

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Environmental Statement

Volume 4, Annex 10.5: International and nationally designated
landscape study

Planning Inspectorate Reference Number: EN010136

Document Number: MRCNS-J3303-RPS-10082

Document Reference: F4.10.5

APFP Regulations: 5(2)(a)

April 2024

F01



MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
F01	Application	RPS	Morgan Offshore Wind Ltd.	Morgan Offshore Wind Ltd.	April 2024

Prepared by:

RPS

Prepared for:

Morgan Offshore Wind Ltd.

Contents

1	INTERNATIONAL AND NATIONALLY DESIGNATED LANDSCAPE STUDY	1
1.1	Introduction	1
1.1.1	Overview	1
1.1.2	Study area	1
1.2	Policy Context.....	1
1.3	Consultation.....	1
1.4	Baseline Environment.....	2
1.4.1	Methodology to inform baseline	2
1.4.2	Identification of designated sites	2
1.4.3	Desktop study.....	3
1.4.4	Site specific surveys.....	4
1.5	Impact Assessment Methodology.....	4
1.6	Baseline	4
1.6.1	The Lake District National Park – Special Qualities.....	4
1.6.2	The English Lake District World Heritage Site - attributes of Outstanding Universal Value	11
1.7	Assessment of effects of the Morgan Generation Assets on the special qualities of nationally and internationally designated landscapes.....	14
1.7.1	Introduction.....	14
1.7.2	The Lake District National Park and the English Lake District World Heritage Site.	15
1.7.3	Cumulative effects.....	23
1.8	Summary	24
1.9	References	25

Tables

Table 1.1:	Nationally and internationally designated landscapes in the Morgan Generation Assets SLVIA study area.	3
Table 1.2:	Summary of key desktop characterisation sources.....	3
Table 1.3:	The Lake District National Park – Special Qualities associated with landscape and seascape.	15
Table 1.4:	The English Lake District World Heritage Site – attributes of outstanding universal value and their component parts associated with landscape and seascape.	16
Table 1.5:	The Lake District National Park and the English Lake District World Heritage Site –Special qualities and component parts of the attributes of outstanding universal value.	18

Appendix

APPENDIX A: FIGURES	26
----------------------------------	-----------

Figure A. 1:	Nationally and Internationally Designated Landscapes within 60 km SLVIA Study Area & Viewpoint Locations.	27
Figure A. 2:	Nationally and Internationally Designated Landscapes within 60 km SLVIA Study Area and Viewpoint Locations.....	28
Figure A. 3:	Nationally and Internationally Designated Landscapes in relation to zone of theoretical visibility for Morgan Array Area & Viewpoint locations.	29

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Glossary

Term	Meaning
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 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.
Zone of Theoretical Visibility	A map, usually digitally produced, showing areas of land within which, a development is theoretically visible.

Acronyms

Acronym	Description
LAT	Lowest Astronomical Tide
LCA	Landscape Character Area
MCA	Marine Character Area
MDS	Maximum Design Scenario
MLWS	Mean Low Water Springs
NL	National Landscape
NRW	Natural Resources Wales
PEIR	Preliminary Environmental Information Report
SCA	Seascape Character Area
SLVIA	Seascape and Landscape Visual Impact Assessment
SSSI	Site of Special Scientific Interest
ZTV	Zone of Theoretical Visibility

Units

Unit	Description
km	Kilometres
%	Percentage
km ²	Square kilometres

1 International and Nationally Designated Landscape Study

1.1 Introduction

1.1.1 Overview

1.1.1.1 This report presents the assessment of the potential impact of the Morgan Offshore Wind Project, hereafter referred to as the Morgan Generation Assets on nationally and internationally designated landscapes and is part of the Seascope Landscape and Visual Impact Assessment (SLVIA) in Volume 2, Chapter 10: Seascope, landscape and visual resources of the Environmental Statement.

1.1.2 Study area

1.1.2.1 The SLVIA study area for the purpose of assessment of effects on nationally and internationally designated landscapes is defined below. The SLVIA study area has been based on the findings of an analysis of the Zone of Theoretical Visibility (ZTV) and is described as:

- The area of land and sea to be temporarily and permanently occupied during construction, operations/maintenance and decommissioning of the Morgan Generation Assets together with a 60 km buffer from the Morgan Array Area. This study area has been selected in response to consultation feedback outlined below in section 1.3.

1.1.2.2 The SLVIA study area is based on the Maximum Design Scenario (MDS) set out in Volume 2, Chapter 10: Seascope, landscape and visual resources, of the Environmental Statement and is illustrated in Appendix A, Figure A.1: Viewpoints and nationally and internationally designated landscapes. Figure A.1 shows the location (boundary extents) of each of the nationally and internationally designated landscapes.

1.2 Policy Context

1.2.1.1 The policy context for the Morgan Generation Assets is set out in Volume 1, Chapter 2: Policy and legislative context of the Environmental Statement. Specific policy relevant to seascope, landscape and visual resources is set out in Volume 4, Annex 10.1: Seascope and visual resources legislation and planning policy context of the Environmental Statement.

1.3 Consultation

1.3.1.1 A summary of the key topics raised during consultation activities undertaken to date specific to seascope, landscape and visual resources is presented in Volume 2, Chapter 10: Seascope, landscape and visual resources, Table 8.6, of the Environmental Statement.

1.3.1.2 In response to Natural England's section 42 consultation recommendation for a 60 km study area for SLVIA, the study area has been extended to 60 km specifically for the assessment of effects of international or nationally designated landscape as presented in section 1.7 of this report.

1.3.1.3 In response to the Isle of Anglesey Council's section 42 consultation feedback, the assessment concludes that there will be no significant effects on the special qualities

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

of the Isle of Anglesey National Landscape due to its distance to the Morgan Array at almost 60 km.

1.4 Baseline Environment

1.4.1 Methodology to inform baseline

1.4.1.1 The seascape, landscape and visual resources baseline of the Morgan Generation Assets is described in detail in the following reports of the Environmental Statement:

- Volume 4, Annex 10.2: Seascape and landscape character baseline technical report, of the Environmental Statement
- Volume 4, Annex 10.3: Visual baseline technical report, of the Environmental Statement.

1.4.2 Identification of designated sites

1.4.2.1 All nationally and internationally designated landscape areas within the 60 km SLVIA study area that could be affected by the construction, operations/maintenance, and decommissioning phases of the Morgan Generation Assets were identified and considered for assessment using the four-step process described below:

- Step 1: All designated landscape/seascape areas of international and national importance within the SLVIA study area were identified using a number of sources. These sources included Isle of Man Government, Natural England and Natural Resources Wales (NRW) environmental datasets
- Step 2: Information was compiled on the relevant qualifying interests for each of the areas, such as their reasons for designation and/or special landscape/seascape qualities
- Step 3: Using the above information and expert judgement, designated landscape/seascape areas were included for further consideration if:
 - A designated area directly overlapped with the Morgan Generation Assets SLVIA study area
 - A designated area was located within the ZTV of the Morgan Array Area
- Step 4: All statutory designated landscape/seascape areas of international and national importance within the SLVIA study area overlapping with the ZTV of the Morgan Array Area were carried forward for consideration in terms of potential effects on the special qualities documented in this report.

1.4.2.2 Nationally and internationally designated landscapes that occur entirely or partially within the SLVIA study area referenced above are presented in Table 1.1 together with approximate distances to the Morgan Array Area. The Lake District National Park and the English Lake District World Heritage Site share the same extents and boundaries apart from two small area of landscape at the eastern boundary of the National Park which are excluded from the World Heritage Site. Both of these areas lie outside the SLVIA study area.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Table 1.1: Nationally and internationally designated landscapes in the Morgan Generation Assets SLVIA study area.

Designated site	Closest distance to the Morgan Array Area (km)
Isle of Anglesey National Landscape (national designation)	58.0 km
The Lake District National Park (national designation)	38.6 km
The English Lake District World Heritage Site (international designation)	38.6 km

1.4.2.3 It is noted that a small part of the Isle of Anglesey National Landscape occurs within the 60 km study area. This includes the coastal landscape in the vicinity of Point Lynas. At distances of 58 km, and considering the limited extent of the designated landscape that falls within the 60 km SLVIA study that overlaps with the ZTV, effects on the special qualities of the Isle of Anglesey National Landscape due to the Morgan Generation Assets are expected to be very limited and not significant. Consultation feedback from both Isle of Anglesey Council and NRW (2nd June 2023) acknowledge that at the distances specified, significant effects are not expected to arise on this designated landscape (this consultation is detailed in Table 10.7 of Volume 2, Chapter 10: Seascape, landscape and visual resources of the Environmental Statement). Therefore, the Isle of Anglesey National Landscape is scoped out of the assessment.

1.4.2.4 Effects on nationally designated landscapes during the construction and decommissioning phases are not expected to be significant due to distance and the short-term duration of these effects. Therefore, effects during the construction and decommissioning phases are excluded from further consideration.

1.4.2.5 Thus, the assessment is focussed on the effects of the Morgan Generation Assets on The Lake District National Park and The English Lake District World Heritage Site during the operations and maintenance phase and is supported by ZTV data as illustrated in Appendix A, Figures: Figure A.2: Nationally and internationally designated landscapes in relation to Zone of Theoretical Visibility for Morgan Generation Assets and Appendix A: Figures: Figure A.3: Nationally and internationally designated landscapes within 60 km SLVIA study area.

1.4.3 Desktop study

1.4.3.1 Information on the special qualities of The Lake District National Park and The English Lake District World Heritage Site was collected through a detailed desktop review of published studies and datasets. These are summarised in Table 1.2 below.

Table 1.2: Summary of key desktop characterisation sources.

Title	Source	Year	Author
Lake District National Park Partnership’s Management Plan 2020 to 2025, A National Park and World Heritage Site.	Lake District National Park Partnership	2021	Lake District National Park Partnership
Lake District National Park Landscape Character Assessment and Guidelines	Lake District National Park Partnership	2021	Chris Blandford Associates (CBA)

1.4.4 Site specific surveys

1.4.4.1 In order to inform the Environmental Statement, site-specific surveys were undertaken in relation to the photography and assessment of the representative viewpoints agreed with statutory consultees (see Volume 2, Chapter 10: Seascape, landscape and visual resources of the Environmental Statement). In addition, extensive fieldwork was carried out during preparation of the SLVIA to support the seascape, landscape and visual resources baseline and impact assessment reports. A summary of the site-specific surveys undertaken is provided in Volume 2, Chapter 10: Seascape, landscape and visual resources of the Environmental Statement.

1.5 Impact Assessment Methodology

1.5.1.1 The assessment of effects on the special qualities of both nationally and internationally designated landscapes has followed the methodology set out in Volume 4, Annex 10.4 Seascape, landscape and visual resources impact assessment methodology, of the Environmental Statement.

1.6 Baseline

1.6.1.1 Baseline descriptive data on the special qualities of The Lake District National Park and the attributes of outstanding universal value of The English Lake District World Heritage Site is presented below, drawn from the publications listed in Table 1.2 and supported by observations in the field.

1.6.1 The Lake District National Park – Special Qualities

1.6.1.1 The Lake District National Park, like all National Parks in the UK has two main purposes:

- Conserve and enhance the natural beauty, wildlife and cultural heritage
- Promote opportunities for the understanding and enjoyment of the special qualities of national parks by the public.

1.6.1.2 The special qualities of the national park are listed below:

- A world class cultural landscape
- Complex geology and geomorphology
- Rich archaeology and historic landscape
- Unique farming heritage and concentration of common land
- The high fells
- Wealth of habitats and wildlife
- Mosaic of lakes, tarns, rivers and coast
- Extensive seminatural woodlands
- Distinctive buildings and settlement character
- A source of artistic inspiration
- A model for protecting cultural landscapes
- A long tradition of tourism and outdoor activities

- Opportunities for quiet enjoyment.

1.6.1.3 Further detail on each of these is outlined below as presented in the published documents.

A world class cultural landscape

1.6.1.4 *'The English Lake District is a self-contained mountain area whose narrow, radiating glaciated valleys, steep fells and slender lakes exhibit an extraordinary beauty and harmony. This landscape reflects an outstanding fusion between a distinctive communal farming system that has persisted for at least a millennium with improvements of villas, picturesque planting and gardens during the 18th and 19th centuries. This combination has attracted and inspired writers and artists of global stature. The landscape also manifests the success of the conservation movement that it stimulated, a movement based on the idea of landscape as a human response to our environment. This cultural force has had world-wide ramifications. The diversity of the landscape is key to its beauty and significance and includes coast, lakes, distinctive farmland, fell, woodland, industrial activity and settlement. Each of the 13 valleys of the Lake District have an individual distinctiveness based on landform, biodiversity and cultural heritage. The character of the Lake District cultural landscape has evolved slowly over many centuries and will continue to evolve in the future under the influence of the knowledge and skills of the local community.'*

Complex geology and geomorphology

1.6.1.5 *'The geology of the national park is complex and varied. Its rocks provide a dramatic record of nearly 500 million years of the Earth's history with evidence of colliding continents, violent volcanic activity, deep oceans, tropical seas and the scouring effects of thick ice-sheets which produced the familiar characteristics of the Lake District's glacial topography. The highest mountains and deepest lakes in England are found here. Creation of stone stripes on mountain plateaus due to freeze/thaw action, sediment transport in rivers, and mobile sand dunes demonstrate some of the active geomorphological processes that continue to shape the landscape. The geology of the National Park has been investigated and studied since the 18th century. Work in the Lake District helped the first geologists (such as Adam Sedgwick) to establish some of the foundations on which modern geology and geomorphology is based. Some Lake District geological sites provide international 'reference types' and many exposures continue to provide important sites for study and research. The diversity of rock and minerals has given rise to a rich mining and quarrying history. Stone axe production dates back to the Neolithic period, while industrial scale mining for ores of iron, copper, lead and for graphite began during the medieval period. Contemporary slate quarrying continues this long established activity. These local natural resources have strongly influenced the built environment and the wider landscape, with local slate, limestone and granite featuring in buildings, bridges, and walls.'*

Rich archaeology and historic landscape

1.6.1.6 *'There have been people in the Lake District since the end of the last ice age, 10,000 years ago, and the landscape reflects a long history of settlement, agriculture and industry. The opportunities for farming have varied over time and there are extensive traces of prehistoric settlements and field systems in the valleys and on the lower fells as a result of warmer climatic conditions several thousand years ago. Important prehistoric sites include Neolithic stone circles, rock art and stone axe quarries; Bronze*

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Age settlements, field systems and burial monuments; and numerous enclosed settlements of the Iron Age. The Romans constructed an impressive network of roads and forts including Hardknott and Ravenglass, which forms part of the Hadrian's Wall World Heritage Site. Important early medieval sites include small, heavily defended hillforts, the remains of an Anglian monastery at Dacre and fine early stone crosses including the example at Irton. In the 10th century an immigration of Norse settlers resulted in additions to the repertoire of ecclesiastical sculpture including the Gosforth cross and numerous decorated hog-back tombstones. The place-names which also resulted from this episode of Norse settlement are one of the most enduring historical legacies and now form part of the distinctive character of the Lake District's cultural landscape.

- 1.6.1.7 *By the time of the Norman conquest at the end of the 11th century the fertile land in the Lake District valleys was separated from the open fell by a stone wall known as a 'ring garth' which enclosed a large common field that was cultivated in strips. Over the following 500 years stone walled 'intakes' were added to the outside of the ring garth for additional cultivation and grazing of stock. This pattern of land use is key to the character of the Lake District landscape and many walls of medieval origin are still in use today.*
- 1.6.1.8 *The gifting of land in the Lake District to monasteries including Furness and Fountains Abbeys from the 12th century led to the development of sheep farming for the production of wool for export and also to increased iron smelting using the abundant local raw materials. Two monasteries were founded within the Lake District, at Shap and in the Calder valley, and the larger monastic institutions located outside the area established sheep farms or 'granges' in order to manage their extensive flocks.*
- 1.6.1.9 *The absence of a resident aristocracy in the central Lake District valleys coupled with the legal securing of customary tenure in the early 17th century ensured the survival of a traditional society of yeoman farmers known in the Lake District as 'Statesmen'. Many of the 'Statesmen' families remained on their farms for generations and from the 17th century their prosperity resulted in a confidence to invest in new farm houses and other agricultural buildings built of stone.*
- 1.6.1.10 *Various factors have encouraged the development of local industries in the Lake District including the availability of metal ores and raw materials from the extensive native woodland. The high rainfall in the Lake District has also assisted the production of water power as a prime source of energy crucial for mining and a variety of milling processes. The exploitation of these natural resources together with industrial processing and the accommodation of workers have had a significant impact on the shaping of the Lake District landscape.*
- 1.6.1.11 *Significant mining of metal ores in the Lake District took place from at least as early as 1000 AD and was developed on a truly industrial scale from the Elizabethan period following the establishment of the Mines Royal. Mining continued to develop from the 18th century and reached a peak in the later 19th and early 20th centuries followed by a decline which saw the last mineral mine close in 1990. Slate quarrying also took place on a small scale from the medieval period and developed as a major local industry from the 18th century. Although it too has declined, several slate quarries are still active in the Lake District. Other important industrial archaeological monuments include blast furnaces of the 18th to 20th centuries and bobbin mills and gunpowder works of similar date.'*

Unique farming heritage and concentration of common land

- 1.6.1.12 *'The pastoral system that has evolved in the Lake District for over a thousand years and its continuation by today's farmers maintains a unique farming legacy. A clear pattern of land use and enclosure has developed which is dictated by the topography and characterised by in-bye (including pastures and hay meadows), in-take, out-gang and open fell. The Lake District has the largest concentration of common land in Britain, and possibly Western Europe, with a continuing tradition of hefted grazing and collective management. This is characterised by landlords' flocks, hefted livestock, communal gathers, and the use of traditional breeds, including Herdwick sheep and fell ponies. Many farming families can trace their ties to the landscape over hundreds of years and the social and cultural elements of the pastoral system are still evident today in the pattern of farm tenure with collective communal grazing, shepherds' meets, local dialect and language and traditions such as agricultural shows and distinctive local sports.'*
- 1.6.1.13 *The stone farm houses, barns and walls of the Lake District have been hand-built by generations of farming families and continue to be maintained as a result of knowledge and skills inherent in the local community. These skills also extend to management of the wider local environment, including traditional practices such as hedge laying, pollarding and coppicing of woodland and quarrying of local building materials.'*

The high fells

- 1.6.1.14 *'The Lake District includes the highest land in England. These mountains, known as 'fells' are rich in wildlife, full of archaeological sites and are predominantly open, common land and an integral part of the hill farming system. For centuries people have come to walk and climb on them and still do to 'get away from it all' and experience a feeling of wildness. Alfred Wainwright popularised walking on them in his iconic guides in the 1960s. The fells have inspired numerous writers and painters including Wordsworth, Coleridge, Turner and Constable and continue to provide a focus for contemporary artists including painters, photographers and creative writers. The fells peaks, crags and passes define the valleys, shed the waters and shape the communities in the valleys below. The fells' characters vary across the Lake District based mainly on geology from the smooth, rounded Silurian slates to the craggy Borrowdale Volcanics.'*

Wealth of habitats and wildlife

- 1.6.1.15 *'The Lake District supports a unique assemblage of wildlife and habitats. The habitats which we see today have been developing since the retreat of the glaciers 10,000 years ago and are a response to a complex underlying geology, geomorphological processes, altitude, climate and the history of human land management. The earliest human influences to vegetation began in Neolithic times. Small areas of clearance are reflected in the pollen record. As cultivation and grazing increased, woodland gave way to more grassland communities. Much later, woodland industry modified the species composition of many of our woodlands.'*
- 1.6.1.16 *Many of the habitats and species found in the Lake District are recognised in their own right for their biodiversity importance at an international level with almost 20% of the National Park area being designated for its biodiversity value. In addition, some of the species that occur here are of European importance. There is an abundance of freshwater habitats, including lakes, tarns and rivers each of which reflect their distinct valley catchments. Vegetation transitions from mountain top to valley bottom boast*

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

moss and lichen heath on the highest plateaus, replaced by dwarf shrub heath, juniper scrub, tall herb ledge and scree vegetation lower down. Blanket bog and wet heath can also be found where conditions allow. Upland oak wood survives in some places to the natural tree line and is extensive in some valleys. On the valley bottoms, upland hay meadows and pastures reflect pastoral management. On the fringes of the park, limestone pavements, grasslands and woodland add to the diversity and in low lying and coastal areas lowland raised mires, sand dunes, dune heaths, saltmarsh, mudflats and honeycomb reefs occur.

- 1.6.1.17 *Each of these habitats is represented by a suite of species, some of which are considered to be particularly important. This may be because they are rare or scarce or because they are in decline and vulnerable to threat (or both). Examples include: red squirrel, natterjack toad, freshwater mussel, mountain ringlet, Duke of Burgundy, floating water plantain, high brown fritillary, vendace, schelly, downy willow and bog orchid.'*

Mosaic of lakes, tarns, rivers and coast

- 1.6.1.18 *'The National Park has a rich variety of becks, rivers, lakes, tarns and coast. They are internationally important because of their water quality, range of habitats, and species, such as vendace, arctic charr and schelly. The plants and animals they support depend on the differences in water chemistry which in turn are influenced by the variations of the underlying geology. Becks and rivers connect upland catchments and open water to the sea, allowing migrating Atlantic salmon to thrive alongside otters, freshwater mussel and white clawed crayfish. The transition from open water to dryer ground adds diversity with reed beds, tall herb fens and wet woodland. Through analysis of their sediments, the lakes and tarns provide a unique record of the climatic and environmental changes which have occurred over time. Although each river and lake has its own distinct identity, together with their catchment of mountains, woodland and farmland, they collectively contribute to the high quality scenery and natural resource which is so distinctively 'The Lake District' and unique in England. The becks and rivers of the Lake District have been harnessed to provide power for a variety of industries and, from the 19th century, the need for fresh water for expanding cities in North West England has resulted in modification of a number of the major lakes.*

- 1.6.1.19 *The Lake District can also celebrate the heritage of 100 years of scientific investigation into lake and stream ecology, and the biological function of freshwater systems, which is recognised throughout the world. The Freshwater Biological Association with its world class library is located on the shores of Windermere.'*

Extensive seminatural woodlands

- 1.6.1.20 *'The semi-natural woodlands add texture, colour and variety to the landscape and some are internationally important habitats. They provide a home for native animals and plants and define the character of many valleys in the Lake District. The high rainfall in the core of the National Park favours woodlands rich in Atlantic mosses and liverworts, ferns and lichens. The limestone on the fringes of the National Park also supports distinctive woodland types and wood pasture, pollards and old coppice woodland contain one of the greatest concentrations of ancient trees in Europe and form a living record of past land use, part of the rich cultural landscape. The Lake District woods have been used for centuries as a source of raw materials for local industries. Coppiced wood was used for producing charcoal which fuelled iron production from the medieval period until the 20th century. It also provided the raw material for making bobbins for the Lancashire cotton industry. Oak bark was used in*

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

tanneries in the Lake District into the late 19th century and oak swill baskets are a traditional product of the area. Some of these traditional industries still survive and the Lake District's woodland is increasingly valued for carbon sequestration and storage and as a source of renewable wood fuel and wood products. Recent woodland regeneration schemes on the fellsides are adding a new generation of woodlands into the landscape.'

Distinctive buildings and settlement character

- 1.6.1.21 *'The local architecture varies from the traditional vernacular buildings with related characteristics to more formal, 'polite' architectural styles associated with Georgian, Victorian and Edwardian period, including those from the Classical, Gothic and Arts and Crafts movements. Materials and details are a common link between contrasting building types and styles. Local materials include a wide range of building stones such as slate stone, volcanic boulders and cobbles, limestone and sandstone depending on the varied local geology. The extensive use and distinctive character of Cumbrian slate for roofing is a unifying feature, with finishes such as lime wash and details in dressed sandstone, granite and limestone adding variety and interest.*
- 1.6.1.22 *Vernacular buildings have a simple functional character and often rugged appearance using local materials, with some displaying varying degrees of modification to more 'polite' styles of more formal appearance. Vernacular buildings come in a variety of distinctive forms, such as traditional yeoman farmhouses, long houses, bank barns, hogg houses, and peat houses. There is also a distinctive range of buildings associated with trade, mining and industry, such as bobbin mills, lime kilns and packhorse bridges. Local vernacular features include 'spinning' galleries, massive round chimneys, deep eaves, crow-stepped gables and walling styles and are frequently a response to the harsh character of the local climate and topography. The Lake District contains some fine examples of villa architecture, following industrialisation in north England and also by the arrival of the railway in the mid-19th century. Villa development, in styles fashionable at the time, was frequently designed to respond to and even modify the landscape, epitomising an era of power and wealth, yet with increasing concern with art, aesthetics and quality of life.*
- 1.6.1.23 *Many towns, villages and hamlets have a range of building types and styles and a distinctive spatial and townscape character depending on their history and development. The network of dry stone walls, hedgerows, lanes, footpaths and the surviving field patterns form a visual and historic link between settlement and countryside. The survival of a dispersed network of vernacular farm building groups, often relatively unaltered by more recent development, is an important component of this special quality. A diverse range of historic settlements types have emerged within a relatively small geographical area. This diversity is strongly related to the historic opportunities and constraints of the varied landscape, topography and geology. Consequently, the National Park has examples of market towns, with burgage plots arranged around a market place; agricultural villages with historic field patterns, some with village greens; industrial and mining settlements with terraces of workers housing; politely planned Georgian towns and villages guided by a wealthy patron; and Victorian new towns, suburbs and tourist resorts, especially following the arrival of the railway.'*

A source of artistic inspiration

- 1.6.1.24 *'The unique beauty of the Lake District's distinctive pastoral landscape has inspired generations of artists and writers. The influence of Picturesque aesthetics led to the physical embellishment of the landscape through construction of villas and gardens,*

designed landscapes and planting schemes. The Romantic movement transformed this into a new and influential view of the relationship between humans and landscape. This included the possibility of a sustainable relationship between humans and nature, the value of landscape for restoring the human spirit and the intrinsic value of scenic and cultural landscape. This was fundamental to the formation and sharing of globally important ideas of the need to protect such landscapes. Key writers and artists of the 18th and 19th centuries associated with the Lake District include William and Dorothy Wordsworth, Samuel Taylor Coleridge, John Constable, J M W Turner and John Ruskin. This tradition continued into the 20th century with such figures as Kurt Schwitters, Alfred and William Heaton Cooper and Norman Nicholson. It is nurtured today and for the future through the agency of various organisations including the Wordsworth Trust, the Brantwood Trust, Grizedale Arts, the Lake Artists Society and through a number of established festivals including Words by the Water and the Kendal Mountain Festival.'

A model for protecting cultural landscapes

1.6.1.25

'In parallel with the aesthetic appreciation of the 'natural beauty' of the Lake District from the 18th century onwards, there also developed an understanding of its vulnerability to forces of change as a result of emerging industrialisation, tree-felling, and landscape enclosure. This combination of ideas gave rise to the idea that valued landscapes could be nurtured and protected, encapsulated in William Wordsworth's famous statement of 1835 that the Lake District should be deemed "a sort of national property, in which every man has a right and interest who has an eye to perceive and a heart to enjoy". The early conservation battles to protect the Lake District, although sometimes unsuccessful, as in the case of the Thirlmere reservoir, began a chain of events which established the Lake District as the birth-place of an innovative conservation movement committed to the defence of its landscape and communities. One strand of this movement led directly to the creation of the National Trust and protection of the Lake District landscape through the acquisition of key farms, fell land and historic houses. Figures such as Beatrix Potter, G M Trevelyan and Canon Hardwicke Rawnsley played an important role in this regard. This has influenced similar models of heritage conservation, secured through protective ownership, elsewhere in Britain and abroad. Another strand of conservation action to emerge from experience in the Lake District was the formation of campaigning groups such as Friends of the Lake District, which won a significant battle in 1936 to prevent commercial deforestation in the central fells. This strand led to the formal designation of protected landscapes at both national and international levels; the Lake District was at the origin of UK national parks based on the 'natural beauty' of these cultural landscapes and influenced the idea of the International Union for Conservation of Nature (IUCN) Protected Areas Category V, Protected Landscapes/Seascapes. It was also instrumental in bringing about a third strand: the creation by UNESCO of the World Heritage Cultural Landscape category in 1992.'

A long tradition of tourism and outdoor activities

1.6.1.26

'The diverse Lake District landscape provides opportunities for a wide range of sporting and recreational activities on land and water. Some of these, such as fell running, are part of traditional local culture. The National Park has the highest concentration of outdoor activity centres in the UK. The birth of recreational rock climbing in England is attributed to the Lake District with the ascent of Napes Needle in the 1880's amongst one of the earliest recorded routes. There is a tradition of unrestricted access to the fells together with an historical network of roads, tracks and footpaths. As a result, the

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Lake District has become a focal point for recreational walking, beginning with the involvement of the Romantic movement with the landscape and the perambulations of Wordsworth and Coleridge. The history of tourism can be traced back to the picturesque fascination with the Lake District landscape and its potential for aesthetic experiences. This led to the production of early guidebooks which included the positions of 'viewing stations' around the major lakes which were followed by Wordsworth's celebrated Guide through the District of the Lakes of 1835 and in the 20th century by the guides of more recent writers including Wainwright.

1.6.1.27 *The coming of the railway to the Lake District in the mid-19th century extended the opportunity to visit the area to a much wider part of society and was the catalyst for a tradition of tourism which continues today.*

1.6.1.28 *Traditional tourist attractions include lake cruises on launches and steamers on the larger lakes, a unique resource in inland England and Wales, and current water-based recreational activities include sailing, motor boating, canoeing, and open water swimming which is growing increasingly popular. Three of the larger lakes have been used since the early 20th century for water speed record attempts. In recent years mountain biking has become another major sporting activity utilising the Public Rights of Way network and Grizedale and Whinlatter forests.'*

Opportunities for quiet enjoyment

1.6.1.29 *'The tranquillity of the fells, valleys and lakes gives a sense of space and freedom. The open character of the uplands, and the absence of modern development, is especially important. To walk freely across the fells, or climb their crags, is liberating and gives a sense of discovery and achievement. There is a feeling of wildness, offering personal challenges for some and impressive open views for everyone. To many people the Lake District is a safe place to explore: it is possible to feel remote yet know that the nearest settlement is never far away. These characteristics provide important opportunities for spiritual refreshment: a release from the pressures of modern day life and a contrast to the noise and bustle experienced elsewhere. These are all vital components of the concept of quiet enjoyment and can be found in many places across the whole of the National Park. The value of the Lake District landscape for spiritual nourishment, originating in the Romantic recognition of the capacity of landscape to nurture and stimulate imagination, creativity and spirit, was recognised by the gift of the highest mountain land in England to the National Trust as a memorial to those who perished fighting in World War 1.'*

1.6.2 The English Lake District World Heritage Site - attributes of Outstanding Universal Value

1.6.2.1 The attributes of outstanding universal value and their component parts are listed under three themes as follows:

- Theme 1: A landscape of exceptional beauty, shaped by persistent and distinctive agro-pastoral and local industry which gives it special character
- Theme 2: A landscape which has inspired artistic and literary movements and generated ideas about landscapes that have had global influence and left their physical mark
- Theme 3: A landscape which has been the catalyst for key developments in the national and international protection of landscapes.

Theme 1: A landscape of exceptional beauty, shaped by persistent and distinctive agro-pastoral and local industry which gives it special character

1.6.2.2 *‘Attribute: Extraordinary beauty and harmony*

- The physical natural landscape of mountains, rivers, lakes, and valleys
- The physical cultural landscape in the main the product of agro-pastoralism, settlements and local industry, including woodlands
- The variety and combination of differing landscape characters and physical attributes of each of the 13 valleys.

1.6.2.3 *Attribute: Agro-pastoral system*

- Evidence, intactness, and legibility of settlements and the agro-pastoral character and function of the field systems and their waterways
- Farmsteads and Farmhouses
- Shepherds meets/shows and traditional sports
- The unique practices of the agro-pastoral farming system
- The surviving physical and social elements of hill farming e.g. shepherding and common gathering
- Local techniques of landscape maintenance (stonewalling, hedging, pollarding)
- Local management and governance of Lake District farming systems, e.g. activities of breeders associations and commons committees
- Common land and the long standing and continuing traditions of Common land management
- Semi-natural habitats created and sustained as a result of a continuing agro-pastoral systems, for example hay meadows, pollards, wood pasture, and coppiced woodland. The mosaic of semi natural habitats above the fell wall within an actively grazed landscape
- Ancient Semi-Natural Woodlands.

1.6.2.4 *Attribute: Local industries*

- Traditional local woodland industries, people and skills
- The physical remains of past woodland industries, buildings, structures (i.e. Bark Barns, Charcoal Sheds)
- The physical remains of historic mines and quarries which have shaped the landscape.

1.6.2.5 *Attribute: Towns and settlements*

- The English Lake District’s settlement pattern of individual farms, small hamlets, large villages and market towns, historically derived and functionally
- Medieval buildings
- Vernacular buildings.’

Theme 2: A landscape which has inspired artistic and literary movements and generated ideas about landscapes that have had global influence and left their physical mark

1.6.2.6 *‘Attribute: Early tourism*

- Places and collections associated with early tourism
- Early tourist infrastructure
- The location of viewing stations, including structures in very limited cases
- Other key views that form the image of the Lake District
- The values, aesthetic ideals and perceptions which led to the creation of early tourism.

1.6.2.7 *Attribute: Villas, gardens and formal landscapes*

- Villa Landscapes – their buildings, gardens and surrounding designed landscapes
- The values, aesthetic ideals and perceptions which led to their creation
- Physical designed landscapes.

1.6.2.8 *Attribute: Sites and collections associated with the Picturesque and Romanticism*

- Residences and places associated with significant writers and poets
- Key literary and artistic associations with Landscape. Surviving landscape which inspired literature and art
- The value and significance of ideas and writings of writers and poets and artist
- Perception and enjoyment of sites and collections associated with Picturesque and Romanticism
- Key associations with the origins of the outdoor movement
- Buildings linked to early outdoor holiday movement
- Surviving landscape which inspired early climbing, outdoors recreation and the early outdoor holiday movement
- The Romantic emphasis on outdoor activity and experience – principally walking
- The open access to the Lake District Fells and lakes for recreation.’

Theme 3: A landscape which has been the catalyst for key developments in the national and international protection of landscapes

1.6.2.9 *‘Attribute: Landscape conservation*

- Areas of the World Heritage property where historic landscape conservation battles were both won and lost
- The idea of landscape conservation inspired by the English Lake District landscape and the universal value of scenic and cultural landscape transcending traditional property rights
- The landscape is protected for its scenic and cultural value and is protected for the Nation

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

- The perception that the landscape is protected for its scenic and cultural value and is protected for the Nation by public and state support
- Properties owned or managed by the National Trust
- The knowledge and perception that the creation of the National Trust was inspired by the English Lake District
- Landscapes owned and sympathetically managed to sustain our Outstanding Universal Values by the Partnership and other landscape conservation bodies
- Farms and land purchased by individuals and public subscription to protect the landscape and our Outstanding Universal Values e.g. traditional farming
- Organisations and public participating in landscape conservation
- The perception and enjoyment of an open landscape.

1.6.2.10 *Attribute: The ability of people to experience the spirit and feeling of the Lake District*

- The ability to feel the values, ideas and perceptions of harmonious beauty and other significance derived from the Picturesque and Romantic traditions specific to the English Lake District
- The value of landscape for restoring the human spirit and wellbeing.
- Opportunities for quiet enjoyment and spiritual refreshment.'

1.7 Assessment of effects of the Morgan Generation Assets on the special qualities of nationally and internationally designated landscapes

1.7.1 Introduction

1.7.1.1 The impacts of the construction, operations and maintenance, and decommissioning phases of the Morgan Generation Assets have been assessed on the special qualities of The Lake District National Park and the attributes of outstanding universal value of The English Lake District World Heritage Site. The MDS against which each impact has been assessed arising from the construction, operations and maintenance and decommissioning phases of the Morgan Generation Assets are outlined in the MDS, Table 10.18 of Volume 2, Chapter 10 Seascape, landscape and visual resources, of the Environmental Statement.

1.7.1.2 Impacts may arise during construction, operations and maintenance, and/or decommissioning phases as a result of the following Morgan Generation Assets project components (taken from the MDS):

- 68 wind turbines and foundation components (blades, nacelles, towers, navigation and aviation lighting) (364 m maximum blade-tip height above Lowest Astronomical Tide (LAT))
- Four OSPs, each measuring 55 m x 65 m x 45 m (height above LAT x length x width, excluding antenna and lightning protection)
- Construction and service vessels/helicopters.

1.7.1.3 The impacts will be caused by both static and moving elements of the above components which will affect the special qualities of The Lake District National Park and the attributes of outstanding universal value of The English Lake District World Heritage Site in the SLVIA study area.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

1.7.1.4 A review of the special qualities and attributes of outstanding universal value is presented below in order to identify those of relevance to the SLVIA.

1.7.2 The Lake District National Park and the English Lake District World Heritage Site.

1.7.2.1 Baseline conditions – The Lake District National Park and the English Lake District World Heritage Site comprises a mountain landscape with narrow, radiating glaciated valleys, steep fells and slender lakes. The mountain landscape slopes down towards a coastal plain which overlooks the Irish Sea and the site for the Morgan Generation Assets. It is located approximately 38.6 km from the Morgan Array Area at the closest point in the vicinity of Silecroft.

1.7.2.2 Impact considerations - The Morgan Generation Assets would be located outside the Lake District National Park and the English Lake District World Heritage Site and therefore, direct effects will not arise.

1.7.2.3 There is potential for effects on the special qualities and attributes of outstanding universal value of this designated landscape to arise as a result of the visibility of the Morgan Generation Assets.

1.7.2.4 The assessment is therefore focussed on the potential effects on the special qualities of the Lake District National Park and the attributes of outstanding universal value of the English Lake District World Heritage Site arising from the Morgan Generation Assets.

1.7.2.5 A review of the special qualities and attributes of outstanding universal value of this designated landscape is presented in Table 1.3 to Table 1.5 in order to identify the particular special qualities and attributes of outstanding universal value, highlighted in bold in the table below, that are relevant to the SLVIA which are then taken forward for more detailed assessment.

Table 1.3: The Lake District National Park – Special Qualities associated with landscape and seascape.

Special Qualities	Relevance to the SLVIA
A world class cultural landscape	The Morgan Generation Assets would not directly affect the world class cultural landscape. The Morgan Generation Assets would, potentially affect the individual's experience of this landscape.
Complex geology and geomorphology	Outside the scope of the SLVIA and excluded from further consideration.
Rich archaeology and historic landscape	Outside the scope of the SLVIA and excluded from further consideration. Heritage setting assessments are included within Volume 2, Chapter 8: Marine archaeology and cultural heritage of the Environmental Assessment.
Unique farming heritage and concentration of common land	Outside the scope of the SLVIA and excluded from further consideration. Heritage setting assessments are included within Volume 2, Chapter 8: Marine archaeology and cultural heritage of the Environmental Assessment.
The High Fells	The Morgan Generation Assets would not directly affect the fabric of the High Fells. The Morgan Generation Assets would, potentially affect the individual's experience of the High Fells.
Wealth of habitats and wildlife	Outside the scope of the SLVIA and excluded from further consideration.
Mosaic of lakes, tarns, rivers and coast	Outside the scope of the SLVIA and excluded from further consideration.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Special Qualities	Relevance to the SLVIA
Extensive seminatural woodlands	The Morgan Generation Assets would not directly affect the fabric of extensive seminatural woodlands. There would be no change to this special quality. The use of these timbers in traditional industries is outside the scope of the SLVIA and is excluded from further consideration.
Distinctive buildings and settlement character	The Morgan Generation Assets would not directly affect the fabric of distinctive buildings and settlement character. There would be no change to this special quality.
A source of artistic inspiration	Outside the scope of the SLVIA and excluded from further consideration.
A model for protecting cultural landscapes	Outside the scope of the SLVIA and excluded from further consideration.
A long tradition of tourism and outdoor activities	Outside the scope of the SLVIA and excluded from further consideration.
Opportunities for quiet enjoyment	The Morgan Generation Assets has the potential to affect the individual's experience of quiet enjoyment.

Table 1.4: The English Lake District World Heritage Site – attributes of outstanding universal value and their component parts associated with landscape and seascape.

Attributes of Outstanding Universal Value	Relevance to the SLVIA
Theme 1: A landscape of exceptional beauty, shaped by persistent and distinctive agro pastoral and local industry which gives it special character	
Extraordinary beauty and harmony	The Morgan Generation Assets has the potential to affect the individual's experience of the physical natural landscape of mountains, rivers, lakes, and valleys.
	The Morgan Generation Assets has the potential to affect the individual's experience of the variety and combination of differing landscape characters and physical attributes of each of the 13 valleys.
	The physical cultural landscape in the main the product of agro-pastoralism, settlements and local industry including woodlands is outside the scope of the SLVIA and is excluded from further consideration.
Agro-pastoral system	Many of the component parts of this attribute are outside the scope of the SLVIA including the unique practices of the agro pastoral farming system and methods for landscape maintenance and common land management. This attribute refers also to ' <i>Ancient Semi-Natural Woodlands</i> ' for which the Morgan Generation Assets would not directly affect the fabric of ancient semi natural woodlands. There would be no change to this special quality.
Local industries	Outside the scope of the SLVIA and excluded from further consideration.
Towns and settlements	Outside the scope of the SLVIA and excluded from further consideration.
Theme 2: A landscape which has inspired artistic and literary movements and generated ideas about landscapes that have had global influence and left their physical mark	
Early tourism	The Morgan Generation Assets has the potential to affect the individual's experience of Other key views that form the image of the Lake District. For the purpose of this assessment, other key views is understood to mean key views that may form the image of the Lake District other than those historical views associated with early tourism.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Attributes of Outstanding Universal Value	Relevance to the SLVIA
	The remaining components are outside the scope of the SLVIA and excluded from further consideration.
Villas, gardens and formal landscapes	<p>The Morgan Generation Assets would not affect the fabric of villa landscapes – their buildings, gardens and surrounding designed landscapes. There would be no change to this component.</p> <p>The values, aesthetic ideals and perceptions which led to their creation is outside the scope of the SLVIA and excluded from further consideration.</p> <p>The Morgan Generation Assets would not affect the fabric of physical designed landscapes. There would be no change to this component.</p>
Sites and collections associated with the picturesque and romanticism	The Morgan Generation Assets will not change the open access to the Lake District Fells and lakes for recreation. There will be no effect on this component. The remaining components are outside the scope of the SLVIA and excluded from further consideration.
Theme 3: A landscape which has been the catalyst for key developments in the national and international protection of landscapes	
Landscape conservation	<p>The Morgan Generation Assets has the potential to affect the individual's perception and enjoyment of an open landscape.</p> <p>The remaining components, pertaining to historic landscape conservation and the principal of landscape protection are outside the scope of the SLVIA and excluded from further consideration.</p>
The ability of people to experience the spirit and feeling of the Lake District	<p>The ability to feel the values, ideas and perceptions of harmonious beauty and other significance derived from the picturesque and romantic traditions specific to the English Lake District is outside the scope of the SLVIA and excluded from further consideration.</p> <p>The Morgan Generation Assets has the potential to affect the value of landscape for restoring the human spirit and wellbeing.</p> <p>The Morgan Generation Assets has the potential to affect opportunities for quiet enjoyment and spiritual refreshment.</p>

- 1.7.2.6 Based on the above review, the special qualities of the Lake District National Park taken forward for assessment are listed below and presented in (Table 1.5) below:
- A world class cultural landscape;
 - Opportunities for quiet enjoyment; and
 - The High Fells.
- 1.7.2.7 These special qualities have informed the component parts of the attributes of outstanding universal value of the English Lake District World Heritage Site detailed in the second column of Table 1.5 below.
- 1.7.2.8 The component parts of the attributes of outstanding universal value are informed by the special qualities and are considered in parallel with the relevant special qualities where these overlap.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Table 1.5: The Lake District National Park and the English Lake District World Heritage Site –Special qualities and component parts of the attributes of outstanding universal value.

Special qualities of the Lake District National Park	Component parts of attributes of outstanding universal value of the English Lake District World Heritage Site.
<p>A world class cultural landscape</p> <p>A self-contained mountain area whose narrow, radiating glaciated valleys, steep fells and slender lakes exhibit an extraordinary beauty and harmony.</p> <p>The diversity of the landscape is key to its beauty and significance and includes coast, lakes, distinctive farmland, fell, woodland, industrial activity and settlement.</p> <p>Each of the thirteen valleys of the Lake District has an individual distinctiveness.</p>	<p>Theme 1: Attribute - Extraordinary beauty and harmony</p> <p>The physical natural landscape of mountains, rivers, lakes, and valleys</p> <p>The variety and combination of differing landscape characters and physical attributes of each of the 13 valleys</p>
<p>The High Fells</p> <p>The Lake District includes the highest land in England. The mountains are predominantly open, common land.</p> <p>For centuries people have come to walk and climb on them and still do to 'get away from it all' and experience a feeling of wildness.</p> <p>The fells peaks, crags and passes define the valleys.</p>	<p>Theme 2: Attribute – Early Tourism</p> <p>Other key views that form the image of the Lake District</p>
<p>Opportunities for quiet enjoyment</p> <p>The tranquillity of the fells, valleys and lakes gives a sense of space and freedom. The open character of the uplands, and the absence of modern development, is especially important.</p> <p>A feeling of wildness, offering personal challenges for some and impressive open views</p> <p>These characteristics provide important opportunities for spiritual refreshment.</p> <p>These are all vital components of the concept of quiet enjoyment and can be found in many places across the whole of the National Park.</p>	<p>Theme 3, Attribute – Landscape Conservation.</p> <p>The perception and enjoyment of an open landscape</p> <p>Theme 3, Attribute – The ability of people to experience the spirit and feeling of the Lake District</p> <p>The value of landscape for restoring the human spirit and wellbeing</p> <p>Opportunities for quiet enjoyment and spiritual refreshment</p>

1.7.2.9 The assessment of effects is supported by fieldwork and the assessment of visual effects at the following representative viewpoints documented Volume 2, Chapter 10 Seascape, landscape and visual resources of the Environmental Statement:

- Representative viewpoint 16 – England Coast Path, Lake District National Park at 40.7 km distance to the Morgan Generation Assets (Volume 4, Annex 10.6: Seascape visualisations, Figures 3.1 and 3.2 of the Environmental Statement)
- Representative viewpoint 17 –Buck Barrow, Lake District National Park at 48.7 km distance to the Morgan Generation Assets (Volume 4, Annex 10.6: Seascape visualisations, Figures 4.1 and 4.2 of the Environmental Statement)
- Viewpoint 58 – Muncaster Fell, Lake District National Park at 52.3 km distance to the Morgan Generation Assets (Volume 4, Annex 10.6: Seascape visualisations, Figures 20.1 and 20.2 of the Environmental Statement)

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

- Viewpoint 59 – Black Combe, Lake District National Park at 43.8 km distance to the Morgan Generation Assets (Volume 4, Annex 10.6: Seascape visualisations, Figures 21.1 and 21.2 of the Environmental Statement)
- Viewpoint 60 – Whit Fell, Lake District National Park at 50.9 km distance to the Morgan Generation Assets (Volume 4, Annex 10.6: Seascape visualisations, Figures 22.1 and 22.2 of the Environmental Statement)
- Viewpoint 61 – Whin Rigg, Lake District National Park at 58.7 km distance to the Morgan Generation Assets (Volume 4, Annex 10.6: Seascape visualisations, Figures 23.1 and 23.2 of the Environmental Statement).

1.7.2.10 For ease of reference, the assessment reporting here forward refers to the Lake District National Park and The English Lake District World Heritage Site as the 'Lake District'.

Operation and maintenance phase

Magnitude of Impact

- 1.7.2.11 A direct impact will arise to the visual amenity of individuals within the Lake District where views of the coast and the Irish Sea are attained along with the Morgan Generation Assets during the operations and maintenance phase. These direct visual impacts have the potential to result in effects on special qualities and attributes of outstanding universal value which are relevant to the viewer's experience of the landscape of the Lake District. These impacts will result from the presence of both moving and static project components occupying the Morgan Array Area, namely the wind turbines, service vessels/helicopters and the stationary Offshore Substation Platforms (OSPs) which have the potential to affect perceptions of the coastal landscape.
- 1.7.2.12 The Morgan Generation Assets will be located approximately 38.6 km from the Lake District at the closest point in the vicinity of Silecroft on the coast overlooking the Irish Sea.
- 1.7.2.13 The hub height ZTV indicates theoretical visibility of the Morgan Generation Assets on part of the landscape of the Lake District in the east, overlooking the Irish Sea, calculated to a 60 km distance from the boundary of the Morgan Array Area. These areas highlighted in the hub height ZTV and tip height ZTV, within the 60 km SLVIA study area, represent 5.8% and 7.7% of the entire Lake District National Park respectively. The main areas highlighted in the hub height ZTV are listed below extending from north to south within the 60 km SLVIA study area and with reference to the relevant areas of distinctive character (ADCs) and the 13 valleys associated with the Lake District. These ADCs and valleys occur within two national Landscape Character Areas (LCA), these being NCA 7 West Cumbria Coastal Plain and NCA 8 Cumbria High Fells and overlook the national Marine Character Area (MCA) 31: St Bees to Haverigg Coastal Waters. Further detail on the national landscape and seascape baseline is documented in Volume 4, Annex 10.2: Seascape and landscape character baseline technical report of the Environmental Statement.
- 1.7.2.14 ADC 36: Calder Valley (within The Ennerdale Valley in NCA 8 Cumbria High Fells)
- Elevated areas of hill farmland east of the settlement of Calder Bridge. This landscape overlooks the lower lying coastal landscape between Beckermet and Seascale (outside the Lake District National Park) in which the Sellafield Nuclear Power Plant is a large-scale, detracting element which blocks open views to the

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

sea. The sense of tranquillity, due to the openness and perceived naturalness of this landscape, is experienced in the northeast and away from the nuclear power plant.

- 1.7.2.15 ADC 37: Bleng and Irt Valleys (within the Wasdale Valley in NCA 8 Cumbria High Fells)
- Elevated isolated patches of hill farmland overlooking the low-lying coastal landscape in the eastern part of this landscape, east of the extensive areas of woodland at Blengdale and Miterdale. These eastern areas are generally tranquil
 - A small part of the upland landscape of Irton Fell, located north of Miterdale Forest and Whin Garth. These areas in the east have a sense of tranquillity
 - Lower lying coastal landscape in the vicinity of Ravenglass and including the estuary of the River Esk.
- 1.7.2.16 ADC 29: Wastwater and Wasdale (within the Wasdale Valley in NCA 8 Cumbria High Fells):
- A small part of the upland landscape at Buckbarrow which has a sense of remoteness, tranquillity and isolation.
- 1.7.2.17 ADC 30: Scafell Massif (within the Eskdale Valley in NCA 8 Cumbria High Fells)
- A small part of the upland landscape at Whin Rigg and Tongue Moor which has a sense of remoteness, tranquillity and isolation.
- 1.7.2.18 ADC 44: Eskdale (within the Eskdale Valley in NCA 8 Cumbria High Fells and NCA 7 West Cumbria Coastal Plain)
- Small patches of upland landscapes surrounding the valley of the River Esk including the upland at Muncaster Fell and uplands further east of the settlement of Eskdale Green. A sense of tranquillity may be attained in these uplands
 - Areas near the coast at the mouth of the River Esk near Waberthwaite.
- 1.7.2.19 ADC 45: Ulpha and Corney Fell (within NCA 8 Cumbria High Fells)
- The summit of Whitfell and some of the east facing slopes associated with Corney Fell including Kinmont Buck Barrow. A sense of tranquillity may be attained in these uplands.
- 1.7.2.20 ADC 60: Black Combe (within NCA 8 Cumbria High Fells)
- The summit and east facing slopes of the upland landscape of Black Combe tranquillity.
- 1.7.2.21 ADC 52: Ravenglass and Bootle (within NCA 7 West Cumbria Coastal Plain):
- Areas of lower lying farmed landscape along the coast extending along the full length of ADC 52. This landscape contrasts sharply with the uplands and fells further east in particular that at Black Combe. Long distance sea views are available to the west from the coastal edge however further inland, the presence of vegetation, built structures would limit views to the Morgan Generation Assets. Detracting elements in this lower lying landscape include an overhead powerline, a railwayline and the busy A595 road. The Sellafield Nuclear Power Plant is a distinctive landmark in views to the north outside this ADC
 - Ravenglass, the only coastal settlement in the Lake District located on the estuary of the Rivers Esk, Mite and Irt.

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

- 1.7.2.22 ADC 61: Whicham Valley (within NCA 8 Cumbria High Fells)
- Part of the Whicham Valley where the focus of attention is likely to be over the Dudon estuary.
- 1.7.2.23 In addition to the areas of the Lake District landscape highlighted in the hub height ZTV, additional areas highlighted in the tip height ZTV are relatively limited overall. These additional areas highlighted in the tip height ZTV comprise mainly forested areas in the vicinity of the fells and fell fringes and some additional areas along the Esk River Valley and at the coast at Ravenglass.
- 1.7.2.24 In reality, the extent of visibility will be less than indicated on the ZTV due to the screening afforded by vegetation, settlements and built structures. These include the extensive wooded areas at Blengdale and Miterdale Forests and woodlands near Irton Pike (within ADC 37) along with wooded areas in the vicinity of Muncaster Fell (within ADC 44) and wooded areas associated with Eskmeals Firing Range at the coast (within ADC 52). Coastal settlements will restrict views out to the Morgan Array, including Ravenglass, Bootle and Silecroft.

Magnitude of impact on the special qualities of the Lake District National Park

- 1.7.2.25 The ‘*world class cultural landscape*’, cited as a special quality of the Lake District National Park is recognised as being of extraordinary beauty and harmony and comprises a diverse landscape of mountains and valleys the majority of which lies outside the 60 km radius study area. Although the elevated mountain landscapes such as that at Corney Fell and Muncaster Fell are highlighted on the ZTV, effects in reality would be relatively limited due to the distance to the Morgan Generation Assets. The ZTV indicates no effects at lower elevations along the valleys within the study area at Coniston, Duddon, Eskdale, Wasdale and Ennerdale. Effects along the coastal plain between Whicham and Ravenglass would be largely limited to the coastal edge with vegetation and built structures serving as visual screens further inland. The extraordinary beauty and harmony of the landscape, experienced by the viewer is often attributed to the diversity of mountain and valley landscape, views of which are often experienced away from the direction of the Irish Sea and Morgan Generation Assets. The potential for effects on this special quality would be very limited to the most westerly part of the designated landscape overlooking the Irish Sea where views of the Morgan Generation Assets would be very limited due to distance and weather conditions.
- 1.7.2.26 Effects on the *High Fells* would generally be limited to the summits of a small number of the fells that overlook the Irish Sea including Black Combe, Whit Fell, Muncaster Fell and Corney Fell. Much of the lower lying valley landscapes which are often defined or framed by the fell peaks and crags would be unaffected. The effects on the fells and the viewer’s experience of wildness and ‘getting away from it all’ would be limited due to the distance to the Morgan Generation Assets and the limited extent of the fells that would be affected. Weather conditions and the presence of existing offshore wind farms would also limit these effects.
- 1.7.2.27 The *opportunities for quiet enjoyment*, cited as a special quality of the Lake District National Park, are attributed to the fells, valleys and lakes and their open character and absence of modern development. Apart from the western edge of the coastal plain, the effects resulting from Morgan Generation Assets would be limited to the elevated fell landscapes overlooking the Irish Sea with the lakes and valleys further east at lower elevations being unaffected. At these distances and with the influence of modern

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

development in the form of the North West England Cluster of offshore wind farms, the Morgan Generation Assets would have very limited effect on this special quality experienced at the more remote locations such as the fells and valleys.

- 1.7.2.28 The attributes of outstanding universal value cited in relation to The English Lake District World Heritage Site are informed by the special qualities of the Lake District National Park. These include reference to a landscape of extraordinary beauty and harmony and the value of the landscape for wellbeing and opportunities for quiet enjoyment. These attributes of outstanding universal value would be affected in a limited way as described above.
- 1.7.2.29 Taking into account the closest distance to the Morgan Generation Assets, and the geographic extent of the effects, being largely confined to part of the coastal plain and a limited extent of the elevated mountain (fell) landscapes that overlook the Irish Sea the magnitude of impact is expected to be **negligible** on all of the above referenced special qualities entitled *world class cultural landscape, the high fells and opportunities for quiet enjoyment*.
- 1.7.2.30 Magnitude of impact on the attributes of outstanding universal value of the English Lake District World Heritage Site
- 1.7.2.31 The attribute '*extrodinary beauty and harmony*', cited as an attribute of outstanding universal value of the Lake District National Park refers to the variety and combination of different landscapes including the diversity of mountain, valley and lake landscape types. For similar reasons cited above in respect of the world class cultural landscape (special quality), a **negligible** magnitude of impact is expected to arise.
- 1.7.2.32 The attribute of *early tourism*, cited as an attribute of outstanding universal value of the Lake District National Park refers specifically to *other key views* that form the image of The Lake District, some of which may be recorded on maps. The fell summits and the lakeland landscapes are widely known and associated with the image of the Lake District. In this regard, and as reported above, the effect of Morgan Generation Assets would be limited to a small number of fell summits on the western edge of the designated landscape as well as the coastal edge. The views from the fell summits within the study area and The England Coast Path that are widely known to the public overlook The Irish Sea (representative viewpoints 16, 58, 59, 60 and 61). Due to distance to the Morgan Generation Assets and the presence of existing offshore wind farms that are located closer to the viewer than Morgan Generation Assets along with sea traffic and weather conditions, the effects on this attribute of outstanding universal value are expected to be very limited. A **negligible** magnitude of impact is assessed to arise.
- 1.7.2.33 The attribute '*landscape conservation*', cited as an attribute of outstanding universal value of the Lake District National Park refers to the *perception and enjoyment of an open landscape* for which, a negligible magnitude of impact is assessed to arise due mainly to the distance to Morgan Generation Assets.
- 1.7.2.34 The attribute, *ability of people to experience the spirit and feeling of the Lake District* refers to the *value of landscape for restoring the human spirit and wellbeing along with opportunities for quiet enjoyment and refreshment*. These experiential qualities are similar to the special quality entitled opportunities for quiet enjoyment referred to above. A negligible magnitude of impact is assessed to arise due mainly to the distance to Morgan Generation Assets.

Sensitivity of the receptor

- 1.7.2.35 The special qualities associated with the Lake District National Park are assessed to be of high value and high susceptibility to the proposed development resulting in a **high** sensitivity.
- 1.7.2.36 The attributes of outstanding universal value associated with the English Lake District World Heritage Site are assessed to be of very high value and very high susceptibility to the proposed development resulting in a **very high** sensitivity.

Significance of the effect

- 1.7.2.37 The effects on the special qualities of The Lake District National Park entitled *world class cultural landscape, high fells and opportunities for quiet enjoyment* are judged to be **negligible to minor adverse** and not significant.
- 1.7.2.38 The effects on the attributes of outstanding universal value of The English Lake District World Heritage Site entitled *extraordinary beauty and harmony, early tourism (key views), landscape conservation (perception and enjoyment of an open landscape)* and the *ability of people to experience the spirit and feeling of The Lake District* are judged to be **minor adverse** and not significant.

1.7.3 Cumulative effects

- 1.7.3.1 Cumulative effects on the special qualities and attributes of outstanding universal value, referenced above, are expected to be very limited and confined to the western part of this designated landscape overlooking the Irish Sea. The cumulative effects assessment is presented below.

Tier 1 existing offshore wind farms

- 1.7.3.2 The potential for additional, cumulative effects with Tier 1 existing offshore wind farms may result from the visibility of Morgan Generation Assets along with the existing North West England offshore wind farm cluster (Barrow, Ormonde, Walney 1, Walney 2, Walney Extension and West of Duddon Sands offshore wind farms). There will be no cumulative effects with the existing Robin Rigg or the existing North Wales offshore wind farm cluster (Gwynt y Môr, North Hoyle, Rhyl Flats) within the 60 km study area. The Morgan Generation Assets will be located further away from The Lake District than the North West England offshore wind farm cluster which presents in the seascape as being in front of the Morgan Array Area.
- 1.7.3.3 Taking into account the limited extent of the designated landscape that would be affected by the addition of Morgan Generation Assets, located behind existing offshore wind farms at a distance of approximately 38.6 km or greater, a **negligible** magnitude of cumulative impact would arise to the special qualities of The Lake District National Park of **high** sensitivity and the attributes of outstanding universal value of The English Lake District World Heritage Site of **very high** sensitivity. The additional, cumulative effects are judged to be in the range of **negligible to minor adverse** and not significant.

Tier 1 existing, consented and submitted offshore wind farms

- 1.7.3.4 There will be no additional, cumulative effects on the Lake District as a result of Morgan Generation Assets and the consented Tier 1 Awel y Môr offshore wind farm within the 60 km study area. Cumulative effects on the Lake District resulting from the in

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

submitted Mona Offshore Wind Project and Morgan Generation Assets would be limited to a very small area of the designated landscape at the coast, south east of Silecroft. The extent of the effects, according to the cumulative ZTV are so limited such that cumulative effects on special qualities are not expected to arise due to Mona Offshore Wind Project.

- 1.7.3.5 The cumulative effects resulting from Tier 1 existing, consented and submitted offshore wind farms will therefore be the same as that reported above for Tier 1 existing offshore wind farms.

Tier 2 proposed offshore wind farms

- 1.7.3.6 There is limited potential for additional, cumulative effects to arise on the special qualities of The Lake District National Park and the attributes of outstanding universal value of The English Lake District World Heritage Site due to the addition of the Morgan Generation Assets along with Morecambe Offshore Windfarm and Moir Vannin Offshore Wind Farm. The cumulative effects would result mainly from Moir Vannin offshore Wind Farm as cumulative effects from Morecambe Offshore Wind Farm would be restricted to the south east corner of the Lake District National Park. Due to the distance between the Lake District and the Morgan Generation Assets and the cumulative influence of Moir Vannin offshore wind farm and to a lesser extent, Morecambe offshore wind farm along with existing sea traffic, cumulative effects are assessed to be very limited.

- 1.7.3.7 A **negligible** magnitude of additional, cumulative impact would arise to the special qualities of The Lake District National Park of **high** sensitivity and the attributes of outstanding universal value of The English Lake District World Heritage Site of **very high** sensitivity. The additional, cumulative effects are judged to be in the range of **negligible to minor adverse** and not significant.

1.8 Summary

- 1.8.1.1 This report presents the assessment of effects of the Morgan Generation Assets on the special qualities of the Lake District National Park and the attributes of outstanding universal value of The English Lake District World Heritage Site.
- 1.8.1.2 A review of the special qualities and attributes of outstanding universal value of the Lake District was undertaken and those of relevance to the SLVIA were selected for assessment.
- 1.8.1.3 The assessment concludes that there will be no significant effects on the special qualities of the Lake District National Park and the attributes of outstanding universal value of The English Lake District World Heritage Site of relevance to the SLVIA. The conclusion was arrived at based on a number of factors including distance and the extent of theoretical visibility as presented in Appendix A, Figures: Figure A.2: Nationally Designated Landscapes in relation to Zone of Theoretical Visibility for Morgan Generation Assets and actual visibility having regard for screening by vegetation and built structures. The effect of Morgan Generation Assets, assessed as being not significant, means that the project will not compromise the basis for the designation of the Lake District as a national park and a world heritage site.

1.9 References

Lake District National Park Partnership (2021) Lake District National Park Partnership Management Plan 2020-2025.

Lake District National Park Partnership (2021) Lake District National Park Landscape Character Assessment and Guidelines.

Appendix A: Figures

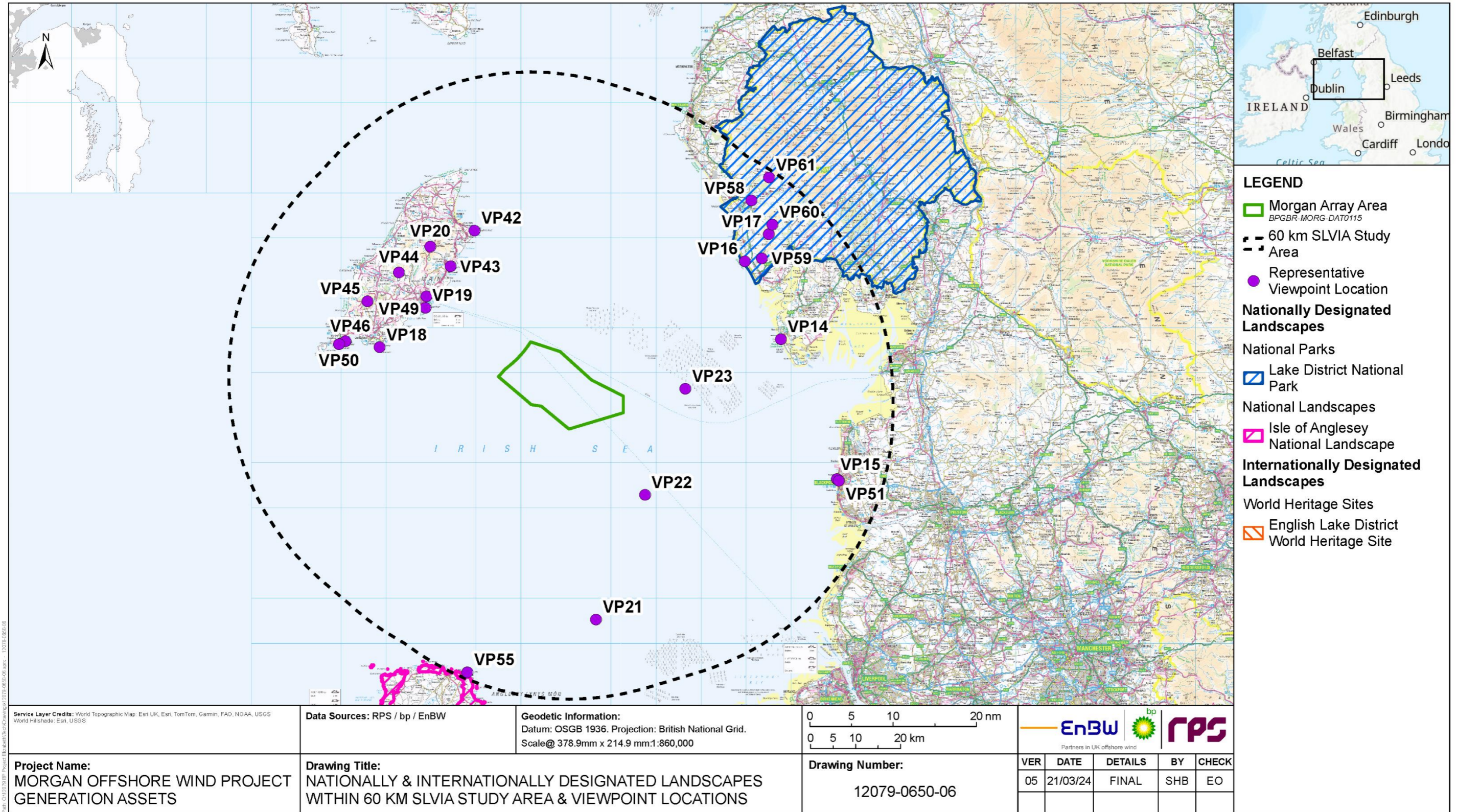


Figure A. 1: Nationally and Internationally Designated Landscapes within 60 km SLVIA Study Area & Viewpoint Locations.

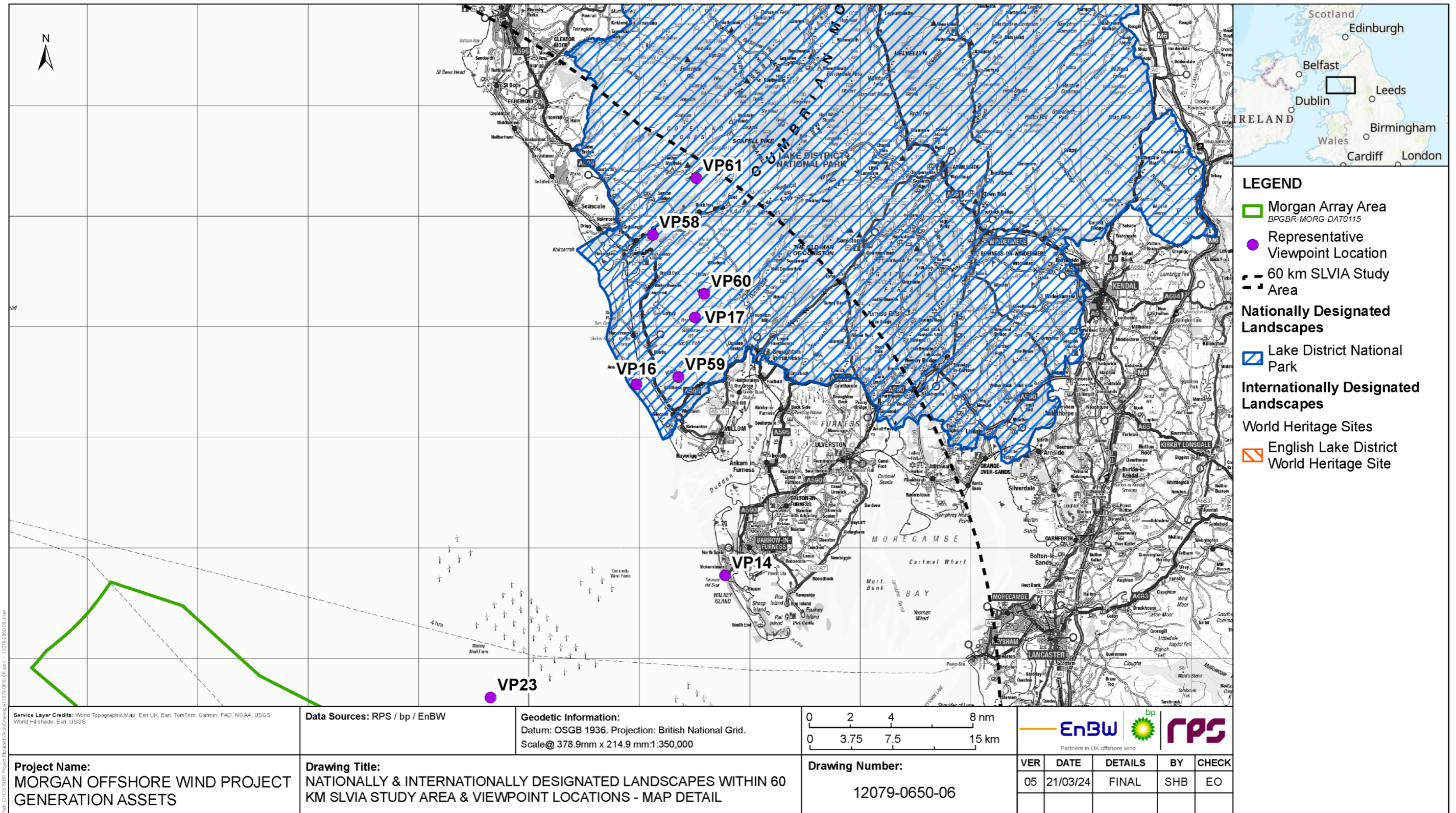


Figure A. 2: Nationally and Internationally Designated Landscapes within 60 km SLVIA Study Area and Viewpoint Locations.

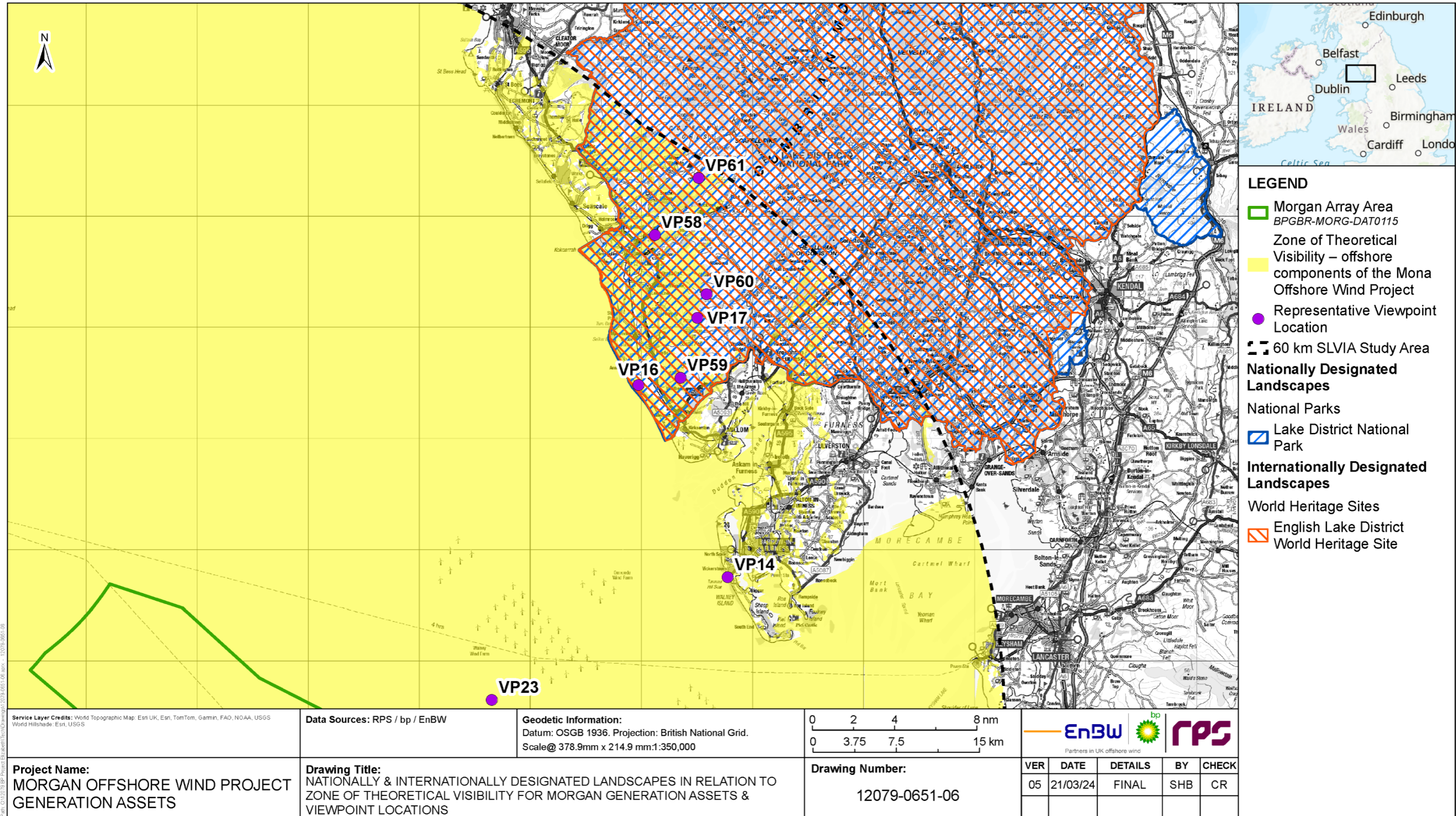


Figure A. 3: Nationally and Internationally Designated Landscapes in relation to zone of theoretical visibility for Morgan Array Area & Viewpoint locations.