

## Appendix 27-2: World Heritage Site Assessment



# ORIEL WIND FARM PROJECT

## Environmental Impact Assessment Report - Addendum Appendix 27-2: World Heritage Site Assessment

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## ORIEL WIND FARM PROJECT – WORLD HERITAGE SITE ASSESSMENT

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### Acronyms

Term	Meaning
CDP	County Development Plan
OUV	Outstanding Universal Value
NISA	North Irish Sea Array
RFI	Request for Further Information
RMP	Record of Monuments and Places
SLVIA	Seascape, Landscape and Visual Amenity
SOUV	Statement of Outstanding Universal Value
UNESCO	United Nations Educational, Scientific and Cultural Organization
WH	World Heritage
WHS	World Heritage Site
ZTV	Zone of Theoretic Visibility

### Units

Unit	Description
mm	Millimetre (distance)
m	Metre (distance)
km	Kilometre (distance)
mm/s	Millimetres per second (speed)
m/s	Metres per second (speed)
mg/l	Milligrams per litre (suspended sediment concentration)
g/l	Grams per litre (suspended sediment concentration)



# 1 INTRODUCTION

This report provides supplementary information to chapter 27 Addendum: Seascape, Landscape and Visual Amenity (SLVIA) of the Environmental Impact Assessment Report (EIAR volume 2C Addendum). It has been prepared in response to a Request for Further Information (RFI) from An Coimisiún Pleanála (ACP) (formerly An Bord Pleanála) regarding the planning application (case reference ABP-319799-24) for the Oriel Wind Farm Project (hereafter referred to as “the Project”).

The ‘Schedule-Further Information Request’ provided by ACP listed 19 items of further information. This report is in response to RFI 12.A, which stated:

The Board acknowledges the comprehensive visual impact assessment undertaken in support of the project. However, the applicant is invited to address the concerns raised by Meath County Council in terms of the potential visual impacts associated with the project on views to and from historic sites including the Bru na Boinne World Heritage Sites, approximately 28.5km from the offshore array area. Having regard to the site’s UNESCO World Heritage Site designation, recognised for its Outstanding Universal Value (OUV), the applicant is requested to assess the proposed development having regard to the World Heritage Convention UNESCO Guidance Notes as they relate to visual impact assessment and wind energy projects, including ‘Guidance and Toolkit for Impact Assessments in a World Heritage Context’ (UNESCO, 2022), ‘Guidance for Wind Energy Projects in a World Heritage Context’ (UNESCO, 2023), and available UNESCO case studies relating to the assessment of offshore projects on World Heritage sites.

The Meath County Council submission outlining concerns for potential visual impacts on views from the Brú na Bóinne World Heritage Site (WHS), is included below:

## **Consideration of other sites of importance in Co. Meath**

### **1. Cumulative Impacts on Seascape and Landscape, Archaeological, Architectural, Cultural Heritage, EIAR & NIS: -**

*(a) Based on the theoretical visibility imagery, it is the opinion of the Planning Authority that the proposed development (and other proposed wind energy developments) could have potential significant impacts on the protected views from the Brú na Bóinne World Heritage List (as part of the Royal Sites of Ireland). It is recommended that An Bord Pleanála seek the advice of an independent World Heritage Expert, with specific expertise and experience in protecting World Heritage Sites (WHS) on behalf of UNESCO, to assess whether the development could impact (either alone or in-combination with other developments) on the WHS using established international best practice.*

This report includes additional representative viewpoints (please refer to Table 3-1) selected to illustrate visibility from a range of locations within and around the WHS (which includes both protected views and other general views), thereby providing a comprehensive review of potential visibility and confirming that the Project will not give rise to any significant visual effects on the WHS.

The Brú na Bóinne WHS was screened out of further assessment in the EIAR (2024), because the wireline analysis from Knowth, Dowth and Newgrange (protected views 59, 87a–d and 88, Meath CDP 2021-27) confirmed that, although limited theoretical visibility is indicated, in practice all views toward the Irish Sea are screened by landform and vegetation, and the proposed offshore turbines. At distances exceeding 30 km the offshore elements of the Project would not be perceptible from within or around the WHS.

## 2 METHODOLOGY

In line with the UNESCO (2022) *Guidance and Toolkit for Impact Assessments in a World Heritage Context*, the assessment of potential effects on a World Heritage (WH) property focuses on a development's potential impact on the property's Outstanding Universal Value (OUV) and the attributes through which that OUV is expressed. While the Seascape, Landscape and Visual Impact Assessment (SLVIA) has addressed theoretical visibility and visual effects on the WHS, this report specifically evaluates how the Project may affect the property's OUV. This response therefore considers the potential for the Project to affect the OUV of the Brú na Bóinne WH Property, including any cumulative effects with other offshore renewable energy developments in the Irish Sea.

An assessment of the Project's potential impact on the OUV was undertaken by Courtney Deery Heritage Consultancy Ltd (CDHC), specialist archaeological and cultural heritage consultants. CDHC has recognised expertise in preparing, reviewing and managing Heritage Impact Assessments (HIAs) in accordance with UNESCO's *Guidance and Toolkit for Impact Assessments in a World Heritage Context* (2022). The practice has direct experience in assessing potential impacts on the Brú na Bóinne World Heritage Property and on sites included in Ireland's UNESCO Tentative List, encompassing road, rail, active travel, renewable energy and other large-scale infrastructure schemes. CDHC applies the UNESCO defined principles of OUV, authenticity and integrity throughout its assessment process.

### 2.1 Brú na Bóinne WHS, Retrospective Statement of Outstanding Universal Value (UNESCO, 2013)

The OUV of a World Heritage Property is the combination of values for which the property was inscribed on the World Heritage List, expressed through its attributes of integrity and authenticity. The Statement of Outstanding Universal Value (SOUV) is a key document for all WHSs as it is the formal statement of values embodied in the property that justify its international designation.

#### 2.1.1 Statement of Outstanding Universal Value

The SOUV of Brú na Bóinne was approved by UNESCO in 2013. The Brú na Bóinne or Archaeological Ensemble of the Bend of the Boyne is identified in the SOUV as a Neolithic funerary landscape of great ritual significance that continued to attract later monuments up to the medieval period. The property has met three of the six criteria for the inscription of cultural WHSs.

A reproduction of the retrospective statement of OUV is as follows:

##### **Brief synthesis**

*Bounded on the south by a bend in the River Boyne, the prehistoric site of Brú na Bóinne is dominated by the three great burial mounds of Knowth, Newgrange and Dowth. Surrounded by about forty satellite passage graves, they constitute a funerary landscape recognised as having great ritual significance, subsequently attracting later monuments of the Iron Age, early Christian and medieval periods.*

*Located about 40 km north of Dublin on a ridge between the rivers Boyne and Mattock, within several kilometres of other prehistoric mounds, the site is part of an area rich in stories of Ireland's ancient past. Predominantly agricultural at the present time the area has been extensively explored for more than a hundred years by archaeologists and historians, with excavations revealing many features.*

*The Knowth group, where the earliest features date from the Neolithic period and the latest from the Anglo-Norman period, has produced thirty monuments and sites that figure on the official inventory; these include passage graves adorned with petroglyphs, enclosures, occupation sites and field systems. The Newgrange group is purely prehistoric, with a ringfort, cursus, passage graves and a henge. The Dowth group is similar to that at Newgrange but there is medieval evidence in the form of a church and a castle.*

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*Criterion (i): The Brú na Bóinne monuments represent the largest and most important expression of prehistoric megalithic plastic art in Europe.*

*Criterion (iii): The concentration of social, economic and funerary monuments at this important ritual centre and the long continuity from prehistory to the late medieval period make this one of the most significant archaeological sites in Europe.*

*Criterion (iv): The passage grave, here brought to its finest expression, was a feature of outstanding importance in prehistoric Europe and beyond.*

### **Integrity**

*The 780 ha area of the World Heritage property Brú na Bóinne encapsulates the attributes for which the property was inscribed on the World Heritage List. In addition to the large passage tombs of Knowth, Newgrange and Dowth, 90 recorded monuments – as well as an unknown quantity of as yet unrecorded sites – remain scattered across the ridge above the Boyne and over the low-lying areas and floodplain closer to (the present course of) the rivers.*

*The buffer zone is comprised of 2,500 hectares, the boundary lines respecting carefully mapped views into and out of the property. Since inscription in 1993, views out of the property have been impacted by the M1 bridge crossing the River Boyne to the east of the property; the addition of a third chimney and other structures to the cement factory on the skyline to the east south-east near Duleek; the addition of an incinerator stack to the skyline at Carranstown and a housing development. The ambiance of the ritual centre is vulnerable to such disturbances which could potentially threaten the integrity of the property. The local authority (Meath County Council) has in place planning policies and procedures to deal with applications for developments which may either incrementally or individually have potential impact on the integrity of the World Heritage property.*

### **Authenticity**

*The archaeological remains on the site, both above and below ground are wholly authentic.*

*Major excavations have been carried out at Newgrange and Knowth and have been fully published. Many small excavations and surveys have been carried out in the area. The main conservation works have concentrated on the two main passage tombs at Newgrange and Knowth subsequent to the excavations undertaken at these sites. All conservation and restoration work has been carried out by skilled professional staff.*

*At Newgrange, there has been comprehensive anastylosis of the kerbstones and the revetment wall, though the latter has been curtailed to allow access by visitors. The passage roof was completely dismantled to allow the orthostats to be returned to the vertical, with the introduction of reinforcement, and a cowl has been constructed over the chamber area. The cairn itself has been stabilised by means of thin revetments of cairn stones.*

*At Knowth, structures from all periods are being conserved. In some passage tombs outer support walls have been built for the burial chambers, involving the use of modern materials such as cement and plastic. Where such new additions are visible they are clearly distinguished in appearance from original materials, but in other cases they are completely concealed.*

*The restoration work on these monuments, the result of close collaboration between archaeologists and conservation architects, conforms with the principles enunciated in Article 7 of the International Charter for Archaeological Heritage Management of 1990.*

### **Protection and management requirements**

*The protection and conservation of Brú na Bóinne is provided by a range of national legislation, international guidelines, statutory and non-statutory guidance. These provisions include the National Monuments Acts of 1930-2004, the Wildlife Acts of 1976 and 2000, the*

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*Planning and Development Acts, various EU Directives and international charters. The national monuments legislative code makes provision for the protection and preservation of national monuments and for the preservation of archaeological objects in the State. The Planning and Development Acts provide a framework to protect against undesirable development.*

*Most of the 780 hectare site is in private ownership. At the time of inscription only 32 hectares, largely around Knowth and Newgrange, were in State ownership (in 2011, 42.75 hectares are in State ownership). The State-owned part of the property has been under the direct management of the Office of Public Works. This State Office uses its professional staff of conservation architects, engineers, land managers and craftsmen in the day to day management activities. Archaeological input to the conservation and presentation of the property is provided by the National Monuments Service of the Department of Arts, Heritage and the Gaeltacht. The State Exchequer provides the funding needed for maintenance, management and conservation.*

*The local authority development plan (Meath County Development Plan) for the area in which Brú na Bóinne is situated seeks to protect the archaeological and cultural landscape and to enhance views within and adjacent to the World Heritage property. The protection of views within and out of the property is a major factor contributing to retention of the property's integrity.*

*The Brú na Bóinne Visitor Centre opened to the public in June 1997. Its primary purpose is to manage the flow of visitors to the megalithic tombs of Newgrange and Knowth. Education, public awareness and an emphasis on local engagement are also central to the role of the Centre. The number of visitors to these monuments each day is limited to the maximum that can be accommodated with due regard to the protection of the monuments. Access to the monuments is by guided tour only.*

### 2.1.2 Attributes that express the OUV of Brú na Bóinne -

As indicated in the SOUV three core inscription criteria define that value. The attributes convey the Outstanding Universal Value of a World Heritage Property and enable an understanding of that value are set out by UNESCO<sup>1</sup> as follows:

#### **Landscape**

- An extensive funerary landscape of great ritual significance in a bend of the River Boyne with a concentration of social, economic and funerary monuments including 40+ passage graves.
- Views into and out of the property

#### **Archaeological features**

- The time depth of Brú na Bóinne from the Neolithic to late medieval periods
- The finest expression of passage graves in prehistoric Europe
- Largest and most important expression of prehistoric megalithic plastic art in Europe
- The design of the passage graves in relation to the skies and astronomy
- The three great burial mounds of Knowth, Newgrange and Dowth and the sites surrounding them.

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<sup>1</sup> <https://www.worldheritageireland.ie/world-heritage-properties/bru-na-boinne/bru-na-boinne-attributes-of-outstanding-universal-value/>



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- Knowth group with use spanning from the Neolithic to the late medieval periods, including passage graves, enclosures, occupation sites and field systems.
- Newgrange group of prehistoric sites including passage graves, henge, cursus, and stone circle
- Dowth group of prehistoric and Iron Age, early Christian and late medieval sites including the great burial mound, megalithic tombs, many smaller burial mounds, henge, standing stone, and medieval church and tower house.
- Other prehistoric, Iron Age, early Christian and medieval sites spread across the landscape.

### Intangible

- Part of an area rich in stories of Ireland's ancient past
- Ambiance of the ritual centre

Of these attributes, only the '*views into and out of the property*' could theoretically be influenced by a distant offshore development. This has been examined from a visual landscape perspective and is examined here in accordance with the UNESCO (2022) methodology, focusing specifically on that attribute while recognising that all others remain unaffected. No part of the Project is located within the WHS core zone or its buffer zone or in its wider setting. Therefore, physical works outside the valley or outside lines of inter-visibility do not influence the OUV.

### 3 IMPACT OF THE PROJECT ON OUV

The ZTV<sup>2</sup> analysis illustrates that large portions of the WHS will not receive any visibility of the Project. It also however indicates that a central portion of the Brú Na Bóinne WHS is predicted to experience variable, theoretical visibility of the Project (Figure 27A-10d). Theoretical visibility modelling show that most areas within the WHS fall within the lowest band of predicted visibility, with only 1 to 6 turbines theoretically visible; a smaller, isolated area may experience theoretical visibility of 19 to 25 turbines. Table 3-1 below gives an outline of the additional viewpoints included as part of this Addendum and their assessments.

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<sup>2</sup> Areas of predicted visibility are based on a bare earth scenario, with the ZTV not taking into consideration any screening provided by intervening built form or vegetation cover such as woodlands and tree lined hedgerows.

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**Table 3-1: Assessment of LVIA Viewpoints (1A–9A) in Relation to Brú na Bóinne WHS and its OUV.**

Viewpoint (Meath CDP Protected VP ref)	Distance (km) To Nearest Turbine	Existing View summary (see LVIA for full description)	Relevance to OUV Attribute (“Views into and out of the Property”)	LVIA Visibility Outcome	Assessment of Effect on OUV
VP01A:  Dowth Hall	31.06 km South-west	The view is partially restricted view south-east with distant horizons visible below and beyond intervening vegetation. Coastal landscapes and views of the sea not perceived / available due to screening effects.	This view is within the WHS core on a natural ridge from the front of Dowth Hall (and site of megalithic tomb) and towards the Henge Monument (RMP ME020-010). It provides an elevated view of the eastern end of the WHS Outward elevated view from the eastern end of the WHS, contributing to the understanding of the valley enclosure and intervisibility of major monuments.	The Project is theoretically visible in north-eastern views with upper blade sweep and tips visible above horizon lines. However as shown in Figures 27A-34a and b, the Project will be difficult to perceive in north-eastern views due to screening effects of intervening vegetation and attenuation by distance, with visible portions of the Project forming an indiscernible addition to the existing view. The character of the existing view will be unaltered.	No impact – OUV attribute unchanged
VP02A:  Dowth Henge	30.6 km South-west	It provides an elevated view of the eastern end of the WHS. The view is partially restricted view south-east with distant horizons visible below and beyond intervening vegetation. Coastal landscapes and views of the sea not perceived / available due to screening effects.	Within the WHS core towards the summit at the eastern end of a ridge above the River Boyne at the eastern edge of the Dowth Henge Monument (RMP ME020-010). Elevated outward view from an important ceremonial monument within the WHS, contributing to appreciation of the wider Boyne Valley setting.	The Project is theoretically visible in north-eastern views with upper blade sweep and tips visible above horizon lines. Figures 27A-35a and b shows the Project will be difficult to perceive in north-eastern views due to screening effects of intervening vegetation and attenuation by distance, with visible portions of the Project forming an indiscernible addition to the existing view. The character of the existing view will be unaltered.	No impact – OUV attribute unchanged

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Viewpoint (Meath CDP Protected VP ref)	Distance (km) To Nearest Turbine	Existing View summary (see LVIA for full description)	Relevance to OUV Attribute (“Views into and out of the Property”)	LVIA Visibility Outcome	Assessment of Effect on OUV
VP03A:  Dowth Mound  (Meath CDP VP88)	31.72 km South-west	View providing partially restricted -south-eastern views constrained by vegetation. Distant horizons partially visible to the left of the view, associated with more elevated lands. Coastal landscapes and views of the sea not perceived / available from this location due to screening effects.	Within the WHS core in an elevated position on a principal monument of Dowth (ME020-017). Key elevated view within the WHS core allowing visual connection with other principal monuments and valley landscape; relevant to understanding spatial relationships within the ritual landscape.	The Project is theoretically visible in north-eastern views with upper blade sweep, tips and 3 hubs visible above horizon lines. However, Figure 27A-36a and b shows the Project will not be visible in north-eastern views due to screening effects of intervening vegetation and attenuation by distance. The character of the view remaining unaltered.	No impact –principal intervisibility between monuments and valley landscape remains unaltered. OUV attribute unchanged.
VP04A:  Field beside L6107	33.72 km South-west	Expansive panoramic view available from gated field access adjacent to Local Road L6107. Available view partially restricted in nature by intervening field boundary vegetation. Distant horizons visible, though punctuated by upper portions of intervening vegetation canopies. Coastal landscapes and views of the sea not perceived / available from this location due to screening effects.	Within the WHS core at the western end. Peripheral WHS view that contributes to the appreciation of landscape enclosure and agricultural setting, but not part of core monumental sightlines.	The Project is theoretically visible in north-eastern views with upper blade sweep and tips of 3 turbines theoretically visible above the horizon lines. However, Figures 27A-37a and b shows that the Project will not be visible in north-eastern views due to screening effects of intervening vegetation and attenuation by distance. The character of the existing view will be unaltered.	No impact – no perceptible change; no influence on OUV attributes.
VP05A:  Field Gate L6107	30.2 km South-west	Within the WHS core at the eastern end with panoramic view available from gated field entrance adjacent to L6107. Views across Dowth Demesne formally planted avenues of trees, which direct views to vegetated mid-distance portions	Elevated approach view toward WHS lands, contributing to the sense of arrival. Contributes to the appreciation of landscape enclosure and agricultural	The Project is theoretically visible in north-eastern views (refer Figures 27A-38a) with upper blade sweep and tips of 7 turbines theoretically visible above the horizon lines. However, Figures 27A-38a and b demonstrates that the Project	No impact – OUV attribute unchanged; setting and approach experience unaffected.



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Viewpoint (Meath CDP Protected VP ref)	Distance (km) To Nearest Turbine	Existing View summary (see LVIA for full description)	Relevance to OUV Attribute (“Views into and out of the Property”)	LVIA Visibility Outcome	Assessment of Effect on OUV
		of the available view. Extensive tree cover in mid-distance portions of the view restrict views of coastal landscapes and seascapes.	setting, but not part of core monumental sightlines.	will not be visible in north-eastern views due to screening effects of intervening vegetation and attenuation by distance. The character of the existing view will be unaltered.	
VP06A: Knowth (Meath CDP VP59)	33.9 km South-west	Expansive, panoramic view from elevated location on top of the mound. View partially constrained by existing group of trees located to the right of the viewpoint, which constrain views of distant horizons beyond. Predominant character of the view is agricultural in nature with a varied field pattern well defined by field boundary vegetation and woodland groups. Coastal landscapes and views of the sea not perceived / available from this location due to screening effects.	Within the WHS core in an elevated position on a principal monument of Knowth. Principal WHS view from the monument, panoramic views forming part of the core OUV attribute, especially intervisibility between Knowth, Newgrange and Dowth and the enclosing ridges and the Boyne valley.	The Project is theoretically visible in north-eastern views with upper blade sweep and tips associated with three turbines theoretically visible above horizon lines. However, Figures 27A-39a and b shows that Project will not be readily perceived in north-eastern views due to screening effects of intervening vegetation and attenuation by distance.  The character of the existing view will be unaltered.	No impact – monumental sightlines and valley enclosure remain intact; no perceptible introduction of new elements.
VP07A: Newgrange Monument Area (Meath CDP VP87a-d)	33.6 km South-west	Available view from this location partially constrained by intervening vegetation cover and topographical changes at mid-distance within the view. Extensive tree cover and upper portions of associated tree canopies restrict views of more distant landscape, with minor portions of horizons visible beyond and below perceived	Within the WHS core in an elevated position at the principal monument of Newgrange. Principal WHS view from the monument, highly relevant to OUV as it reflects the relationship between the mound and the Boyne Valley landscape.	The Project is theoretically visible in north-eastern views with upper blade sweep and tips associated with three turbines theoretically visible above horizon lines. However, Figures 27A-40a and b shows that the Project will not be visible in north-eastern views due to screening effects of intervening	No impact - the Project is not visible; OUV attribute unchanged

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Viewpoint (Meath CDP Protected VP ref)	Distance (km) To Nearest Turbine	Existing View summary (see LVIA for full description)	Relevance to OUV Attribute (“Views into and out of the Property”)	LVIA Visibility Outcome	Assessment of Effect on OUV
		horizons formed by vegetation cover. Coastal landscapes and views of the sea not perceived / available from this location due to screening effects.		vegetation and attenuation by distance.  The character of the existing view will be unaltered.	
VP08A:  Local Road (SE of WHS)	33.6 km South-west	View is partially constrained by existing vegetation to the left of the view, with timber poles carrying overhead lines visible from foreground to mid-distance. Local road north-west of within the central portion of the view. Upper portion of support and wires associated with the Mary McAleese Boyne Valley Bridge crossing visible above intervening vegetation to the right of the view, read in combination with rising lands adjacent. Coastal landscapes and views of the sea not perceived / available from this location due to screening effects of intervening topography and vegetation cover.	Within the WHS core at the western end, with expansive panoramic view available from adjacent to local road north-west of Newgrange. Typical approach view contributing to the wider experience of the WHS but not part of the major sightlines that express OUV.	Upper blade sweep and tips associated with five turbines theoretically visible in north-eastern views.  However as evidenced in Figures 27A-41a and b, the Project will not be visible in north-eastern views due to screening effects of intervening vegetation and attenuation by distance.  The character of the existing view will be unaltered.	No impact – attribute unchanged; wider setting reads as existing.
VP09A:  View from Rath Lugh / Slane Road (Meath CDP VP31)	32.4 km South-west	Extensive vegetation cover at mid-distance associated with the eastern banks of the River Boyne screens views of more distance lands beyond. Visitors centre is also not visible within the view, due to screening effects of intervening vegetation. Coastal landscapes	Restricted view from within the WHS, in proximity to the River Boyne and the Brú Na Bóinne visitor's centre. Restricted view within WHS illustrating the wooded, enclosed valley character; contributes to overall understanding of	No theoretical visibility. As evidenced in Figures 27A-42a and b, the Project will not be visible in north-eastern views due to screening effects of intervening vegetation.	No impact – no theoretical or actual visibility; attribute entirely unchanged.

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Viewpoint (Meath CDP Protected VP ref)	Distance (km) To Nearest Turbine	Existing View summary (see LVIA for full description)	Relevance to OUV Attribute (“Views into and out of the Property”)	LVIA Visibility Outcome	Assessment of Effect on OUV
		and views of the sea not perceived / available from this location due to screening effects of intervening topography and vegetation cover.	valley integrity and relationship to the river Boyne but not a principal OUV sightline.	The character of the existing view will be unaltered.	

## 4 ASSESSMENT OF POTENTIAL IMPACT

At each viewpoint location where there was theoretical visibility, the verified viewpoints have shown that there are either no visible turbines or, at most, imperceptible blade tips which were screened by landform and vegetation. The assessment has established that:

All assessed viewpoints are greater than 30 km from the proposed turbines.

The other attributes such as archaeological fabric, spatial layout, integrity of monuments are physically unaffected by an offshore development located more than 30 km away.

The only potentially relevant OUV attribute—“views into and out of the property”—remains wholly unaffected.

Verified LVIA Viewpoints 1A–9A show no perceptible turbine visibility; where theoretical visibility exists, it is screened or beyond visual resolution.

No verified viewpoint demonstrates perceptible turbine visibility.

Coastal landscapes and views of the sea are not perceived or available from any location due to screening effects of intervening topography and vegetation cover.

The orientation of the WHS monuments and their sightlines are inward, across the Boyne Valley; they do not extend toward the eastern coastal plain or the Irish Sea.

In summary the magnitude of change to the OUV is *none*; the significance of effect on OUV is *no impact*. No change arises to the setting, integrity, or perception of the monuments or their skyline; the OUV attribute of the WHS comprising ‘views into and out of the property’ remains intact. The sea horizon lies well beyond the visual and perceptual range of these attributes; it does not contribute to or frame the OUV. The proposed offshore wind farm lies far beyond the skyline features referenced in the SOUV and will not introduce any new element perceptible from the property; therefore, it will not alter the character of the wider setting or adversely affect the OUV.

It can be clearly demonstrated that a proposal will not affect the property’s OUV or its attributes. Consequently, the proposal can be scoped out of further World Heritage Impact Assessment.

### 4.1 Cumulative Effects

The cumulative visual impact assessment presented in chapter 27 Addendum: Seascape, Landscape and Visual Amenity shows no additive or synergistic effect from the North Irish Sea Array (NISA) offshore wind farm project in the Irish Sea. As the Project is not perceptible from any WHS viewpoints including the summit of Dowth Passage Tomb, there is no cumulative visual effect with the NISA project from which there is also no visibility. Accordingly, due to distance and the intervening landmass, there is no cumulative pathway through which the Project, either alone or in combination with other offshore developments, could affect the OUV of the World Heritage Property.



## 5 CONCLUSION

Applying the UNESCO World Heritage Impact Assessment methodology, it is clearly demonstrated that:

- The Project lies entirely outside the property, buffer zone, and wider setting relevant to its OUV.
- The Project will not affect the property's integrity, authenticity, or any attribute of OUV.
- There will be no significant individual or cumulative visual impact on the OUV of the WHS.

It can be concluded that there is no adverse impact on Outstanding Universal Value of the WHS.

## 6 REFERENCES

UNESCO (2022) Guidance and Toolkit for Impact Assessments in a World Heritage Context.