the sea and the works at the landward side, at the TJBs and construction compounds will also be visible.					
North Devon and Torridge District Landscape Character Types - Directly Affected – 5B Coastal Undulating Farmland							
Strongly rolling landscape with prominent ridges and hilltops, influenced by the close proximity of the sea:	Medium	The landfall and eastern part of the Onshore HVDC Cable Corridor passes through this landscape. The TJBs and the cable route will be buried but there will be construction compounds and haul roads within this LCT in the interim.	Short term	Small	Minor adverse	Not significant	An Outline On-CEMP will be a Requirement of the DCO
Pervading maritime influence with long coastal views, to coastal settlements and to the north-west peninsula of the North Devon coastline	High	The long coastal views will not be obstructed in any way. However, the construction works along the Onshore HVDC Cable Corridor might be visible from some inland locations.	Short term	Negligible	Minor adverse	Not significant	
Linear bands of broadleaved woodland, occasional small mixed woods, ornamental parklands and blocks of conifer plantation combined with a strong network of hedges resulting in a well-treed appearance	Broadleaved woodlands: High Conifer Plantation: Medium	The Onshore HVDC Cable Corridor has either been routed around woodland or will cross underneath, using a trenchless technique, such as HDD	Short term	No change	None	Not significant	
Strong pattern of regular medium-large fields of post-medieval and modern origin, interspersed with significant areas of smaller curving or	Medium	There will be no alteration to field boundaries. However, during the construction works the field boundaries may be temporarily removed to allow trenched crossings and the fields may have	Short term	Small	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
medieval strip fields (e.g. around Rickard's Down).		construction works or compounds located within them					
Fields bounded by Devon hedges of mixed species with flower-rich banks and some sections of stone facing. The use of hawthorn, hazel, elm and/or beech is locally characteristic.	High	Patches of gorse reinforce a sense of exposure: Where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method will usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method will require temporary removal of part of the hedgerow or hedgebank	Short term	Medium	Moderate adverse	Not significant	
Predominantly pastoral land use, with occasional arable fields and patches of rough grazing land	Medium	During the construction phase, some fields will have the cable route or construction compounds located within them	Short term	Small	Minor adverse	Not significant	
Settlement and farms linked by a network of rural roads enclosed by high hedgebanks. The main A39 cuts through the area:	High	The A39 will be crossed using a trenchless technique, such as HDD and will not be affected. Where lanes with high hedgebanks are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD, sunken lanes may be one such feature. If a trenched method is used it will require temporary removal of part of the hedgebank.	Short term	Medium	Moderate adverse	Not significant	
North Devon and Torridge District Landscape Character Types- Directly Affected – 3H Secluded Valleys							
Steep-sided, incised valleys with fast-flowing streams and rivers carving through the landscape,	High	The steep sided valleys will be crossed using trenchless techniques, such as HDD	Short term	No change	None	Not Significant	An Outline On-CEMP will be a Requirement of the DCO

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
crowned by rounded hill summits							
Includes the main tributary valleys of the Torridge	Medium	The tributary valleys will be crossed using trenchless techniques, such as HDD	Short term	No change	None	Not Significant	
Dense tree cover cloaking valley sides, including ancient semi-natural oak woodlands with a colourful ground flora, beech-dominated broadleaved woodlands, and conifer blocks. Patches of wet woodland tracing river/stream courses	High	The cable corridor has been routed to avoid areas of woodland. Where this is not possible trenchless techniques, such as HDD, will be used to go under the woodland	Short term	No change	None	Not Significant	
Mixture of field sizes and shapes – often smaller, irregular medieval enclosures on lower slopes, with upper slopes merging into larger post-medieval and modern fields, often retaining earlier curving boundaries	High	There will be no alteration to field boundaries. However, during the construction works sections of the field boundaries may be temporarily removed to allow trenched crossings and the fields may have construction works or compounds located within them.	Short term	Small	Minor adverse	Not Significant	
Species-rich Devon hedges on wildflower-rich banks, with bank-side ferns and frequent hedgerow trees associated with lower valley locations:	High	Where the Onshore HVDC Cable Corridor crosses hedgerows and hedgebanks as boundaries to fields the crossing method will usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method will require temporary removal of part of the hedgerow or hedgebank	Short term	Medium	Moderate adverse	Not Significant	
Steep valley sides dominated by pasture grazed by sheep and	High	During the construction works sections of the field boundaries may be	Short term	Small	Minor adverse	Not Significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
cattle, with patches of rough grazing land on upper slopes and rushy meadows fringing watercourses:		temporarily removed to allow trenched crossings and the fields may have construction works or compounds located within them					
High levels of peace and tranquillity frequently defined by sounds of rushing water echoing out from the valley bottoms, though locally impacted by main roads in some valleys.	High	Along the cable corridor there will be a reduction in tranquillity, however, as it only crosses a small part of this LCT	Short term	Small	Minor adverse	Not Significant	
North Devon and Torridge District Landscape Character Types- Directly Affected – 5A Inland Elevated Undulating Land							
Elevated land cut by a series of tributaries forming folds in the landform:	Medium	The cable corridor will cross these tributaries using trenchless techniques, such as HDD.	Short term	HVDC corridor: No change	HVDC corridor: None	HVDC Corridor: Not significant	An Outline On-CEMP will be a Requirement of the DCO
				Converter Stations: Large	Converter Stations: Major adverse	Converter Stations: Significant	
Tributary valleys lined by broadleaved and wet woodland providing contrasting shelter and texture. Small farm woods, occasional conifer blocks and avenues of mature beech on hill summits and along roadsides	High	The Onshore HVDC Cable Corridor and Converter Site are routed/located to avoid these features. Where the cable corridor cannot avoid valleys or woodland, it crosses them using trenchless techniques, such as HDD	Short term	No change	None	Not Significant	
Medium-scale regular fields of recent enclosure, with pockets of smaller fields of medieval origin on valley slopes and tracts of unenclosed rough grazing along valley bottoms:	Medium	There will be no alteration to field boundaries, due to the construction of the Onshore HVDC Cable Corridor. However, during the construction works sections of the field boundaries may be temporarily removed to allow trenched crossings and the fields may have construction works or compounds located within them	Short term	HVDC corridor: Small	HVDC corridor: Minor adverse	HVDC Corridor: Not significant	
				Converter Stations: Large	Converter Stations: Moderate adverse	Converter Stations: Not Significant	
Fields enclosed by mixed species hedges (predominantly thorn) with	High	Where the Onshore HVDC Cable Corridor and HVAC Cables cross hedgerows	Short term	Medium	Moderate adverse	Not Significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
flower-rich banks and frequent hedgerow trees in sheltered locations. Some locally distinctive hedges topped with gorse and beech. Occasional amalgamated fields bounded by fences:		and hedgebanks as boundaries to fields the crossing method will usually be trenched. Where they are close to, or part of, larger features, they may be crossed using a trenchless technique, such as HDD. The trenched method will require temporary removal of part of the hedgerow or hedgebank					
Strong farmed character with pasture fields grazed by cattle and sheep a frequent occurrence en route, occasional fields of arable cultivation and rough grazing of rushy meadows along valleys although mostly rather improved grassland:	High	During the construction works sections of the field boundaries may be temporarily removed to allow trenched crossings and the fields may have construction works or compounds located within them. There is one area of rushy/wet meadow close to Bipole 2, which will be crossed using a trenched crossing	Short term	HVDC corridor: Medium	Moderate adverse	Significant	
North Devon and Torridge District Landscape Character Types- Directly Affected – 3A Upper Farmed and Wooded Valley Slopes							
A pastoral landscape, with some fields of arable cultivation on higher slopes, forming a strong mosaic with copses, interlinking Devon hedges and small woodlands as well as occasional small blocks of coniferous plantation:	Overall sensitivity: Medium Broadleaved copses and wet woodland, Devon hedgebanks, Culm grassland and damp meadows views of the church towers: high Infrastructure : low.	The pylons will be realigned, but would not remove existing landscape elements	Short term	No change	None	Not significant	An Outline On-CEMP will be a Requirement of the DCO
Some areas of intensive arable cultivation in larger, regular fields found on	Medium	The pylons will be realigned, but would not	Short term	No change	None	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
more elevated land. Villages and tributary valleys often characterised by smaller, historic field patterns:		remove existing landscape elements					
Nature conservation interest provided by areas of species-rich Culm grassland, rich valley mire, wet woodland and damp meadows associated with tributary valleys and springs. Patches of gorse on higher slopes give some areas an upland feel	High	The pylons will be realigned, but would not remove existing landscape elements	Short term	No change	None	Not significant	
Main roads prominent pylon lines and the influence of modern development at Bideford and East the Water erode levels of tranquillity locally – although overall this is a peaceful and highly rural landscape	Low	The pylons will be realigned, but would not remove existing landscape elements	Short term	No change	Minor adverse	Not significant	
Square church towers form strong local landmark features peeping through the rolling hills…:	High	The realignment works of the pylons and overhead lines might have an impact on views of church towers	Short term	Small	Minor adverse	Not significant	
North Devon and Torridge District Landscape Character Types- Indirectly Affected – 1F Farmed Lowland Moorland and Culm Grassland							
Long views	High	The Proposed Development lies to the west of the majority of this LCT and does not lie between the LCT and views of Exmoor and Dartmoor. However, the construction works may feature at the periphery of some long views.	Short term	Small	Minor adverse	Not significant	An Outline On-CEMP will be a Requirement of the DCO
Tranquillity and remoteness	High	The part of the LCT that lies within the ZTV of the Converter Site is not remote, the construction works may affect some aspects of tranquillity	Short term	Small	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Visual Receptor Groups - People using Public Rights of Way and Access Land							
People using Public Rights of Way and Access Land – Landfall and Onshore HVDC Cable Corridor	People using all PRoW: High	The Onshore HVDC Cable Corridor would be underground the effects experienced by visual receptors would be temporary and almost exclusively during the construction phase. People using the PRoW within 1 km are likely to have some views of the construction works.	Short term	Users of wider PRoW network: Negligible to Small	Users of wider PRoW network: Negligible to Moderate adverse	Users of wider PRoW network: Not significant	An Outline On-CEMP will be a Requirement of the DCO
	People using South West Coast Path within North Devon Coast NL: Very High	The largest impacts would be where people have views of the construction compounds containing the plant used in the major crossing points, i.e. people using the South West Coast Path and those using the Tarka Trail		People using the two PRoW where managed crossings would be put into place: Medium to Large.	People using the two PRoW where managed crossings would be put into place: Moderate adverse	People using the two PRoW where managed crossings would be put into place: Significant	
	People accessing beach and sea within 1km of landfall: Very High			People using South West Path: Medium	People using South West Path and Tarka Trail: Major adverse	People using South West Path and Traka Trail: Significant	
				People using Tarka Trail: Large	People using beach and sea from beach: Major adverse	People using beach and sea from beach: Significant	
				People using beach and sea from beach: Large			
People using Public Rights of Way and Access Land – Convertor stations, HVAC Cables and Alverdiscott Substation Connection Development	High	Due to distance from the Converter Site	Short term	Negligible to Small	Negligible to Moderate adverse	Not significant	
Dynamic receptors							
Recreational sailors – Landfall and Onshore HVDC Cable Corridor	High	Although their concentration is primarily on sailing, they would be within 1 km of the NL and an undeveloped section of coast	Short term	Medium	Moderate adverse	Significant close to landfall but would decrease with distance	An Outline On-CEMP will be a Requirement of the DCO
Road users in vehicles – Landfall and Onshore HVDC Cable Corridor	Overall: Low	People crossing the NL may have views of the construction works associated with the Onshore HVDC Cable Corridor	Short-term	Negligible to medium	Drivers within NL: Negligible to Moderate adverse	Drivers within NL: Not Significant to Significant	
	People in vehicles crossing the NL: Medium				Drivers outside NL: Negligible to Minor adverse	Drivers outside NL: Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Cyclists and people walking along roads – Landfall and Onshore HVDC Cable Corridor	Medium	Cyclists are not enclosed by a vehicle and are raised above the level of people within a standard vehicle and are travelling slower. People walking along minor roads have varied sensitivities to the Proposed Development, depending on which element of the project they are looking at and the context of the view	Short-term	Small to medium	Within the NL: Minor to Moderate adverse Outside NL: Minor to moderate adverse	Within the NL: Not Significant to Significant Outside NL: Not Significant	
Road users in vehicles within NL – Convertor stations, HVAC Cables and Alverdiscott Substation Connection Development	Medium	Construction is at a distance and intervening topography and vegetation	Short-term	Negligible	Minor adverse	Not Significant	
Cyclists and people walking along minor roads within NL – convertor stations, HVAC Cables and Alverdiscott Substation Connection Development	High	Construction is at a distance and intervening topography and vegetation	Short-term	Negligible to Small	Negligible to Minor adverse	Not Significant	
Road users in vehicles outside NL – Convertor stations, HVAC Cables and Alverdiscott Substation Connection Development	Low	Barring the minor road that runs between Gammaton Moor and Webbery Cross/Webbery Barton which forms the western boundary of the Converter Site, there are few roads that are close to the Converter Site.	Short-term	Large	Moderate adverse	Not significant	
Cyclists and people walking along minor roads outside NL – Convertor stations, HVAC Cables and Alverdiscott Substation Connection Development	Medium	Barring the minor road that runs between Gammaton Moor and Webbery Cross/Webbery Barton which forms the western boundary of the Converter Site, there are few roads that are close to the Converter Site	Short-term	Large	Major adverse	Significant	
People at work – Landfall and Onshore HVDC Cable Corridor	Low	The focus of attention is on their work not on the surroundings	Short-term	Negligible to Large	Negligible to Moderate adverse	Not Significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
People at work – Convertor stations, HVAC Cables and Alverdiscott Substation Connection Development	Low	Most working people that have views towards the Onshore HVDC Cable Corridor are involved in the agricultural or fishing sector.	Short-term	Large	Moderate adverse	Significant	
Representative Viewpoints							
Representative Viewpoint 23: View south from public right of way Newton Tracy Footpath 4, to the south of Hoewood	High	The plant used to construct the Converter Site and the National Grid substation, install the HVAC cables and form the earth-modelling mitigation would be visible on the skyline from this viewpoint	Short-term	Large	Major adverse	Significant	An Outline On-CEMP will be a Requirement of the DCO
Representative Viewpoint 27: View west from junction of minor road with B3232, at Alverdiscott	People in vehicles: Low Cyclists and people walking: Medium	The plant used to construct the Converter Site and the National Grid substation, install the HVAC cables and form the earth-modelling mitigation would be visible on the skyline from this viewpoint	Short-term	Large	Minor to Major adverse	Significant	
Representative Viewpoint 29: View west-northwest from minor road, to the south of Alverdiscott	People in vehicles: Low Cyclists and people walking: Medium	The plant used to construct the Converter Site and the Alverdiscott Substation Connection Development, install the HVAC Cables and form the earth-modelling mitigation would be visible on the skyline from this viewpoint	Short-term	Large	Minor to Major adverse	Significant	
Representative Viewpoint 32: View northwest from public right of way Footpath 1, to the east of Huntshaw	High	The plant used to construct the Converter Site and the Alverdiscott Substation Connection Development, install the HVAC Cables and form the earth-modelling mitigation would be visible on the skyline from this viewpoint	Short-term	Large	Major adverse	Significant	
Representative Viewpoint 33: View north-northeast from minor road, to the north of Gammaton Moor	People in vehicles: Low Cyclists and people	The plant used to construct the Converter Site and the National Grid substation, install the	Short-term	Large	Moderate to Major adverse	Significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
	walking: Medium	HVAC cables and form the earth-modelling mitigation would be visible from this field gate					
Representative Viewpoint 40: View east southeast from minor road at Rickard's Down, north of Abbotsham, within the North Devon National Landscape	People in vehicles: Medium Cyclists and people walking: High	Distance from the construction as well as intervening topography and hedgebanks	Short-term	Negligible to Small	Negligible to Moderate adverse	Not Significant	
Representative Viewpoint 44: View south from public footpath east of Limekiln Lane	High	Distance from the construction as well as intervening topography	Short-term	Negligible	Negligible adverse	Not Significant	
Night time effects on Landscape and Seascape Receptors							
Night time effects on receptors	High	The Proposed Development is an area of medium to darker skies	Short-term	Negligible	Negligible adverse	Not significant	An Outline On-CEMP will be a Requirement of the DCO
Operational phase							
North Devon Biosphere Reserve							
Characteristic landscapes such as Culm grasslands and Devon hedgerows. There will be **no change** on this aspect of the special feature, as there is no Culm grassland within the Converter Site, or within the Proposed Development Draft Order Limits at the Converter Site.	High	The Onshore HVDC Cable Corridor does not cross any Culm grasslands and the Converter Site are not located on Culm grassland. The Devon hedgerows within the Proposed Development Draft Order Limits will be reconstructed where the Onshore HVDC Cable Corridor has passed through them	Short term	Culm grassland: No change Devon Hedgebank: Negligible	Culm grassland: None Devon hedgebank: Moderate adverse	Culm grassland: Not significant Devon hedgebank: Locally significant, not widely significant	An outline LEMP will be a Requirement of the DCO
Special western oak woodlands with a plethora of pollution-sensitive lichens.	High	The wood between Gammaton Manor and Webbery Cross/Webbery Barton will be avoided. These field boundaries will be replanted with shrub species, as the field will be crossed in a trenched crossing	Short term	Oak Woodland: No change Wet Oak Woodland: Medium	None	Not Significant	
High level of tranquillity	High	There will be an impact on visual tranquillity from the Converter Site, as the land	Long term	Local Impact: Large Wider Biosphere Transition Zone: Small	Moderate reducing to Minor adverse	Locally significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
		will change from agricultural fields to an area containing large built forms. the 'cut' in the hillside will be remediated and planted, the planted earth-modelling will remain in place at decommissioning).					
Nocturnal darkness	High	The Converter Site will have some lighting at night and there be security lighting, and manned 24 hours a day. Earth modelling and planting will reduce light pollution as it establishes.	Long term	Small	Moderate reducing to Minor adverse	Locally significant	An outline Lighting Strategy will be a Requirement of the DCO
North Devon Coast National Landscape							
Panoramic views across a rolling landscape of pastoral farmland, wooded combes and valleys from elevated inland areas	High	There will be an impact of views from elevated land within the NL, towards the Converter Site	Long term	Negligible	Negligible adverse	Not significant	An outline LEMP will be a Requirement of the DCO
National Landscape Character Area 149: The Culm							
Rolling, open plateaux…wide views across a remote landscape	High	The Converter Site are located in this area of the NCA. There will be an impact of views from elevated land towards the Converter Site.	Long term	Small	Minor adverse	Not significant	An outline LEMP will be a Requirement of the DCO
Little tree cover on the plateau, except for occasional wind-sculpted hedgerow and farmstead trees, and conifer blocks.	High	No woodlands are present at the Converter Site. However, once the earth-modelling has been completed, it will be planted with native woodland species and will add to the broadleaved woodland in the area.	Long term	Small	Minor beneficial	Not significant	
Mosaic of field patterns reflecting the historic land use of the Culm, surrounded by characteristic hedgebanks	High	The fields in which the Converter Site are to be located are large, smaller fields having been subsumed to allow for more efficient agriculture. This farmed landscape	Long term	Small	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
		has also had the track to the National Grid Alverdiscott substation imposed on it. These more recent boundaries are marked by mature hedgerows and hedgerow trees, sometimes associated with ditches					
County Landscape Areas – High Culm Ridges LCA							
Ridges divided by small spring-fed tributary streams, flowing into the Torridge (to the west)	Medium	The Converter Site are located to the east and south of a ridge of high ground. There are two watercourses/ditches that flow west to east outside/on the boundaries of the Converter Site, which join a small stream, that flows west to the River Torridge. However, these watercourses/ditches are not impacted by the Proposed Development	Long term	Converter Stations/Ridges: Large Tributary Streams: No change	Converter Stations/Ridges: Major adverse Tributary Streams: None	Converter Stations: Significant Tributary Streams: Not significant	An outline LEMP will be a Requirement of the DCO
Extensive linear deciduous woodlands and some orchards in valleys; occasional windswept trees and hilltop clumps of beech; and blocks of coniferous plantation on higher ground	High	The Converter Site will not require the removal of these features, there will be no change to the existing features. Woodland planting on the earth-modelling/bunds forms part of the landscape and ecological mitigation.	Long term	Existing features: No change Woodland Planting on earth-modelling: Small	Existing features: None Woodland planting: Minor beneficial	Not significant	
Farmland generally in pastoral use, with some areas of arable on better-quality land	Medium		Long term	Large	Major adverse	Significant	
Complex pattern of fields, generally with smaller, irregular fields around villages and on valley sides, and larger, more regular fields (suggesting more recent enclosure) on areas of higher land	Medium	The fields within which the Converter Site are located are already large (the combination of several smaller fields) and the pattern compromised by the National Grid development	Long term	Small	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Fields generally divided by hedgerows or hedgebanks in variable condition: some well-managed, others grown-out or closely flailed	High	Some internal field boundaries may need to be changed	Long term	Small	Moderate adverse	Not significant	
Long views from high ground across the Torridge valleys, and to Exmoor, as well as views of the sea	High	There will be an impact of views from elevated land towards the Converter Site.	Long term	Small	Minor adverse	Not significant	
North Devon and Torridge District Landscape Character Types- Directly Affected – 5A Inland Elevated Undulating Land							
Elevated land cut by a series of tributaries forming folds in the landform:	Medium	At the Converter Site, the elevated land will experience impact during the operations and maintenance phase	Long term	Large	HVDC corridor: none Converter stations: Major adverse	HVDC corridor: Not significant Converter stations: Significant	An outline LEMP will be a Requirement of the DCO
Tributary valleys lined by broadleaved and wet woodland providing contrasting shelter and texture. Small farm woods, occasional conifer blocks and avenues of mature beech on hill summits and along roadsides	High	The Converter Site are located to avoid the existing woodland features. The proposed woodland planting is a part of the proposed landscape and ecological mitigation	Long term	Existing woodlands: No change Proposed woodland planting: Small	Existing woodlands: None Proposed woodland planting: Minor beneficial	Not significant	
Medium-scale regular fields of recent enclosure, with pockets of smaller fields of medieval origin on valley slopes and tracts of unenclosed rough grazing along valley bottoms	Medium	The Converter Site are located in larger fields, of more recent enclosure.	Long term	Large	Moderate adverse	Not significant	
Fields enclosed by mixed species hedges (predominantly thorn) with flower-rich banks and frequent hedgerow trees in sheltered locations. Some locally distinctive hedges topped with gorse and beech. Occasional amalgamated fields bounded by fences.	High	The HVAC Cables and Converter Site may cross hedgerows, but not hedgebanks. The exact location of the Converter Site is not yet decided and they may be avoided	Long term	Medium	Moderate adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Strong farmed character with pasture fields grazed by cattle and sheep a frequent occurrence en route, occasional fields of arable cultivation and rough grazing of rushy meadows along valleys although mostly rather improved grassland.	High	The Converter Site are located in large fields, of recent enclosure.	Long term	Large	Moderate adverse	Not significant	
North Devon and Torridge District Landscape Character Types- Directly Affected – 3A Upper Farmed and Wooded Valley Slopes							
A pastoral landscape, with some fields of arable cultivation on higher slopes, forming a strong mosaic with copses, interlinking Devon hedges and small woodlands as well as occasional small blocks of coniferous plantation:	High	There will be no change to these elements and character, as the pylons will be realigned, but would not remove existing landscape elements	Long term	No change	None	Not significant	An outline LEMP will be a Requirement of the DCO
Some areas of intensive arable cultivation in larger, regular fields found on more elevated land. Villages and tributary valleys often characterised by smaller, historic field patterns:	Medium	There will be no change to these elements and character, as the pylons will be realigned, but would not remove existing landscape elements	Long term	No change	None	Not significant	
Nature conservation interest provided by areas of species-rich Culm grassland, rich valley mire, wet woodland and damp meadows associated with tributary valleys and springs. Patches of gorse on higher slopes give some areas an upland feel…: There will be no change to these elements and character, as the pylons will be realigned, but would not remove existing landscape elements	High	There will be no change to these elements and character, as the pylons will be realigned, but would not remove existing landscape elements	Long term	No change	None	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Main roads prominent pylon lines and the influence of modern development at Bideford and East the Water erode levels of tranquillity locally – although overall this is a peaceful and highly rural landscape	Medium	The realigned pylons would be better positioned than the current locations and remove pylons from crossing ridgelines, having an effect of the visual tranquillity in the land to the north of the Converter Site	Long term	Negligible	Negligible beneficial	Not significant	
Square church towers form strong local landmark features peeping through the rolling hills.	Medium	The realigned pylons would be better positioned than the current locations and remove pylons from crossing ridgelines.	Long term	Negligible	Negligible beneficial	Not significant	
North Devon and Torridge District Landscape Character Types- Indirectly Affected – 1F Farmed Lowland Moorland and Culm Grassland							
Long views	High	The Proposed Development lies to the west of the majority of this LCT and does not lie between the LCT and views of Exmoor and Dartmoor. However, the Converter Site and the realigned pylons and overhead power lines may feature at the periphery of some long views. The	Long term	Negligible	Negligible adverse	Not significant	An outline LEMP will be a Requirement of the DCO
Tranquillity and remoteness	High	The part of the LCT that lies within the ZTV of the Converter Site is not remote,	Short term	Negligible	Negligible adverse	Not significant	
Visual Receptor Groups							
People using Public Rights of Way and Access Land – Landfall and Onshore HVDC Cable Corridor	Overall: High Users of South West Coast Path National Trail (crossing National Landscape): Very High	The cables would be underground and the construction compounds and the elements crossed using trenched techniques would be reinstated.	Long Term	Negligible	Negligible to Minor adverse	Not Significant	
People using Public Rights of Way and Access Land – Convertor stations, HVAC Cables	High	Due primarily to distance from the Converter Site	Long Term	Negligible to Small	Negligible to Moderate adverse	Not Significant	
Dynamic Receptors							

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
People using road network – Convertor stations, HVAC cable and National Grid Substation Site	People within vehicles: Low Cyclists: Medium People walking minor roads: Medium	Impact is less than during construction phase	Long term	Medium	People in vehicles: Minor adverse Cyclists and walkers: Moderate adverse	People in vehicles: Not Significant Cyclists and walkers: Significant	
People at work – Landfall and Onshore HVDC Cable Corridor	Low	Only affected during construction phase	Long term	N/A	N/A	N/A	
People at work – Converter stations, HVAC cable and National Grid Substation Site	Low	Those with close views of the Proposed Development would be people working at the Converter Site, National Grid employees and those people working on the adjacent solar farm.	Long term	Medium	Moderate adverse	Significant	
Representative Viewpoints							
Representative Viewpoint 23: View south from public right of way Newton Tracey Footpath 4, to the south of Harwood	High	During the operation phase the Converter Site and National Grid Substation Development are screened by proposed earth-modelling from this viewpoint. The impacts will reduce over time as mitigation planting establishes and integrates with the surroundings	Long term	Medium to Negligible	Moderate adverse to Negligible adverse	Not significant	
Representative Viewpoint 27: View west from junction of minor road with B3232, at Alverdiscott	People in vehicles: Low Cyclists and people walking: Medium	During the operation phase the Converter Site and National Grid Substation Development are screened in part by proposed earth-modelling and earth-modelling forms a backdrop to those parts of the buildings that might not be screened. However, the mitigation itself breaks the skyline and before the proposed planting becomes	Long term	Medium to Small	Minor to Moderate adverse reducing to Negligible to Minor adverse	Not Significant to Significant reducing to Not Significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
		established would form the new skyline					
Representative Viewpoint 29: View west-northwest from minor road, to the south of Alverdiscott	People in vehicles: Low Cyclists and people walking: Medium	During the operation phase the Converter Site and National Grid Substation Development are screened by proposed earth-modelling from this viewpoint. The impacts will reduce over time as mitigation planting establishes and integrates with the surrounding landscape	Long term	Medium to Small	Minor to Moderate adverse reducing to Negligible to Minor adverse	Not Significant to Significant reducing to Not Significant	
Representative Viewpoint 32: View northwest from public right of way Footpath 1, to the east of Huntshaw	High	During the operation phase the Converter Site and National Grid Substation Development are screened in part by proposed earth-modelling and earth-modelling forms a backdrop to those parts of the buildings that might not be screened. However, the mitigation itself breaks the skyline and before the proposed planting becomes established would form the new skyline. The impacts will reduce over time as mitigation planting establishes and integrates with the surrounding landscape	Long term	Medium to Small	Minor to Moderate adverse reducing to Negligible to Minor adverse	Significant reducing to Not Significant	
Representative Viewpoint 33: View north-northwest from minor road, to the north of Gammaton Moor	People in vehicles: Low Cyclists and people walking: Medium	During the operation phase the Converter Site and National Grid Substation Development are screened by proposed earth-modelling from this viewpoint. The impacts will reduce over time as mitigation planting establishes and integrates with the surrounding landscape	Long term	Large to Medium	Moderate to Major adverse reducing to Minor to Moderate adverse	Significant reducing to Not Significant	

Receptor	Sensitivity of receptor	Description of impact	Short / medium / long term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Representative Viewpoint 40: View east-southeast from minor road at Rickard's Down, north of Abbotsham within the North Devon Coast National Landscape	People in vehicles: Medium Cyclists and people walking: High	Due to distance and screening effects of topography and intervening hedgebanks	Long term	Negligible	Negligible adverse	Not Significant	
Representative Viewpoint 44: View south from public footpath, east of Limekiln Lane	High	Due to distance and convertor stations screened by earth-modelling	Long term	Negligible	Negligible adverse	Not Significant	
Night Time Effects							
Night time effects	High		Long term		Small		A Lighting Strategy will form a Requirement of the DCO
Decommissioning phase							
Visual Receptor Groups							
People using Public Rights of Way and Access Land – Landfall and Onshore HVDC Cable Corridor	Overall: High Users of South West Coast Path National Trail (crossing National Landscape): Very High	The cable ducts are left in situ	Long Term	Negligible	No change to Negligible adverse	Not Significant	
People using Public Rights of Way and Access Land – Convertor stations, HVAC Cables	High	The decommissioning would take place within an established landscape, which would screen most activities. The HVAC cable and (it is presumed) the National Grid's Substation Development would remain in situ	Long Term	Negligible	Minor adverse	Not Significant	

Table 2.23: Summary of potential cumulative environmental effects

Landscape and Visual receptors	Sensitivity	Construction		Operation	
		Magnitude	Level of Effects	Magnitude	Level of Effects
Landscape resource					
Local landscape fabric of Inland elevated undulating land LCT	Medium	Large	**Moderate to major**	Medium	**Moderate**
Inland elevated undulating land LCT	Medium	Small	Minor	Small	Minor
Farmed lowland moorland and Culm grassland LCT	Medium	Small	Minor	Negligible to small	Negligible to minor
Visual receptors					
Road users of local road to the south of Alverdiscott	Low to Medium	Small to medium	Moderate to minor	Small	Minor to moderate
Road users local road between Huntshaw and Knockworthy Cross	Low to Medium	Small to medium	Moderate to minor	Small	Minor to moderate
Road users of the local road between Gammaton Moor to Webbery Barton	Low to Medium	Large	**Moderate to major**	Medium	Minor to moderate
Residential properties adjacent to local road between Gammaton Moor to Webbery Barton	High	Medium to large	**Moderate to major**	Small	Minor to moderate

2.14 Next Steps

2.14.1 The work that will take place after submission of the PEIR and before the submission of the ES will include:

- Further photography is planned to complete the set of winter/summer photographs for those already taken.
- The design of the converter station buildings and layout will be progressed.
- The design of the mitigation – in particular the earth-modelling will be designed in a workshop, using different viewpoints to ensure that it integrates as far as is possible into the existing landscape, while at the same time minimising views of the converter station buildings.
- The outline design of mitigation works along the chosen access routes to the Converter Site and assessment of the same.
- The development of a landscape and ecology strategy plan (figure) for the Converter Site.
- The development of an Outline Landscape and Ecology Management Plan (Outline LEMP).
- Liaison with Torridge District and North Devon District Council's Landscape consultants (and other statutory consultees) on the landscape mitigation and assessment.

2.14.2 Other work items may need to be undertaken during this period, such as potential updates to the baseline and assessment in the ES chapter.

2.15 References

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