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Morlais Project Environmental Statement

Addendum to Volume I Chapter 24: Seascape, Landscape and Visual Impact Assessment

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Morlais: SESM Variation

Seascape, Landscape and Visual Impact Assessment

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Basis of Report

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Acronyms and Abbreviations

AONB	Area of Outstanding Natural Beauty
ES	Environmental Statement
DDP	Device Deployment Protocol
GHRA	Green Hatch Restricted Area
IACC	Isle of Anglesey County Council
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
MDZ	Morlais Demonstration Zone
MVAA	Marine and Coastal Access Act 2009
NM	Nautical Mile
NRW	Natural Resources Wales
PDE	Project Design Envelope
PPW	Planning Policy Wales
SCA	Seascape Character Areas
SLR	SLR Consulting Limited
SLVIA	Seascape, Landscape and Visual Impact Assessment
SESM	Surface Emergent Seabed Mounted
TTL	Tidal Technologies Limited
UKC	Under Keel Clearance
WADZ	West Anglesey Demonstration Zone
ZTV	Zones of Theoretical Visibility



1.0 Introduction

This report has been prepared by Simon Myers, Associate Landscape Architect at SLR Consulting Ltd. Simon holds a master's degree in Landscape Planning and Management (MLPM (Hons)) from the University of Manchester and is an associate member of the Landscape Institute. Simon has over 20 years environmental consultancy experience, focussed on Landscape and Visual Impact Assessment for proposed developments. He has undertaken landscape and visual assessments (including seascape where applicable) for multiple developments throughout the UK and Ireland, including renewable energy projects. He prepared the Seascape, Landscape and Visual Impact Assessment (SLVIA) for the Morlais Project in 2019 and was the SLVIA expert witness at the subsequent Public Inquiry.

The Morlais Project (referred to as the "Project") comprises a tidal energy development with a generating capacity of up to 240MW. The Project is located within the West Anglesey Demonstration Zone (WADZ), a zone primarily selected for its tidal stream resource. Menter Môn has been appointed as the manager of the WADZ by The Crown Estate. The WADZ is referred to as the Morlais Demonstration Zone (MDZ).

The Project has been authorised by the following principal consents:

- A Transport and Works Act Order under the Transport and Works Act 1992; and
- A Marine Licence under the Marine and Coastal Access Act 2009 (MCAA).

The offshore development area where installation can take place covers an area of 35 km² to the west of Holy Island, Anglesey. The project includes communal infrastructure for tidal technology developers, which provides a shared route to an onshore grid connection. Terrestrial elements of the project have been implemented and some offshore cable HDD drills been completed. A Switchgear Building has been constructed at Parc Cybi, to the south of Holyhead and onshore grid cables have been installed connecting this with the Landfall Substation have been installed.

This document comprises an addendum to the Seascape, Landscape and Visual Impact Assessment (SLVIA) for a proposed variation to the parameters of the Morlais Project. This variation would allow the inclusion of devices that are a hybrid of both Surface Emergent and Seabed Mounted (SESM) devices with a maximum height above sea level of 18m in a newly defined area of the MDZ as shown in Figure 4-5 V4 as the Green Hatch Restricted Area (GHRA) as described in [Chapter 4 v2]. Figure 1 shows the location and extent of the MDZ and the position of the proposed SESM devices within this.

The Environmental Impact Assessment for the Project was based on a Project Design Envelope (PDE) approach, which assumed the maximum height of the tidal energy devices would be 6.5m. This maximum device height is reflected in the Marine Licence for the Project. This assessment relates to a proposed variation to allow the inclusion of SESM devices within the MDZ.

This SLVIA comprises a concise document compared with the 2019 SLVIA. The approach focuses on whether there have been any changes to the context of the Project that might influence the original judgements, and then considers the revised PDE and whether they would change the conclusions in relation to the consented development. It comprises the following key elements:

- Section 2.0 provides an overview of the approach that has been taken.
- Section 3.0 provides an overview of consultation with stakeholders, including how comments received have been responded to.
- Section 4.0 contains a review of relevant policy and guidance.



- Section 5.0 provides a summary of the baseline context of the Project, highlighting changes that have taken place since the 2019 SLVIA was prepared.
- Section 6.0 outlines the nature/characteristics of the proposed variation and how this compares with the consented development, particularly Project Design Envelope (PDE) assessed in the 2019 Environmental Statement (ES) and SLVIA.
- Section 7.0 presents an assessment of the proposed revised PDE.
- Section 8.0 comprises a summary and conclusions.

This assessment is supported by a range of Figures, included in Appendix A, set the context for the proposed variation and illustrate the array of devices:

- Figure 1: Restricted Area Plan (revised version v5) and Proposed Development, see also Figure 4-5 for the Restricted Area Plan;
- Figure 2: Zones of Theoretical Visibility (ZTV) for the proposed variation;
- Figure 3: Comparative ZTV; and
- Figures 4.1 to 4.5: Viewpoint photography, wirelines and photomontages.

In addition, visualisations based on those included in the 2019 SLVIA are included in Appendix B for the viewpoints used in this assessment. These show the overall PDE that was assessed as part of the 2019 SLVIA to help set the context for this assessment.



2.0 Approach

This document comprises an addendum to the Seascape, Landscape and Visual Impact Assessment (SLVIA) contained within the Environmental Statement (2019) for the proposed Morlais Project Application and the Marine Licence submitted in 2021. This SLVIA should be read in conjunction with the 2019 Environmental Statement (ES), particularly Chapter 24: SLVIA (referred to as the 2019 SLVIA)¹.

The analysis contained in this document has involved revisiting elements of the 2019 SLVIA. This has comprised evaluating whether there have been any changes to relevant policy, guidance or the baseline context that would influence the judgements made in the 2019 SLVIA. This included changes that might affect perceptions of value or sensitivity, or the approach to the assessment e.g. the method used to undertake the assessment.

A review of the baseline context has been undertaken, concentrating on whether there have been any changes to the relevant landscape designations and character assessments that informed the previous assessment work.

The findings in the 2019 SLVIA have been reviewed and judgements made in relation to how the proposed variation would influence the judgments made as part of the 2019 SLVIA i.e. would the inclusion of the SESM device type have altered the assessment judgements. The judgements included in this document have been made based on principles applied in the original SLVIA methodology (2019 SLVIA, Section 8.6.1).

The photography and visualisations of the Project, showing the revised PDE including SESM devices, with Tidal Technologies devices (maximum height 18m above LAT, see Section 6.0 and Chapter 4 for further detail) used as the exemplar technology, have been prepared based on guidance published by the Landscape Institute, TGN 06/19 Visual Representation of Development Proposals. The photography was captured using a full frame digital SLR camera, mounted on a tripod with a panoramic tripod head. The photography has been joined together digitally to create the images presented in Figures 4.1 to 4.4.

The visualisations have been prepared using three dimensional digital models of the tidal energy devices and structures that form part of the PDE. The photography and visualisations have been presented to show a 90 degree cylindrical projects field of view at each viewpoint. Each 90 degree frame has been directed to include as much of the MDZ that contains surface emergent tidal energy devices as possible, whilst also ensuring the SESM devices are also visible. The observer height at each viewpoint is typically 1.5m above ground level, the exception to this is the offshore wireline visualisation (Viewpoint A), for which an observer height of 1m has been used to represent the expected eye level of kayakers.

As a comparison, the corresponding visualisations which formed part of the 2019 SLVIA, are included in Appendix B.

3.0 Consultation

A Morlais Variation Scoping Report was submitted to Natural Resources Wales (NRW) in April 2025. This identified the need to undertake further SLVIA work to understand the potential effects of the proposed variation to the Project. As part of the preparation of the SLVIA a consultation exercise was undertaken with Natural Resources Wales (NRW) and the Isle of Anglesey County Council (IACC). The key purpose of this exercise was to outline the nature of the proposed variation and the approach to this SLVIA.

¹ <https://publicregister.naturalresources.wales/Search/Download?RecordId=20663>



In response to the Morlais Variation Scoping Report a Scoping Opinion has been provided by NRW. Key points raised in this Scoping Opinion are as follows:

Table 3-1 Consultation Comments and Responses

Comment	Response
Clarity on whether the SESM devices would be limited to a specific part of the MDZ.	This device type would be limited to the GHRA within the MDZ (previously described as Berth GR1).
The baseline for assessment should be the same as used for the assessment of the PDE	The approach taken in the assessment has been to consider the SESM devices in the context of the PDE relative to the baseline considered in the Environmental Statement i.e. would the inclusion of the SESM Devices in the PDE alter the previous assessment judgements.
Sufficient viewpoints should be included to enable an understanding of the of the potential effects of the revised PDE. The Scoping Opinion requests the inclusion of Viewpoint 4 in the assessment, together with an offshore viewpoint represented by a wireline.	Viewpoint 4 has been included, with visualisations prepared for this location. A wireline visualisation for an offshore viewpoint, intended to be representative of Kayakers has also been included.
Advised the photomontages and visualisations should be presented in accordance with guidance published by the Landscape Institute, TGN 06/19 Visual Representation of Development Proposals.	The photography and visualisations have been prepared and presented based on the TGN 06/19 Visual Representation of Development Proposals.



4.0 Legislation, Policy and Guidance

4.1 National Planning Policy

4.1.1 UK Marine Policy Statement

The Marine Policy Statement (MPS) (HM Government, Northern Ireland Executive, Scottish Government, Welsh Assembly Government, March 2011) provides the framework for preparing Marine Plans and taking decisions affecting the marine environment. The MPS includes specific reference to seascape and the need to consider this in relation to proposed developments in marine and coastal areas. It identifies the relevance of baseline character, quality and value and its capacity to accommodate change specific to a proposed development. The MPS places importance on the consideration of nationally designated areas and the statutory purposes of these designations.

4.1.2 Planning Policy Wales

National and local planning policy that were applicable to the 2019 SLVIA have been reviewed to consider whether there have been any changes that are likely to alter any judgements that were made in relation to the Proposed Development.

At a national level, planning policy context is set out in Planning Policy Wales (PPW) Edition 12 in February 2024. The key Planning Principles of PPW identified in the 2019 SLVIA remain unchanged. Much of the coastline of Anglesey is designated an Area of Outstanding Natural Beauty (AONB). Whilst AONBs are now also known as National Landscapes their legal designation remains AONB and there is no change in the importance or value of such designations. The key points relevant to the 2019 SLVIA and the Proposed Development in the PPW relate to the protection afforded to AONBs, however there is no difference in the value attributed to such designations in either version of PPW.

4.2 Local Planning Policy

4.2.1 Anglesey and Gwynedd Joint Local Development Plan 2011 – 2026

At a local level the Anglesey and Gwynedd Joint Local Development Plan 2011 – 2026 (adopted 31st July 2017) is still applicable as the Review Report published in March 2022 does not detail any specific changes to be made to the Plan. A new Local Plan of the Isle of Anglesey is in preparation, but is currently at an early stage in this process.

4.2.2 The Isle of Anglesey AONB (National Landscape)

The Isle of Anglesey AONB Management Plan has been replaced since the preparation of the 2019 SLVIA. The Isle of Anglesey AONB Management Plan 2023-2028 sets out relevant strategy and policy context for the Proposed Development. Whilst the detail of the new Management Plan differs from the previous document, the underpinning principles linked with the protection of the landscape remain. This document sets out the protection afforded to the AONB and the need to conserve and enhance the landscape, whilst also recognising themes linked with sustainable communities and economy. The AONB Management Plan also sets out the features and special qualities of the AONB. The features of the Anglesey AONB are defined as coastal landscape/seascape features, traditional agricultural landscape features, and geological and geomorphological features. The key aims policies and objectives that are relevant to the SLVIA are those associated with Landscape and Seascape Character, and Planning and Development. These all relate to the overall aim for enhancing countryside and coastal character.



4.3 Key Relevant Guidance

In addition, changes to, or new, guidance documents that were used to inform the approach taken to the 2019 SLVIA have also been considered. Relevant new guidance that has been published subsequent to the preparation of the 2019 SLVIA include:

- Visual Representation of Development Proposals (Landscape Institute, Technical Guidance Note 06/19, September 2019); and
- Assessing Landscape Value Outside National Designations (Landscape Institute, Technical Guidance Note 02/21).

In relation to guidance for preparing visualisations of development revised guidance has been published by the Landscape Institute: Visual Representation of Development Proposals (Landscape Institute Advice Note 06/19). The visualisations included in the 2019 SLVIA were prepared and presented based on relevant detailed guidance that was available at the time: Visual Representation of Wind Farms (February 2017), published by Scottish Natural Heritage, now NatureScot. The principles that were applied in the 2019 SLVIA are comparable with those included in the Landscape Institute Guidance.

The Landscape Institute document “Assessing Landscape Value Outside National Designations” provides guidance for the assessment of landscape value, which is an integral part of landscape sensitivity judgements. However, in the case of the Project, much of the closest coastline is designated at a national level as an AONB, with broadly corresponding sections of Heritage Coast. This national value attributed to these landscapes was considered as part of the 2019 SLVIA and therefore the publication of this guidance document has no material influence on the judgements made, particularly in relation the key receptors considered in this assessment.



5.0 Baseline Context

The baseline assessment in the 2019 SLVIA described the relevant seascape, landscape and visual receptors, based on published documents where relevant. A review of the baseline context has been undertaken to identify any potential changes that could affect the assessment judgements. The review comprised identifying any changes to published landscape character assessment and landscape designations. The SLVIA was completed in 2019 and there are no material changes to the nature or distribution of visual receptors that would alter the previous assessment judgements. The key relevant designations, together with walking and cycling routes and their location/extent relative to the MDZ are shown in the Figures included in Appendix B, which were included in the 2019 SLVIA.

Key changes that have taken place since the completion of the 2019 SLVIA comprise the construction of the Morlais Landfall Substation and the redevelopment of the RSPB visitor centre at South Stack. The Landfall Substation forms an integral part of the overall proposed development and was considered as part of the 2019 SLVIA. The scale and appearance of the Landfall Substation is comparable with the structures assessed as part of the 2019 SLVIA, and falls within the previously assessed parameters. The redevelopment of the RSPB visitor centre changes comprises a larger structure compared with the previous centre, but it does not alter the value placed on the landscape/seascape context. It has the potential to attract more people to the coastline in the vicinity of South Stack, but it comprised a popular destination when the 2019 SLVIA was undertaken and there are no material differences in relation to the sensitivity of such visitors.

The Anglesey Landscape Strategy, 2011, and the Anglesey Seascape Character Assessment, 2013, remain the most up to date character assessments and therefore there have been no changes to this context. Reviewing landscape designations within the Study Area, these are consistent with those considered in the 2019 SLVIA. The extent of the Anglesey AONB, and the two sections of Heritage Coast have not altered. The AONB designation attributes national value to the landscape, and this high level of value was reflected in the 2019 SLVIA.

There are no changes in the local landscape designations; Special Landscape Areas, applicable in Anglesey. Overall, it is considered that there have been no changes to the designations that were considered as part of the 2019 SLVIA.



6.0 Nature/Characteristics of the Proposed Variation

This section provides a description of key design parameters for this proposed variation and how they compare with from the Consented Scheme in the 2019 SLVIA, focussed on the above elements of the exemplar Tidal Technologies devices.

The development of the SESM technology described in this proposed variation has occurred since the definition of the original Project Design Envelope for the Marine Licence. The SESM technology is well suited to contributing to the delivery of renewable energy that is required to meet government policy targets. Tidal Technologies Ltd is one of the major proposers of the SESM technology and is committed to deploying in Wales, at Morlais. For this reason SESM is being proposed to form a key element of the technology mix within the MDZ. Further information on the reasons behind the proposed variation is provided in the Request for Scoping Opinion.

Key parameters of the proposed variation, and how the SESM devices compare with the Project Design Envelope (PDE) considered in the 2019 SLVIA are outlined in Table 6-1. Full details of the proposed SESM devices are provided in Chapter 4.

Table 6-1 Key Parameters used in this assessment

Parameter	2019 Environmental Statement ²	SESM Devices
Maximum Device Length	72m	60m note that the (maximum length of the above water structure is 45m)
Maximum Device Width	30m	30m note that the (maximum width of the above water structure is 7m)
Maximum Device Height (above water line)	6.5m (main device structure)	18m (Max) above LAT (Lowest Astronomical Tide), 11.5m above max spring high tide
Number of Surface Emergent Devices (Floating or SESM) (Maximum of 130	15 for a 30MW deployment

6.1 Location within MDZ

The SESM devices would be positioned within the Green Hatched Restricted Area (GHRA), within the south westerly part of the MDZ. It is proposed that this device type would only be deployed within the GHRA, ensuring a minimum separation distance of approximately 2.2km from the coastline. The proposed SESM devices are therefore clearly located within the existing Green Restricted Area where floating and surface emergent tidal devices can already be deployed. The location of the proposed SESM devices and the Restricted Areas are illustrated by Figure 1.

6.2 Construction Activities

The SESM devices incorporate a ballasted reinforced concrete gravity base, positioned on the seabed and kept in place solely by its own weight. Current installation methodology assumes that the devices will be fully assembled in port. Fully assembled devices will float with a draught of circa 4m and will be towed to their operational site. Installation will simply

²Included in Section 4.3.3 of Morlais Project Environmental Statement, Chapter 4: Project Description



require pumping seawater into the base and tower through the top of the tower until the unit starts to sink. The construction activities would be within the parameters allowed by the consent for the Project. The potential seascape, landscape and visual effects associated with construction activities were proposed to be scoped out of further assessment in the Morlais Variation Scoping Report. The Scoping Opinion did not disagree with this approach, therefore no further consideration has been given to construction activities in this assessment.

6.3 Maintenance

The devices are not expected to need to be lifted during their lifetime. They will be continuously monitored, inspected once per month and will require major scheduled maintenance every 7-10 years. Generators, gearboxes and associated electrical equipment in are fully protected in storm proof containers, always above the highest projected waves. This means that all scheduled operational and maintenance tasks can be done on site without the need for heavy lifting vessels or divers. The vertical blades and blade arms can be raised vertically, using buoyancy, to a surface emergent position and can then be removed from the device using small vessels. This enables simple blade connection, maintenance, de-snagging and/or replacement. Arms and blades are then lowered back down to at least 5m below Lowest Astronomical Tide (LAT) when in operation. Cable inspections are expected to occur every two years, with repair work expected to be required for a period of one month every 15 years, depending on weather conditions.

6.4 Size and Scale of SESM Devices

The width and length of the proposed SESM devices is within the Project Design Envelope applied in the 2019 Environmental Statement, as set out in Table 5-1. However, the maximum height of the devices above water would be greater at 18m. As the SESM devices would rest on the seabed the extent of the above water elements of the devices would vary with the height of the tide. Whilst a maximum device height would be 18m above sea level this would only occur during LAT, and at the maximum spring high tide this would approximately 11.5m. The maximum height of the SESM devices would be the same as the electrical hubs that formed part of the PDE for the 2019 SLVIA.

A 30MW array deployment would comprise a total of 15 tidal energy devices, positioned in rows, with spacing between the devices within the limits used in the 2019 SLVIA PDE and as described in Chapter 4. The proposed SESM devices would comprise part of the overall maximum number of 130 floating and surface emergent devices factored into the Project Design Envelope for the 2019 Environmental Statement. The array of SESM devices would replace rather than supplement one of the arrays included in the 2019 SLVIA PDE. The generating capacity of the TTL devices (2MW per device) is higher than some of the other device types included in the SLVIA. For comparison, the 2019 SLVIA PDE assumed Aquantis devices would be deployed in the same area, with 28 devices required to achieve the overall 30MW generating capacity for this berth. In addition, the nature of the SESM devices means electrical connection infrastructure can be contained with the device structures and there would be no requirement for a separate electrical hub.

6.5 Colouring and Marking

At the time the 2019 SLVIA was prepared, as a worst case it was assumed that the tidal energy devices, electrical hubs and marker buoys will be lit at night, in conformance with guidance from Trinity House and the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA). It was also assumed that, in accordance with IALA guidance, yellow colouring would be required for any surface emergent elements. Therefore, this colouring was applied in the visualisations included in the 2019 SLVIA.



It was identified in the 2019 SLVIA and during the Public Inquiry for the Project, that it may be possible to agree variations to colouring and marking with the relevant consultees at the time specific deployments are proposed. However, to allow clearer comparison with the 2019 SLVA the same approach to colouring/markings has been assumed i.e. much of the SESM devices would be yellow. However, it may be that the approach to colouring and marking could be altered through consultation with the Maritime and Coastguard Agency and Trinity House in relation to a specific deployment. This may result in the SESM devices being coloured grey, with appropriate yellow markings.



7.0 Impact Assessment

7.1 Summary of SLVIA for Consented Scheme

The 2019 SLVIA presents an assessment of the potential effects on seascape and landscape resources and visual amenity that would be likely to result from the construction and operation of the proposed PDE.

The 2019 SLVIA was undertaken in accordance with best practice at the time. There have been some changes to the relevant professional guidance, as set out in Section 3.0. However, none of these changes make a material difference to the approach to SLVIA.

The 2019 SLVIA assessed potential effects, concentrating on the operational phase, on:

- Seascape/ landscape character;
- Landscape designations; and
- Visual amenity.

The 2019 SLVIA identified the potential for daytime and night-time effects on seascape, landscape and visual amenity.

The 2019 SLVIA considered that the potential effects on seascape/landscape character would vary between major/moderate (significant) to minor (not significant). The Seascape Character Areas (SCA) relative to the MDZ are illustrated by Figure 24-1-3 of the 2019 SLVIA (included in Appendix B for reference). The predicted effect would be greater for SCA 13 – Holyhead Mountain where a major/moderate and significant effect was predicted, and SCA 14 – Rhoscolyn, where a moderate and significant effect was predicted. Lesser effects were predicted in relation to SCA 31 – West of Anglesey where a moderate and not significant effect was predicted, and SCA 10 – Carmel Head to Penrhyn, and SCA 11 – Holyhead, where minor and not significant effects were predicted.

The major/moderate and moderate effects on SCA 13 and 14 were considered significant due to the tidal devices and associated infrastructure introducing man-made features in the wider seascape. The tidal energy devices would not become a defining feature of seascape or landscape character and would comprise small components within the open views that can be seen over the Irish Sea.

Localised significant adverse effects were predicted on the AONB and section of the Heritage Coast closest to the Project, specifically in relation to the Holyhead Mountain and Rhoscolyn seascape character areas.

Potential effects on visual amenity at a range of viewpoints that are representative of views seen by visual receptors were assessed. Significant potential visual were identified in relation to receptors in the closest part of the coastline, between Penrhyn Mawr and South Stack. These receptors include residents of dispersed properties, people walking the Anglesey Coastal Path/ Wales Coast Path and People visiting the RSPB reserve and visitor centre.

Viewpoints where significant effects were predicted are included in Table 7-1.



Table 7-1 Viewpoints where significant effects were predicted in the 2019 SLVIA

No.	Viewpoint Name	Sensitivity	Magnitude of Change	Visual Effect	Nature of Effect
01	Summit of Holyhead Mountain	High	Medium	Major/moderate	Adverse
03	Car park at South Stack Light House	High	Substantial	Major	Adverse
04	Ellin's Tower, South Stack	High	Substantial	Major	Adverse
06	South Stack Cliffs Nature Reserve/Penrhyn Mawr	High	Substantial	Major	Adverse

7.2 Data Gaps and Uncertainties in Relation to this Assessment

Potential data gaps and uncertainties that are relevant to this assessment include:

- No night time field work or viewpoint photography has been undertaken, however this is not considered material as the Consented Scheme incorporates navigation lighting, and this detail is not expected to be materially different to the PDE assessed in the 2019 ES and SLVIA; and
- Weather or visibility data have not been obtained to inform the assessment judgements, but this would not influence the judgements due to the proximity of the Project to the coastline and assuming a worst case of clear visibility.

7.3 Zone of Theoretical Visibility Analysis

ZTVs have been prepared to show the predicted visibility of the proposed SESM devices and are included in Figures 2 and 3. The ZTVs are based on bare earth terrain data meaning that any screening influence of surface features, such as vegetation and buildings, are not taken into account. Surface features are not particularly relevant to the landscape context of the Project due to the sparse settlement pattern and limited areas of taller vegetation.

Figure 2 comprises a ZTV that is specific to this proposed variation. The SESM devices would be primarily visible from SCA 13 – Holyhead Mountain and SCA 14 – Rhoscolyn, in relation to SCAs which overlap with terrestrial parts of the SLVIA Study Area, together with SCA 31 – West of Anglesey offshore.

The ZTV shows potential visibility of the proposed SESM devices from SCA10 – Carmel Head to Penrhyn, and SCA 30 – North West of Anglesey. The closest parts of SCA 10 and SCA 30 are located approximately 4km from the proposed SESM devices. The ZTV also shows theoretical visibility from the terrestrial parts of SCA 10 to the south the Carmel Head, however the separation distance between the SESM devices and this section of coastline is approximately 15km. There is also predicted visibility in relation to a small part of the coastline to the west of Aberffraw, but this is beyond the 15km SLVIA Study Area, and the intervening distance would limit the any potential effects on seascape character.

Figures 2 and 3 illustrate key viewpoints, assessed in the 2019 SLVIA, and agreed through consultation for this assessment from which the proposed SESM devices are predicted to be visible from. These comprise viewpoints 1, 3, 4 and 6 from the 2019 SLVIA, i.e. the viewpoints referred to in Table 7-1. These viewpoints are located between approximately 3km and 4.3km from the SESM devices. In addition, as described in sections 2.0 and 3.0 of this document, a wireline visualisation has been prepared for an additional offshore viewpoint to represent views seen by kayakers.



There would be relatively distant views of the SESM devices (between approximately 7km and 15km) from viewpoints 8, 9 and 12. Viewpoint 11 is located on the very edge of the ZTV is located over 18km from the SESM devices. There would also be potential visibility of the proposed devices from viewpoints 13 and 14 from the 2019 SLVIA, both of which are offshore locations over approximately 6km from the SESM devices.

In addition, Figure 3 comprises a comparative ZTV, showing how the pattern of visibility associated with this variation to the PDE compares with the overall ZTV pattern predicted in the 2019 SLVIA. Figure 3 demonstrates how the visibility associated with the proposed variation would be considerably less than and contained entirely within the worst case scenario ZTV included in the 2019 SLVIA. This is because the worst case scenario ZTV in the 2019 SLVIA was based on reference points representing the maximum height of the electrical hubs as these comprised the tallest proposed structures (maximum height 18m above LAT) around the perimeter of the MDZ as opposed to the SESM devices that are limited to the Green Hatched Restricted Area. The smaller ZTV pattern associated with the proposed SESM devices means multiple viewpoints that were included in the 2019 are not relevant to this assessment due to no predicted visibility. Therefore, daytime viewpoints where the proposed SESM devices are not predicted to be visible due to intervening landform comprise viewpoints 7, 10, and 19.

Overall, the limited scale of the variation, compared with the PDE considered in the 2019 SLVIA results in a more limited ZTV pattern. The ZTVs also demonstrate there are no additional areas from which the proposed revised PDE would be visible from, compared with the PDE for the 2019 SLVIA.

7.4 Analysis of Potential Effects

New wireline and photomontage visualisations have been prepared using the same approach that was applied for the 2019 SLVIA (Figures 4.1 to 4.5). These have been prepared for the locations discussed and agreed through consultation, described in Section 3.0. As described in Section 2.0 the approach to the preparation of these visualisations is in accordance with the Landscape Institute guidance TGN 06/19 Visual Representation of Development Proposals. The visualisations show the proposed variation in the context of the PDE assessed in the 2019 SLVIA. These have been prepared to demonstrate the relative location and size/scale of the proposed variation, and where the devices are predicted to be seen in the context of views experienced along the western edge of Holy Island. They have been used to judge whether the proposed variation could alter the assessment of potential effects, compared with those assessed previously.

For each viewpoint a baseline photograph is presented, together with visualisations for the proposed variation. These Figures are based on the viewpoint photography and visualisations included in 2019 SLVIA, with the key figures from the Environmental Statement included in Appendix B. The first images in each sequence comprise a photograph that is made up of overlapping stitched images with a 90 degree horizontal angle of view, subsequent images comprise wireline visualisations. The second image is a wireline, third images (where present) are photomontages (viewpoints 4 and 6). A further wireline visualisation has been prepared for an offshore viewpoint to represent potential views towards the MDZ from the perspective of kayakers. These images allow a fuller appreciation of the context of the viewpoint than can be achieved with a single frame view. All photographs and wirelines are presented in cylindrical projection.

A key consideration linked with the magnitude of change in the 2019 SLVIA was the introduction of an array of tidal devices and associated structures, into the context of the open, panoramic views experienced over the sea. The inclusion of SESM devices would not alter this key change to the baseline context.



The overall size and scale of the Project would not alter as a result of the inclusion of SESM devices. The extent of the views occupied by the Project would not alter as a result of the proposed variation. In addition, the characteristics of the form of the SESM devices, in terms of their engineered nature, are comparable with the devices that formed part of the SLVIA PDE.

The proposed variation would not increase the number of structures that could be developed. The overall generating capacity of the MDZ would not alter. The principles associated with the generation output of each berth would also not change i.e. the inclusion of SESM devices would mean that a different device type would be replaced rather than supplemented. The generating capacity of the TTL SESM devices shown is 2MW per device, which is greater than the potential output of other device types considered as part of the 2019 SLVIA. Therefore, the inclusion of SESM devices is expected to result in fewer structures being introduced to the baseline context in a scenario where the Project is implemented in a way that is consistent with the overall PDE.

The maximum 18m height of the SESM devices, relative to LAT, is taller than the envelope covered by the consent permits. However, the proportion of the structures that would be exposed would vary with the tide height and the 18m level relatively to LAT would only occur for a limited duration. In addition, the height of the SESM structures would be consistent with the electrical hubs that were included in the 2019 PDE, which comprised a tower type structure with a height of 18m above LAT.

Whilst the height of the SESM devices is taller the other key dimensions, i.e. the length and width, would be considerably less than the consent allows. As set out in Table 6-1, the maximum length of the of the above water elements of the SESM devices would be 45m compared with 72m, and the maximum width of the SESM devices would be 7m compared with 30m. Therefore, the SESM devices are likely to have a smaller overall mass visible above the water level than other device types that could be deployed.

The SESM devices will be restricted to part of the MDZ where visually prominent surface emergent devices are already permitted in the context of the Restricted Area plan . The GHRA is on the western side of the MDZ and therefore the separation distance from the coastline would at its greatest. .

The height of the SESM devices is an important consideration. A key part of this is the potential for the SESM devices to extend above the horizon when viewed from locations in the surrounding context. The terrestrial viewpoints show that the top of these structures is not predicted to extend above the skyline, demonstrated by the wireline visualisations. The visualisation for the additional offshore viewpoint shows that the SESM devices would extend above the horizon. However, this would be in the context of the other devices which formed part of the PDE for the 2019 SLVIA, which would also extend above the horizon. Therefore, the SESM devices would not introduce anything distinctly different. In addition, the positioned of the SESM devices in the westerly part of the MDZ would reduce their relative prominence due to the presence of other device types in the intervening seascape context.

The duration of any SESM device deployment would be limited to the timeframe permitted and all visible elements would be removed, meaning any change to seascape character or visual amenity would be reversible.

The SESM devices have been coloured in the visualisations in a way that is consistent with other devices included in the PDE for the 2019 SLVIA. Consultation with marine navigation stakeholders in relation to a specific deployment has established that devices that are largely grey with yellow markings are acceptable. Therefore, whilst the towers of the SESM devices are shown as completely yellow in the visualisations, this is a worst case and it is likely that more of each device would be coloured grey when considered as part of a specific proposed deployment.



On balance, considering the above factors and parameters, in relation to the baseline seascape context and the PDE applied in the 2019 SLVIA, it is anticipated that the potential seascape, landscape and visual effects would not alter as a result of the proposed variation. The proposed variation is not predicted to increase the significance of any effects experienced by any seascape, landscape or visual receptors. The characteristics of the proposed SESM devices are broadly consistent with the PDE set out in the 2019 ES and SLVIA.



8.0 Summary and Conclusion

There have been no changes in the baseline context of the Proposed Development, i.e. changes to the published landscape character assessment, landscape designations, or the policy context, that would materially alter the judgements made in the 2019 SLVIA.

The ZTVs demonstrate that the visibility of the proposed SESM devices would be less than that predicted for the PDE considered in the 2019 SLVIA. There would be no additional locations where the proposed SESM devices would be visible.

The visualisations that have been prepared for the proposed revised PDE demonstrate that the variation would result in the inclusion of a device type that differs from the 2019 PDE applied in the SLVIA. However, the only notable difference is the height of the SESM devices, and in other respects the inclusion of this device type would be within the overall parameters considered.

On balance, following assessment of the characteristics of the SESM devices and how these compare with the 2019 PDE, the proposed variation is not considered to alter the SLVIA judgements. The key change that would result from the Project is the introduction of an array of tidal energy devices of the west coast of the Isle of Anglesey. The inclusion of an array of SESM devices, as described in the proposed variation, would not alter the judgements relating to the magnitude of change or level of seascape, landscape or visual effect.





Appendix A Figures

Morlais: SESM Variation

Seascape, Landscape and Visual Impact Assessment

Menter Môn Cyf.

SLR Project No.: 406.064994.00001

19 September 2025





Appendix B 2019 SLVIA Figures

Morlais: SESM Variation

Seascape, Landscape and Visual Impact Assessment

Menter Môn Cyf.

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