



## Adroddiad

Ymchwiliad a gynhaliwyd o 01/12/2020

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Arolygydd a benodir gan Weinidogion Cymru

Dyddiad: 24.06.2021

## Report

Inquiry Held from 01/12/2020

by Clive Sproule BSc MSc MSc  
MRTPI MIEnvSci CEnv

an Inspector appointed by the Welsh Ministers

Date: 24.06.2021

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**TRANSPORT AND WORKS ACT 1992**

**TOWN AND COUNTRY PLANNING ACT 1991**

**MORLAIS DEMONSTRATION ZONE ORDER**

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### List of abbreviations used in this report

In this report, and as noted below, the text “Ref:” is followed by, and signifies, an inquiry library document reference number.

the 1990 Act	Town and Country Planning Act 1990
ADD	Acoustic deterrent device
AEOI / AEOSI	Adverse effect on the integrity of a site / Adverse effect on site integrity
AIS	Automatic Identification System
ALARP	As low as reasonably practicable
the AONB	The Isle of Anglesey Area of Outstanding Natural Beauty
the Applicant	Menter Môn Limited
Art.	Article
CA/CPO	Compulsory Acquisition / Compulsory Purchase Order
CCC	Committee on Climate Change
Cdr	Commander
the CIL regulations	Community Infrastructure Levy Regulations 2010 – Statutory Instrument 2010 No.948
CJEU	Court of Justice of the European Union
CoCP	Code of Construction Practice
the Council	Cyngor Sir Ynys Môn / Isle of Anglesey County Council (also referred to as “IoACC”)
CPO / CA	Compulsory Purchase Order / Compulsory Acquisition
CRM	Collision Risk Modelling
CTMP	Construction Traffic Management Plan
DDP	Device Deployment Protocol
DEMMP	Detailed Environmental Mitigation and Monitoring Plan
Detailed EMMP	See “DEMMP”
ECC	Export Cable Corridor
EIA	Environmental Impact Assessment
EMEC	European Marine Energy Centre
EMF	Electromotive force
EMMP	Environmental Mitigation and Monitoring Plan
oEMMP / OEMMP	Outline Environmental Mitigation and Monitoring Plan
EMR	Electromagnetic radiation
ERM	Encounter Rate Modelling
ES	Environmental Statement
ETPM	Exposure Time Population Model
Fig	Figure
FEI	Further environmental information (for the ES)
FSA	Formal Safety Assessment

the Habitats Directive	EC Directive 92/43/EEC (as amended) (Ref: MDZ/B5)
the Habitats Regulations	Statutory Instrument 2017 No.1012 - <i>The Conservation of Habitats and Species Regulations</i> (Ref: MDZ/B6) (as amended by Ref: MDZ/B10)
HDD	Horizontal directional drilling
HLMO	High Level Marine Objective
HRA	Habitats Regulations Assessment
IDNO	Independent network operator
IMO	International Maritime Organisation
IoACC	Cyngor Sir Ynys Môn / Isle of Anglesey County Council (also referred to as "the Council")
IROPI	Imperative reasons of overriding public interest
JLDP	Joint Local Development Plan (Ref: MDZ/D52)
kV	Kilovolt = 1,000 volts
LDP	Local Development Plan
LPA	Local Planning Authority
m	metre
MCA	Marine and Coastguard Agency
MCAA	Marine and Coastal Access Act 2009
MDZ	Morlais Demonstration Zone
MGN 543	Maritime Guidance Note (MGN 543) - <i>Safety of Navigation: Offshore Renewable Energy Installations (OREIs) - Guidance on UK Navigational Practice, Safety and Emergency Response</i> (Ref: MDZ/I2)
MHWST	Mean High Water Spring Tides
ML	Marine Licence
the Morlais project	The works sought by the application
MPS	UK Marine Policy Statement - 2011
MW	Megawatt = 1,000,000 watts of electrical power
NDF	National Development Framework: <i>Future Wales – The National Plan 2040</i>
the NE Report	Appendix 1 to Mr Campbell's proof (Ref: MDZ/P3) ' <i>Small-scale effects: How the scale of effects has been considered in respect of plans and projects affecting European sites – a review of authoritative decisions</i> '
NETS	National Electricity Transmission System
NM	Nautical Mile
NPS	National Policy Statement
NR	Network Rail
NRA	Navigation Risk Assessment
NRAA	Navigation Risk Assessment Addendum
NRI	Network Rail Infrastructure

NRW	Cyfoeth Naturiol Cymru / Natural Resources Wales
the NRW collision risk Review	<i>Review of potential collision risk between tidal stream devices and marine mammals</i> ABPmer (2020) (Ref: MDZ/F15.2)
NTS	Non-Technical Summary
NWWT	North Wales Wildlife Trust
OfDA	Offshore Development Area
OMBES	Outline Marine Biodiversity Enhancement Strategy
the Order	The Morlais Demonstration Zone Order
OREI	Offshore Renewable Energy Installation
Ornithology modelling note	Marine Ornithology Collision Risk Modelling Note (Ref: MDZ/A31.10)
Orthios	Orthios Eco Parks (Anglesey) Limited and Orthios Power (Anglesey) Limited
oEMMP / OEEMP	Outline Environmental Mitigation and Monitoring Plan
Outline EMMP	See “oEMMP / OEMMP”
p. / pp.	Page / pages
para. / paras.	Paragraph / paragraphs
PoE	Proof of Evidence
PRoW	Public right of way
PIM	Pre-Inquiry Meeting
PDE	Project Design Envelope (see also the ‘Rochdale Envelope’ in the Glossary)
PDF	The ‘PDF’ file format used for documents in the inquiry library
PVA	Population Viability Analysis
PPMP	Pollution Prevention and Management Plan
PPW	Planning Policy Wales (10 <sup>th</sup> edition, 2018, Ref: MDZ/D1) (11 <sup>th</sup> edition, 2021, available online)
PTEC	A tidal stream energy project for the seas around the Isle of Wight that evidence to this inquiry refers to.
Ref:	Inquiry library document reference number
Ref.	Reference (number)
Reg. / Regs.	Regulation / Regulations
REP	Renewable Energy Plant
RIB	Rigid inflatable boat
RIIO	A regulatory model name that is understood to be derived from “Revenue”, “Incentives”, “Innovation” and “Outputs”
RPoE	Rebuttal Proof of Evidence
RSPB	Royal Society for the Protection of Birds
RT	Roundtable
RX	Re-examination
RYA	Royal Yachting Association
s. / ss.	Section / sections
SAC	Special Area of Conservation

S.I.	Statutory Instrument
SLVIA	Seascape Landscape Visual Impact Assessment
SoCG	Statement of Common Ground
SCC	Snowdonia Canoe Club
SNH	Scottish Natural Heritage
the SNH Guidance	<i>Assessing collision risk between underwater turbines and marine wildlife</i> - Ref: MDZ/F19
SPA	Special Protection Area
SPEN	Scottish Power Energy Networks
SSSI	Site of Special Scientific Interest
TAN 5	Technical Advice Note 5, 'Nature Conservation and Planning'
TCPA	Town and Country Planning Act 1990
TEC	Tidal Energy Converter
the 2015 Act	Well-Being of Future Generations (Wales) Act 2015
the 2016 Act	Environment (Wales) Act 2016
the Triangle	The suggested extension of the Restricted Area Northern, to the triangle outlined in Figure 5 of Mr Sumner's PoE (POE021, p.71)
TWA	Transport and Works Act 1992
TWAO	Transport and Works Act Order
TWA Application Rules	Statutory Instrument 2006 No.1466 - <i>Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006</i> (Ref: Inquiry Doc – 113)
TWA Inquiry Rules	Statutory Instrument 2004 No.2018 - <i>Transport and Works (Inquiries Procedure) Rules 2004</i> (Ref: MDZ/B4)
TWG	Marine Mammal Technical Working Group
UKC	Under-keel clearance
VER	Valued Ecological Receptor
WFD	Water Framework Directive 2000/60/EC
WGC	Welsh Government Circular
Withdrawal Act 2018	European Union (Withdrawal) Act 2018
WLMOMS	Welsh Language Mitigation, Optimisation and Monitoring Strategies
WNMP	Welsh National Marine Plan (2019)
XX / XXC	Cross-examination

## Glossary

Device deployment protocol	A statement that addresses the deployment of tidal devices and operational hubs in the MDZ. The full definition is in Article 2 of the Order, and Article 3 and Part 4 of the Order are also relevant.
Export Cable Corridor	The corridor in which export cables and associated cable protection would be laid to carry generated power from the MDZ to landfall.
Grid connection substation	In this report, the area of Orthios Eco-Park that includes the two 132kV import/export cable terminations, and in some documentation, also referred to as the "Penrhos substation".
Landfall substation	The proposed substation at Ty Mawr farm in the area of Ynys Gybi / Holy Island known as Penrhos Feilw
Penrhos substation	The grid connection substation (see above)
Project Design Envelope	The parameters that describe the maximum extent of the project in terms of materials, scale, time and location. The 'Rochdale envelope' approach as applied in this case.
Repowering	Replacing one tidal energy device with another
Switchgear building	Proposed to be located at Parc Cybi
the Triangle	An extension of the " <i>Restricted Area – Northern</i> " suggested by NRW in Fig 5 of its proof – see Ref: POE021, p.71.
Water column	In this report, the 'column' of water between the surface of the sea and the seabed

## MORLAIS DEMONSTRATION ZONE ORDER

and

## APPLICATION FOR DEEMED PLANNING PERMISSION

- The Order would be made under sections 3 and 5 of the Transport and Works Act 1992 (“the TWA”).
- The deemed planning permission would be granted by a Direction under section 90(2A) of the Town and Country Planning Act 1990 (“the 1990 Act”).
- The application for the Order and deemed planning permission was made on 16 September 2019 but was subsequently amended before close of the Inquiry.
- The Order and the deemed planning permission would authorise Menter Môn Limited (“the Applicant”) to acquire compulsorily land and rights to land and the use of land temporarily in connection with the Morlais Demonstration Zone.
- The Applicant’s CPO Process Schedule records 13 landowner and statutory undertaker objections to the Order outstanding at the closure of the inquiry, and 12 other “Annex 1 objectors”. Not all parties in the schedule made objections to the inquiry, and not all objections received were in relation to the compulsory purchase of land or rights over land.

**Summary of Recommendation:** That the Order be made and that deemed planning permission granted subject to conditions.

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### Introduction and Procedural Matters

1. A Pre-Inquiry Meeting was held at the Trearddur Bay Hotel on 22 November 2019.
2. An initial assessment of the application’s Environmental Statement (“ES”) issued in December 2019 (Ref: MDZ/E10 MMC424), resulted in further environmental information (“FEI”) being provided in March 2020. My assessment of the application’s ES with the FEI, issued in August 2020 (Ref: MDZ/E11 MMC433) noted: the Applicant’s view that the areas of disagreement regarding the ES concern matters of professional judgement; the still to be contested matters in relation to the FEI; and, concluded that while the FEI provided sufficient environmental information, that was conditional on the outcome of this inquiry.
3. Other documentation supplemented the FEI through its submission with the Applicant’s statement of case. It included information that had been submitted to NRW as part of the Marine Licensing process. However, some the supplemental information was new to both this inquiry and the Marine Licensing process. The inquiry timetable enabled all parties to the inquiry to consider the additional information submitted and if necessary, address it within the inquiry sessions.
4. Due to restrictions associated with the COVID-19 pandemic, the second PIM and the inquiry were on-line virtual events. The second PIM dealt with the administrative arrangements for the inquiry. It also gave parties an opportunity to use the digital platform and test their connectivity before the inquiry opened.
5. The inquiry sat for 17 days between 1 December 2020 and 12 February 2021. Differing tribunal formats were used within the inquiry. These included formal inquiry sessions, inquiry roundtable sessions and an evening public speaking session. Closing submissions were received, and those of IoACC, NRW, Orthois and the Applicant were heard, on 11 and 12 February 2021.
6. *Future Wales – The National Plan 2040* and the 11<sup>th</sup> edition of *Planning Policy Wales* were published on 24 February 2021. Parties to the inquiry were provided with an

opportunity to comment on how changes to the versions of the two documents available when the inquiry opened had affected their cases.

7. Unaccompanied site visits were carried out: on 09/10/2019, prior to the first PIM; on 22/10/2020, prior to the vPIM and the subsequent opening of the inquiry; and, on 02/04/2021, which included views taken after sunset with a dark sky.
8. The inquiry was closed 'in writing' (i.e. parties were notified of the closure) on 24 March 2021.

## The Proposal, the Site and Surroundings

9. The proposed works would provide a demonstration zone, namely the Morlais Demonstration Zone (“MDZ”), to support the development and trialling of devices for capturing tidal energy, with a maximum installed capacity of 240MW. The proposal includes works for construction, commissioning, repowering (i.e. the replacement of a tidal energy device(s) with another) and decommissioning; along with infrastructure to bring the electricity ashore from the generating devices, and to connect the demonstration zone to both the national grid and the local distribution network. Up to nine export cables within an export cable corridor (“ECC”) would transfer the generated power from the MDZ to shore. Parameters within the Project Design Envelope (“PDE”) set out the maximum extent of the works in terms of their scale, materials, timing and location. The project parameters are set out in Table 4-21 to Table 4-30 within Chapter 4 of the updated ES (from para. 279 of Ref: MDZ/A25.4).
10. The works have been described as being a “...30+ year project...” (para. 28 of the Applicant’s opening statement, Ref: Inquiry Doc – 006). In that regard, the ES is based on a project life of 37 years (para. 26 of ES Chapter 4, Ref: MDZ/A25.4), and that timeframe is one of the “Generic Project Parameters” listed in Table 4-21 of ES Chapter 4 (Ref: MDZ/A25.4). The “*project parameters*” are included in the Order through their definition in Article 2 of the Order and to control the extent of the works via Article 3(4). The ES states that after this period the works would be decommissioned and removed (see para. 332 of Chapter 24 Vol I Ref: MDZ/A25.24).
11. These works can be, and in the documentation before the inquiry often are, grouped into an offshore and onshore development areas. Details are provided within documents that include: the ES Non-Technical Summary (Ref: MDZ/A24); the Addendum to it and Chapter 27 (Ref: MDZ/A28.46); the evidence of Dr Orme (Ref: MDZ/P10); the works and land plans (Refs: MDZ/A17.1 to MDZ/A17.9 and subsequent inquiry documents proposing amendments to them); and, the Applicant’s closing submissions (Ref: Inquiry Doc - 154). Differing controls would apply in the two areas. Controls for the offshore works would include those provided through a Marine Licence, and controls for the onshore works would include those of the deemed planning permission that is also sought through this TWA application.
12. The Order would enable the compulsory acquisition of certain land and rights over land. An overview of these powers is provided in the Explanatory Memorandum and associated documentation (Refs: Inquiry Doc – 104, Inquiry Doc – 065, MDZ/A17.1 to MDZ/A17.9, Inquiry Doc – 066).
13. Onshore works would include: the landfall of power cables from the demonstration zone; a substation at Penrhos Feilw near to South Stack; 132kV underground cables from that substation to a switchgear building at Parc Cybi, which would enable a 33kV connection to the local electricity network; underground cables from the Parc Cybi switchgear building to the 132kV grid connection substation at the former Anglesey Aluminium site, which is now the site of Orthios Eco-Park; a battery storage facility linked to the grid connection substation; and, the grid connection substation and any associated battery storage would also feed into the local distribution network via a 33kV return circuit to the switchgear building at Parc Cybi.

Spare 132kV cable ducts would be installed during trenching works to provide for future increased export capacity.<sup>1</sup>

14. A tidal energy device developer wishing to place its equipment within the MDZ would be allocated locations or berths within the MDZ for the siting of one device or an array of devices. The actual designs of these devices are yet to be known, the proposed units could be mounted on the seabed, submerged, buoyant and positioned in the mid-water column, or floating. The devices would be designed to operate in the depths of water present, which are up to 35m deep in the MDZ. A device deployment protocol, administered through a Marine Licence, would confirm the designs and locations of the tidal generators placed within the MDZ.
15. The 'site' includes: 35km<sup>2</sup> of the sea off the western coast of Ynys Gybi / Holy Island and the sea bed between Penrhos Feilw and South Stack lighthouse; the cable route from the landfall, in the bay referred to as Abraham's Bosom during the inquiry, to the South Stack substation on farmland above, and inland, of the landfall; the cable corridor along highways, and on other land, between the South Stack substation and the land that the switchgear building would be constructed on at Parc Cybi; the route of the cables between Parc Cybi and the grid connection substation at Penrhos on the Orthios site, which lies to the southeast of Holyhead and on the opposite side of Ynys Gybi / Holy Island from the MDZ; and, the grid connection substation site at Penrhos on the Orthios site.
16. Tidal energy on this section of coast is known to be high. This attracts sea kayakers and other seafarers that wish to experience and use such conditions. It is also the tidal energy resource that the MDZ would seek to capture and utilise.
17. The immediate and wider surroundings of the site include: the sea to the west of Ynys Gybi / Holy Island; the area around the South Stack lighthouse, including Holyhead Mountain; other elements of the historic environment; land within an Area of Outstanding Natural Beauty; land falling within ecological designations; along with the agricultural, tourist, recreational, infrastructural, (often isolated) residential, business, industrial and other land uses that are present to the west, south, and south east of Holyhead. While all of these land uses are present, extensive areas of agricultural land are present around the land-based elements of the proposal to the west of Holyhead, and parts of the site to the south. Business, retail, industrial and infrastructural land uses, along with open space, agricultural land and land intended for development, is present to the south and south east of Holyhead.

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<sup>1</sup> Section 4.10 of Mr Billcliff's Proof of Evidence (Ref: MDZ/P8), in addition to the information in sections 2.2.4 and 2.2.5 of the ES Non-Technical Summary (Ref: MDZ/A24 & MDZ/A23)

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## **Outline of the Order Scheme**

18. The Applicant's Statement of Aims (Ref: MDZ/A5) provides a written outline of the scheme, the background to it and what it seeks to achieve. This includes details of the applicant company, its existing schemes, and its role in regard to the current proposal.
19. Intended benefits of the scheme are set out in the Statement of Aims, and include:
  - a) promoting and supporting the use of alternatives to fossil fuels;
  - b) reducing greenhouse gas emissions;
  - c) having an installed generating capacity of up to 240MW;
  - d) assisting the development of a tidal stream energy industry within the UK and internationally, and Anglesey as a centre of excellence for tidal energy;
  - e) creating employment opportunities for the local community and in the local supply chain; and,
  - f) attracting significant investment into Anglesey and resulting revenues that would result in socio-economic benefits.

Potential disbenefits of the scheme are set out in the cases of the parties below.

20. The application's Explanatory Memorandum (Refs: Inquiry Doc – 104 and Inquiry Doc – 105) also sets out the background to the scheme. It also addresses the purpose and effect of the Order and the Articles and Schedules within it.

## The Case for Menter Môn Limited

### Introduction

21. The Applicant (“Menter Môn”) applies for an Order (the “Order”) under the Transport and Works Act 1992 (“TWA”). The project will provide an offshore area for the installation and commercial demonstration of multiple arrays of tidal energy devices, to a maximum installed capacity of 240 Megawatts (“MW”). The project will also provide communal infrastructure through the provision of electrical infrastructure, including substations and onshore electrical cable route to grid connection (“the Morlais project”).
22. The Order<sup>2</sup> sought would also authorise the compulsory acquisition and use of land for the purposes of the onshore works, and grant certain ancillary powers.
23. By this application Menter Môn also seeks a deemed planning permission under s. 90(2A) Town and Country Planning Act 1990 (“TCPA”) for the onshore element of the works.
24. Although this project will also require a Marine Licence (“ML”) issued by Natural Resources Wales (“NRW”) to proceed, that is not the subject of this inquiry.
25. The interaction between the Order, the deemed planning permission and the ML is considered below.
26. It is worth beginning by setting out the aims of the Morlais project. These are<sup>3</sup>:
  - (i) to create local high-quality jobs.
  - (ii) to mitigate the jobs lost by the closure of the Wylfa nuclear power plant and Hitachi’s decision to pull out of the Wylfa Newydd 2700MW proposed nuclear power plant.
  - (iii) to maximise local skills, training, and job opportunities in the development, construction, and operational phases.
  - (iv) to harness the opportunity for Anglesey and North Wales to become globally significant in the development and commercialisation of tidal stream energy generation technology.
  - (v) to maximise community benefit from the project.
  - (vi) to provide a source of low carbon electricity and contribute to meeting Wales’s Net Zero Carbon 2050 target.
  - (vii) to provide local ownership, in accordance with Welsh Government requirements.

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<sup>2</sup> Ref: Inquiry Doc – 102

<sup>3</sup> See Mr Billcliff’s proof at para. 2.12 (Ref: MDZ/P8)

## **Project overview**

27. An overview of the project, science, and constraints behind it was given by Dr Orme on the first day. His evidence went entirely unchallenged<sup>4</sup> – clarificatory questions were asked by the Inspector and the RSPB, but nobody could or did take issue with any of the points that he raised.
28. What is sought by this Order is, in effect, the power to construct a 35km<sup>2</sup> offshore demonstration zone for tidal stream technology (the Morlais Demonstration Zone or “MDZ”), and the ancillary offshore and onshore infrastructure to take the electricity generated through for export to the national grid. We return to the detail of this project below, but before we do it is worth bearing in mind the following points about Menter Môn, tidal stream technology and the state of the industry.

### *Menter Môn*

29. This has been explored in the evidence of both Dr Orme<sup>5</sup> and Mr Billcliff.<sup>6</sup> In summary, Menter Môn is a third sector not-for-profit company<sup>7</sup> providing solutions to the challenges facing rural Wales, and seeking to add value to Welsh natural resources for the benefit of the community. Its primary objective is to provide long term secure jobs for the people of North West Wales.
30. Menter Môn has been involved in a number of community energy projects, including the hydro projects of Ynni Ogwen and Ynni Padarn Peris. It has also been involved in the conservation of the red squirrel, the restoration of 125 miles of coastal path, and publishing a book about the birds of Anglesey. Since 1996 it has attracted £70 million to Anglesey, and supported 5,000 businesses. It is very much embedded within the community, and holds dear the same landscape, ecological and economic values which have so galvanised the community around this application. If the Order is made, it would be this company which negotiates with developers on behalf the project throughout its life. It would be a prime example of community owned energy – indeed this has the potential to be the UK’s largest locally owned renewable energy project.<sup>8</sup>

### *Tidal stream energy*

31. As Dr Orme has confirmed in evidence in chief,<sup>9</sup> and outlined in his Proof of Evidence<sup>10</sup> tidal stream technology converts energy from the ebbing and flowing of the tides into kinetic energy. As the tide ebbs and flows, in certain areas where channels or (as here) promontories and headlands constrict the area through which the tide can travel, water is forced through constricted features and accelerated. This gives streams of high velocity current. Tidal Energy Converters (“TECs”) placed in the water are turned by the tidal stream, converting that energy into kinetic

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<sup>4</sup> Evidence in chief of Dr Orme - Day 1, PM session 1 and 2 (Ref: MDZ/P10)

<sup>5</sup> Day 1, PM session 1

<sup>6</sup> Mr Billcliff’s Proof of Evidence, para. 2.11 and following (Ref: MDZ/P8)

<sup>7</sup> Details provided within para. 10.1.2 of Mr Billcliff’s Proof of Evidence (Ref: MDZ/P8)

<sup>8</sup> Mr Billcliff’s Proof of Evidence at paras. 5.1.2 & 5.1.3 (Ref: MDZ/P8)

<sup>9</sup> Evidence in chief of Dr Orme - Day 1, PM session 1 and 2 (Ref: MDZ/P10)

<sup>10</sup> Dr Orme’s Proof of Evidence, para. 7.6.1 onward (Ref: MDZ/P10)

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energy. This technology is particularly sensitive to the speed of the tides – it is the cube of the tidal stream’s velocity that determines the power output. So, for example, doubling the velocity of the tidal stream gives eight times the power output. To use a more modest example, a 20% increase in the velocity of the tidal stream leads to 73% more power generated.

### *State of the Industry*

32. Tidal stream technology is still in its infancy. It, like wind, solar, and other tidal energy devices needs to come forward to help create the diverse portfolio of renewable energy sources required to meet the challenge of the climate emergency. Whenever a new technology emerges there are often a variety of designs that need to be explored before an industry discovers which is most effective, efficient, and deployable at scale. Wind first went through this process in the early 1970s.<sup>11</sup> Tidal stream technology has not yet had that chance. Dr Orme took the inquiry through the illustrative variety of devices and designs, and the variety of surface-emergent, mid-water column and seabed mounted sub-surface devices. Even among the submerged devices, there is a mixture of those firmly fixed to the seabed and those which, while moored to the seafloor, float under the water.<sup>12</sup> These devices do not just look different, but take advantages of different speeds present in different areas of the water column.<sup>13</sup> They may also each have different costs and benefits. As was explored in the Character and Appearance roundtable (“RT”) , surface emergent devices, for example, are easier to access and maintain, take advantage of the engineering aphorism that “chain is cheap”, and may well have a lesser impact on the benthic ecology to those fixed to the seabed. Overall, there are some key design principles emerging, on matters such as maximum diameters of the turbines,<sup>14</sup> but nobody yet knows which works best, or most efficiently.
33. The industry, however, is keen to advance, and various technologies are at high readiness levels, with turbines deployed at sites in the Pentland Firth and Shetland Islands, with other prototype, pre-production and commercial devices deployed for extended periods at the European Marine Energy Centre (“EMEC”) in Orkney.<sup>15</sup> Many of the device developers are “small players,” who struggle to meet big costs of development<sup>16</sup> - indeed this inquiry has heard from a number of those small developers (both national and international) including Orbital Marine Power,<sup>17</sup> Sabella,<sup>18</sup> Aquantis,<sup>19</sup> Instream,<sup>20</sup> Verdant Power<sup>21</sup> and Magallanes.<sup>22</sup> As will become particularly relevant to the discussion of character and appearance (encompassing seascape, landscape and visual issues), when developing a prototype

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<sup>11</sup> Currently, floating wind is going through the same, with demonstration sites being encouraged by the Scottish Government’s offshore wind policy statement.

<sup>12</sup> Evidence in chief of Dr Orme - Day 1, PM session 1 and 2 (Ref: MDZ/P10) and Ref: MDZ/A25.4 Table 4-2, pp12-14 and see Plate 4-2, 4-3 and 4-4.

<sup>13</sup> Evidence of Dr Orme at the Character and Appearance RT, Day 6 AM session 1. (Ref: MDZ/P10)

<sup>14</sup> Evidence in chief of Dr Orme - Day 1, PM session 1 and 2. (Ref: MDZ/P10)

<sup>15</sup> Mr Billcliff’s Proof of Evidence 5.1.2. (Ref: MDZ/P8)

<sup>16</sup> Dr Orme’s evidence in chief day 1. (Ref: MDZ/P10)

<sup>17</sup> Day 2 public Speaking Session 1 and Ref: MDZ/M

<sup>18</sup> Day 2 public Speaking Session 2 and Ref: MDZ/M3

<sup>19</sup> Ref: MDZ/M1

<sup>20</sup> Ref: MDZ/M2

<sup>21</sup> Ref: MDZ/M5

<sup>22</sup> Ref: MDZ/M6

the focus initially tends not to be so much on how they look, but whether they work. Once that fundamental question has been addressed, and developers then have to address deployment, the constraints of deployment areas get factored in. So, as here, if deployment is limited to areas of visual beauty, visual constraints will then get worked into the design process as a design driver.<sup>23</sup>

### *Constraints*

34. Evidently, this industry needs to develop. However, there are, for geographical reasons, only a limited number of places where such technology can be employed. Where such technology is currently deployed, it is usually with only a single device. There are a small handful of projects with arrays of multiple devices, but the numbers of devices are low. Nowhere in the world yet hosts a demonstration zone for multiple arrays. That creates a barrier to the development of the technology – as Dr Orme has outlined it prevents the economies of scale which can be used to drive down research and production costs.<sup>24</sup> The purpose of a demonstration zone like this is to fill that gap, providing a ‘plug and play’ system for various commercial developers to demonstrate their tidal array technologies over a long-term period. However, in view of the nature of this technology and the state of this industry, any demonstration zone (and the MDZ is no exception), is subject to a number of constraints to be addressed if it is going to achieve the substantial benefits that can come with it (see below).
35. First, there are geographical limitations. The physics underlying this project means that, unlike other sources of renewable energy (such as wind or solar), the areas where tidal stream devices can be deployed are relatively limited. Dr Orme in his evidence indicated that around the UK a number of areas have been considered by The Crown Estate but only three of them including the MDZ were found to be especially well-suited for the purpose of tidal stream demonstration zones.<sup>25</sup> However, importantly the fixed costs of deploying a device are largely comparable, whether it is deployed in an area of high velocity or low velocity. In an industry which operates on fine margins, location is fundamental both to the viability of any project, and to ensuring that as much energy as possible is generated.<sup>26</sup> We will turn in more detail to the project itself below, but suffice to note for now that in 2016 Menter Môn explored with potential device developers what sort of flow speed they require – the average minimum flow speed required was stated by developers to be 2.48m/s mean spring peak velocity. As Dr Orme explained and as clearly shown in slide 11 and 12 of the presentation accompanying his evidence in chief,<sup>27</sup> the areas of highest flow near the project area are adjacent to the coast and hence the need to deploy in these areas.
36. Second, the project must be able to deploy at scale. This is for three reasons:
- (i) It is only by deploying multiple devices that developers are able to benefit from economies of scale. Smaller projects in this context incur costs which are disproportionately larger than those of larger projects. Some fixed costs

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<sup>23</sup> Dr Orme’s evidence Day 6 AM Session 1.

<sup>24</sup> Dr Orme’s Proof of Evidence, para. 7.7.1 (Ref: MDZ/P10)

<sup>25</sup> Ref: Inquiry Doc – 001, p. 9

<sup>26</sup> Evidence in chief of Dr Orme - Day 1, PM session 1 and 2.

<sup>27</sup> Ref: Inquiry Doc – 001, pp.11-12

simply do not scale. An example was given of the costs of an operation team capable of servicing the devices. As Dr Orme explained,<sup>28</sup> economies of scale help drive down research and production costs. This is essential in order to bring this technology to market. It is also important to note – and this arose from an Inspector’s question – that although such economies may be greatest at the 240MW level, they still apply at a lower deployment as would be expected at Phase One. It is a sliding scale – designing and deploying six devices is cheaper (relatively) than designing and deploying one, designing and deploying 200 is cheaper still. As one developer put it to Dr Orme, a 2MW project is, relatively, 60% more expensive than a 12MW project.<sup>29</sup>

- (ii) It is only by granting a consent for a scalable project (even one, as here, restricted in how it develops) that you provide a route to market for developers. The inquiry heard this from not only Dr Orme,<sup>30</sup> but also from Andrew Scott (CEO of Orbital Marine Power) in a representation,<sup>31</sup> and from Oliver Wragg, a commercial director at Orbital Marine Power who attended the public speaking session.<sup>32</sup> Those who are investing in this technology need certainty and visibility that there will be somewhere to deploy it. Everyone accepts that this will not be a “free pass” – matters such as biodiversity concerns mean developers will of course have to accept that as more is learned about this technology the level of acceptable deployment will be kept under review – but the route must be there at least as a possibility, and de-risked as far as possible at an early stage by consenting up to 240MW.
- (iii) In many ways the bigger the deployment the bigger the benefits. These are discussed in more detail below, but more can be learned, more energy provided and more economic benefit given to the local community the more generating power the project has.

37. Third, the project must proceed on the basis of a Project Design Envelope or “PDE” (sometimes known as the “Rochdale Envelope”), for the examination and assessment of the environmental impacts on the project. This is necessitated by the early stage of the industry, and the very nature of the MDZ in bringing various different technologies forward. It is not possible to say, at the consenting process, precisely which turbines will be used and in what quantities. So, an envelope of proposed worst case environmental parameters will have to be used, and the assessment of environmental effects undertaken on those. This is not unusual, and has been accepted as a valid approach in case law,<sup>33</sup> UK-wide policy,<sup>34</sup> and government guidance. We come to the law in more detail below. The use of PDE for tidal energy projects is explicitly endorsed by Natural Resources Wales (“NRW”) – see its report *Defining project envelopes for marine energy projects: review and tidal energy test facility and marine mammals case study*.<sup>35</sup> This states that:

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<sup>28</sup> Evidence in chief of Dr Orme - Day 1, PM session 1 and 2; Dr Orme Proof of Evidence, para 7.7.1 (Ref: MDZ/P10).

<sup>29</sup> Evidence in chief of Dr Orme - Day 1, PM session 1 and 2.

<sup>30</sup> Evidence in chief of Dr Orme - Day 1, PM session 1 and 2.

<sup>31</sup> Orbital Letter of Support (Ref: MDZ/M4)

<sup>32</sup> Day 2, PM public speaking session.

<sup>33</sup> See *R v Rochdale MPB ex p. Milne* [2001] Env. LR 22, from which the phrase ‘Rochdale Envelope’ is derived. (Ref: Inquiry Doc – 120)

<sup>34</sup> See e.g. NPS EN-1 para 4.2.8 fn78 (Ref: MDZ/D2), and NPS EN-3 para 2.6.43 fn23 (Ref: MDZ/D3)

<sup>35</sup> Ref: MDZ/F15

*"A PDE approach is a consenting approach that allows a project proponent to submit an assessment of the potential maximum impacts of a range of design parameters within its application. This is often required because at the time of consent application, the details of project design are not finalised. This allows the project proponent with the flexibility to build out a number of potential design options, as long as the project is constructed and operated within the range of parameters assessed".*

38. The use of a PDE is also endorsed in the *UK Wave and Tidal Demonstration Zones Workshop Report*<sup>36</sup> (a joint document produced by among others the Welsh Government, NRW and The Crown Estate), and *PINS Advice Note Nine: Rochdale Envelope*.<sup>37</sup>
39. Fourth, because this project is so ground-breaking, there are some data gaps. Of particular (but not exclusive) interest in this project - there is limited information as to how tidal stream devices, and in particular multiple arrays of tidal stream devices, will interact with the local wildlife (particularly marine mammals and diving birds). These gaps need to be dealt with, through adaptive monitoring and management – something that is also endorsed in the above mentioned NRW publication. As we will outline more below, Menter Môn acknowledge this such that the whole project has been designed with this in mind. But it is important to note at the outset that it *is* a constraint, and would be a constraint on any project seeking to bring tidal stream arrays forward. Indeed, this is an inevitable consequence of trying to move forward the sum total of human knowledge.

#### *The project: components*

40. It is against that background and those constraints that we come to this project and how it has been developed. We will run through the geographical features of the project and how some points have been reached, before moving on to how it will be deployed. The parameters of the project are outlined in Chapter 4 of the Environmental Statement ("ES").<sup>38</sup> See, in particular, Tables 4-21 to 4-30. The Inspector considered these broad parameters to be satisfactory in terms of the description of the development for the purposes of the TWA Application and EIA Regulations.<sup>39</sup>
41. The limitations of this project are reflected in the draft Order. Arts 3(1)-3(3) grant the undertaker the power to construct, maintain, repower and decommission the authorised works. However, in so doing, various documents (outlined in Part 4 of Schedule 1) have to be submitted to and approved by the Welsh Ministers:<sup>40</sup> Art. 3(4). Any tidal works must then be constructed "in accordance with" those submitted documents: Art. 3(6). Any operations must take place in accordance with any documents approved under Art. 3(4): Art. 5(2). The Art. 3(4) documents are, therefore, key. In approving the content of those documents, the Welsh Ministers are specifically prohibited from authorising any works "outside the project

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<sup>36</sup> Ref: MDZ/D13

<sup>37</sup> Ref: MDZ/D14 paras. 5.6 and 5.7

<sup>38</sup> Ref: MDZ/A25.4

<sup>39</sup> PINS Assessment of Environmental Statement, 4 December 2019, para. 15 (Ref: MDZ/E10).

<sup>40</sup> Or NRW – see Art. 3(7).

parameters”: Art. 3(4). The “Project Parameters” are what is set out in Tables 4-21 to 4-30 of the ES: Art. 2(1).<sup>41</sup>

42. The MDZ as it is currently envisaged is described in paras. 4.1 and 4.2 of Dr Orme’s proof:<sup>42</sup>

*“4.1 The Morlais Demonstration Zone (MDZ) covers an area of 35km<sup>2</sup> of seabed to the west of Holy Island, Anglesey, Wales. The area is shown in Figure 1.*

*4.2 It is a total of c.8.3km north to south and at its widest point is 5.4km east to west. Following consultation, the eastern MDZ boundary has been designed to allow an inshore navigation channel which averages 1.9km in breadth between the coast and the nearest surface emergent tidal devices. At its narrowest points at South Stack and Penrhyn Mawr there are short sections where the breadth of this channel is limited to 1km. The MDZ boundary itself runs 500m closer to shore, with any tidal devices within this area constrained in size to allow a minimum under keel clearance of 8m (Restricted Area Blue). Similarly in the northern most part of the zone, around the west and also to the south, there is an area which allows for 20m of under keel clearance (Restricted Area Purple). In addition, in the area to the west and north of South Stack, no visually prominent devices are permitted (Restricted Area Gold).”<sup>43</sup>*

43. This will require intra-array cables and up to 9 export cables with cable tails, relevant navigation and environmental monitoring equipment, and of course the energy generating hubs.<sup>44</sup>
44. In terms of location, Dr Orme’s evidence both in his proof and orally<sup>45</sup> that it was The Crown Estate that developed the idea of Demonstration Zones, and sited the West Anglesey Demonstration Zone in 2013 following a review of key resource areas throughout the UK, consultation with stakeholders and its own Habitats Regulations assessment.<sup>46</sup> As Dr Orme outlined in evidence, 70% of all potential tidal demonstration zones in the UK are 500m or less from the coast. 83% are within 1,000m of it. In around 2015, the demonstration zone was moved further north, to where the MDZ currently lies, following higher definition flow modelling indicating that was a better area of tidal stream resource. Its current location covers the best area of tidal stream resource available.<sup>47</sup> It is also located within the North Anglesey Marine/Gogledd Môn Forol Special Area of Conservation (“SAC”),<sup>48</sup> which is designated for the harbour porpoise. It is in the vicinity of the Pen Lyn, Cardigan Bay and Pembrokeshire Marine SACs, designated for bottlenose dolphin and grey seal. It is also located off the coast of the Anglesey AONB.<sup>49</sup> We return to the significance of all this below.

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<sup>41</sup> Ref: MDZ/A16.2, and see the amended draft Order at Ref: Inquiry Doc – 102.

<sup>42</sup> Ref: MDZ/P10

<sup>43</sup> While the location of the Morlais project has been driven by nature, and not by the existence of constraints nonetheless the restrictions imposed on deployment the MDZ are all designed to deal with these constrains.

<sup>44</sup> Dr Orme evidence in chief, Day 1, PM session 1.

<sup>45</sup> Dr Orme evidence in chief; and Ref: MDZ/P10 para. 4.5 and following.

<sup>46</sup> Dr Orme evidence in chief.

<sup>47</sup> Dr Orme evidence in chief and see Ref: MDZ/P10 Fig 2 and Ref: MDZ/A27.2 Fig 5.6

<sup>48</sup> See Ref: MDZ/P2 Fig 1.

<sup>49</sup> Ref: MDZ/P5 Image 2, p.13.

45. Nine subsea cables will then be drawn in from the MDZ to the mainland in an area known as the export cable corridor. The cables then make landfall at Abraham's Bosom. Again it should be noted that a significant proportion of the Anglesey coastline (and all of that portion near the MDZ) falls within the Glannau Ynys Gybi/Holy Island Coast Special Protection Area ("SPA"), SAC and Site of Special Scientific Interest ("SSSI").<sup>50</sup> It is hoped, and indeed expected, that the cables will be able to transfer from the sea to the mainland via horizontal directional drilling ("HDD") – in short, a straight line tunnel being dug from the land (some 220m back from the cliff face)<sup>51</sup> out to sea.<sup>52</sup> In this way, it would completely bypass the cliff face and habitats concerned. Moreover, a condition to the deemed planning permission is now proposed requiring that Menter Môn demonstrate that HDD is not feasible before it uses any other method to achieve landfall.
46. In case that is not possible. Menter Môn has developed a fall-back – running those cables in J-tubes up the cliff face.<sup>53</sup> It should be noted (and as will be discussed in more detail below) that the footprint of this element of the project, if it is required, has already been substantially reduced, and that Abraham's Bosom is one of the narrowest points of the Holy Island Coast SAC/SSSI and SPA that could have been chosen.
47. From there, the cables will travel to a landfall substation.<sup>54</sup> From the landfall substation, cabling will follow a route predominantly along already existing roads (South Stack Road, Porthdafarch Road, Lon Isallt and Mill Road), detouring into private land on relatively few occasions.<sup>55</sup> That cabling will pass under the existing A55 highway and rail line, to the Grid Connection Substation at the National Grid's Penhros substation. This in turn will feature a 33kV supply to the Distribution Network Operator's existing infrastructure at Park Cybi, and a 132kV connection to the National Grid. Part of the cabling route between the Landfall Substation and the Grid Connection substation will require a taking of privately owned land. The main objectors at the outset of the inquiry were Land and Lakes<sup>56</sup> and Orthios<sup>57</sup>. Land and Lakes have now withdrawn their objection having reached agreement with Menter Môn.<sup>58</sup>

*The project: deployment*

48. Menter Môn is seeking permission to deploy up to 240MW. However, in light of the sensitive nature of the location, the remaining data gaps, and the inherent flexibility required by this PDE to accommodate devices of multiple types, it does not seek permission to deploy 240MW on day one. Instead, there are a number of limitations

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<sup>50</sup> Ref: MDZ/P1 Fig 1; Ref: MDZ/P3 Fig 1.

<sup>51</sup> In plot 5 of that same map – Ref: MDZ/A17.1.

<sup>52</sup> Beyond plot 1 in the TWAO Map1 Location Plan – Ref: MDZ/A17.1.

<sup>53</sup> A visualisation has been included in Ref: RPE007, Rebuttal Proof of Evidence of Mr Myers, p.6.

<sup>54</sup> Plans at Ref: MDZ/P5 p.19 and visualisation at p.20.

<sup>55</sup> For the route maps see Ref: MDZ/P8 Fig 18 and Refs: MDZ/A17.1-MDZ/A17.9.

<sup>56</sup> Who own a large amount of land along the route.

<sup>57</sup> Who own land surrounding the National Grid's Penhros substation – see further below.

<sup>58</sup> The formal withdrawal does not appear to have made it into the Core Documents. Pinsent Masons, on behalf of Land and Lakes, wrote to PINS on 11 December 2020. This letter is available on the PINS TWA Morlais website at <https://dns.planninginspectorate.gov.uk/projects/wales/twa-morlais-demonstration-zone/?ipcsection=docs>.

on what can be deployed, where and when. There are a plethora of plans and other documents that must be submitted to and approved by the Welsh Ministers or NRW prior to various stages, by virtue of Art. 3(4), 3(7) and Part 4, Schedule 1 of the Order.<sup>59</sup> We do not go through them all here, but we wish to highlight four key restrictions.

49. First, Menter Môn proposes a phased approach to deployment, as part of an overarching Environmental Monitoring and Mitigation Plan (“EMMP”).<sup>60</sup> An outline EMMP has been prepared at this consent stage (“Outline EMMP” sometimes referred to as “the OEMMP”), a detailed EMMP (“Detailed EMMP” sometimes referred to as “the DEMMP”) is intended to follow the consent. This, as Mr Fortune explained, is to be a “living document” over the lifetime of the project, adapted, improved, and resubmitted to the Welsh Ministers every time the Morlais Project commences or repowers any tidal works.<sup>61</sup> It is addressed in more detail below, but in sum includes the following stages:<sup>62</sup>
- (i) Following the establishment of an Advisory Group, the Regulator (NRW) and the Advisory Group review the technology parameters of a proposed Phase One deployment against the consented PDE. If it falls within the consented PDE then,
  - (ii) NRW must agree the level of deployment. If they do, then
  - (iii) The Advisory Group and Menter Môn identify the parameters of the Phase One deployment to be monitored, any mitigation to be deployed, and prepares a Detailed EMMP. It is then presented to NRW for approval. If NRW approves, then
  - (iv) Phase One (and any mitigation) can be deployed and demonstrated.<sup>63</sup> Thereafter,
  - (v) Phase One is monitored. After a period, the Advisory Group and NRW will review the significance of the EMMP outputs. If there is uncertainty about the potential for significant impacts, they continue to monitor. If there is the potential for significant impacts, array scale mitigation is deployed. Only after it is concluded that there are no significant effects can Menter Môn look toward Phase Two – and the process repeats.
50. At each stage, deployment is limited by reference to the tightest of the ecological parameters imposed by NRW. At the initial phase, any deployment has to be such that the collision risk comes under the threshold 0.7 bottlenose dolphins per year. That is going to lead to a relatively small scale deployment in the order about 12 MW likely between 5 – 10 devices, but it could be more (c. 21) if very much smaller devices are deployed.<sup>64</sup>

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<sup>59</sup> See Ref: Inquiry Doc - 102, Schedule 1 Part 4.

<sup>60</sup> See for a visualisation Ref: MDZ/A16.8, Ref: Inquiry Doc – 100 and 101 Plate 2-1.

<sup>61</sup> Mr Fortune evidence in Cross examination, Day 13 AM Session 1; see Ref: Inquiry Doc – 102, Draft Order Schedule 1 part 4.

<sup>62</sup> This is for deployment, there are a number of other safeguards for monitoring and mitigating environmental impacts in real time.

<sup>63</sup> Mr Fortune’s evidence on Day 13, AM session 1 was that some of the stages in the OEMMP are likely to run side by side.

<sup>64</sup> See Ref: MDZ/A31.13, Tables 3-3 and 3-4.

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51. Pausing there, there are two points that the Inspector asked us to be clear on for his note. The first is the relationship between phasing and adaptive management in the EMMP. The “phasing” is as outlined in paras. 37-40 of the Outline EMMP. It is the “Deploy a small phase, monitor, manage, deploy another” type approach we just outlined. The phasing is constrained by the ecological parameters imposed by NRW. “Adaptive management” is the iterative process whereby uncertainty is progressively reduced through monitoring and data study, and there is real time monitoring and deployment of mitigations. It is described more fully in paras. 41-49 of the Outline EMMP. So, the two obviously interact, because it is only through knowledge gained from adaptive management that one gains greater clarity on where the allowable parameters of the next phase are.
52. The Inspector’s second query was about the extent to which this phasing and adaptive management approach is a risk to the full deployment of the Morlais project. For the reasons we will explore in more detail when it comes to the ecology section below, we do not believe it is. We are certain, and the inquiry has heard from leading experts on this, that our assessments are highly precautionary, and predict, far far worse results than will actually eventuate. We are also firmly of the view that the mechanisms and technologies put in place within the EMMP can both be proven to work and will safeguard the local ecology. But the key point for the inquiry and the Welsh Ministers is that any residual risk remains on the project – it is not a risk that something may be placed into the sea which would cause a greater environmental harm than they assess at this stage.
53. Second, even when there is full deployment there are a number of restricted areas which limit what devices Menter Môn can deploy where.<sup>65</sup>
54. Third, prior to the construction, repowering or decommissioning of any tidal work, an updated navigational risk assessment (“NRA”) must be submitted and approved by the Welsh Ministers.<sup>66</sup> Thus, although this is a PDE approach, and although (as we will turn to below) concerns have been expressed about particular devices, a detailed device and array specific NRA will be undertaken before each deployment to ensure navigational safety. Nothing is going to go into the water without Welsh Ministers or NRW signing it off first.
55. Fourth, a Device Deployment Protocol (the “DDP”) must be submitted and approved by the Welsh Ministers<sup>67</sup> prior to every single deployment of a surface emergent device, or one with less than 8m or 20m under-keel clearances (“UKC”) in the restricted areas. This will require among other things an updated landscape, seascape and visual impact assessment to be undertaken. It must also be consistent with the updated NRA for each deployment.
56. Each of these documents must, as we outlined a moment ago, fall within the project parameters of the ES.
57. As we have said this is just a flavour of some of the checks in place, but what it does show is, notwithstanding the fact that we have adopted a PDE approach, there are device specific checks and balances at each and every stage to allow further consideration to be given to the effects on ecology, landscape, and navigation.

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<sup>65</sup> Ref: MDZ/A28.1, and Ref: Inquiry Doc – 102, Order Schedule 1 Part 3.

<sup>66</sup> Or NRW by virtue of Art. 3(7) of the Order.

<sup>67</sup> Or NRW by virtue of Art. 3(7) of the Order.

*The project: benefits*

58. Against that background, we come to the significant benefits of the Morlais project. Mr Bell has outlined them both in his Proof of Evidence<sup>68</sup> and orally<sup>69</sup> during this inquiry. This evidence, like Dr Orme's, went entirely without challenge. A number of the benefits of this project were repeated by those who came to give evidence at the public speaking session on day 2 of the inquiry. On a personal level, it is the first time either of our careers that our team have ever had more public speakers speaking in favour of a proposal, than against it.
59. First and foremost, it will contribute to combatting climate change through the generation of renewable energy. This has been a theme of both Mr Bell's evidence and a benefit recognised by the public speakers<sup>70</sup> - even those opposed to this project.<sup>71</sup> There are two points we wish to draw out:
- (i) It fills a gap in the renewable energy portfolio. Because of the nature of tidal stream energy, it is predictable. There are, as Dr Orme confirmed in evidence in chief,<sup>72</sup> four predictable peaks of energy – every day, every month, and every year. That, combined with the clever use of batteries, has the potential to create a constant base load supply of energy. This is almost unique in the renewable energy industry. Wind or solar energy, for example, are intermittent - they may have large gaps in their supply on days the wind does not blow or the sun does not shine. To fill those gaps, fossil fuels must be kept online. Tidal Stream energy provides a renewable way to fill that gap.
  - (ii) It has the capacity to generate up to 240MW of clean, renewable, energy. As Mr Bell explained, that could provide enough electricity to power 188,000 homes – more than Anglesey, Gwynedd and Conwy combined.<sup>73</sup>
60. Second, it will help the tidal stream sector to advance, with the attendant wider benefits in the fight against climate change that this provides. Again, this is a benefit stated by Mr Bell,<sup>74</sup> from the developers who have written in support of the application,<sup>75</sup> and from those who spoke in the public session in support of this development.<sup>76</sup> Key concerns to which Mr Bell urges regard to be had are outlined in para 7.1.3 of his proof. Those are:
- (i) The ability to bring the technology to a market ready position as soon as possible;

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<sup>68</sup> Mr Bell's Proof of Evidence (Ref: MDZ/P9), para. 7.1 and following.

<sup>69</sup> Day 1 PM sessions 1 and 2.

<sup>70</sup> See e.g. the evidence of Mr McHugh, Mr Jones, Ms Hooper, Mr Ap-Rhisiart and Ms Simes, Day 2 PM public speaking session.

<sup>71</sup> See e.g. the opening statement of Snowdonia Canoe Club and Canoe Wales p.5 (Ref: Inquiry Doc – 010), Opening Statement of RSPB para. 9 (Ref: Inquiry Doc – 008), the evidence of Mr Green for Whale and Dolphin Conservation Trust in the public speaking session (Day 2 PM public speaking session). Mr Maurici asked in the navigation RT (Day 10, AM session 2) if any disagreed with that proposition, and none did.

<sup>72</sup> Evidence in chief of Dr Orme - Day 1, PM session 1 and 2.

<sup>73</sup> Mr Bell's Proof of Evidence (Ref: MDZ/P9), para. 7.1.2.

<sup>74</sup> Mr Bell's Proof of Evidence (Ref: MDZ/P9), para. 7.1.3.

<sup>75</sup> Refs: MDZ/M1-MDZ/Z6

<sup>76</sup> See e.g. the evidence of Mr Wragg, Mr Ap-Rhisiart, Ms Moutel, Ms Simes, Ms Kynaston.

- (ii) The potential to further develop a local industrial and supply chain strategy and to service the UK and European markets;
  - (iii) The importance of having visibility of deploying marine devices at scale and that the MDZ provides this opportunity;
  - (iv) That early consent of site deployment will help prove both the technical performance and the environmental acceptance of technology and there is a unique opportunity to test operation of arrays and devices in multiple rows and columns;
  - (v) The benefits of deployment at scale which can lead to accelerated learning in relation to the fields of power off-take, materials/structures, optimised operations and maintenance: all with a view to reducing costs to a competitive level. By deploying sufficient capacity, it can help achieve cost reductions necessary so that tidal energy can compete with more established forms of renewable energy generation;
  - (vi) Without the scale of deployment of Morlais it will be challenging to model whole array interactions and progress with plans for larger deployment - which may mean that the economic and clean energy opportunities that the UK is uniquely positioned to secure will be missed. This includes opportunities to service the global tidal energy market.
  - (vii) That all of the above can lead to the unlocking of further investment.
61. We re-emphasise, however, that all of this can be done in a highly controlled and managed way that will avoid the risk of adverse impacts on biodiversity.
62. Third, there are significant benefits to be obtained, both for economic growth more generally and for the local community. Of course, Menter Môn is a not-for-profit social enterprise, which has a key objective of providing solutions to the varied challenges facing rural Wales. The benefits extracted by Menter Môn from this development will be returned to the local community. Again, key points on which we urge regard to be had include:
- (i) Job creation, including of highly skilled jobs. As Mr Bell confirmed in evidence, it is expected that this will generate up to 467 jobs per year during construction, and up to 456 jobs per year arising from operation and maintenance. Of these, approximately 137-228 could be in Anglesey, 91 in North Wales and 46<sup>77</sup> across the rest of Wales.<sup>78</sup> The inquiry also heard the first hand testimony from Ms Kynaston, Ms Simes and Ms Hooper regarding how the provision of marine energy jobs enabled them to either return to, or remain in, local communities otherwise suffering from “brain drain”.<sup>79</sup> The same would be a benefit here.
  - (ii) The utilisation of the local workforce and supply chain – to which Menter Môn is committed. Menter Môn has shown that the local spend of the proposed development may add somewhere between 0.4% and 4% to the annual

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<sup>77</sup> See the socio-economic section below for discussion of the agreement reached with the IoACC on how to secure maximum local employment and supply chain opportunities.

<sup>78</sup> Mr Bell’s Proof of Evidence (Ref: MDZ/P9) para. 7.1.6.

<sup>79</sup> Day 2, PM Public speaking session.

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economic activity of Anglesey.<sup>80</sup> That on its own is a significant amount, and a great headline. But look past that – at the human element of what that means in practice. It means using local contractors, and businesses. Not just for the “here and now” but over the long-term life of this project. And giving those businesses the incentive to take on staff, school leavers, and college graduates. The inquiry heard from Dr Jones how the businesses in this area, skilled up in anticipation of a Wylfa that will now never come, have the skills and equipment needed by developers at the MDZ.<sup>81</sup> Mr Ap-Rhisiart, of M-SParc, also spoke of how local companies are willing, able, and excited to take advantage of the opportunities this offers.<sup>82</sup> Mr Gleeson, a representative of Verdant Isles (a developer waiting in the wings to deploy at the MDZ), made three pertinent points: first the local supply chain is particularly important because transporting large devices can be difficult, second how impressed Verdant Isles has been with some of the local business which it has *already* contacted, and third the prospect of ancillary businesses arriving to accommodate this, such as battery storage sites and data centres. Morlais, he considered, would be a pathfinder.<sup>83</sup> We would ask that the evidence of Mr Jones-Griffith is considered, principal of Coleg Menai and Coleg Meirion-Dwyfor, who has supported this project precisely because of the opportunities it will afford to young people – both through the immediate project and beyond – for apprenticeships, training, and skill development. Real skills, real opportunities, real long term jobs, for the young people who are going to bear the brunt of this climate crisis.

- (iii) As Chapter 25 of the ES records,<sup>84</sup> it is anticipated that Anglesey could expect to benefit directly from local spend as a consequence of the project between £3.2m and £41.4m annually for the life of the project. The benefits to the North Wales region are expected to be between £2m and £25m annually for the life of the project, with the rest of Wales seeing potential benefits of £14.5m to £33m annually. Although not a point put forward by Mr Bell, the inquiry also heard from Mr Ap-Rhisiart of the benefits brought to Anglesey by being less reliant on the tourism sector. Now to be clear we don't think the tourism sector will suffer, but there is certainly, Mr Ap-Rhisiart submitted, a benefit in having a more diverse stream of inward investment into the Island.<sup>85</sup>

63. All of these benefits were reiterated by Mr Henry Aron of the North Wales Economic Ambition Board.<sup>86</sup>

64. As Mr Bell has noted,<sup>87</sup> the importance of these economic benefits cannot be underestimated in today's circumstances. This last year has seen the biggest collapse in economic activity and shock to the economy since records began, according to the Office of Budget Responsibility. As we will come to, over 10% of Anglesey's workforce is involved in the tourism sector – an area badly hurt by the

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<sup>80</sup> Mr Bell's Proof of Evidence (Ref: MDZ/P9) para. 7.1.6.

<sup>81</sup> Day 5, PM session 1. He highlighted one company which has already won such a contract.

<sup>82</sup> Socio-economic RT, Day 5, AM session 1.

<sup>83</sup> Socio-economic RT, Day 5, AM session 1.

<sup>84</sup> Mr Bell's Proof of Evidence (Ref: MDZ/P9), para 7.1.6. and Ref: MDZ/A25.25.

<sup>85</sup> Socio-economic RT, Day 5, AM session 1.

<sup>86</sup> Socio-economic RT, Day 5, AM session 2.

<sup>87</sup> Mr Bell's Proof of Evidence (Ref: MDZ/P9) para 7.1.7; and evidence in chief Day 1.

lockdown policies. The Committee on Climate Change (“CCC”) has given advice to the UK Government that there is a consistent economic and environmental imperative to deliver projects contributing to both the economic recovery and climate emergency. It is hard to think of a project better place to do that than the Morlais project.

65. Against the background of those benefits it is no surprise that there is already significant political support for the project. There is support in the North Wales Growth Deal, in WEFO funding, it was mentioned in the First Minister of Wales’ opening address at the 2019 Marine Energy Wales conference, and there have been various meetings between Menter Môn representatives and the Government. This is all recounted in the proof of Mr Billcliff.<sup>88</sup>

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<sup>88</sup> Mr Billcliff’s Proof of Evidence (Ref: MDZ/P8) para. 5.1.1.

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## **Legal principles**

66. So that is the background to the project. Before we turn to the main matters in issue we are going to outline some of the key legal principles governing the decision that the Welsh Ministers will have to make. The main legal issues are:

- (i) The regulatory regimes in issue and the relationship between them;
- (ii) The Ministers' obligations under the various pieces of environmental legislation;
- (iii) Utilisation of a PDE and what the legal requirements are;
- (iv) The extent to which the Ministers can rely on other regulatory regimes, bearing in mind (i), (ii) and (iii) above.

67. Some consideration of these principles also features in Chapter 2 of the ES.<sup>89</sup>

### *The regulatory regimes*

68. Menter Môn has addressed the various regulatory regimes covering this project in Eversheds Sutherland note of 23 November 2020,<sup>90</sup> from which we borrow extensively in the next few paragraphs.<sup>91</sup>

69. This project will require consenting under three different regimes:

- (i) The Order, applied for pursuant to the TWA;
- (ii) A planning permission under the Town and Country Planning Act 1990 ("TCPA"), deemed to be granted by provisions under the TWA; and
- (iii) A ML, required by the Marine and Coastal Access Act 2009 ("MCAA").

70. The application before this inquiry concerns the first two. Broadly, the TWA sets out procedures for authorising the construction and operation of certain transport projects (such as railways or works which interfere with navigation rights) that formerly required statutory approval under the Private Bill procedure in Parliament. The Private Bill procedure was required because the construction of such projects almost inevitably interferes with the rights of private citizens – compulsory purchase may be the only practical way of acquiring the necessary land, a new marina might interfere with navigation rights, and the operation of a project such as a railway might leave the operator liable to a nuisance claim. Without some sort of legislative attenuation of those rights, individuals might be able to prevent a project taking place. The Private Bill procedure allowed the attenuation of those rights, and the grant of various ancillary rights to (for example) undertake works on streets. The

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<sup>89</sup> Ref: MDZ/A25.2

<sup>90</sup> Ref: RPE008 i.e. the Applicant's Note on the Order and its interrelationship with other regimes.

<sup>91</sup> The note though needs to be read in full. It is a thorough and comprehensive analysis of the position that was warmly welcomed, and agreed with, by Counsel for NRW. Most other parties opposed to the Morlais project have made no comment on the note. The RSPB (see below) limited its comment to two paragraphs only – paras. 21 - 23 – it seemingly being the case that the remainder of the note was undisputed by RSPB.

TWA allows all that to be done via a Transport and Works Act Order. See further the *Encyclopaedia of Planning Law and Practice* at para 2-3372.

71. However, where something is to be built it is not enough to attenuate others' private rights. Two statutory regimes also exist to control development – a terrestrial development requires a planning permission under the TCPA, a development in the water requires a ML under the MCAA. In the case of **R. (Powell) v Marine Management Organisation** [2017] EWHC 1491 (Admin) the Court held at para. 82 that (emphases added)

*"Just as planning control is concerned with factors relating to the use of land (**Stringer v Minister of Housing and Local Government** [1970] 1 WLR 1281, 1294), marine licensing is concerned with use of the sea. Those uses are not limited to navigation, nor is the focus on rights of navigation. Amenity uses and development in the form of mineral extraction are examples of legitimate uses of the sea. Given that section 69(1)<sup>92</sup> is relevant to whether or not an application for a marine licence should be granted, it can be seen that "legitimate" is not used simply to refer to a lawful use or to legal rights, but in a broader sense to describe justified, proper or acceptable uses. Thus, "legitimate" allows the MMO to evaluate the merits of a use or of competing uses, including existing uses. Accordingly, the MMO can decide how much weight or merit to give to a proposal to use an area of sea for temporary development such as mineral extraction, or for permanent development such as residential or commercial buildings, as compared with the extent to which practical use is made of that area for navigation or indeed other "legitimate uses". For example, in the present case it is plain from the evidence received by the MMO that the spending beach and area of sea affected by the phase 2 works are used for only very limited navigation purposes and relatively infrequently."*

72. Section 90(2A) of the TCPA allows the Welsh Ministers to make a direction deeming that planning permission be granted for the onshore works (subject to conditions set out in the direction) alongside the making of the Order. There is no equivalent provision for a ML, which therefore always requires a separate application and approval – in Wales the approval function has been delegated to NRW by the Welsh Ministers.<sup>93</sup>
73. There are, of course, differences between these regimes. We do not need to undertake a comprehensive assessment of that now, but suffice to note for present purposes that in many ways the two development control regimes under the TCPA 1990 and MCAA 2009 are more flexible than an order granted under the TWA. Conditions on a planning permission<sup>94</sup> or ML<sup>95</sup> can be varied under the TCPA 1990 or MCAA 2009, albeit only on application being made and approval granted. Amendments to a ML are not infrequently required, and there are many examples of this. There is no provision to vary a TWAO – any application for that would require an entirely new application and inquiry. This is one way in which the TWAO regime is

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<sup>92</sup> This provides "In determining an application for a marine licence (including the terms on which it is to be granted and what conditions, if any, are to be attached to it), the appropriate licensing authority must have regard to— (a) the need to protect the environment, (b) the need to protect human health, (c) the need to prevent interference with legitimate uses of the sea, and such other matters as the authority thinks relevant."

<sup>93</sup> Art. 3, *Marine Licensing (Delegation of Functions) (Wales) Order 2013* (S.I. 2013/414, W.50)

<sup>94</sup> s.73 TCPA 1990.

<sup>95</sup> s.72 MCAA 2009

more limiting than the regime contained in the Planning Act 2008 for nationally significant infrastructure projects. There does not appear to be any justification for this, but it is important given this, that matters which do not need to be included in the TWAO are not, so as to allow for variation applications.

74. Notwithstanding the fact that there are three different regimes required here, for the two in which the Welsh Ministers will have to make a decision (the TWAO and the deemed planning permission), there is a large amount of overlap in the considerations that they will have to take into account in deciding whether to make the TWAO and grant the planning permission. Welsh PINS documents *Applications for Orders under the Transport & Works Act 1992* (Sept 2019) notes that the DfT's *A Guide to TWA Procedures* (2006) remains relevant and provides detailed guidance on TWAOs. That notes, *inter alia*, that where (as here) a planning direction has been sought, as a matter of policy the planning permits would be part of the consideration of whether to authorise the scheme (para. 1.4), and that in any case relevant planning policy is a matter to which is to be had regard (para 1.28). Planning considerations are therefore going to be an important part of the Welsh Ministers decision when deciding both the TWAO and Deemed Planning Permission, notwithstanding the two may be considered conceptually separate. This is not the time to rehearse the entire corpus of planning law but a matter has repeatedly arisen throughout the inquiry, which is how a public perception of harm should be taken into account. We refer to the relevant section of the *Planning Encyclopaedia* at para 70.39, which summarises the law.<sup>96</sup> We submit, broadly:

- (i) That public opposition *per se* is not a material consideration. However, the fact that fears and concerns are held by members of the public may constitute a material consideration if
  - a. They relate to a matter which is a material consideration;
  - b. They are objectively justified; or
  - c. Even if baseless, they may have land use consequences.
- (ii) Whether such fears and concerns must be dismissed if shown to be baseless is less clear, as there is a split in Court of Appeal authority. Even if, however, it is not an automatic dismissal questions of what risks exist, are acceptable, and are weighty enough to justify a departure from the local plan are all matters for the decision maker.

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<sup>96</sup> This matter came up during Day 10, AM Session 1, when we were the only lawyers "in the room". The Inspector asked Mr Maurici QC to "step away from" his client and "into the middle of the room" and advise the inquiry. That is not quite right, as Mr Maurici QC indicated during the hearing. We owe a duty to any tribunal to ensure that it is not misled. This includes drawing the Tribunal's attention to any decision or provision adverse to the interests of our client, which is particularly important when appearing against unrepresented parties (gC5). So, it is not the case that we can step away from our client and "advise" the Tribunal, but we do have to make sure it has all relevant legal materials in front of it. Mindful of that obligation we have enclosed the full extract of the *Planning Encyclopaedia* (Inquiry Doc -138) dealing with public perception of harm as, in our view, this gives a comprehensive and fair account. [Inspector's Note: The detailed explanation of the duty, and its source, is noted. The analogy was used to assist those without (much) experience of the tribunal system to understand the appropriateness of unopposed submissions to the inquiry on points of law.]

75. So those are the three broad regimes in issue here. As we have noted the regimes and how they will crossover in this particular case was outlined in more detail in the Eversheds Sutherland Note, which as we have said was not very controversial (save for the limited points made by the RSPB, to which we turn later). It should also be noted that there is a government steer toward the controls imposed by various regimes being complementary, rather than duplicating or conflicting with one another.<sup>97</sup> Menter Môn was given the same steer by NRW in this case – see para. 32 of its statement of case which states that “*NRW will argue that any overlap in the requirements of the TWAO, the planning permission and the marine licence should be avoided, wherever possible, to avoid duplication and confusion.*”<sup>98</sup>

#### *Environmental obligations*

76. Many of the environmental obligations biting on this project are derived from EU law. Over the course of this inquiry, we have ended the “implementation period” provided for by the European Union (Withdrawal) Act 2018 (“Withdrawal Act 2018”).<sup>99</sup> Ss. 2-3 of the Withdrawal Act 2018, as amended, provides that direct EU legislation, and EU-derived domestic legislation, continue to have effect in domestic law after that day. Very broadly, the interpretation of any retained EU law is to be the same as it was before that day, insofar as the retained EU law remains unmodified in UK law and regulations have not been promulgated providing otherwise (s. 6(3) of the Withdrawal Act 2018). We will refer below primarily to the relevant UK and Welsh regulations which still have effect, and the old EU directives and CJEU case law, as those remain an aid to interpretation save insofar as we will direct otherwise.

77. The Ministers have obligations under s. 13A-C TWA, rules 7, 11 and Schedule 1 of the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006 (S.I. 2006/1466) (the “TWA Application Rules”), and the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017

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<sup>97</sup> See e.g. Ref: MDZ/D1 Planning Policy Wales at paras 1.20 (“*The planning system should not be used to secure objectives which are more appropriately achieved under other legislation. The aim should be to maintain the principle of non-duplication, wherever possible, even where powers and duties resulting from other legislation may also be the concern of local authorities. This does not mean failing to address issues which the planning system should be properly concerned with. In practice issues will often overlap and in such circumstances the planning system will have a preventative and early role to play and is capable of both avoiding the creation of problems and securing multiple benefits through positive and proactive planning approaches. Where appropriate it will be advantageous to address issues in parallel. The grant of planning permission does not remove the need to obtain any consent that may be necessary, nor does it imply that such consents will be forthcoming, and similarly, the granting of other consents should not be used to justify the granting of planning permission*”) and 5.13.3 (“*Planning authorities, other relevant local authority departments and Natural Resources Wales (NRW) must work closely together to ensure that conditions attached to planning permissions and those attached to Environmental Permits are complementary and do not duplicate one another. Sufficient information should accompany development proposals in order for planning authorities to be satisfied that proposals are capable of effective regulation. NRW should assist the planning authority in establishing this position through the provision of appropriate advice. The parallel tracking of planning and environmental permitting applications should be the preferred approach, particularly where proposals are complex, so as to assist in mitigating delays, refusal of applications or conditions which may duplicate the permit/licence*”).

<sup>98</sup> Ref: MDZ/N9

<sup>99</sup> As amended by the European Union (Withdrawal) Act 2020.

(S.I. 2017/567) (the “2017 EIA Regulations”)<sup>100 101</sup>, to ensure that the project undertakes a sufficient Environmental Impact Assessment (“EIA”). This, of course, stems originally from the EU’s EIA Directive.<sup>102</sup> We do not propose to go into great detail about this now as we do not think that is required, but highlight three key points:

- (i) EIA is intended to be an aid to efficient and inclusive decision-making in special cases, not an obstacle race for developers: **R (Jones) v Mansfield DC** [2004] Env LR 21, per Carnwath LJ (as he then was) at para. 58. There is no requirement for an ES to contain every scrap of environmental information: **R (Blewett) v Derbyshire CC** [2003] EWHC 2775 at para. 68. Otherwise, as was noted in **R v Rochdale MBC ex p. Milne (No. 2)** [2001] Env LR 22 at para. 113, an ES would become so voluminous that both the public and local planning authority would lose the wood for the trees. Moreover, in **Blewett** at para. 41 Sullivan J said:

*“As Lord Hoffmann said in R. v North Yorkshire CC Ex p. Brown [2000] 1 A.C. 397, at p.404, the purpose is “to ensure that planning decisions which may affect the environment are made on the basis of full information”. In an imperfect world it is an unrealistic counsel of perfection to expect that an applicant’s environmental statement will always contain the “full information” about the environmental impact of a project. The Regulations are not based upon such an unrealistic expectation. They recognise that an environmental statement may well be deficient, and make provision through the publicity and consultation processes for any deficiencies to be identified so that the resulting “environmental information” provides the local planning authority with as full a picture as possible ...”.*

So what is to be taken into account is not just the ES but all the “environmental information”, see e.g. the 2017 EIA Regulations which at Reg. 2 define this as meaning “the environmental statement, including any further information and any other information, any representations made by any consultee and any representations duly made by any other person about the environmental effects of the development” (emphasis added). See too the definition of “EIA Information” in s. 13A(3) TWA. So, it is not correct, as the RYA and SCC seem to think, that an objector can point to some alleged deficiency in the baseline information presented in the ES and that this, even if it is accepted to be a deficiency, invalidates the process. It is open to

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<sup>100</sup> As to whether the 2017 Regulations apply given the fact that the 2006 Regulations also require an Environmental Statement to be submitted. We consider so. The 2017 Regulations prevent a planning permission or subsequent consent for EIA development being granted unless an EIA has been undertaken. “Planning Permission” has the same meaning as in the TCPA 1990, which means “planning permission granted under Part III” of that Act (s. 336 TCPA 1990). Part III includes s. 90 deemed planning permission. S. 90(2A) of course is the basis on which a deemed planning permission is sought. In any case, this is more a matter for formality than anything, given that this is already a requirement under the 2006 Regulations.

<sup>101</sup> There are also the Conservation of Offshore Marine Habitats and Species Regulations 2017/1013. For the avoidance of any doubt these do not apply to the current application. They do not apply to the UK’s territorial sea. The Territorial sea is, broadly, 12 nautical miles from shore: s. 1(1) Territorial Sea Act 1987. The MDZ is within that.

<sup>102</sup> Directive 2011/92/EU as amended by Directive 2014/52/EU.

objectors, and indeed incumbent on them, not just to point out alleged deficiencies but to submit their own information on such matters. Not every gap in information is tantamount to a legal error; that would be a ridiculous suggestion. Regrettably, much time (and also public resources) was wasted by the RYA and the SCC pursuing palpably bad points such as these in relation to the socio-economic impacts.

- (ii) Whether an ES contains sufficient information on which the decision maker (here, the Welsh Ministers) may rely in making their decision, is reviewable only on *Wednesbury* grounds: ***Atkinson v Secretary of State for Transport*** [2006] EWHC 995 (Admin) at para. 31, ***R (Friends of the Earth Ltd) v Heathrow Airport Ltd*** [2020] UKSC 52 at para. 142-143. In this regard we would note that the ES was subject to a full scoping process with PINS prior to submission.<sup>103</sup> Following submission of the ES this was subject to detailed assessment,<sup>104</sup> with further environmental information submitted. There are no outstanding requests for further environmental information from PINS in this TWAO. The ML application also went through detailed scoping and it will be recalled that the position is that all environmental information submitted in the ML process has also been submitted to this inquiry.
- (iii) It is well recognised that an ES is limited to what can be achieved on the current state of knowledge. This should be obvious, and has been recognised in legislation (see, e.g. Reg. 11(2)(b) of the TWA Application Rules, Reg. 17(4)(d) 2017 EIA Regulations) and in case law (see e.g. ***Preston New Road Action Group v Secretary of State for Communities and Local Government*** [2018] Env LR 18, para. 67). The Divisional Court in ***Spurrier v SST*** [2019] EWHC 1070 (Admin)<sup>105</sup> at para. 417 in considering the provisions of both the EIA and SEA Directives in this regard said that in terms of what must be included “*a judgment is involved as to “the information that may reasonably be required”, taking into account current knowledge, assessment methods, the contents and level of detail in the plan, its stage in the decision-making process and whether matters are more appropriately assessed in other procedures*”. The issue in this litigation was, whether at the plan stage (the adoption of the Airports NPS supporting a third runway at Heathrow) more detailed assessment was required of noise. The authors of the assessment that accompanied the NPS used indicative flight paths<sup>106</sup> because the patterns of air traffic movement likely to be created by the use of a new runway were at that stage uncertain and it was not possible to base the assessment of likely noise impacts on definite flight paths. The claimants argued that using only one set of indicative flight paths, as the assessment had done, was not enough. This argument was rejected by the Divisional Court and by the Court of Appeal<sup>107</sup>: see paras. 168, 170 and 173 – 175 of

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<sup>103</sup> Ref: MDZ/A8

<sup>104</sup> Ref: MDZ/E10 and Ref: MDZ/E11

<sup>105</sup> Upheld on this point by the Court of Appeal in ***Plan B v SST*** [2020] P.T.S.R. 1446, and not the subject of appeal to the Supreme Court albeit that there is further endorsement of this approach in the judgment of the Supreme Court see ***R. (Friends of the Earth Ltd) v Heathrow Airport Ltd*** [2020] UKSC 52 para. 144-145

<sup>106</sup> Para. 167.

<sup>107</sup> In the same source.

the Court of Appeal's judgment.<sup>108 109</sup> This rejection was on the basis that when the NPS was being prepared, the siting, dimensions and design of the new runway were not yet final and hence it was reasonable to use indicative flightpaths only, and indeed only one set of those.

78. Although the ML application is not before this inquiry for determination, it should be noted that where works require a ML, the EIA Directive has been implemented into national legislation by the Marine Works (Environmental Impact Assessment) Regulations 2007 (S.I. 2007/1518) as amended.
79. The second broad branch of environmental legislation and regulation impacting this project is that concerned with the protection of habitats, birds and species. At EU level, this stemmed from the Habitats Directive and the Wild Birds Directive.<sup>110 111</sup> The key piece of legislation is the Conservation of Habitats and Species Regulations 2017 (S.I. 2017/1012) (the "Habitats Regulations"), as amended.<sup>112</sup> This is not the time for a thorough legislative review. Broadly, the Habitats Regulations require sites to be selected and designated as European Sites.<sup>113</sup> This is done by reference to which natural habitat types listed in Annex I of the Habitats Directive, and which species listed in Annex II of the Habitats Directive, the site hosts (Regs. 12-19 Habitats Regulations).
80. Once designated, controls exist on the approval of plans and projects that might have an adverse effect on the integrity of a European Site (Part 6, Regs. 61-113 Habitats Regulations). Reg. 63 requires an appropriate assessment to be undertaken for consents etc. prior to that consent being given, if the plan or project is likely to

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<sup>108</sup> "174 Mr Pleming submitted that if paragraph (c) of Annex 1 is read, as it should be, in the light of the precautionary principle and the aim of the SEA Directive to ensure that communities likely to be affected by a plan or programme are consulted and given an early and effective opportunity to comment, it is necessary to avoid underestimating the area over which flights may occur. Using only one set of indicative flight paths, as the Secretary of State did here, was not enough. It was probable that many people significantly affected by noise would not be under those flight paths. It was true that in the Divisional Court the Hillingdon claimants had not argued for the use of "actual flight paths" in the Appraisal of Sustainability (see para 473 of the judgment). But in the absence of precise flight paths, the Secretary of State ought to have used areas instead, not indicative flight paths. Mr Pleming relied on the approach indicated in Advocate General Kokott's opinion in **D'Oultremont v Région Wallonne** (Case C-290/15) EU: C:2016:561 , points 37–45.

175. We cannot accept those submissions. In our opinion, there was nothing amiss in the Secretary of State's use of indicative flight paths. It was neither irrational nor in any other way unlawful. As Mr Maurici argued, it was understandable, for at least three reasons. First, when the ANPS was being prepared, the siting, dimensions and design of the new runway were not yet final. Secondly, the assessment of noise impacts in the Appraisal of Sustainability had to be undertaken before the separate statutory process for airspace change was conducted, and its outcome known. And thirdly, the approach adopted by the Secretary of State corresponded to that of the Airports Commission when comparing the three airport expansion schemes in its final report in July 2015." (emphases added).

<sup>109</sup> This part of the Court of Appeal's judgment was not subject to appeal to the Supreme Court and so is unaffected by that decision: [2020] UKSC 52, the Supreme Court in fact endorsed this aspect of the Court of Appeal's analysis in considering the other grounds before it.

<sup>110</sup> EC Directive 92/43/EEC (as amended) (Ref: MDZ/B5)

<sup>111</sup> EC Directive 2009/147/EC (as amended) (Ref: MDZ/B8)

<sup>112</sup> Conservation of Habitats and Species (Amendment) (EU Exit) Regulations S.I. 2019/579 (Ref: MDZ/B10)

<sup>113</sup> Although the regulations only protect European sites.

have an adverse effect on the integrity of a European Site “in view of” that site’s conservation objectives (Reg. 63(1)). An authority cannot grant permission if the project would adversely affect the integrity of the European Site (in shorthand, whether it would have an adverse effect on site integrity or (“AEOSI”). In considering whether there is AEOSI, the competent authority must have regard to the manner in which it is proposed the project be carried out, or any conditions or restrictions subject to which it proposes the authorisation be granted – that is to say any proposed mitigation. If there is found to be an AEOSI notwithstanding any proposed mitigation, Reg. 64 allows the project to continue in certain circumstances of overriding public interest. (For clarity we do not rely on Reg. 64 here, but mention it as it is relevant to a matter between us and NRW). Regs. 63 and 64 transposed Arts. 6(3) and (4) of the Habitats Directive. There is under these provisions a clear difference in law between mitigation and compensation measures. Mitigation measures (i.e. those which “lessen the negative effect of a plan or project, with the aim of ensuring, if possible, that... the ‘integrity of the site’ is not as such adversely affected”) may be taken into account in determining whether there is AEOSI under Reg. 63. In contrast compensation measures (i.e. one that “does not achieve that goal within the narrower framework of the plan or project itself but seeks to counterbalance the failure to do so through different, positive effects with a view to, at the very least, avoiding a net negative effect”) may only be considered under Reg. 64: see **Briels v Minister van Infrastructuur en Milieu** [2014] PTSR 1120, per Advocate-General Sharpston at para. 36.

81. It is worth being clear on what is required of an appropriate assessment under Reg. 63 Habitats Regulations. Lord Carnwath in **R (Champion) v North Norfolk District Council** [2015] UKSC 52 said at para. 41:

*“‘Appropriate’ is not a technical term. It indicates no more than that the assessment should be appropriate to the task in hand: that task being to satisfy the responsible authority that the project ‘will not adversely affect the integrity of the site concerned’ taking account of matters set in the article. As the court itself indicated in Waddenzee, the context implies a high standard of investigation. ... the issue ultimately rests on the judgment of the authority. ... no special procedure is prescribed, and, while a high standard of investigation is demanded, the issue ultimately rests on the judgment of the authority.”*

82. In terms of what it must address, it must (a) catalogue the entirety of habitat types and species for which a site is protected, (b) identify and examine the implications of the project for the species present on that site, and those species present for which the site has not been listed, and the implications for habitat types and species outside the boundaries of the site insofar as those implications are liable to affect the conservation objectives of the site, and (c) where the competent authority rejects the findings in a scientific expert opinion recommending additional information be obtained, include an explicit and detailed statement of reasons capable of dispelling all reasonable scientific doubt concerning the effects of the work envisaged on the site concerned. See the judgment of the CJEU in **Holohan v An Bord Pleanála (C-461/17)** [2019] Env L.R. 16, para. 37 and following. It should also be based on the “best scientific knowledge in the field”.
83. However, in terms of what level of certainty must be shown, there is no requirement for absolute certainty. The case-law makes clear that the removal of all scientific uncertainty is not necessary in order for an appropriate assessment to be completed: see **Landelijke Vereniging tot Behoud van de Waddenzee and Another v Staatssecretaris Van Landbouw, Natuurbeheer en Visserij** [2005]

2 C.M.L.R. 31 per the Advocate-General at para. 107. Some of the CJEU case-law talks of the need to have complete precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effect of the proposed works on the protected site concerned. The English and Welsh courts though have made clear that:

*"absolute certainty that there would be no adverse effects was not required; a competent authority could be certain that there would be no adverse effects even though, objectively, absolute certainty was not proved; R (Champion) v North Norfolk District Council [2015] UKSC 52 at [41], and Smyth v Secretary of State for Communities and Local Government [2015] EWCA Civ 174 at [78]"*

(per Sir Duncan Ouseley Sitting as a High Court Judge in **Compton v Guildford BC** [2019] EWHC 3242 (Admin) at para. 207).

84. The differences between EIA and Habitats obligations was explored by Sullivan LJ in **R (An Taisce (National Trust for Ireland)) v Secretary of State for Energy and Climate Change** [2015] PTSR 189, at para. 16:

*"While the text of Art.2(1) of the EIA Directive and Art.6(3) of the Habitats Directive is essentially similar, and both Directives are concerned with environmental protection, there is in my view a clear distinction between the two Directives. The scope of the EIA Directive is wide-ranging, it ensures that any project which is likely to have significant effects on the environment is subject to a process of environmental impact assessment. The EIA Directive does not prescribe what decision must be taken by the competent authority to permit or to refuse if the environmental impact assessment concludes that the proposal is likely to have significant effects on the environment. The Habitats Directive is more focused, it protects particular areas of Community importance, which have been defined as "special areas of conservation", and which must be maintained at, or restored to, "favourable conservation status": see articles 2 and 3. In order to achieve this aim Art.6(3) provides that, subject only to "imperative reasons of overriding public interest" (see Art.6(4)), where there has been an "appropriate assessment": the competent authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned." (emphasis added)*

85. In that case, he continued to consider what "likely" means having regard to both the EIA Directive and the Habitats Directive (now of course the relevant regulations). We highlight the following points:

- (i) Under the Habitats Directive, a project must have an appropriate assessment undertaken if it is "likely" to have a significant effect on a protected site (Art. 6(3) Habitats Directive, equivalent to Reg. 63(1) Habitats Regulations). It is 'likely' if it cannot be excluded. (para. 14). Now that applies at the 'screening' stage of the Habitats Regulations – we are obviously past that, as a Habitats Regulations Assessment has been undertaken, and so the concern below and what the Welsh Ministers have to address is whether it will or will not have AEOSI (Reg. 63(5) Habitats Regulations). We flag the "likely" point here, not because we are relying on it, but because it is a helpful contrast with "likely" under the EIA Directive.
- (ii) Under the EIA Directive, for a Schedule 2 Development one must assess both whether the effect is "likely" to occur, and then whether it would be

“significant” (see e.g. Art. 1(1), and 2(1) EIA Directive, Reg. 3 and the definition of “EIA development” in Reg. 2 of the 2017 EIA Regulations). “Likely” here connotes a “real risk”, not simply that something is more likely than not (see paras. 12, 23). So, for example, that case concerned the construction of a nuclear reactor at Hinkley Point in Somerset. The Defendant did not carry out a transboundary consultation required by Art. 7 of the directive because, although the risks of (say) a meltdown were significant, they were not “likely”. The Court of Appeal upheld that approach in **An Taisce**.

86. It is important to note that in respect of the ornithology issues RSPB’s case is focussed on impacts – which Menter Môn says will be minor adverse – on two species of bird: the breeding guillemot and razorbill populations from the South Stack and Penlas colonies. These are **not** birds that are features of any relevant European site. The evidence clearly shows no impact on the Manx shearwater populations relevant to nearby SPAs. Nor is any issue on impact on SPA chough pursued.
87. Of course, when dealing with wildlife, dolphins and other cetaceans are also protected under other legislation.<sup>114</sup> The Welsh Government has particular responsibilities with respect to Sites of Special Scientific Interest (“SSSIs”) under s. 28G of the *Wildlife and Countryside Act 1981*. An authority to which this section applies has the duty “...to take reasonable steps, consistent with the proper exercise of the authority’s functions, to further the conservation and enhancement of the flora, fauna or geological or physiographical features by reason of which the site is of special scientific interest”. We flag here the key species of concern to the RSPB at this inquiry, namely guillemot and razorbill, are associated with the Glannau Ynys Gybi / Holy Island Coast SSSI but neither species are identified as interest features for the site’s designation and the populations of these species at this site are not part of, or associated with, SPAs.<sup>115</sup> There is thus here no prohibition on granting consent (e.g. like that under Reg. 63 / Art. 6(3)) whatever the impacts on these species, these are though, of course, material considerations.

#### Project Design Envelope

88. As we have already noted, the nature of a demonstration zone requires permission to be sought for a PDE. It is well recognised that seeking a planning permission for an outline consent can be reconciled with the need to undertake EIA. This was set down by Sullivan J in **Milne (No. 2)**. He acknowledged at paras. 89-90 that, where a project is to evolve over a period of years, there is no reason why a “description of the project” should not recognise that fact, provided it takes full account of the implications for the environment of this need for flexibility – it is for the relevant authority to decide whether the difficulties and uncertainty is not acceptable in terms of its potential effect on the environment.<sup>116</sup> The level of information required is that

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<sup>114</sup> See Dr Learmonth’s Proof of Evidence at paras. 4.9 – 4.12 (Ref: MDZ/P2).

<sup>115</sup> See Dr Grant’s Proof of Evidence at para. 4.4 (Ref: MDZ/P1).

<sup>116</sup> The full passage reads:

*“89. Since the “description of the project” required by Article 5(2) is a means to that end, in that it provides the starting point for the assessment process, there is no reason to believe that the directive was seeking to be unduly prescriptive as to what would amount to an appropriate description of a particular project. The requirement in Article 5(2) (see page 89C to E) to provide “information on the site, design and size of the project” is, and is intended to be, sufficiently flexible to accommodate the particular characteristics of the different types of*

which is sufficient to enable the main or likely significant effects to be assessed and the mitigation measures described.<sup>117</sup> In *Milne (No. 2)*, the environmental statement had considered the worst environmental impacts that could arise from the project. Sullivan J held this was entirely acceptable.<sup>118</sup> The important points are that the application (1) acknowledges the need for details to evolve over a number of years within clearly defined parameters, (2) the environmental assessment takes account of that need and reflects the likely significant effects of such a project in the environmental statement, and (3) the authority imposes conditions to ensure the process of evolution keeps within the parameters applied for and assessed.

89. Although of course we are not here dealing with an outline consent in the way one would think of an “outline” planning permission, this same approach is applied large infrastructure projects where the details will evolve over time and cannot be fixed at the time of consent. The PINS Guidance note on *Rochdale*<sup>119</sup> while focussed on the 2008 Act is also relevant here. It explains:

*“1.2 The ‘Rochdale Envelope’ approach is employed where the nature of the Proposed Development means that some details of the whole project have not been confirmed (for instance the precise dimensions of structures) when the application is submitted and flexibility is sought to address uncertainty. Such an approach has been used under other consenting regimes (the Town and Country Planning Act 1990 and the Electricity Act 1989) where an application has been made at a time when the details of a project have not been resolved.”*<sup>120</sup>

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*project listed in annexes I and II (Schedules 1 and 2 to the assessment regulations). It may be possible to provide more or less information on site, design and size, depending on the nature of the project to be assessed.*

*90. If a particular kind of project, such as an industrial estate development project (or perhaps an urban development project) is, by its very nature, not fixed at the outset, but is expected to evolve over a number of years depending on market demand, there is no reason why “a description of the project” for the purposes of the directive should not recognise that reality. What is important is that the environmental assessment process should then take full account at the outset of the implications for the environment of this need for an element of flexibility. The assessment process may well be easier in the case of projects which are “fixed” in every detail from the outset, but the difficulty of assessing projects which do require a degree of flexibility is not a reason for frustrating their implementation. It is for the authority responsible for granting the development consent (in England the local planning authority or the Secretary of State) to decide whether the difficulties and uncertainties are such that the proposed degree of flexibility is not acceptable in terms of its potential effect on the environment.”*

<sup>117</sup> See para 104: *“If one asks the question “how much information about the site, design, size or scale of the development is required to fall within ‘a description of the development proposed’ for the purposes of paragraph 2(a)?”, the answer must be: sufficient information to enable “the main”, or the “likely significant” effects on the environment to be assessed under paragraphs 2(b) and (c), and the mitigation measures to be described under paragraph 2(d).”*

<sup>118</sup> See para. 122: *“Both the directive and the regulations recognise the uncertainties in assessing the likely significant effects, particularly of the major projects, which may take many years to come to fruition. The assessment may conclude that a particular effect may fall within a fairly wide range. In assessing the “likely” effects, it is entirely consistent with the objectives of the directive to adopt a cautious “worst case” approach. Such an approach will then feed through into the mitigation measures envisaged under paragraph 2(c). It is important that they should be adequate to deal with the worst case, in order to optimise the effects of the development on the environment”.*

<sup>119</sup> Ref: MDZ/D14

<sup>120</sup> It may also be used in the TWA context.

*1.3 The need for flexibility is identified in a number of National Policy Statements (NPS) which suggest the Rochdale Envelope as an approach to address uncertainties inherent to the Proposed Development ...".*

90. NPS EN-1 explains that "[t]he 'Rochdale Envelope' is a series of maximum extents of a project for which the significant effects are established. The detailed design of the project can then vary within this 'envelope' without rendering the ES inadequate".<sup>121</sup> NPS EN-3 similarly says in the context of wind (but the same is a fortiori with tidal given how nascent it is) that "wind farm operators are unlikely to know precisely which turbines will be procured for the site until some time after any consent has been granted".<sup>122</sup>
91. It says that where flexibility is sought and the precise details are not known, then "the applicant should assess the effects the project could have... to ensure that the project as it may be constructed has been properly assessed (the **Rochdale Envelope**). In this way the maximum adverse case scenario will be assessed and the IPC should allow for this uncertainty in its consideration of the application and consent". The **Rochdale** envelope is explained to be "a series of maximum extents of a project for which the significant effects are established. The detailed design of the project can then vary within this 'envelope' without rendering the ES inadequate"<sup>123</sup>.
92. As already noted above the use of the **Rochdale** envelope/ a PDE is also explicitly endorsed in the UK Wave and Tidal Demonstration Zones Workshop Report<sup>124</sup> - a joint document produced by among others the Welsh Government, NRW and The Crown Estate. It says that its key findings include:

*"Use of the Rochdale Envelope*

- *The use of a project design envelope or Rochdale Envelope is common in applications for wave and tidal stream projects.*
- *The use of a well-defined design envelope which clearly distinguishes information relevant to different technologies and different project components allows flexibility to accommodate future developments and different technical parameters.*
- *If the envelope is not used robustly it can bring risks into the consents process and also in delivering projects on site post-consent.*
- *The understanding of the history of the envelope and the full implications of its use is variable and project descriptions in environmental impact assessments (EIAs) reflect this.*
- *The word 'Rochdale' has little relevance to marine projects and workshop participants considered that 'project design envelope' was more suitable terminology to use. At present the terms are used interchangeably.*
- *Project design envelopes have been used in other sectors and experience from these could benefit the wave and tidal stream industry."*

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<sup>121</sup> Ref: MDZ/D2, Footnote 78

<sup>122</sup> Ref: MDZ/D3

<sup>123</sup> Ref: MDZ/D3, Footnote 23

<sup>124</sup> Ref: MDZ/D13

93. We submit that a PDE approach is equally acceptable under the Habitats Regulations. What it is that the authority must assess may be different and use different thresholds (as outlined above), but there is nothing inimical to the Habitats Regulations in seeking to assess the worst-case parameters of a project in a PDE format. To hold otherwise would kill any developments near European Sites that may need to evolve over time. And this is a view explicitly supported by NRW in this particular context in *Defining project envelopes for marine energy projects: review and tidal energy test facility and marine mammals case study*<sup>125</sup>: see above.

*Reliance on other consenting regimes*

94. Where consent is required for a development under more than one regime it has long been recognised that the decision may assume a subsequent regulatory authority will act with competence. In **Milne (No. 2)** Sullivan J said at para. 128:

*" 128. Any major development project will be subject to a number of detailed controls, not all of them included within the planning permission. Emissions to air, discharges into water, disposal of the waste produced by the project, will all be subject to controls under legislation dealing with environmental protection. In assessing the likely significant environmental effects of a project the authors of the environmental statement and the local planning authority are entitled to rely on the operation of those controls with a reasonable degree of competence on the part of the responsible authority: see, for example, the assumptions made in respect of construction impacts, above. The same approach should be adopted to the local planning authority's power to approve reserved matters. Mistakes may occur in any system of detailed controls, but one is identifying and mitigating the "likely significant effects", not every conceivable effect, however minor or unlikely, of a major project."*

95. This was then considered by **Smith v Secretary of State for the Environment, Transport and the Regions** [2003] Env LR 32, [33]:

*" 33. In my view it is a further important principle that when consideration is being given to the impact on the environment in the context of a planning decision, it is permissible for the decision maker to contemplate the likely decisions that others will take in relation to details where those others have the interests of the environment as one of their objectives. The decision maker is not however entitled to leave the assessment of likely impact to a future occasion simply because he contemplates that the future decision maker will act competently. Constraints must be placed on the planning permission within which future details can be worked out, and the decision maker must form a view about the likely details and their impact on the environment." (emphasis added).*

96. **R (Hereford Waste Watchers Ltd) v Herefordshire CC** [2005] Env LR 29, Elias J said:

*" 34. I would therefore summarise the material principles in play here, as derived from Smith and Gillespie and the decisions to which they refer, as follows:*

*1. The decision whether a process or activity has significant environmental effects is a matter for the judgment of the planning authority. In making that*

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<sup>125</sup> Ref: MDZ/F15

*judgment it must have sufficient details of the nature of the development, of its impact on the environment and of any mitigating measures.*

*2. Equally, it is for the planning authority to decide whether it has sufficient information to enable it to make the relevant judgment. It need not have all available material provided it is satisfied that it has sufficient to enable a clear decision to be reached.*

*3. In making that determination, the planning authority can have regard to the mitigating measures provided that they are sufficiently specific, they are available and there is no real doubt about their effectiveness. However, the more sophisticated the mitigating measures and the more controversy there is about their efficacy, the more difficult it will be for the authority to reach a decision that the effects are not likely to be significant.*

*4. If the authority is left uncertain as to the effects, so that it is not sure whether they may be significant or not, it should either seek further information from the developer before reaching a conclusion, or if an ES has already been provided it should require a supplement to the ES which provides the necessary data and information. It cannot seek to regulate any future potential difficulties merely by the imposition of conditions.*

*5. The authority cannot dispense with the need for further information on the basis that it is not sure whether or not there are significant environmental effects, but that even if there are, other enforcement agencies will ensure that steps are taken to prevent improper pollution. However, it should assume that other agencies will act competently and it should not therefore anticipate problems or difficulties on the basis that those agencies may not do so.*

97. This was reiterated in ***Atkinson v Secretary of State for Transport***. That concerned a TWAO granted for the construction of a tunnel. Following the inquiry, the Secretary of State relied, in part, that the excavation, treatment and disposal of materials could be carried out within prejudicing public health and safety, accepting the view of the Environment Agency that the statutory procedures for regulating these activities, taken with the proposed planning conditions relating to waste management, were sufficient. It could not be identified at that stage exactly which landfall sites and haulage routes could be used. We draw attention to paragraphs 25 and following, which relate to reliance on subsequent procedures when granting permission under a TWAO. It considers both ***Smith*** and ***Rochdale***. We draw attention in particular to para. 29, which is in similar terms to that which we have already cited in ***Hereford Waste Watchers Ltd***:

*"29. The position, therefore, as I understand it, is this. The decision maker must make his decision in the light of an environmental statement that describes the likely significant effects of the project and the measures to be taken to avoid, reduce or remedy any significant adverse effects. In determining whether the statement does provide the necessary description he is not entitled, in relation to a particular area of potential impact, to take the view, simply because subsequent consent from some other responsible body will be required, that no consideration needs to be given as to whether there are likely to be significant effects in that area or what they will be or what mitigation measures are needed. What he is entitled to do, however, is to reach the conclusion, on the basis of such information as he has that is of relevance to the particular area of potential impact, and in the light of the need for subsequent consent from the other*

*responsible body, that the effects in that area are unlikely to be significant or that appropriate mitigation measures will be taken. He must, that is to say, have some information before him that, when coupled with the need for subsequent consent, enables him to conclude that the effects will not be significant or that appropriate mitigation measures will be taken. As Sullivan J put it in Milne (at para 114) in relation to reserved matters in a planning permission:*

*"The local planning authority are entitled to say, 'We have sufficient information about the design of this project to enable us to assess its likely significant effects on the environment. We do not require details of the reserved matters because we are satisfied that such details, provided they are sufficiently controlled by condition, are not likely to have any significant effect.'"*

*30. For the Secretary of State to have relied as he did on the need for subsequent approvals to be obtained would only have been unlawful, in my judgment, if he had had no information before him that, when coupled with the need for such approvals, was capable of enabling him to reach the decision that he did. The question thus comes down to the adequacy of the information."*

98. While we are here, it is also worth noting to what it is that NRW Regulatory will have to have regard in deciding whether to grant a ML. S. 69(1) MCAA 2009 provides:

*"(1) In determining an application for a marine licence (including the terms on which it is to be granted and what conditions, if any, are to be attached to it), the appropriate licensing authority must have regard to—*

*(a) the need to protect the environment,*

*(b) the need to protect human health,*

*(c) the need to prevent interference with legitimate uses of the sea,*

*and such other matters as the authority thinks relevant."*

99. Exactly what obligations this imports on NRW was recently considered in **Powell** (see above) at paras. 80 and following. So, environmental considerations will be at the forefront of NRW's mind.

#### *Conclusion*

100. That has been a somewhat lengthier exposition of the legal principles than one would usually make in closing submissions. However, it is hoped that this hearing has served to illuminate the principles underlying some of the key points of dispute. It is against that background that we turn to the main matters identified by the Inspector.

## **Main matters**

### **1. The policy and legislative background to the proposal**

101. There are two principal issues under this heading – the policy and legislative background to this proposal, and the relationship between the various regulatory regimes. We take each in turn.

#### *Policy and legislative support for the proposal*

102. An essential reading list was provided in section 1.4 of Mr Bell's Proof of Evidence.<sup>126</sup> His evidence on the policy support for this project is outlined in detail there, was discussed in his oral evidence and, as already noted, went entirely unchallenged despite being tendered for cross examination. He has updated this with two notes as further policy support has emerged in the course of the inquiry.<sup>127</sup> Therefore, it is safe to rely on his conclusions that there is strong policy support for this project.

#### (i) The Climate Change and Energy Policy Background

103. There are, unsurprisingly, international, European, UK and Welsh policy imperatives to reduce climate change. As Mr Bell says at para 4.1.2 of his Proof of Evidence, "*there is unequivocal, clear and consistent policy support at all levels, from international to local, for the deployment of renewable energy generally to combat global heating, diversify the mix of energy sources, achieve greater security of supply, and to attain legally binding renewable energy and emission reduction targets.*" Internationally, the relevant materials are set out in Mr Bell's proof, but particularly the Paris Agreement (12 December 2015) which provides the imperative for parties to reach global peaking of greenhouse gas emissions as soon as possible. This Agreement now feeds through into the UK and Welsh Government's legislative targets for 2050.

104. Targets at the European level are outlined in para 4.2.9 (and onward) of Mr Bell's proof. Again, we refer to all references, but particularly highlight the 2018 Renewable Energy Directive, which establishes a binding renewable energy target for the EU for 2030 of at least 32% of energy generation from renewables. For the UK, the obligations include for 15% of all energy consumed in the UK to come from renewable sources by 2020. Based on the latest (July 2020) statistics from the UK Government, the current position is that the UK is well short of that target as at the end of 2019 – a mere 12.3%. Although these are European targets, as explained above, the Withdrawal Act 2018 converts EU laws, rules and targets into domestic UK law. These targets cannot, therefore, be avoided.

105. Turning to the UK policy position, this is outlined in section 4.3 of Mr Bell's proof. All we do here is highlight some key points:

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<sup>126</sup> Ref: MDZ/P9

<sup>127</sup> Ref: Inquiry Doc – 014 & Ref: Inquiry Doc – 046

- (i) The CCC's landmark report on "*Net Zero*" was published in May 2019, recommending the UK reach the net zero target by 2050, and recommending a target for Wales of a 95% reduction in greenhouse gas emissions by 2050. This, it was said, would deliver on the obligations made under the Paris Agreement.
- (ii) Shortly thereafter, the UK amended the Climate Change Act 2008, which now requires a 100% reduction of greenhouse gas emissions by 2050.
- (iii) More recently, the CCC's Annual report to the UK Parliament (June 2020)<sup>128</sup> provided advice to the UK Government on securing a green and resilient recovery following the COVID-19 pandemic. We would particularly like to highlight the following section, extracted from the Executive Summary:

*"Choices in the coming months must steer a recovery that drives vital new economic activity, accelerates our transition to Net Zero and strengthens our resilience to the impacts of climate change. UK domestic climate ambition can be the basis for UK international leadership in 2021, in the Presidency of the delayed UN climate summit in Glasgow (COP26) and in the G7 Presidency. It is 12 months since Net Zero became law, requiring the UK to reduce net emissions of greenhouse gases to zero by 2050. Initial steps towards a net-zero policy package have been taken, but this was not the year of policy progress that the Committee called for in 2019.*

*Net Zero has been adopted as a key goal of the Government .....but we are not making adequate progress in preparing for climate change. The delay of COP26 to November 2021 provides a window to address this policy deficit and establish a credible internationally-leading position"*<sup>129</sup>

To achieve success, net-zero emissions and improved climate resilience are integral to the COVID-19 recovery. There are new economic and social pressures, but climate investment can help create jobs and stimulate the economic recovery, while changing the course of UK emissions and improving our resilience to climate change for the coming decade and beyond:

*"the economic recovery from [COVID-19] gives the UK a chance to grow back in a way that is fit for the low-carbon future to which it aspires, and that can benefit from the industrial and economic developments that this future offers."*<sup>130</sup>

- (iv) The UK Government's unambiguous position, in its response to the CCC progress report,<sup>131</sup> is that meeting net zero emissions will require reductions in emissions across the economy on a scale not previously seen. The Executive Summary states:

*"under any feasible scenario, meeting net zero will require reductions in emissions across the economy on a scale not previously seen; ambitious and early deployment of existing technologies and approaches; and innovation in new technologies... will enable us to offset emissions from*

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<sup>128</sup> Ref: MDZ/D8

<sup>129</sup> Ref: MDZ/D8 p.13

<sup>130</sup> Ref: MDZ/D8 p.16, Box 1

<sup>131</sup> Ref: MDZ/D50

*sectors which cannot fully decarbonise*".<sup>132</sup> The government's objective is to *"deliver emissions reductions at a rate which...maximises the economic opportunities for the UK, both from domestic deployment of clean technologies as well as through realising export opportunities in what promise to be large and growing international markets in low carbon technologies and services"*<sup>133</sup>

- (v) Since the inquiry opened more matters occurred, which Mr Bell considered are material to this section: the National Audit Office Report on *Achieving Net Zero* (2020); the Government's new target of a 68% reduction in greenhouse gas emissions on 1990 levels by 2030; the new energy White Paper; the sixth CCC Carbon Budget; the CCC document *The path to Net Zero and reducing emissions in Wales*; the UK Government's announcement of the North Wales Growth Deal; and the Hornsea Three Offshore Wind Farm DCO. Mr Bell considered these further supported his conclusions, and has submitted two notes to this effect.<sup>134</sup>

106. Turning to Welsh Government energy policy, again we refer to section 4.4 of Mr Bell's proof, where he references key statutory and policy provisions including the Well-Being of Future Generations (Wales) Act 2015<sup>135</sup> (the "2015 Act"), the Environment (Wales) Act 2016<sup>136</sup> (the "2016 Act") and *Prosperity for All, A Low Carbon Wales* (2019).<sup>137</sup>

107. The Well-Being of Future Generations act followed an extensive consultation period known as the National Conversation. Section 3(1) of the 2015 Act requires public bodies to carry out "sustainable development", which is defined in s.2 as *"the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle (see section 5), aimed at achieving the well-being goals (see section 4)."* Section 5(1) incorporates the well-known definition of sustainable development as acting *"in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs."* Section 4 outlines the seven well-being goals, and we extract the most relevant six below:

A prosperous Wales An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.

A resilient Wales A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the

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<sup>132</sup> Ref: MDZ/D50 p.7

<sup>133</sup> Ref: MDZ/D50 p.7

<sup>134</sup> Ref: Inquiry Doc – 014 & Ref: Inquiry Doc – 046

<sup>135</sup> Ref: MDZ/B15 Well-being of Future Generations (Wales) Act 2015

<sup>136</sup> Ref: MDZ/B6 Environment (Wales) Act 2016

<sup>137</sup> Ref: MDZ/J3 Prosperity for All: A Low Carbon Wales (2019)

capacity to adapt to change (for example climate change).  
[...]

A healthier Wales A society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood.

A more equal Wales A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio-economic background and circumstances).

A Wales of cohesive communities Attractive, viable, safe and well-connected communities. [...]

A globally responsible Wales A nation which, when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being.

108. The 2016 Act sets in place an obligation on the Welsh Government to reduce greenhouse gas emissions by 80% against 1990 levels by 2050. As Mr Bell outlines,<sup>138</sup> there are regulations in progress to move this target toward the CCC recommendation to achieve a 95% reduction in greenhouse gas emissions by 2050, but it is acknowledged these are not yet in place. The commitments by the Government, however, are both there and clear.

109. It is against this strong policy backdrop that the importance of the climate emergency should be viewed. The Welsh Government declared a climate emergency on 29 April 2019:<sup>139</sup>

*"I believe we have the determination and ingenuity in Wales to deliver a low carbon economy....we hope that the Declaration by Welsh Government today can help to trigger a wave of action at home and internationally. Tackling climate change is not an issue which can be left to individuals or to the free market. Our sustainable development and environmental legislations is already recognised as world leading and now we must use that legislation to set a new pace of change."*

110. Of course, the effects of climate change are not just limited to a hotter planet. There is a link between the climate emergency and an upcoming ecological emergency, as Mr Bell outlined in evidence in chief. Climate change is causing harm to ecosystems and species – something recognised in the draft National Development Framework (to which we return below),<sup>140</sup> and Overarching Energy National Policy Statement ("NPS") EN-1.<sup>141</sup>

111. Bringing that all together, it is the unchallenged view of Mr Bell<sup>142</sup> that energy policy from the local to the international level shows there is an urgent need and driving policy imperative for more renewable energy capacity. This was recognised as urgent in 2011 when the National Policy Statements were published. That need is

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<sup>138</sup> Mr Bell's Proof of Evidence para. 4.4.9 (Ref: MDZ/P9); and see MDZ/D12

<sup>139</sup> Ref: MDZ/D11

<sup>140</sup> Mr Bell's Proof of Evidence para. 5.4.27 (Ref: MDZ/P9)

<sup>141</sup> Ref: MDZ/D2 para. 5.3.6; see Mr Bell's Proof of Evidence para. 6.3.3

<sup>142</sup> Mr Bell's Proof of Evidence, section 4.5 (Ref: MDZ/P9)

even greater now. Mr Bell does not assert, and we do not argue, that this matter overrides all other considerations. However, it is one to be afforded significant weight in the consideration of this case.<sup>143 144</sup>

(ii) Planning Policy

112. The other suite of policies that bear on this application are the local and national planning policies. There are many of these, and although we attempt to condense them down here, again we refer to chapter 5 and section 6.2 of Mr Bell's proof in full. Again, his evidence on this point was entirely unchallenged.
113. Beginning with UK-wide planning policy, the suite of NPSs, in particular the Overarching NPS for Energy EN-1<sup>145</sup> and NPS for Renewable Energy EN-3<sup>146</sup> are material considerations. Although the Energy White paper has announced a review of these, it makes clear these remain in force until that is concluded.<sup>147</sup> These were devised for energy generating stations and energy infrastructure of this scale, and although the policy provision date is 2011 the documents are nevertheless important and relevant, and may be helpfully employed as a framework for assessment. In particular, NPS EN-3 section 2.6 (which relates to offshore wind farms) is analogous. Although tidal stream technology has progressed since NPS EN-3 was written, policy imperatives to accept that flexibility is required in the consent, basing an assessment on the maximum adverse case scenario and allowing for uncertainty in consideration (see e.g. para. 2.6.42 of EN-3) are particularly relevant here.
114. Also of direct relevance, both at the UK-wide and Welsh levels are the UK and Welsh National Marine Plans. The Welsh National Marine Plan (2019) ("WNMP")<sup>148</sup> is the most up to date. We also refer to Planning Policy Wales (2018) ("PPW"),<sup>149</sup> also relatively up to date, having been published in 2018. Some key points that we would pull out of the WNMP:
- (i) Para. 20, which expresses the longstanding principle that "*any decision with the potential to affect the plan area, including those related to terrestrial activities, should be taken in accordance with this plan unless relevant considerations indicate otherwise.*"
  - (ii) The WNMP identifies a number of "resource areas" (i.e. the spatial distribution of natural resources) that could support future sector activity. WNMP p. 16, Fig 2 illustrates an overview of those, and this includes tidal stream energy to

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<sup>143</sup> Some examples of where great weight has been given to this consideration by Welsh Ministers in previous decisions, see Mr Bell's Proof of Evidence at paras. 4.5.6 (Ref: MDZ/P9) and following

<sup>144</sup> A query has been raised by the North Wales Wildlife Trust in their Statement of Case (MDZ/N11) regarding the energy cost of this project as compared to, say wind. For the avoidance of doubt the policy imperative is for renewable technologies – encouragement of renewable energy development is an important component of national renewables policy. Whether there might be more effective ways of tackling climate change is a matter for such policy – it is not for consideration on the context of the determination of this application. See Mr Bell's Proof of Evidence at 4.5.4 onward (Ref: MDZ/P9)

<sup>145</sup> Ref: MDZ/D2

<sup>146</sup> Ref: MDZ/D3

<sup>147</sup> Ref: Inquiry Doc – 048 p.55

<sup>148</sup> Ref: MDZ/D5

<sup>149</sup> Ref: MDZ/D1

the west and north of Anglesey. The WNMP thus provides explicit endorsement for the location of the Morlais project.

- (iii) There are also various cross-cutting policies in the WNMP. Ones of particular relevance are listed in para. 5.4.11 of Mr Bell's proof, relating to matters such as planning policy (GEN\_01 and GEN\_02), sustainable economic growth (ECON\_01), co-existence of sectors (ECON\_02), and minimising climate change (SOC\_10).
- (iv) It includes general policies of relevance. Again, we bring out but one example – Policy SCI\_01, which specifically states that:

*"Relevant public authorities should make decisions using sound evidence and a risk-based, proportionate approach. Where appropriate they should apply the precautionary principle and consider opportunities to apply adaptive management."*

- (v) There is a key sector specific policy for low carbon technologies. On p.94 the WNMP states:

*"Energy – Low Carbon*

*Sector Objective 1*

*To contribute significantly to the decarbonisation of our economy and to our prosperity by increasing the amount of marine renewable energy generated, through: [...]*

*Supporting the development and demonstration of wave energy and tidal stream technologies in the short to medium term;*

*Increasing (where appropriate) the number of wave energy and tidal stream energy generation devices deployed in commercial scale developments over the medium term; [...]*

*Sector Objective 2*

*To develop Wales as an exemplar of marine renewable energy technology by developing the essential skill base, infrastructure and technical knowledge to support the development of the industry over the next 20 years."*

As Mr Bell brings out in his Proof of Evidence, this policy has been specifically developed with reference to the 2016 Act and PPW, and highlights marine renewable energy as a strategic priority for marine planning, with significant potential for sustainable development over the WNMP lifetime. It also highlights the potential employment generation that can result from scaling up commercial arrays, and estimates that by 2040 tidal stream energy could support almost 14,500 jobs (see the supporting text paras. 327-328). It also notes the Welsh Government is "Strongly committed" to unlocking the energy potential from Welsh waters (para. 336), and backing this project would only underline that commitment.

- (vi) WNMP Policy ELC\_03 'Low carbon Energy (supporting) tidal stream' states:

*"ELC\_03 a: Proposals for tidal stream energy generation will be supported where they contribute to the objectives of this plan. Proposals should*

*comply with the relevant general policies and sector safeguarding policies of this plan and any other relevant considerations”;*

*“ELC03 b: In order to understand future opportunities for tidal stream energy development, relevant public authorities in the sector are encouraged, in liaison with other interested parties, to collaborate and understand opportunities for the sustainable use of tidal stream energy resources including identification of..... natural resources that provide the potential opportunity for use”;*

- (vii) Again, we would just draw attention to the following elements of the supporting text at para 344 (emphasis added):

*" 344. Under Policies ELC\_02 and ELC\_03 the use of demonstration zones should be supported and facilitated by using a risk-based approach to consenting, employing adaptive management where this is necessary and appropriate for the management of impacts that are hard to predict at the point of decision making in line with Policy SCI\_01. The Welsh Government is working with TCE, NRW, industry, Marine Energy Wales and others to progress testing and demonstration zones for wave and floating wind and tidal stream energy in order to enhance and further develop knowledge and understanding of risks, opportunities and capabilities. The demonstration zones off south Pembrokeshire (wave) and west Anglesey (tidal stream) provide good opportunity for developers to deploy, refine and demonstrate their technologies before expanding projects into wider commercial scale resource areas, subject to successful tests and acceptability in terms of potential adverse effects."*

115. It is Mr Bell’s unchallenged view that the proposed development is consistent with those policy provisions, with other relevant policies in the WNMP and with the WNMP as a whole. Against that view the RYA have suggested that the policy conflicts with the WNMP, based entirely on the RYA’s view of the impact of the proposal on recreational boating.<sup>150</sup> We will deal with that in more detail when we come to main matters discussions later, but suffice to note here that the RYA did not take the opportunity to challenge Mr Bell’s conclusion when it was made in evidence, which we submit gives an indication of how unsupportable they know their contentions to be.

116. A further key planning policy document, and one which the Inspector specifically highlighted, is the draft National Development Framework *Future Wales – The National Plan 2040*<sup>151</sup> (the “NDF”). Mr Bell addresses this in his Proof of Evidence from para 5.4.25 and following.<sup>152</sup> The post consultation amended NDF was placed before the Senedd on 21 September 2020. We highlight the following points:

- (i) Chapter 1 now makes reference to both the climate emergency and ecological emergency to which we have already referred. We quote from p.3:

*“we face a climate emergency which is actively changing our environment and directly affecting humans; we have an ecological emergency, where the behaviours and decisions of the human race are causing harm to the*

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<sup>150</sup> RYA Statement of Case, para. 11.5 (Ref: MDZ/N2)

<sup>151</sup> Ref: MDZ/D41

<sup>152</sup> Mr Bell Proof of Evidence, para 5.4.25 onward (Ref: MDZ/P9)

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*resilience of ecosystems and species; we have suffered the effects of a global health pandemic and must re-energise our economy in a sustainable way, demonstrating that we have learnt from previous excesses that have resulted in inequitable wealth and access to services. The Welsh Government will face these challenges and find the opportunities for a better Wales with every mechanism at our disposal. Our National Development Framework in this context is an important lever to deliver the change we need."*

- (ii) The NDF explicitly refers to the WNMP, noting that the WNMP has informed the development of the NDF and, where relevant, it should inform strategic and local Development Plans and planning decisions. The two work together to provide a framework for the management of change around the coast. The NDF explicitly acknowledges that co-ordination between marine and terrestrial planning is important to facilitate the development of, among other things, energy generation.<sup>153</sup>
- (iii) References in Chapter 2 to climate change have been strengthened from the initial version. In particular, it now states that it is *"vital that we reduce our emissions to protect our own wellbeing and to demonstrate our global responsibility"*.<sup>154</sup>
- (iv) Although offshore proposals do not fall within the remit of the NDF, the Welsh Government sets out in Policy 18 that it is supportive of offshore proposals, noting that the *"the onshore development aspect of offshore schemes are supported"*.<sup>155</sup> It cross-refers to the WNMP, recognising there are a number of opportunities to generate renewable energy across a variety of technologies both onshore and offshore which *"should be maximised to help meet the targets."*
- (v) Chapter 5 makes reference to the regions of Wales. Policy 24 is dedicated to "North West Wales and Energy", stating that *"The Welsh Government supports North West Wales as a location for new energy development and investment. Proposed developments associated with the Isle of Anglesey Energy Island Programme, [...] will be supported in principle as a means to create significant economic benefits for the area as well as generating renewable or low carbon energy. [...] On-shore developments associated with offshore renewable energy projects will be supported in principle"*.

117. So, the latest version of the NDF places additional emphasis and importance on climate change, and maintains specific references to the offshore opportunities presented in the context of the Isle of Anglesey. Mr Bell's unchallenged view is that this development is consistent with the document when read as a whole, and that the NDF should be afforded significant weight.

118. To complete the planning policy picture, reference should be made to the Joint Local Development Plan ("JLDP")<sup>156</sup> and the provisions of the Isle of Anglesey Area of Outstanding Natural Beauty Management Plan.<sup>157</sup> Mr Bell deals with key policies

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<sup>153</sup> Reg: MDZ/D41 at pp. 8-9 of the PDF document

<sup>154</sup> Ref: MDZ/D41 at p.21 of the PDF document

<sup>155</sup> Ref: MDZ/D41 at p.82 of the PDF document, column 1.

<sup>156</sup> Ref: MDZ/D52

<sup>157</sup> Ref: MDZ/D7

from both in his proof.<sup>158</sup> In the interests of time we highlight only JLDP Theme 3,<sup>159</sup> which aims to support growth and regeneration and transform the local economy under the umbrella of the Anglesey Energy Island Programme, and JLDP Strategic Policy PS7, which supports (wherever feasible and viable), renewable energy generation, including from marine sources. There is thus strong support for this scheme in the statutory development plan as well. We should also note here (and we will address this in more detail below) that although IoACC initially had concerns the scheme was contrary to the JLDP, those have been addressed.<sup>160</sup>

119. Taking that together – and we appreciate there is a lot – it is Mr Bell’s view that the principle of this development has compelling policy support.<sup>161</sup> Menter Môn agrees, and commends that unchallenged conclusion to the inquiry.
120. It is against that broad background that we move onto the policy context for the main matters in issue: ecology, character and appearance, socio-economic impact, and navigation.
121. The first is biodiversity and ecology. These have been addressed at section 6.3 of Mr Bell’s Proof of Evidence and again by him in evidence in chief. We particularly refer the inquiry to his Proof of Evidence, as that includes a lot of helpful cross referencing. Although biodiversity has taken up a lot of inquiry time, the policy position can in fact be relatively shortly stated. The key point drawn out by Mr Bell is that, when it comes to marine mammals, the broad policy approach seeks to avoid adverse impacts, minimise impacts where they cannot be avoided, and mitigate impacts. From his review of Dr Learmonth’s evidence (which we will come to shortly), Mr Bell considers a highly precautionary approach has been taken to allow the deployment of Phase One, and put appropriate safeguards (such as the EMMP) in place to minimise the risk of adverse effects.<sup>162</sup> Overall, he relies on Dr Learmonth’s position that the applicant has worked and will continue to work with NRW to ensure there is no significant risk to marine mammals and no potential for adverse effect on the integrity of designated sites where marine mammals are a qualifying feature. Similarly, he has drawn on the approach of Dr Grant when it comes to considering matters of ornithology, and Mr Campbell for onshore ecology. Taking that body of evidence together Mr Bell considers the proposed development is, in terms of applicable planning policy, acceptable. It should also be noted that, in the Statement of Common Ground now agreed with IoACC<sup>163</sup> it is agreed that an ecological action plan is now secured through deemed planning condition 3.
122. The second specific matter highlighted by the Inspector is character and appearance. IoACC does not now object on these grounds, because of mitigation committed to as part of the project, and because Menter Môn has agreed to fund certain measures, secured by a section 106 (“s.106”) obligation cross linked to condition 21 of the draft deemed planning conditions.<sup>164</sup> Those funds are to be payable by Menter Môn and applied toward (1) landscape improvement works on land managed by IoACC, (2) providing funding to projects undertaking landscape restoration or enhancement programmes, (3) directly funding landscape

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<sup>158</sup> See para 5.5.1 onward

<sup>159</sup> p.29

<sup>160</sup> Ref: MDZ/L7 p.22 row 26

<sup>161</sup> Mr Bell Proof of Evidence section 6.2, and evidence in chief Day 1, PM (Ref: MDZ/P9)

<sup>162</sup> In this, Mr Bell also relies on the evidence of Mr Fortune.

<sup>163</sup> Ref: MDZ/L7, Appendix B

<sup>164</sup> Ref: MDZ/L7, p.21 and Appendix B Condition 21

improvement work on third party owned land, and (4) improving public access to land including the provision of new public road rights or improving existing roads. It is agreed these measures are sufficient to address IoACC's concern that the proposals are contrary to the JLDP, specifically policies PS 19, AMG 3 and AMG 4.

123. There are, however, parties that still raise character and appearance concerns, and so we address them. The policy matters, to which regard should be had, are all referred to in detail in section 6.4 of Mr Bell's Proof of Evidence. In particular, he highlights key policies in the JLDP and the AONB Management Plan. We do not recite them here. Instead, we emphasise Mr Bell's conclusions – again unchallenged. In his view, relying on the detailed evidence of Mr Myers:

- (i) Menter Môn has been proactive in incorporating mitigation measures in the offshore elements of the project. These include limitations on the number of surface emergent tidal devices and where they can be deployed; a minimum separation distance of 1km applied to the coastline for visually prominent devices, with it generally being further; and the DDP;
- (ii) In addition, in terms of the onshore components of the project, structures have been positioned to reduce potential seascape, landscape and visual effects (e.g. by considering the ground level of any buildings and locating them in the context of existing structures where possible); specific mitigation is proposed in relation to the landfall Substation (comprising the design and layout of the structures, proposed materials, boundary treatments and reducing security fencing and lighting); and the use of underground cables and routing this within local road corridors where possible.

124. It is accepted that there would be some significant adverse impact on views from the AONB of the seascape, and that the development would not be consistent with policy objectives that seek to enhance the AONB. However, almost no major development would ever be able to satisfy that policy principle of enhancement, and it is inescapable that any type of development will result in some policy tensions with those provisions. Moreover, the locations in the UK that are suitable for tidal device deployment are all in or near remote places appreciated for the landscape – and those which are frequently protected as such (as Dr Orme explained). The Skerries and PTEC proposals for example are both located off AONBs. A balance is required as to what is acceptable given the constraints imposed by geography and the pressing need for more renewable energy. What is clear is that considerable efforts have gone into ensuring that the design approach has been very carefully considered, which is supplemented by the various mitigation provisions referred to above. These were all explained in detail in Mr Myers' evidence, and we come back to that. Overall, taking all of that into account it is Mr Bell's unchallenged view that given the evidence presented by Dr Orme and Mr Myers, the proposed development is acceptable in terms of planning policy in respect of these matters.

125. Turning to the policies underlying socio-economic impact of the project, these are addressed in detail at section 6.5 of Mr Bell's Proof of Evidence, where he cross references in detail to the evidence of Dr Jones and to both national policies and the JLDP. In particular we draw attention to the Vision set out in the JLDP at para. 4.7, which sees the Isle of Anglesey adapting to and responding positively to the challenges of climate change. A fundamental part of that vision is that the Isle of Anglesey is:

*"recognized as a leading location for a variety of renewable and low carbon energy sectors and knowledge based industries, which will have contributed to transforming the local economy, ....., generating low carbon energy and catalysing regeneration in the Plan area."*

126. Importantly in terms of the local economy, there are economic benefits set out in Chapter 25 of the ES and summarised in Mr Bell's proof at para. 6.5.9 with regard to the estimated local expenditure during construction, the jobs to be created during construction and the repowering stages, and from operational and maintenance activity. Overall, in terms of the benefits that are estimated to occur for the project, and in light of the various mitigation actions proposed with regard to socio-economics as set out in the evidence of Dr Jones, Mr Bell considers that the proposed development accords with planning policies to support local economies. Again, this is unchallenged and we commend it to the inquiry. We also note in passing (we will come back to this when discussing the substance of socio-economic impact), that IoACC is now content with the socio-economic effects of the projects and the mechanisms that allow for the monitoring and securing of benefits and mitigations. This is reflected in the Statement of Common Ground.<sup>165</sup>
127. Notwithstanding the fact that no party sought cross examine Mr Bell when the opportunity was offered, the RYA Proof of Evidence raises the matter of recreational amenity and socio-economic matters. In particular, Mr Hill's Proof of Evidence asserts that NPS EN-1 requires a socio-economic impact assessment at local or regional levels, and that Menter Môn, with regard to recreational boating and associated economic activity, failed to undertake that assessment.<sup>166</sup> He also states that applicants should describe the existing socio-economic conditions in the area in order to give proper consideration to mitigation, and asserts again that Menter Môn has failed to do so.<sup>167</sup> We will come back to whether this is factually correct below, but from a policy perspective it is Mr Bell's (unchallenged) view that there are two points here: (1) the socio-economic impact of the project in relation to recreational boating and associated economic activity, and (2) effects in relation to water based recreational amenity. These he considered covered in:
- (i) The evidence of Mr Myers and the Seascape Landscape Visual Impact Assessment ("SLVIA") chapter of the ES;<sup>168</sup>
  - (ii) The evidence of Cdr Brown in terms of navigation and the associated ES chapter;<sup>169</sup> and
  - (iii) The evidence of Dr Jones and as set out in the Chapter 25 of the ES.<sup>170</sup>
128. The impacts, Mr Bell considered, would include potential direct impact on the recreational resource area which has primarily been assessed by Cdr Brown. From a planning policy perspective, the material impacts are broadly, and on a high level basis:
- (i) The potential for direct impact on recreational activity areas;

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<sup>165</sup> Ref: MDZ/L7 p.22 onward at entries 27-36

<sup>166</sup> Mr Hill Proof of Evidence para A.10 (Ref: POE008)

<sup>167</sup> Mr Hill Proof of Evidence para A.10 (Ref: POE008)

<sup>168</sup> Ref: MDZ/A25.24

<sup>169</sup> Ref: MDZ/A25.15

<sup>170</sup> Ref: MDZ/A25.25

- (ii) Visual impact in relation to recreational amenity for water based activities; and
- (iii) Whether the effects, were they to arise, could have a knock-on indirect impact in relation to propensity for visitors or users to spend time in the area, for to be deterred from undertaking repeat visits.

129. Mr Bell concluded, from his review of the ES chapters and the evidence of the witnesses, that these matters are satisfactorily covered. The allegation that such assessments have not been undertaken is therefore incorrect.

130. Mr Bell also considered Mr Hill's allegation in paragraph C1 of his Proof of Evidence<sup>171</sup>, based on the WNMP and policy ELC-02b regarding the need for collaborative working when establishing a demonstration zone, that Menter Môn "*has not had due regard for the WNMP with respect to promoting collaborative work between stakeholders before applying for consent*". That, Mr Bell considers, to be contrary to the evidence before the inquiry on the approach undertaken and the evidence outlined by Cdr Brown. It is Mr Bell's experience when dealing with major infrastructure projects that if the landscape and visual effects of a development are deemed acceptable in the overall planning balance (and clearly that is Menter Môn's position here) then as a consequence the effects of the development in relation to tourism and recreation and those aspects of the local economy would be acceptable. There may, Mr Bell considered, be particular circumstances in any given case where there might be a specific activity requiring more detailed consideration, and that particular topic is addressed in more detail by other witnesses. He also added that a key matter of the WNMP is the policy of facilitating satisfactory co-existence between users, as expressed through policy ECON\_02 (and see Mr Bell's proof at para 5.4.11). The policy recognises that co-existence will help optimise the use of the marine area. He considered that satisfactory co-existence can take place and that the effects covering visual amenity, boating amenity activity and potential economic impact have been addressed and are considered acceptable.

131. Finally, to the extent any party went further, and alleged there would be a negative socio-economic impact, during the socio-economic RT<sup>172</sup> Mr Bell reminded everyone that NPS EN-1 para 5.12.7<sup>173</sup> provides a decision maker may accord limited weight to any such assertions which are not supported by evidence.

132. The final specific main matter issue relates to navigation. Mr Bell addresses this in his Proof of Evidence at para. 6.6. The key planning points are, he considers:

- (i) The phased nature of deployment of generating devices, with a modest first two phases allowing considerable opportunity to measure actual impacts against prediction; and
- (ii) Cdr Brown's view that by committing to the provisions of the Navigation Risk Assessment ("NRA") the project is navigationally safe, and that he could see no reason why from a marine and navigation perspective the project should not be given approval.

133. In light of the technical evidence presented by Cdr Brown, Mr Bell considers only limited weight should be given to navigation objections. A key policy objective in the

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<sup>171</sup> Mr Hill's Proof of Evidence (Ref: POE008)

<sup>172</sup> Day 6, PM Session 2.

<sup>173</sup> Ref: MDZ/D2

WNMP is to achieve satisfactory co-existence of activities. Mr Bell considered that objective achieved for the project in relation to other marine interests. Again, and we have emphasised this before, this was unchallenged.

134. Turning then, to the overall planning balance, Mr Bell considered the key conclusions informing the planning balance include:

- (i) The Welsh Government supports North West Wales as a location for new energy development and investment as set out in the latest version of the NDF which has been placed before the Senedd at its final stage. The language in the NDF on the need to combat the global climate heating crisis is demonstrably stronger than that in the current PPW. Furthermore, the context within which the NDF and the WNMP policy statements were given is demonstrably different by way of more stretching emission reduction targets and the declared climate emergency.
- (ii) Mr Bell's evidence has confirmed the more urgent need for more renewable energy capacity: an increase of this renewable energy technology is supported through a number of policy documents and by Welsh and UK Government commitments. The need was already viewed and described as "urgent"<sup>174</sup> to the attainment of targets in 2011 with the publication of the Overarching NPS for Energy EN-1. It is beyond dispute that this imperative has only increased since a climate emergency was declared, and new net zero targets introduced.
- (iii) There is compelling support for the MDZ in national and local plan policies in so far as the project will make a significant contribution to the transition to low carbon electricity generation and investment in the local economy of North Wales and Anglesey.
- (iv) The proposed development has been designed to avoid where possible significant adverse impacts and with the proposed mitigation measures secured through the Order provisions and deemed planning conditions.
- (v) The proposed development has been designed to avoid harm to the integrity of protected sites, with regard to the Habitats Regulations. The ES and Information to Support the HRA<sup>175</sup> demonstrates that the potential impacts of the proposed development have been carefully considered and the proposed mitigation measures will reduce and manage impacts.

135. Mr Bell fairly acknowledges that there will be some significant impacts predicted on views from some locations within the AONB of the seascape. However, his view, taking into account the view of Mr Myers, is that these impacts cannot be avoided and have been mitigated as far as reasonably practicable through siting and design, and compensation for landscape enhancement to be secured by a s.106 obligation. IoACC shares this view.

136. The various national and local energy and planning policy documents that Mr Bell has examined set out a strong position of support in relation to renewable energy and renewable energy targets and recognise the significant energy resource that can be provided by offshore resources. This is clearly not at any cost; matters such as

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<sup>174</sup> EN-1 paragraph 3.4.5 (Ref: MDZ/D2)

<sup>175</sup> Ref: MDZ/A27.11

environmental effects need to be judged to be acceptable. However, in Mr Bell's view, the residual adverse impacts are outweighed in the planning balance by:

- (i) the overall accordance with planning and energy policy;
- (ii) the delivery of significant benefits from renewable energy generation of up to 240 MW, including
- (iii) the ability for new operators to trial their products before wider deployment;
- (iv) the significant economic benefits to Anglesey during construction and in the operation and maintenance phase, and to the wider Welsh economy.

137. He concluded that it has therefore not only been demonstrated that the proposed development accords with local and national planning policy, but that there is additionally a substantial need for this type of development in order that pressing future targets in relation to the global heating crisis and renewable energy generation and greenhouse gas emission reductions can be met in time.

138. We can do no more at this point than commend that view to the inquiry. Mr Bell is an experienced planner. His views are careful and considered, and have been reached after a thorough review not only of the Applicant's case but those of other parties. Crucially, his view went entirely unchallenged in cross examination on Day 1.

#### *Regulatory regime relationship*

139. Turning to the relationship between the ML, Deemed Planning Permission and this TWAO, we do not say much more than what was in the Eversheds Sutherland Note of 23 November 2020.<sup>176</sup> With the exception of a point raised by the RSPB, that note has not proven controversial, and indeed we heard from NRW's counsel, Mr G Lewis, that it has given NRW Advisory "*a great deal of comfort*" in how we all understand the separate regimes and controls to apply.<sup>177</sup> We therefore submit that the Inspector can proceed on the basis of what is in that Eversheds Sutherland Note. We also highlight the mitigation route map that is present in the Core Documents, outlining where specific controls lie between these three regimes.<sup>178</sup> We will, however, address two further distinct, but closely related matters that have arisen in this inquiry.

140. First, the Inspector mentioned the well-established expectation that other competent regulators will act competently. That is entirely correct, as we have laid out above, it being something supported by High Court case-law.

141. The second but closely related issue is what that means in practice – what do the Welsh Ministers have to decide now and on what basis can that be made, and then

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<sup>176</sup> Applicant's Note on the Order and its interrelationship with other regimes (Ref: RPE008)

<sup>177</sup> Mr G Lewis, contribution in the Regulatory RT, Day 2 AM session 1. One point that was raised was what is meant by references to "reasonable expectation" in para 24.10 of the Eversheds Sutherland Note. As Mr Maile explained in the RT, that is no more than an expression that one would normally expect conditions to be attached to a ML to ensure the environmental statement is delivered and project parameters adhered to. As the Inspector put it, it is simply an expectation that the relevant ML regulatory (NRW) will act competently.

<sup>178</sup> Ref: MDZ/A16.7

what can be left to later regulation. This arises in two distinct contexts – RSPB have raised it in the context of what one might consider a “pure” environmental matter (i.e. the impact on birds), but the Inspector also raised it in the context of navigation issues - if it can be assumed NRW Regulatory will competently regulate with regard to the ML, how far do the Welsh Ministers have to go into the same question?<sup>179</sup> The same point arises with the MCA and Trinity House who have key roles in relation to the DDP and the further NRAs required on each deployment.

142. We have laid out the principles above. In particular we refer the inquiry back to the extracts from **Atkinson** (also cited by the RSPB in their closing), **Smith**, and **Hereford Waste Watchers**. With regard to environmental impacts, it is implied in the closing speech for RSPB (see para. 25) that we rely only on the fact that further consents are required in order to persuade the Welsh Ministers they can be satisfied of the environmental impacts of this projects. That wholly misreads Menter Môn’s case and is rather undermined by the weeks of evidence heard during the inquiry and reams of documentation which relate to the environmental impact of this project. We say (for reasons we will explore more below) that what is before the inquiry is more than adequate for the Welsh Ministers to consider the likely significant effects of the projects, and conclude that in light of (but not solely because of) the need for subsequent consent from other responsible bodies, they are unlikely to be significant and that appropriate mitigation measures will be taken.<sup>180</sup> Indeed, we can see from para. 28 of RSPB’s closing, and Dr McCluskie’s concerns in cross examination that even if it takes part in the Advisory Group, deployments may take place with which RSPB is not happy, that what really underlies their concern is a wish for a veto.
143. With specific regard to navigational impacts, we submit that the Welsh Ministers should assess these to the same level that they would any other potential environmental impact under the EIA requirements. As the Inspector highlighted in the navigation RT,<sup>181</sup> the need to prevent interference with legitimate uses of the sea is one factor which NRW will consider when issuing a ML.<sup>182</sup> This, of course, includes navigation and navigational safety.<sup>183</sup> The Inspector is to assume they will competently regulate and that a ML can make provision for adequate safety of water users. When the Inspector put that to the attendees of the navigation RT none disagreed with that. So, the task for the Welsh Ministers is to assess what the likely impacts of the project are on the navigation of the sea and its users, bearing in mind both (a) the project envelope and “worst case” scenario, (b) the mitigations and checks built into the Order (an updated NRA must be undertaken and approved prior to any device deployment, involving the MCA and Trinity House and consultation with other stakeholders) and (c) the fact that NRW will also be concerned with safeguarding legitimate uses of the sea at the ML stage.

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<sup>179</sup> The Inspector’s question to NRW’s Mr Byass during the Character and Appearance RT, Day 6 AM Session 1

<sup>180</sup> A particular point is made in the RSPB’s closing (Ref: Inquiry Doc – 146, para. 23) , foreshadowed in the Regulatory Functions RT, regarding the fact that s. 13C(4) TWA does not allow the imposition of conditions on a ML, whereas it does on a deemed planning permission. There is nothing in this. As **Smith** makes clear the Welsh Ministers can still have regard to what other responsible bodies are likely to do, and it would be most unlikely for NRW to impose less stringent conditions in the ML than those which Menter Môn itself offers.

<sup>181</sup> Navigation RT, Day 10, AM Session 1

<sup>182</sup> s. 69(1)(c) of the MCAA 2009

<sup>183</sup> See, for the avoidance of any doubt, para. 241 of the Explanatory Notes to the MCAA 2009.

## **2. Biodiversity**

144. There are a number of biodiversity issues arising from this project, covering onshore ecology, benthic ecology, ornithology, marine mammals and Menter Môn's proposed EMMP. Although the effects of the project on migratory fish has been raised, it is no longer in issue and so we do not address it further.<sup>184</sup> There has been submitted a very lengthy and detailed ES,<sup>185</sup> reams of further environmental information,<sup>186</sup> the responses to the further environmental information,<sup>187</sup> our responses to those responses,<sup>188</sup> the responses to our further modelling,<sup>189</sup> and of course all the information produced and evidence elicited at this inquiry. It is, to put it mildly, fulsome.
145. This is fully in accordance with both the requirements for an EIA and Habitats Regulations Assessment. Indeed as became clear at the inquiry perhaps the only biological impact we appear to have missed is the impact of the project on 'Aquatic Bears',<sup>190</sup> and we feel confident that would have been scoped out had the matter been raised.

### *Onshore ecology*

146. As we said in opening, a raft of assessments have been undertaken regarding the effect of this development on onshore ecology.<sup>191</sup> Of these, the only issue now taken is the effect on the ecology where the cables make landfall, if they have to scale the cliffs at Abraham's Bosom.
147. Menter Môn's preferred solution is to use HDD to put the cables inside the cliffs. In such circumstances, the cables would emerge 220m from the cliff face.<sup>192</sup> Menter Môn and NRW have agreed that HDD will not have a direct effect on the SAC/SPA/SSSI, and that following the implementation of management plans any indirect effects can be considered only minor adverse.<sup>193</sup> Condition 5 of the proposed conditions for the deemed planning permission restricts the ability of Menter Môn to use anything other than HDD unless and until a written report is submitted to, and approved by, IoACC explaining why HDD is not feasible.<sup>194</sup>

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<sup>184</sup> See para.21 of NRW's summary Proof of Evidence (Ref: POE021).

<sup>185</sup> Refs: MDZ/A25.1-MDZ/A27.11

<sup>186</sup> Refs: MDZ/A28.1-MDZ/A31.17

<sup>187</sup> Refs: EIC001-EIC013

<sup>188</sup> Refs: Inquiry Docs – 044 and 086

<sup>189</sup> Ref: MOC001

<sup>190</sup> Mr Fortune's mistaken reference to bears in cross-examination

<sup>191</sup> See e.g. Ref: MDZ/P3 Proof of Evidence of Mr Campbell, Ref: MDZ/L6 Statement of Common Ground ("Other Topics") between Menter Môn and NRW; Terrestrial Ecology Assessment Update v04 (Ref: MDZ/A28.18); Chapter 19 of the ES Ref: MDZ/A25.19; Information to Support HRA (Ref: MDZ/A31.16).

<sup>192</sup> Mr Campbell in Onshore Ecology RT, Day 2, AM Session 2

<sup>193</sup> Mr Campbell in Onshore Ecology RT, Day 2, AM Session 2 and Ref: MDZ/L6 Menter Môn Statement of Common Ground with NRW on "Other Topics", p.34.

<sup>194</sup> Ref: Inquiry Doc – 098

148. There is, at present, no reason to believe HDD cannot be used. Dr Orme has confirmed that none of the surveys or activities undertaken so far would indicate any reason why that cannot work.<sup>195</sup> The inquiry also heard from Mark Wheeler,<sup>196</sup> a Technical Director with Black and Veatch Ltd, the head of its geotechnical team in the UK and EMEA region, who has 44 years of engineering geology and geotechnical experience. This highly credentialed witness reiterated that it was “*most unlikely*” that HDD would not be successful. In general terms, although there can be some issues with rock most HDD is successfully executed. Although he fairly acknowledged that a detailed consideration of the specific area in issue here had not been undertaken, the biggest risks here were the abrasive nature of the rock stemming from its quartz or silica content, and potentially steep dip of strata in certain cases. However, Mr Wheeler considered that, based on his current knowledge, nothing here could not be overcome through a combination of selecting the right drill bit and utilising steering technology. Mr Billcliff has also added that there may be issues if there are voids.<sup>197</sup> As to that – we simply will not know until drilling commences. So, there is no obvious reason to consider that HDD may not be possible here, but until the project specification is finalised and the means adopted, any potential failure must be planned for.
149. The alternative solution developed by Menter Môn is to run cables in J-tubes over the cliff edge at Abraham’s Bosom. It is important to note that this is not an “*all or nothing*” approach. It is correct, as Dr Orme confirmed in evidence, that the route for any given cable cannot use both HDD and affixing J-tubes to the cliff. However, there will be multiple cables and multiple boreholes – nine of each. It might well be that some boreholes can be used, while for others HDD would prove impracticable. Accordingly, and as confirmed by Mr Billcliff, a hybrid solution is possible.<sup>198</sup> We do not rely on that – for the purposes of this assessment we have assumed in the worst-case scenario that every cable must be affixed using the J-Tube method – but the Inspector and the Welsh Ministers can take some comfort from the fact that were HDD not to work, the assessment undertaken may be worse than what has occurred.
150. Turning, then, to the fall-back position, it is worth bearing in mind the steps taken by Menter Môn following submission of the application to take the concerns of NRW into account and minimise as far as possible the potential impact of the project on the SAC/SPA/SSSI. Following a request from NRW, Menter Môn undertook a detailed botanical survey of the cliff vegetation in June 2020. Off the back of that, and in further consultation, a number of steps have been taken to minimise the effect of the project on the habitat. We make four key points:
- (i) Micrositing. The location of landfall has now been positioned to be within a very narrow band of the SAC to minimise the footprint on the designated habitat. At this location, the SAC is limited to the cliff face and does not include the grassland at the top of the cliff. Following receipt of the 2020 Botanical (NVC) Survey data<sup>199</sup> the route has been further microsited to avoid

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<sup>195</sup> Dr Orme evidence in chief, Day 1, AM Session & PM session 1.

<sup>196</sup> Mr Wheeler in Onshore Ecology RT, Day 2, AM Session 2.

<sup>197</sup> Mr Billcliff’s Proof of Evidence para. 4.11.4 (Ref: MDZ/P8)

<sup>198</sup> Mr Billcliff’s Proof of Evidence, para 4.11.4.4 (Ref: MDZ/P8)

<sup>199</sup> Ref: MDZ/F10

as much of the vegetated sea cliff as possible - approximately 50% of the cliff surface.<sup>200</sup>

- (ii) Avoidance. The width of the working corridor has been reduced within the SAC from 30m with up to 30m working width either side (a total of 90m), to 7m with 2m working width either side (a total of 11m). The revised construction footprint within the cliff is 510m<sup>2</sup>,<sup>201</sup> an 88% reduction on the original project footprint assessed in the ES.<sup>202</sup> All wet and dry heath habitat has also already been avoided in the creation of the original development boundary presented in the ES.
- (iii) Construction and maintenance methodology. To minimise damage to the SAC, it is now proposed to drill the J-Tubes to the cliff using bolt anchors, allowing the J-Tubes to sit approximately 400mm away from the face of the cliff. Drilling of the J-tubes will be undertaken using dust extraction equipment.<sup>203</sup> At the cliff top, works within unimproved grassland habitats will be avoided as far as possible, with any stockpiles or storage taking place within poor semi-improved / improved grassland areas. Works are proposed to be undertaken directly on the cliff face or using a crane mounted at the cliff top, outside the SAC, to minimise interaction with the cliff face measures will be put in place during construction of the J-Tubes (such as handholds) to ensure maintenance activities (i.e. inspection and re-painting) can occur without further disturbing the cliff during maintenance.<sup>204</sup> NRW has confirmed that it is satisfied that these measures ensure that impacts during maintenance works would be minor adverse.<sup>205</sup>
- (iv) The provision of environmental management plans to manage construction and environmental risks secured by planning condition. These include:
  - a. An ecological action plan,
  - b. A code of construction practice and pollution prevention management plan,
  - c. A soil management plan and turf management plan,
  - d. A dust management plan,
  - e. An invasive non-native species management plan,
  - f. A landscape management plan,
  - g. A biodiversity enhancement strategy (Ref: Inquiry Doc – 070, which has been agreed with NRW).

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<sup>200</sup> The Microsited route is available at Figure 1, ES Update (Ref: MDZ/A28.18)

<sup>201</sup> Mr Campbell in Onshore Ecology RT, Day 2, AM Session 2.

<sup>202</sup> Ref: MDZ/A31.4 Section 6.1.2

<sup>203</sup> v04 of the ES Update (Ref: MDZ/A31.4), para 5.2.1. During the RT the Inspector raised the issue of dust and how effective any plan could be, bearing in mind a fine clay dust may be more difficult to control than more granular dust. Mr Wheeler said he thought it would be more granular dust in this case, and that Mr G Lewis and Ms H Lewis confirmed that if NRW can be presented with a satisfactory plan, it is content on the issue of pollution control (Onshore Ecology RT, Day 2, AM Session 2.)

<sup>204</sup> v04 of the ES Update (Ref: MDZ/A31.4)

<sup>205</sup> Ref: MDZ/L6 p.35

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- h. A copy of the proposed planning conditions, all but one of which has been agreed, is at Ref: Inquiry Doc – 098 (see conditions 3, 5, and 7).

151. That brings us to the sole matter in dispute – the effect of the proposed development on the Glanau Ynys Gybi/ Holy Island Coast SAC/SPA/SSSI. It is agreed that the installation of the J-Tubes will lead to some loss of the vegetated sea cliff habitat (albeit very much reduced from what was originally considered). What Menter Môn and NRW disagree about is whether that loss would give rise to AEOSI. We will outline (1) the current state of the habitat, (2) the physical impact of the proposed works and then (3) whether that can constitute a significant impact in EIA terms or AEOSI.
152. We largely agree with NRW on the state of the habitat and what the physical effect of the works will be. In terms of the habitat it is agreed, we think, that a range of habitat types are present on the cliff face and cliff top. A plan of these can be found in Fig 1 of version 4 of the Terrestrial Ecology Update.<sup>206</sup> This includes communities MC1, MC1b, and a mosaic of MC5b/MC8f – all communities listed on the Annex 1 designation. The cliff face also includes other areas, such as blackthorn scrub, and an area of bare rock immediately above the intertidal zone.<sup>207</sup> It should also be noted that although Menter Môn was specifically asked by NRW to examine the area of the existence of spotted rock-rose, spatulate fleawort, golden hair lichen and ciliate strap lichen), none have been found.<sup>208</sup> Two further species from the SSSI citation (golden samphire and species of the rock sea-lavender aggregate) were found in the MC1b and MC1 communities. That is the state of the habitat at present.
153. Turning to the impact of the proposed works, we consider the impact both during construction and then during the operation and decommissioning phases.
154. With regard to the construction phase (which is the main focus here),<sup>209</sup> Menter Môn has assessed the loss of habitat on the basis that trenching through a narrow coastal strip will involve disturbance and temporary habitat loss of 0.046% of the Annex I Vegetated Sea Cliffs of the Atlantic and Baltic Coasts Habitat. Of this only 0.029% will be subject to impacts in the long term (i.e. over the project's 37+ year lifetime and 10 years recovery) and the remaining 0.016% would be subject to impacts during construction only. Menter Môn assessed that any loss is recoverable in the long term, and does not give rise to loss of the key species which constitute the uniqueness of the habitat within the SAC. As an aside we should note two points:

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<sup>206</sup> Ref: MDZ/A31.4, between pp. 38-39

<sup>207</sup> Mr Campbell in the Onshore Ecology RT, Day 2, AM Session 2. Ms H Lewis of NRW and Mr Campbell for Menter Môn disagreed about whether things like that bare rock, where there are not MBC [Inspector note: This abbreviation is not clearly defined] communities, should be considered part of the "Annex 1" habitat. Ms H Lewis said yes, Mr Campbell said no. However, as Mr Campbell confirmed in the Ecological RT, as a precautionary approach the assessment does consider as a worst case the other parts of the habitat that are not Annex 1 protected. So there is perhaps a difference of approach here but because Menter Môn has acted in a precautionary manner, it has not in fact affected the assessment.

<sup>208</sup> Mr Campbell in Onshore Ecology RT, Day 2, AM Session 2

<sup>209</sup> With regard to operation and decommissioning, following the change in maintenance methodologies Menter Môn assesses there will be, at worst, a loss of epilithic lichens within the whole footprint – an impact of minor adverse significance with which NRW agrees – see Ref: MDZ/I7. The Applicant makes no further comment about it here.

- (i) This 0.046% is itself a highly precautionary figure. Following the 2020 Botanical (NVC) Survey data Menter Môn is of the view that the actual area of Annex 1 Habitat effected is approximately 50% of that 0.046% figure – 0.023%.<sup>210</sup> However, we have assessed and continue to use the 0.046% figure, and during the Ecology RT Ms H Lewis confirmed she was content to proceed using that highly precautionary figure.<sup>211</sup>
- (ii) There was some discussion during the Ecology RT of whether the effects should be considered temporary but long term (Menter Môn's classification) or permanent (as suggested by Ms H Lewis). The effects are in fact not permanent because the habitat will recover – it is a dynamic habitat, albeit one which is slow to recover. Ms H Lewis indeed agreed that our suggested recovery period of 5-10 years was reasonable. Instead, Ms H Lewis suggested that over the lifetime of the project it should be treated as a permanent effect. We say that is simply not right – if you treat habitat effects as permanent simply because they will continue as long as the project would, you will only ever end up with permanent habitat effects.

155. Turning then, to the question of whether these construction impacts are significant or have an AEOSI: it is Menter Môn's case that the physical impacts of the project give rise to a minor adverse impact, (i.e. one of negligible magnitude on a high importance receptor) which is not significant in EIA terms and does not cause AEOSI. As with HDD, the indirect effects arising from sediment runoff from stockpiles of excavated material and the effects from dust generated during construction are also assessed as minor adverse.<sup>212</sup> This conclusion – that there is no AEOSI - is reached bearing in mind both the works' quantitative and qualitative implications.

156. Beginning first with quantity - there is a range of habitat impacts which can be considered so small as to have no AEOSI. Mr Campbell has outlined some cases in which an impact was held *de minimis*. Natural England's *Small Scale Effects: How the scale of effects has been considered in respect of plans and projects affecting European sites – a review of authoritative decisions* (2016)<sup>213</sup> summarises many of the most important decisions up to the date of its publication. Part B specifically examines why the scale of the effect is important to decision making, with part B.3 noting how the scale of an effect might influence the conclusions at both the stage 1 (screening) and stage 2 (appropriate assessment and impact on integrity) tests. It states that "*a site's integrity is inextricably linked to the concept of the scale of the effect*".<sup>214</sup> In practice, table C.3<sup>215</sup> records that this can be anywhere from 0.00153%-0.056% of the SAC, or 0.0000019% - 0.41% of the relevant habitat within the SAC, depending on the type of effect and nature of the habitat. Mr Campbell's evidence also explores some more recent decisions (the Norfolk Vanguard (2020) decision)<sup>216</sup> in addition to the Walney OWF (2014), Able Marine

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<sup>210</sup> Ref: MDZ A31.4 Section 8, Mr Campbell in Onshore Ecology RT, Day 2, AM Session 2

<sup>211</sup> Ms H Lewis in Onshore Ecology RT, Day 2, AM Session 2

<sup>212</sup> Mr Campbell in Onshore Ecology RT, Day 2, AM Session 2.

<sup>213</sup> Appendix 1 to Mr Campbell's Proof of Evidence (Ref: MDZ/P3).

<sup>214</sup> Internal p.11 (PDF page 72 of 218) of Appendix 1 to Ref: MDZ/P3

<sup>215</sup> Internal p.15 (PDF page 76 of 218) of Appendix 1 to Ref: MDZ/P3

<sup>216</sup> Mr Campbell's evidence also relied on the "Minded to" letter in the Hornsea 3 decision. However, since the delivery of Mr Campbell's evidence the Hornsea P3 project has been granted a Development Consent Order by the Secretary of State. In doing so, the Secretary of State has revisited the conclusions regarding AEOSI on the sandbank habitats of the North

Park (2013) and Gilwerne to Hafodyrynys pipeline decision (2012). We summarise this in a table below:

<b>Project</b>	<b>% of habitat lost</b>	<b>Area of habitat lost</b>	<b>Annex I Habitat type</b>
Norfolk Vanguard (2020)	0.26-1.4%	up to 930ha	Sandbanks
Walney OWF (2014)	0.41%	2.46ha	Intertidal mudflats
Able Marine Park (2013)	0.33%	31.5ha	Intertidal mudflats
Gilwerne to Hafodyrynys pipeline (2012)	0.28%	1ha	European dry heath
Construction of new hard surfaced path at Henborth (2019) <sup>217</sup>	N/A	No area provided  1m-wide corridor down cliff	European dry heath
<i>Upper value selected where more than one footprint is considered.</i>			

157. As will be immediately apparent from a review of that table, we fall well within the range where it has been held that there is no AEOSI. Ms H Lewis during the RT has made some points about the distinction between Vegetated Cliff Face on the one hand and Habitats such as Sandbanks and Intertidal Mudflats on the other. We accept these are different habitats and that what matters is the Welsh Ministers' judgment in the current context. However, that judgment should be informed by previous decisions and these provide a useful and persuasive context. For the avoidance of all doubt, we do accept that quantity is not the end of the analysis.

158. One must also, of course, consider quality. This includes consideration of matters such as the rarity, location, distribution, vulnerability to change and ecological structure of the habitat affected in order to determine whether a small scale effect

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Norfolk Sandbanks and Saturn Reef SAC and the Wash and North Norfolk Coast SAC, and concluded that AEOSI cannot be ruled out on the basis of uncertainty surrounding the recoverability of the Annex I habitat in question. The change in the decision was not made with reference to the scale of the habitat affected, and this change in the decision does not affect the footprints regarding de minimis decisions presented in Section 5.34 of Mr Campbell's Proof of Evidence, as the upper limit of Annex I Sandbanks habitats affected (1.4% of the SAC area for habitats affected) is defined by the Norfolk Vanguard case presented, not the Hornsea P3 case.

<sup>217</sup> We will come back to the Henborth path below – it is clearly not an infrastructure project like the others.

may give rise to AEOSI. This is, of course, a context specific judgment. Taking everything together, Menter Môn submits this would not give rise to AEOSI. We refer the inquiry to Mr Campbell's Proof of Evidence and note as follows:<sup>218</sup>

- (i) The 2020 Botanical (NVC) Survey<sup>219</sup> found no evidence of the four key species identified by NRW (as cited in the site Core Management Plan<sup>220</sup>) within the working footprint. Ms H Lewis stated that the SSSI species (Golden Samphire and rock sea-lavender aggregate) are also important, with the former being nationally scarce, such that the importance of the area cannot be dismissed. Menter Môn does not dismiss the importance of the area by any means, but the absence of the four key species sought by NRW is material. The presence of one of these four species would mark this particular section of cliff out as a key area of high value within the SAC. These species are rare and localised in a small number of areas within the SAC, with often isolated colonies present. If they had been present, we would not have concluded that the habitat would be able to recolonise following construction, as should these species be lost in one area, we would not be confident that they would recolonise, as there are unlikely to be neighbouring areas which can provide propagules /a seedbank for recolonization;
- (ii) The vegetated sea cliff habitat is by its nature a dynamic ecosystem, comprised of pioneer species and early establishers of disturbed ground, and is situated on a substrate which is active and prone to infrequent collapse. Although the habitat is marginal and therefore prone to easy damage, it is also recoverable. As such, assuming that the surrounding habitats integrity is maintained, the recovery prospects for the cliff face habitat from disturbance are positive in the long term.<sup>221</sup> Ms H Lewis stated that pioneer habitat is condition dependant. We do not disagree with that, but as the conditions will be the same following decommissioning (same substrate, same cliff structure such as the retention of crevices / ledges and the regolith associated with them, same saline influence, same climatic conditions, same nearby seedbank, same clifftop habitats) the conditions will be present for recolonization. This may take time (we acknowledge 5-10 years), and it may not be identical to what was lost (given the habitat is a mosaic with various pockets of interest) but recolonization is likely to happen.
- (iii) The area affected is a narrow strip (maximum 11m-wide), and is considered unlikely to prevent the seed dispersal pattern or habitat connectivity across the working area, thus not affecting the overall ecosystem function beyond the habitat directly affected;
- (iv) Ms H Lewis made reference to the conservation objectives, asserting they are not really dealt with in Menter Môn's ecological assessment and emphasising (by reference to one performance indicator), that there should be no anthropogenic activity which could alter the extent of features. The

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<sup>218</sup> Ref: MDZ/P3 para 5.35

<sup>219</sup> Ref: MDZ/F10

<sup>220</sup> Ref: MDZ/F2

<sup>221</sup> Ms H Lewis during the RT made a comment that one cannot recreate like with like. We accept that any further measures undertaken by Menter Môn to help with biodiversity net gain (see below) by changing grassland habitat would not recreate the Annex 1 vegetated sea cliff habitat lost, but have never asserted otherwise. We do not understand this to go to the point regarding whether any loss is significant and/or AEOSI

Conservation Objectives were explicitly considered in Mr Campbell's proof and throughout the document – see e.g. para. 1.7 of Mr Campbell's Proof of Evidence <sup>222</sup> and paras. 9.2 -9.3 of the Terrestrial Ecology Update (version 4).<sup>223</sup> With regard to the conservation objective concerns specifically:

- a. the *Small Scale Sites* notes that the extent to which a development might undermine the conservation objectives will be influenced by its scale.<sup>224</sup> This is, obviously, something to which Mr Campbell has had regard in reaching his conclusion, and
  - b. the Henborth path. This is a helpful example of a planning permission <sup>225</sup> granted for a (private) path in this sensitive area. The proposal involves the creation of a 1m wide strip of new, hard surfaced path in place of an existing, unpaved path. That current path, Mr Llewellyn accepted, is not visible in his videos and largely overgrown with vegetation. The view of NRW and IoACC was that on the basis of a cursory desktop ecological study that there were no likely significant effects for EIA and no adverse effect in terms of habitats.<sup>226</sup> Ms H Lewis confirmed that NRW had indeed visited this area,<sup>227</sup> and on the same area, of cliffs in the same SAC/SPA/SSSI they were content with these works, and the construction of them. This shows that the hardline view of their witness that the conservation objectives allow for "*no anthropogenic activity that could alter the extent of features*" and "*no measurable decline in the mapped extent of the feature at Penrhyn Mawr or Holyhead Mountain*" is simply not correct. It does seem extraordinary that NRW would take a far stricter approach where the scheme in issue carries such strong public benefit, but takes a more pragmatic (some might say realistic) approach in respect of a private development that confers no public benefit at all.
- (v) Ms H Lewis stated that Sea Cliffs are restricted to the coastal zone, that is 1% of Wales. Menter Môn accepts that, but given the foregoing points that does not prevent a finding of a minor adverse effect. We are still affecting only a very small percentage of the Annex I vegetated sea cliff habitat. It is important to compare the loss against the extent of this habitat found locally, not the prevalence of the habitat within the country.
- (vi) At times, Ms H Lewis during the ecology RT appeared to be looking at the wrong stage of the assessment, asking whether there was likely to be a significant effect – the screening stage in any habitats assessment. Here, however, we are past the screening stage and the question is whether there is AEOSI.

159. In light of this, and the temporary nature of the effects, the project concludes no AEOSI on the SAC. This conclusion falls comfortably within the margins of previous decisions.

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<sup>222</sup> Ref: MDZ/P3

<sup>223</sup> Ref: MDZ/A28.18

<sup>224</sup> Appendix 1 to Ref: MDZ/P3, Mr Campbell's proof of evidence.

<sup>225</sup> Mr Llewellyn initially denied having planning permission for this, but it became apparent after some questioning in the public speaking session (Day 2, PM public speaking session) that he did, it was simply conditional as all planning permissions are.

<sup>226</sup> Ref: MDZ/P3 Appendices 11 and 12.

<sup>227</sup> Ms H Lewis, Onshore Ecology RT, Day 2, AM Session 2.

160. We also take this opportunity to remind the inquiry of the following:

- (i) The whole of the western coastline is a designated European Site, so if one is going to have an energy project with landfall at Anglesey, something supported by *inter alia* the WNMP, one is going to have to go through the protected site *somewhere* unless HDD can be used - and no one can be entirely sure this is possible until it is tried. Menter Môn has chosen narrowest section of the protected site. Any scheme coming forward will have to say they would like to use HDD, but cannot rule out needing a reserve option.
- (ii) The habitat enhancement mechanisms Menter Môn intends to put in place, through a biodiversity net gain initiative.<sup>228</sup> To be very clear, we do not say this is "compensation" within Art. 6(4) of the Habitats Directive because we say there is no AEOSI. We do, however, acknowledge there will be some (albeit *de minimis*) impacts on the habitats on the cliff face, and so propose to undertake steps to restore areas of grassland to a more natural state along the top of the cliff, to enhance the coastal ecosystem and allow the development of a more natural transitional zone. NRW<sup>229</sup> have informed Menter Môn that they are satisfied with this outline enhancement plan Ref: Inquiry Doc – 070.

161. If the Welsh Ministers were to reject all of the above and were instead to accept NRW's case that the impact on the cliffs was such that an AEOSI cannot be ruled out then there remains - as NRW have suggested - an alternative route to the making of the Order.

162. To be clear this is not the case that Menter Môn has advanced, and instead we urge a conclusion of no AEOSI based on the above. In its closing NRW, relying on the Hart case as applied by the Court of Appeal in ***Mynydd Gwynt*** (see para. 11 of NRW's closing speech), say that great weight should be given to NRW's views on this issue because it is the appropriate nature conservation body and that "cogent" reasons are needed to depart from its view. Reference is also made by NRW to what is said in TAN5 to the effect that the views of NRW on such matters should only be departed from where there are "exceptional and convincing reasons". The correct position in law, it is submitted, is as set out by the Court of Appeal in ***Mynydd*** - a 2018 case, rather than the somewhat earlier TAN from 2009. It is submitted, in any event, that the detailed evidence of Mr Campbell and the other detailed documents submitted dealing extensively with onshore ecology (see above) provide a cogent and indeed compelling and convincing basis for departing from NRW's views. Where NRW's position is challenged and tested and explored fully at inquiry - as they have been here - it cannot be correct to set some overly high burden for its views to be overridden. This is supported by numerous cases. (see e.g. ***Wealden DC v Secretary of State for Communities and Local Government*** [2017] EWHC 351 (Admin) at 44 (viii) per Jay J and ***Thorpe Hall Leisure Ltd v Secretary of State for Housing, Communities and Local Government*** [2020] EWHC 44 (Admin) 15 Jan 2020 per Sir Duncan Ouseley Sitting as a High Court Judge at paras 35 and 63–

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<sup>228</sup> Mr Campbell's RT evidence. During the RT, Mr G Lewis for NRW said that biodiversity net gain is not a concept found in Welsh Planning Policy, which instead talks about enhancement and restoration. Menter Môn submits nothing turns on this.

<sup>229</sup> The fact that agreement has been reached is recorded in Ref: Inquiry Doc - 064

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64)<sup>230</sup> and decisions in a number of other planning appeals. The evidence has been tested and explored. NRW's case on the law and the facts should be rejected.

163. But, if the Welsh Ministers are ultimately against us, as NRW suggests, then Reg. 64 is an alternative route that is open to the Welsh Ministers. This was the route taken to consent by the Secretary of State in the recent Hornsea 3 Offshore Wind Farm decision.

164. To grant consent under this route regs. 64 and 68 of the Habitats Regulations requires three things:

- (i) First, that the project is carried out for imperative reasons of overriding public interest ("IROPI") and which may be of a social or economic nature;
- (ii) Second, that there are no alternative solutions to the project are available which are less damaging to the affected European site; and,
- (iii) Third, compensatory measures are secured.

165. In relation to the first it is submitted that the benefits of this scheme which are set out fully above, and have not really been disputed by any party, are sufficient to give rise to IROPI. NRW in closing, in raising the Reg. 64 alternative, did not seek to suggest that the benefits of the scheme could not properly be regarded as IROPI.

166. In relation to the second, something is only an alternative for the purposes of Reg. 64 if it is feasible and it would actually meet the objectives of the project. If an alternative fails to meet a genuine and critical objective of the project it is not an alternative: see the Plan B case (above). There are no alternatives here for these reasons:

- (i) The essential objectives of this scheme are set out at para. 6 above (including creating employment in North Wales, mitigating the closure of Wylfa and harnessing the opportunity for North Wales to become globally significant in the development and commercialisation of tidal energy generation. The objectives and need for the project are also set out in the ES (Chapter 1, Section 1.2.1 and para. 31, MDZ/A25.1). These objectives would not be met by a scheme that was not in Wales;
- (ii) In relation to Wales, The Crown Estate has identified the area in which the MDZ is located as the appropriate location for such a facility off Wales;
- (iii) Moreover, Welsh Government policy - including the WNMP and the NDF (see above) strongly supports this project in this location;
- (iv) If a tidal energy scheme is to be located in the resource area off Holy Island then the cabling route is (as explained above) going to have to cross the SAC which runs along this whole section of coast. Indeed, as explained above the cliff fall location chosen is where the SAC is at its narrowest and thus the impacts are least. Other cabling options were ruled out as not feasible: see

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<sup>230</sup> **Wealden** reads: "a decision-maker discharging its duties under the Habitats Directive and the Habitats Regulations should give the views of a statutory consultee [in that case NE] considerable weight ... . However, that advice is not binding and it does not have to be given such weight if cogent reasons can be given for departing from it"; **Thorpe Hall** shows that an Inspector is perfectly free to depart from the advice of NE so long as reasons are given)

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e.g. Mr Billcliff's Proof of Evidence at para. 4.5 and in the ES Chapter 3 (MDZ/A25.3).

- (v) Works to the cliffs may only be undertaken if it is shown that HDD is not feasible: see the conditions on the Deemed planning permission. HDD is expected to be feasible and work.
- (vi) The works have been micro-sited as far as possible: see Mr Campbell's Proof of Evidence at paras. 3.5 - 3.9.
- (vii) More information on alternatives, and why these were rejected, is provided in MDZ/A25.3. This chapter of the ES covers why Anglesey, the site selection process and project alternatives.

167. In relation to the third matter above NRW have stated (see their closing at para. 33) that the "Outline Habitat Enhancement Plan" (while not submitted for this purpose) can be regarded as necessary compensation for the purposes of Reg. 68 of the Habitats Regulations.

168. The above provides a sufficient basis for a decision based on Reg. 64, but this is not the approach that Menter Môn advocates.

#### *Benthic and intertidal habitats*

169. Turning to benthic and subtidal habitats, again agreement has been reached between NRW and Menter Môn on this topic,<sup>231</sup> and it will be recalled that this was a remarkably productive and collegial RT. Menter Môn's position is, firmly, that benthic concerns are not a reason to refuse this application. That is NRW's position too.

170. By way of brief summary, this part of the application concerns the seabed between the MDZ and export cable corridor (sometimes known as the Offshore Development Area or "OfDA"). Some features of conservation importance have been identified within the OfDA via the EIA characterisation surveys undertaken in 2018 – three Annex 1 reef features were identified (bedrock, stony and biogenic reef), which are protected under the Habitats Directive. However, it should be noted at the outset that these features are not designated feature of the North Anglesey SAC, so we are not in Reg. 63 Habitats Regulations territory.<sup>232</sup>

171. In any case, it is not the case that the entirety of the seabed in the OfDA is this protected habitat. Only some parts of the OfDA constitute this habitat, and as Mr J Lewis made clear in the benthic RT, save for bedrock and stony reef, the seabed is entirely variable. Menter Môn's ES therefore undertook an assessment on the highly precautionary (and artificial) assumption that the entirety of the seabed is this protected habitat. Without mitigation, the ES assessed that the long term loss of benthic habitat and Annex I reef features via initial placement of the project infrastructure and re-powering would result in a moderate adverse impact.<sup>233</sup> With the mitigation of more detailed pre-construction surveys (which would actually make clear to where the Annex I habitats were) and then micrositing project infrastructure

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<sup>231</sup> Ref: MDZ/L6

<sup>232</sup> Ref: Inquiry Doc – 069, the Outline Marine Biodiversity Enhancement Strategy, paras. 1-11

<sup>233</sup> Ref: MDZ/A25.9 paras. 144-151

to try and avoid such habitat, the ES concluded this could be reduced to a minor adverse effect.<sup>234</sup>

172. The position when the RT opened was that NRW appeared to accept that this proposal will lead to some loss of habitat. NRW is not contesting that cannot happen. Instead, it raised concern about the efficacy of mitigations and micro-siting and links that back to an alleged requirement for more detailed surveys. Mr Wray, for NRW, had requested in his Appendix to NRW's Proof of Evidence<sup>235</sup> an Outline Marine Biodiversity Enhancement Strategy ("OMBES"), to be secured by condition in the ML. Menter Môn then provided such a strategy in Appendix 3 to Mr Fortune's rebuttal Proof of Evidence.<sup>236</sup> So, by the time of the RT there were (1) big picture questions about the efficacy of Menter Môn's ES survey and mitigation questions, and (2) other specific points on the OMBES. We are pleased to say that the latter issue has been resolved. Since the RT further discussions have been held between Menter Môn and NRW, culminating in the version of the OMBES submitted to the inquiry in January this year.<sup>237</sup> We understand this is acceptable to NRW, and a final version will therefore be produced in the post-consent phase. The requirement to produce this final version is proposed to be included in a ML condition, and at NRW's request has been included as one of the documents at Part 4 of Schedule 1 of the Order.<sup>238</sup>

173. In light of the fact that agreement has now been reached on the OMBES, we do not think the former dispute remains an issue for the inquiry, as our understanding of NRW's position is that the OMBES resolves their concerns. However, we will take it shortly. As mentioned, the complaint NRW has persisted with is that it wanted further, more detailed, survey work done to the mosaic of benthic habitats, and that without that a proper assessment cannot be undertaken.<sup>239</sup> We have two short points in reply:

- (i) All that a more detailed assessment could achieve would be to reduce the significance of the assessed impact on benthic habitats. The assessment in the EIA has been taken on an ultra-precautionary basis, assuming that all of the habitat that could be affected is sensitive. It clearly is not. Crucially, therefore, the ES survey and related assessment is as precautionary as it can be.
- (ii) As explained by Mr J Lewis in the RT, an ES will typically be undertaken significantly before offshore construction would be due to take place – sometimes by up to four or five years. In that period, the benthic habitats may change. This applies in particular to biogenic reef habitats such as *Sabellaria spinulosa* which are characterised by exhibiting large temporal and spatial variation. Instead, it is common practice<sup>240</sup> to undertake a somewhat

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<sup>234</sup> Ref: MDZ/A25.9 paras. 152-153

<sup>235</sup> Ref: POE021, Appendix E, para. 4.9

<sup>236</sup> OMBES paras. 1-11 outlines that history (Ref: Inquiry Doc – 069). We flag it, at this point, because points were made in the RT regarding the late supply of the OMBES by Menter Môn. Menter Môn, however, had to consider and design an entirely new outline strategy

<sup>237</sup> Ref: Inquiry Doc – 069

<sup>238</sup> Ref: Inquiry Doc – 102

<sup>239</sup> See e.g. para. 5.1 of Appendix X [Inspector's note: perhaps should read "...para. 5.1 of Appendix E..."] to NRW's proof (Ref: POE021).

<sup>240</sup> Mr Wray disagreed with the argument that this was common practice. We suggest the evidence of Mr J Lewis is preferable. He is a director of Marinespace Ltd, and has impeccable

less detailed survey to characterise the site and to inform the ES, progressing to a more granular view through more detailed pre-construction surveys closer to the time of deployment. As the Inspector pithily put it to Mr J Lewis, an applicant provides the evidence that is necessary at ES stage, and adds to it on a site specific level when deployment occurs.

On that basis, we submit the impacts on benthic ecology are not be a reason to refuse this application. We do not understand that to be NRW's case either.

### *Marine mammals*

#### (i) Introduction

174. The potential impacts of tidal devices on marine mammals has been a key consideration in relation to the Morlais project from the outset. The particular focus being in relation to:
- (i) the North Anglesey Marine SAC, in which the MDZ is located and which is designated for harbour porpoise; and
  - (ii) the potential effects on bottlenose dolphin and grey seal which are features of the Pen Lyn, Cardigan Bay and Pembrokeshire Marine SACs, to the extent that these animals could forage or move through the MDZ.
175. The ES Chapter 12<sup>241</sup> and the Information to Support HRA<sup>242</sup> set out in considerable detail all the possible adverse impacts on these three species as well as Risso's dolphins, common dolphins and minke whales. The list of potential impacts considered is exhaustive, covering all aspects of: (i) construction, installation and repowering; (ii) operation and maintenance (iii) decommissioning and (iv) in-combination effects.<sup>243</sup>
176. In their evidence to this inquiry NRW pursued just three potential impacts on marine mammals: (i) collision risk with tidal devices; (ii) disturbance by noise from the operation of tidal devices and (iii) the impacts of the deployment of Acoustic Deterrent Devices ("ADDs"). None of the many other potential impacts that have been assessed in Chapter 12 of the ES have been pursued at this inquiry by NRW.<sup>244</sup> Thus, the only issues that require consideration are the three identified in NRW's proof.

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credentials including working on the biodiversity enhancement strategy of Swansea Bay. We do not, however, think anything turns on this.

<sup>241</sup> Ref: MDZ/A31.14

<sup>242</sup> Ref: MDZ/A31.16

<sup>243</sup> Ref: MDZ/A31.34 at para. 301 [Inspector's note: perhaps should be "...Ref: MDZ/A31.14..."].

<sup>244</sup> See the full list of potential impacts in Ref: MDZ/A31.14, pp. 73 – 74, and see also in the Marine Mammals Statement of Common Ground Ref: MDZ/L1, Table 3-2. This lists 43 issues of which 34 are marked green as entirely agreed. Of those marked ongoing or not agreed for three of them cumulative impact, assessment methodology and barrier effects and IROPI NRW have agreed that these are secondary matters capable of agreement at a later stage and so not covered in evidence to the inquiry. One concerns IROPI that is not in issue here. Of the remaining issues: 16, 32, 39, 40 and 43 these all relate to the three main issues set out above: collision risk, operational noise and ADDs or to the content of the EMMP

177. In relation to the first of these issues, which Mr G Lewis in the RT rightly said was in fact NRW's "main issue" in relation to marine mammals, it has now been agreed by Menter Môn and NRW that collision risk from the Morlais project does not give rise to AEOSI in respect of marine mammals, this is confirmed by NRW's note<sup>245</sup> which explains that "*securing the DEMMP (and the specified details required), based on the OEMMP, via a condition on the draft marine licence*" provides "*assurance*" that "*there will be no adverse effect on marine mammals as a result of collision*". Happily, in its closing NRW also announced that the other two issues are agreed.

(ii) Collision risk

178. Before setting out in more detail the agreed position now happily reached between NRW and Menter Môn to the effect that the Morlais project will not give rise to AEOSI in respect of marine mammals under the Habitats Regulations, there are some preliminary points that need to be set out.

179. First, Menter Môn is delighted that agreement has now been reached with NRW on this key issue in relation to the protection of marine mammals. It will be recalled from Dr Orme's evidence that Menter Môn is a not for profit company providing solutions to the challenges facing rural Wales, and seeking to add value to its natural resources. Menter Môn would never have pursued this project if it considered that it would risk harm being caused to marine mammals. Thus, throughout the process it has sought to do all in its power to demonstrate that the MDZ will not have an AEOSI on marine mammals in the area through collision risk. That is why:

- (i) Since 2017 the lead marine mammal technical specialist for the Morlais project has been Dr Learmonth. Her experience as a mammal consultant on infrastructure projects including tidal<sup>246</sup> is absolutely second to none. Her extensive experience includes working on two other tidal projects.<sup>247</sup> Indeed, it should be noted that she worked on the marine mammal HRA required for the tidal lagoon policy in the Welsh National Marine Plan on behalf of the Welsh Government.
- (ii) Menter Môn has undertaken many detailed and exhaustive assessments and technical pieces of work in respect of marine mammals, and in particular in relation to the issue of collision risk (as well as noise – see below); and
- (iii) Menter Môn have been so willing to accept and adopt NRW's advice on measures to be included in the EMMP to limit to the lowest possible level any risks to marine mammals – see below.

180. Second, while there is no disputing the importance of the protections afforded to marine mammals in law – and indeed this has driven all of Menter Môn's actions - it must be said that the collision risk issue is on the evidence somewhat of a hypothetical risk. Thus:

- (i) NRW have published a document produced by ABPmer entitled Review of potential collision risk between tidal stream devices and marine mammals<sup>248</sup>

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<sup>245</sup> Ref: Inquiry Doc - 085, at point 1

<sup>246</sup> Thus, by way of example she worked on the Brims tidal development from 2015 to 2018.

<sup>247</sup> E.g. Brims tidal development.

<sup>248</sup> Ref: MDZ/F15.2

(“the NRW collision risk Review”) which acknowledges that *“to date, none of the monitoring studies on marine mammals and seabirds have been able to record a direct collision with a device” and that this “may reflect an absence of collisions”*; <sup>249</sup>

- (ii) Dr Learmonth’s proof contains an overview <sup>250</sup> of operational tidal turbine installations which shows there has been deployment of 23.5 MW of tidal devices for in total 51.3 operational years in areas where marine mammals are known to be present without any evidence of a single collision.<sup>251</sup> Despite this Dr Learmonth notes that it is *“theorized that the moving rotors of tidal energy devices pose a potential collision risk for marine mammals”*; <sup>252</sup>
- (iii) Further, this year a report was published in relation to monitoring undertaken over a number of years in respect of the Bluemull Sound. The first tidal device was installed there in 2016, and there are now four.<sup>253</sup> Throughout this time (and indeed before) there has been extensive monitoring undertaken including vantage point surveys and underwater video.<sup>254</sup> The environmental monitoring report was published in June 2020 by EnFAIT and is entitled *Enabling Future Arrays in Tidal*.<sup>255</sup> In relation to marine mammals the most commonly recorded at that site was the harbour porpoise but despite this the surveys showed *“a very low level of spatial overlap between marine mammals and turbines ... even taking into account the most frequently recorded and abundant species”*<sup>256</sup> and it was concluded that *“the results indicate that the likelihood of near-field encounters between diving birds and marine mammals and therefore the risk of negative environmental effect is very low”*<sup>257</sup> .

181. Third, despite all the above, the risk – the theoretical risk– of collision between marine mammals and tidal devices has been extensively modelled and assessed by Menter Môn. For the marine mammal collision risk assessment two methods were employed, Encounter Rate Modelling (“ERM”) and Collision Risk Modelling (“CRM”), using the Scottish Natural Heritage (“SNH”) guidance for assessing collision risk between underwater turbines and marine wildlife.<sup>258</sup> This approach was agreed with NRW at the 2nd Marine Mammal Technical Working Group (“TWG”) in February 2019, as outlined in the marine mammals SoCG.<sup>259</sup> The use of ERM and CRM, as Ms Morris helpfully points out in her proof, is *“widely accepted in the renewable industry sector”*<sup>260</sup> and indeed has been very widely (indeed universally) used on other renewables schemes.<sup>261</sup> Moreover, the NRW collision risk Review itself recognises

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<sup>249</sup> Ref: MDZ/F15.2 p.10

<sup>250</sup> See Table 2, pp. 6–7 of Ref: MDZ/P2

<sup>251</sup> See Dr Learmonth’s Proof of Evidence at para 6.3 (Ref: MDZ/P2)

<sup>252</sup> See Dr Learmonth’s Proof of Evidence at para 6.4 (Ref: MDZ/P2)

<sup>253</sup> Though many of the reports reference three devices, a fourth device was added in October 2020.

<sup>254</sup> See section 2.2. The video footage alone runs to 20,000 hours and 1 million videos (see section 2.2.2)

<sup>255</sup> See RSPB’s proof, Ref: POE007, and which starts at PDF page 915 of 1530.

<sup>256</sup> See Ref: POE007 section 3.2.1, PDF page 927 of 1530

<sup>257</sup> Ref: POE007 section 3.2.1, PDF page 927 of 1530, and see also section 5.1.1

<sup>258</sup> Ref: MDZ/F19

<sup>259</sup> Ref: MDZ/L1

<sup>260</sup> See Ms Morris’ Proof of Evidence at para. 4.1.1 (Ref: POE021).

<sup>261</sup> See Dr Learmonth’s rebuttal Proof of Evidence at para. 2.16 (Ref: RPE004).

that these models, even recognising the limitations of any modelling, *"are still the best way<sup>262</sup> to assess the potential risk of collision"*.<sup>263</sup>

182. Fourth, because there remain uncertainties with the modelling, as a result of the relatively limited deployment of tidal devices to date, Menter Môn built in a number of very precautionary parameters including:<sup>264</sup>

- (i) using two models and using worst-case for maximum predicted collision risk;<sup>265</sup>
- (ii) linear scaling of individual device to array, assuming all devices in array could have the same collision risk;<sup>266</sup>
- (iii) using the highest marine mammal density estimates used, assuming evenly distributed across the site and wider area throughout the year;<sup>267</sup>
- (iv) assuming that all collisions or encounters would be fatal;<sup>268</sup> and,
- (v) using realistic worst-cases for the devices.<sup>269</sup>

183. Fifth, it must be recalled that the outputs of the collision risk modelling take no account at all of the proposed mitigations secured via the EMMP. That is of course crucial, as it is the monitoring and mitigation built into the EMMP and the assurance that a Detailed EMMP will be developed,<sup>270</sup> in line with a proposed draft condition on the ML that has resulted in NRW withdrawing its objection to the Morlais project on the grounds of collision risk to marine mammals.

184. Sixth, the proper avoidance rate to be applied is quintessentially a question of judgment.<sup>271</sup> Dr Learmonth's evidence explains that an avoidance rate of 98% is considered a precautionary and yet realistic approach.<sup>272</sup> Underwater noise from operational turbines will be detected by marine mammals and this is why it has the potential to cause disturbance (see below<sup>273</sup>), but it also means that these animals can detect and hence avoid the devices. But to allow for the potential for masking of the devices' operational noise due to high background noise levels in the area, 100% avoidance behaviour has not been assumed to occur in response to tidal device

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<sup>262</sup> As is recorded in Dr Learmonth's rebuttal (Ref: RPE004) "[i]t should be noted, as acknowledged by SNH (2016) [Ref: MDZ/F19], that the ERM and CRM methods will provide at best, an order of magnitude estimate of collision risk. As stated in SNH (2016) [Ref: MDZ/F19]: "Neither the ERM nor the CRM can be regarded as an accurate calculator of encounter or collision rate. However, both are likely to provide a reasonable order-of-magnitude estimate." In that, based on the parameters used in the models the results should provide reasonable estimations of the number of individuals that could encounter or collide with a turbine device, which is then scaled up for the potential number of devices that could be deployed."

<sup>263</sup> See Ref: MDZ/F15.2 p.10

<sup>264</sup> See Dr Learmonth's Proof of Evidence at para. 6.6 (Ref: MDZ/P2)

<sup>265</sup> See Dr Learmonth's Proof of Evidence at para. 6.11 (Ref: MDZ/P2)

<sup>266</sup> See Dr Learmonth's Proof of Evidence at para. 6.17 (Ref: MDZ/P2)

<sup>267</sup> See Dr Learmonth's Proof of Evidence at paras. 6.23 – 6.27 (Ref: MDZ/P2)

<sup>268</sup> See Dr Learmonth's Proof of Evidence at para. 6.36 (Ref: MDZ/P2)

<sup>269</sup> See Dr Learmonth's Proof of Evidence at para. 6.14 – 6.16 (Ref: MDZ/P2)

<sup>270</sup> Ref: Inquiry Doc – 085 point 1

<sup>271</sup> See NRW's collision risk review (Ref: MDZ/F.15.2) at p.12.

<sup>272</sup> See Dr Learmonth's Proof of Evidence (Ref: MDZ/P2) at para. 6.32.

<sup>273</sup> See the Underwater Noise Modelling Note (Ref: MDZ/A28.11).

noise. However, the tidal devices do make noise and are relatively large with solid structures, which would be detectable by marine mammals. Given that, the 98% avoidance rate is clearly a justified judgment. Moreover, this rate has been used in risk assessments on other tidal schemes,<sup>274</sup> something from which comfort can be taken.

185. Despite all of the above NRW maintain that there remain some shortcomings in the assessment of collision risk. Menter Môn refutes this, and reference should be made to Dr Learmonth's rebuttal at paras. 2.9 – 2.31 (Ref: RPE004), which really is the last word on these matters. But in any event, most of the disputes that remain are effectively resolved as now both NRW and Menter Môn agree that as a result of the revised Outline EMMP, and assurance that there will be a "sufficient nexus" between this and the Detailed EMMP<sup>275</sup> it can be safely concluded by the Welsh Ministers that the Morlais project will not have an AEOSI on marine mammals. The revised Outline EMMP has taken on board all of NRW's Advice on adaptive management of the risk of collision impacts on protected marine mammal species in Welsh waters from the Morlais project.<sup>276</sup> Thus, the Outline EMMP<sup>277</sup> now includes, inter alia, all the following commitments:

- (i) That it will be demonstrated prior to any tidal device operation (for Phase One and for all subsequent phases to full build out) that the real-time monitoring will be able to: (a) detect marine mammal movements in and around an array and collisions with the devices as they occur, in real-time, and report accordingly; and (b) determine, in the event of a collision, what species or species groups have collided with the devices, in real-time.<sup>278</sup>
- (ii) That if for any reason following evidence of a collision it is not possible to determine the species, then a worst-case scenario will be assumed that it was a bottlenose dolphin – the species with by far the lowest PBR. And, further, if it is not possible to determine the severity of the collision, then a worst-case scenario will be assumed that it was a fatal collision.<sup>279</sup>
- (iii) If there is evidence of collision there will be the implementation of adaptive management measures to ensure that the risk of further collisions is reduced, and which will be agreed and demonstrated prior to any tidal device operation,<sup>280</sup> following the tiered hierarchy.<sup>281</sup>
- (iv) Prior to any tidal device operation the mitigation is proven to be effective and will be adapted in response to any increasing risk of causing adverse effect.<sup>282</sup>

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<sup>274</sup> See Ref: MDZ/P2 Dr Learmonth's Proof of Evidence at para 6.31 and Ref: RPE004 her rebuttal at para. 2.23. In relation to the suggestion of a possible 68% avoidance rate (see POE021 Ms Morris' proof at para. 4.1) see Ref: RPE004 Dr Learmonth's rebuttal at paras. 2.26 – 2.30. The suggestion of such a low rate is totally without merit.

<sup>275</sup> Ref: Inquiry Doc 085 – Point 1. This nexus will be secured both within the Outline EMMP itself (see Ref: Inquiry Docs – 100 and 101, para. 16) and as a condition on the ML – Ref: Inquiry Doc – 090.

<sup>276</sup> Ref: MDZ/F15.3

<sup>277</sup> Ref: MDZ/A16.8, latest version at Ref: Inquiry Docs – 100 and 101

<sup>278</sup> Paras. 8 and 46(1) of the Outline EMMP (Ref: Inquiry Docs – 100 and 101).

<sup>279</sup> Para. 46(1) of Ref: Inquiry Docs – 100 and 101.

<sup>280</sup> Para. 46(2) of Ref: Inquiry Docs – 100 and 101.

<sup>281</sup> Paras. 46(3) and 48 of Ref: Inquiry Docs – 100 and 101.

<sup>282</sup> Para. 46(4) of Ref: Inquiry Docs – 100 and 101.

- (v) And, crucially, there is a failsafe that allows NRW to require that tidal devices cease operation.<sup>283</sup> NRW's Collision Decision Framework has been included in the EMMP to ensure a rapid response and demonstrate the decisions that will be made in real-time should a suspected collision occur;<sup>284</sup>
- (vi) There is a set maximum collision limit for all relevant marine mammal species and which must not be exceeded.<sup>285</sup> The lowest of these limits – the most stringent - is for bottlenose dolphin and this is 2 over 3 years;
- (vii) Moreover, Phase One of the Morlais Project is defined by the species limits which NRW assured Menter Môn would result in there being no significant impact on marine mammals or AEOSI on any designated sites with marine mammals as a qualifying feature.<sup>286</sup> These limits (the lowest of which is currently 0.7 bottlenose dolphin) were provided in advice to Morlais in October 2020,<sup>287</sup> and subsequently agreed in the Statement of Common Ground on Marine Mammals.<sup>288</sup> NRW has clearly accepted that any deployment coming under those limits will not have an AEOSI, and we explicitly ask the Welsh Ministers to so find. The reason we ask for this explicitly finding is because despite this clear acceptance, NRW in both Ms Morris' evidence and in submissions seek to qualify this. Ms Morris in paras 4.1.9 suggests that there should be further reduction from the 0.7PBR threshold, despite later admitting at para 4.2.3 that NRW "*do not consider it possible*" to define a scale at which no AEOSI is predicted.<sup>289</sup> See too the NRW note ahead of the EMMP session at point 2.<sup>290</sup> The view Ms Morris takes is simply unsupportable – it is wholly unhelpful for a regulator to say "*a little bit more*" but "*we don't know how much more*". We ask the Welsh Ministers to make a finding that the species limits NRW agreed with us are adequate to avoid AEOSI.

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<sup>283</sup> Paras. 48-49, 69 and 137 of Ref: Inquiry Docs – 100 and 101.

<sup>284</sup> Paras. 98-99, 104, 137 and Plate 2-1 of Ref: Inquiry Docs – 100 and 101.

<sup>285</sup> Paras. 45, 46(3) and 50 of Ref: Inquiry Docs – 100 and 101.

<sup>286</sup> Paras. 39 and 50 of Ref: Inquiry Docs – 100 and 101

<sup>287</sup> Ref: MDZ/F15.3. See e.g. p.14 which states "*The species limits represent the maximum number of collisions between individual animals of a species or a species group, and the moving parts of the turbines, that are considered to be compatible with avoiding adverse effects on the integrity of SACs and would ensure no detriment to the conservation status of European Protected Species (EPS).*"

<sup>288</sup> Ref: MDZ/L1. See para 2.1.1.1 which states: "*An adaptive management approach is being adopted at Morlais, whereby a first phase of device will be deployed and monitored prior to deployment of further devices. The scale of the first phase is constrained and defined as having a predicted impact of less than 0.7 Bottlenose dolphin collision per year. The number of devices and MW that this corresponds to is subject to review post consent depending on the device type being deployed and its associated collision risk. This will be managed through an Environmental Mitigation and Monitoring Plan (EMMP) which will be a condition of the Marine Licence, in accordance with the Outline EMMP (document reference, MOR/RHDHV/DOC/0072 (latest version submitted 18th November 2020). The position of Menter Môn and NRW regarding mitigation and monitoring is discussed in Section 3.*" And see p.14 entry 12 which states "*NRW have advised following a marine mammals meeting on 06/01/20 that the current maximum sustainable mortality for this bottlenose dolphin population, calculated as the Potential Biological Removal is 0.7 animals per year*" and "*Note, that NRW updated their position to 0.7 bottlenose dolphin, so predicted collision risk should fall below this figure to be able to rule out adverse effect on site integrity.*"

<sup>289</sup> Ref: POE021

<sup>290</sup> Ref: Inquiry Doc - 085

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- (viii) Now returning to the point we were making, which is that the EMMP will safeguard the relevant species limits. Phase One "*[w]ill be installed at a capacity (MW) at which no significant impact is predicted on marine mammals or diving birds using the MDZ. This commitment ensures an initial level of mitigation in place at the start of the EMMP through the limitation of the scale of the development*". The scale of the Phase One deployment (MW) will be determined by the outcome of further modelling of potential collision and encounter risk for marine mammals and diving birds, and associated population modelling, which is in turn dependent upon: (i) the type of TECs to be installed in the array; and (ii) the physical characteristics of the location of the array.
- (ix) Each stage of deployment would then only progress based on the species collision limits and that the regular reviewing of the monitoring and mitigation indicate that there was no increased collision risk.

186. It must be stated that it is Menter Môn's expectation based on all the detailed work it has undertaken, and based on the experience from the operation of other tidal devices, that there will not be any mammal collisions. But, what all the above provisions do is to very strictly control and limit the Morlais project and allow immediate action to be taken in real time if any of this proves in any way to be incorrect. In this regard it is pertinent to note that in NRW's *Defining project envelopes for marine energy projects: review and tidal energy test facility and marine mammals case study*<sup>291</sup> it is recognised that one knowledge gap is in relation to the understanding of how marine mammals may respond to multiple devices.<sup>292</sup> But, the only way to move the sum total of human knowledge forward is to deploy devices, albeit in a strictly controlled and limited way, based on monitoring and adaptive management. And that is what NRW and Menter Môn have agreed through the EMMP.

187. The limitation of the deployment in Phase One as set out in the EMMP needs to be explored a little bit further as it is also relevant in relation to NRW's remaining noise issues. The Marine Mammals Additional Collision Risk Modelling<sup>293</sup> sets out at Table 3-3 the maximum possible MW deployment and the number of devices for each possible device type<sup>294</sup> based on the 0.7 PBR for bottlenose dolphin. The result is that Phase One is likely to be no more than about 12 MW and to consist of (very roughly) between 4 to 10 tidal devices (though Table 3-3 makes clear this could be up to 21 smaller devices). This is on any view, a relatively limited level of initial deployment. And, deliberately so. This then allows for monitoring, and with further phases dependent on the outcome of this.

188. The short conclusion is this. It can be conclusively, and happily, be reported to Welsh Ministers that the Morlais Project may be consented without risk of AEOSI as a result of marine mammal collision.

### (iii) Noise from operation of tidal devices

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<sup>291</sup> Ref: MDZ/F15

<sup>292</sup> See p.82 of Ref: MDZ/F15

<sup>293</sup> Ref: MDZ/A31.13

<sup>294</sup> On this see Table 12-76 in Chapter 12 of the ES, Ref: MDZ/A31.14. What this might look like, with only 6 devices, is shown in Dr Orme's presentation (Ref: Inquiry Doc - 001) p. 21.

189. In terms of the noise issue that arises from the operation of the tidal devices there are a number of introductory points to make.
190. First, happily NRW have now agreed that any adverse effect on integrity as a consequence of noise can be ruled out - see NRW's closing submission at para. 46 (Ref: Inquiry Doc - 148).
191. Second, Menter Môn has provided a considerable amount of information – including noise modelling on an indicative and reasonable worst-case basis - to allow the noise impacts to be assessed as far as they can be at this stage; but in any event beyond that the EMMP contains requirements for further modelling and assessment when the devices to be deployed are known, and further monitoring following the first (initial, and quite limited) deployment. Menter Môn's position is thus that: (i) it has provided more than sufficient information in relation to these matters for the purposes of the making of the Order; and (ii) in any event further controls have been embedded in the EMMP that require further modelling and assessment post-consent. There is provision through the EMMP for more detailed modelling once the proposed devices are known. This, is now agreed.
192. Third, under the Outline EMMP (and later the Detailed EMMP) noise is a matter that will be further monitored and if necessary mitigated. And this is now agreed with NRW. Thus, the Outline EMMP's objectives in terms of environmental protection includes not just collision risk but also noise (see para. 5), and as is explained in para. 53 "*the assessment of potential significant effects from underwater noise is included in the EMMP. This will include underwater noise modelling and monitoring*". The provisions include:
- (i) Para. 22: referring to the development of a Marine Mammal Mitigation Protocol to protect against any risk of permanent auditory injury to marine mammals as a result of construction, despite assessments indicating no risk and this not being an issue raised by NRW.
  - (ii) Para. 23 provides that prior to any deployment "*[u]nderwater noise from operational turbines will be reviewed as part of the ongoing development of the EMMP when details on the types of devices to be deployed are available post consent*". These assessments will then "*determine the potential for any significant disturbance based on operational tidal device noise levels in different conditions, for individual devices and the array of devices to be deployed, taking into account ambient noise, the different species hearing sensitivities and the latest guidance for assessing the significance of noise disturbance against Conservation Objectives of harbour porpoise Special Areas of Conservation (SACs) (JNCC et al., 2020), as the MDZ is located in the North Anglesey Marine/Gogledd Môn Forol SAC designated for harbour porpoise*".
  - (iii) Similarly, and this is considered below, "*the underwater noise from Acoustic Deterrent Devices (ADDs) will be reviewed as part of the ongoing development of the EMMP when details on the types of ADDs to be deployed are available post consent*". And "*once information on noise source levels for the types of ADDs to be used is available, will determine the potential for any significant disturbance based on individual and multiple ADDs that could be activated across the Morlais site, taking into account ambient noise, the different species hearing sensitivities and the latest SNCB Guidance...*" (see para. 25). The EMMP "*will ensure that underwater noise from operational*

*turbines will not result in the significant disturbance of marine mammals and that, following the latest Statutory Nature Conservation Body (SNCB) Guidance...underwater noise disturbance in the North Anglesey Marine/Gogledd Môn Forol SAC, for the project alone or in-combintion with other projects and activities, would not exclude harbour porpoise from more than*

1. *20% of the relevant area of the site in any given day; or*
  2. *an average of 10% of the relevant area of the site over a season"* (para. 24);<sup>295</sup>
- (iv) Moreover, and again despite this not being an issue raised by NRW "*[p]rior to deployment, the array layout will take into account the potential for any barrier effects as a result of underwater noise from operational tidal turbines and the use of any ADDs, as well as the potential of any physical barrier effects. This will also be developed as part of the EMMP"* (see para. 25);
- (v) In addition, once there is initial deployment, monitoring will be undertaken in order to address data gaps and will not only inform the modelling and assessments for the next phases of the Morlais development, but also for the ongoing development of the tidal energy industry. This will include, but not be limited to "*underwater noise monitoring to determine if noise limits from operational tidal turbines are sufficient for marine mammals to detect them, but not high enough to result in any auditory injury or significant long-term disturbance"* (see para. 59, 3rd bullet);
- (vi) Moreover, in terms of the Advisory Group to be established one of its aims is proposed to be (see para 75) to "*[a]llow development of the Project to proceed without ... significant disturbance, displacement or barrier effects as a result of underwater noise"*;
- (vii) The monitoring indicators in the EMMP (see Table 2-1, at I8) include noise, as does the outline monitoring questions (see Table 2-2, Q8);
- (viii) Following the EMMP RT some additional wording has been added on noise to deal with the issues raised by NRW in Refs: Inquiry Doc – 100 and Inquiry Doc – 101, see paras. 30, 147, Table 4-1 and 163.
193. The most recent changes are what have prompted NRW to agree that adverse effect from noise can be ruled out.
194. Given the agreement reached the technical issues explored are no longer central. Menter Môn sets out its case on these in case it should be regarded as relevant going forward.
195. First, noise issues have been the subject of really quite extensive consideration in the ES, the Information to Support HRA and also in the Underwater Noise Modelling Report<sup>296</sup> and the Underwater Noise Modelling Note<sup>297</sup>, as well as in the written and

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<sup>295</sup> NRW, in Ref: Inquiry Doc – 085, point 5, fail to really engage with para. 24-26 of the Outline EMMP. Instead, they simply ask for further information, which of course will take place at the Detailed EMMP stage.

<sup>296</sup> Ref: MDZ/A28.10

<sup>297</sup> Ref: MDZ/A28.11

oral evidence of Dr Learmonth. Subacoustech conducted the underwater noise modelling for the Morlais project. Subacoustech have over 20 years' experience in conducting underwater noise modelling for the marine industry to monitor and mitigate the effects of noise in the marine environment.<sup>298</sup>

196. Second, because the devices to be deployed are not known at this stage the assessment of noise has in a number of respects been based on a worst-case scenario, and hence is precautionary. Thus, Chapter 12 of the ES<sup>299</sup> for example used a worst-case scenario having reviewed all currently available information for different types of devices: see section 12.6.4.1.
197. Third, the assessments suggest that the turbines would be audible to marine mammals, which it is important to note is a desirable outcome in order to assist in avoiding collision risk, but obviously it is important that they are not loud enough to result in any significant long-term disturbance and negative impacts.
198. Fourth, in terms of the thresholds used to assess disturbance there are a number of points:<sup>300</sup>
- (i) Currently no agreed thresholds and criteria exist for modelling the disturbance of marine mammals from underwater noise.<sup>301</sup>
  - (ii) Accordingly, the modelling used two potential thresholds for disturbance effects: (i) 120 dB (SPL<sub>RMS</sub>) based on Southall *et al.* (2007); and (ii) 142 dB based on Hastie *et al.* (2018).<sup>302</sup>
  - (iii) It is acknowledged that the 142 dB threshold was not intended by Hastie *et al.*<sup>303</sup> as such to represent a threshold for avoidance, but importantly this is consistent with the observations in Southall *et al.* (2007), that exposures exceeding 140 dB<sup>304</sup> induced an avoidance behaviour response in wild harbour porpoise. As a precautionary approach, noise levels exceeding the 142 dB<sup>305</sup> threshold have been regarded as having the potential to result in some disturbance, particularly to harbour porpoise. Therefore, this is adjudged to be a suitable threshold to determine the potential for disturbance.
  - (iv) The 120 dB<sup>306</sup> threshold used is the worst case for a possible initial behavioural reaction in marine mammals, particularly harbour porpoise. However, marine mammals, including harbour porpoise, would not be significantly disturbed from the maximum area predicted by the 120 dB<sup>307</sup>

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<sup>298</sup> See Ref: RPE004, Dr Learmonth's rebuttal Proof of Evidence, at para. 2.120.

<sup>299</sup> Ref: MDZ/A31.14

<sup>300</sup> See Dr Learmonth's rebuttal (Ref: RPE004) at paras. 2.123 and 2.135, and her evidence in the RT.

<sup>301</sup> Ms Morris at the RT acknowledged that there were not accepted thresholds for disturbance, and that this is hard to define.

<sup>302</sup> See Ref: MDZ/A28.11 p.6. It is important to note that the 120dB re 1 µPa (SPL<sub>RMS</sub>) criteria based on Southall *et al.* (2007), was not included in the subsequent Southall *et al.* (2019) Marine Mammal Noise Exposure Criteria: Updated Scientific Recommendations for Residual Hearing Effects: see paras 2.127 – 2.130 of Dr Learmonth's rebuttal (Ref: RPE004).

<sup>303</sup> See Dr Learmonth's rebuttal at para. 2.134 (Ref: RPE004).

<sup>304</sup> re 1 µPa (SPL<sub>RMS</sub>)

<sup>305</sup> re 1 µPa (SPL<sub>RMS</sub>)

<sup>306</sup> re 1 µPa (SPL<sub>RMS</sub>)

<sup>307</sup> re 1 µPa (SPL<sub>RMS</sub>)

threshold. This is clear given that background noise levels of 120 dB<sup>308</sup> have been recorded in the vicinity of Cemlyn Bay, Cemaes Bay and the Wylfa Newydd Development Area off north Anglesey.<sup>309</sup> As such, the noise plots that NRW commented on (and that show noise up to a 120dB threshold may propagate approximately 17km from the centre of the array<sup>310</sup>) indicate the area over which marine mammals could (a) detect the noise from operational turbines and (b) may illicit some kind of a response. But they would not result in continuous disturbance at this range and certainly would not cause AEOSI on North Anglesey Marine SAC for the duration of the project operation.

- (v) At the RT Ms Morris said that NRW asked for a range of thresholds to be used to show impact ranges and that while NRW queried the choice of the 142db it was acknowledged similar thresholds are sometimes used. She said that NRW advised that 120dB was also presented to allow assessment and comparison and she accepted that this had been done. But she went on to complain that this modelling was done for a single large and a single small turbine, but not for all the array scenarios. The concern being not, as Mr G Lewis at first suggested it was, that there was no assessment of array scenarios but rather that the assessment was limited to only two indicative scenarios shown in plots in the Underwater Noise Modelling Report at figures 4-10 and 4-11.<sup>311</sup> This is very similar to the complaint made in the **Spurrier** and **Plan B** cases and rejected: see the discussion of this case above. Given the stage reached the assessment had to be indicative, and the indicative scenarios considered are clearly reasonable. There was also a complaint made by Ms Morris that the associated data for these indicative scenarios was not presented and this meant that there was thus no estimate of the maximum noise disturbance range.<sup>312</sup> But in relation to this Dr Learmonth's rebuttal explains<sup>313</sup> that "*[t]he noise modelling presented as noise plots is an indicative worst-case. As outlined in section 4.2.3 Underwater Noise Modelling Report* <sup>314</sup>, *ranges for cumulative impact have not been calculated as there are multiple source locations, and no possible 'start' location for any receptor for exposure calculation. In respect of prediction of the maximum distance, the modelling would have to decide on what reference point to use – for example, a point in an array, either an end of an array or the centre of array. Therefore, as the underwater noise modelling is indicative and not based on actual noise levels from potential array scenarios, this has not yet been modelled in detail*". This is a clear and compelling explanation of why more cannot be provided at this stage, and of course the EMMP itself requires further modelling later on when the devices to be deployed are known: and this is now agreed. But there is a more fundamental reason why the NRW criticism here is without merit. We turn to this next.

<sup>308</sup> re 1  $\mu$ Pa (SPL<sub>RMS</sub>)

<sup>309</sup> Ref: MDZ/A25.12, although greater than background noise levels in and around the MDZ of 89 dB to 107 dB SPL<sub>RMS</sub> re 1  $\mu$ Pa (Underwater Noise Modelling Note, Ref: MDZ/A28.11). This does illustrate that background noise levels can exceed 120dB re 1  $\mu$ Pa (SPL<sub>RMS</sub>)

<sup>310</sup> Ref: MDZ/A28.10 Figure 3

<sup>311</sup> Ref: MDZ/A28.11

<sup>312</sup> See Ref: POE021 Ms Morris' proof at para 4.3.6.

<sup>313</sup> See para. 4.120.

<sup>314</sup> Ref: MDZ/A28.10

199. Fifth, although the noise modelling is indicative at this stage and not based on actual array scenarios, which have not yet been – and cannot be - modelled further at this stage, nonetheless the assessments and underwater noise modelling for operational turbines have been based on the best information currently available and worst-case scenarios, using a similar approach that was used for the collision risk modelling and assessments. A range of thresholds and criteria have been presented and assessed in the ES,<sup>315</sup> Information to Support HRA,<sup>316</sup> the Underwater Noise Modelling Report<sup>317</sup> and Underwater Noise Modelling Assessment Note.<sup>318</sup> As there are currently no agreed thresholds and criteria for modelling the disturbance of marine mammals from underwater noise, the best currently available information was used. Providing a range of potential thresholds and criteria was a precautionary approach to ensure a range of potential impact ranges were included in the assessments.
200. The latest Statutory Nature Conservation Bodies (SNCBs) Guidance for assessing the significance of noise disturbance against Conservation Objectives of harbour porpoise SACs in England, Wales & Northern Ireland (JNCC *et al.*, 2020 ), defines significant noise disturbance within a harbour porpoise SAC as noise disturbance within an SAC from a plan/project, individually or in combination, is considered to be significant if it excludes harbour porpoises from more than: (i) 20% of the relevant area of the site in any given day, or (ii) an average of 10% of the relevant area of the site over a season.
201. The Underwater Noise Modelling Note presented an assessment for the full deployment based on arrays rather than individual tidal devices,<sup>319</sup> as individual marine mammals would be more likely to be disturbed by the closest turbine they approach rather than all individual turbines within the array. As an indicative precautionary worst-case, the assessment was based on up to 10 arrays for 240MW. Also, the assessment assumed no overlap in disturbance areas between arrays / groups of turbines.
202. The potential impact area of 0.15km<sup>2</sup> for 10 tidal devices representing 10 arrays (based on 70m maximum range for large turbine and 142dB range) represents up to 0.005% of the North Anglesey Marine SAC (which has an area of 3,249km<sup>2</sup>).<sup>320</sup> Even for the maximum impact area of 5.31km<sup>2</sup> (based on 1.3km maximum impact range for large turbine and using the 120dB threshold) the maximum area for 10 devices representing 10 arrays could result in a disturbance area of up to 53.1km<sup>2</sup>, which is 1.6% of the North Anglesey Marine SAC.<sup>321</sup> The assessment in the Information to Support HRA<sup>322</sup> and ES<sup>323</sup> was based on a maximum area of potential disturbance of harbour porpoise from operational turbines of 11.7km<sup>2</sup>, which represents 0.36% of the North Anglesey Marine SAC.<sup>324</sup>

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<sup>315</sup> Ref: MDZ/A25.12

<sup>316</sup> Ref: MDZ/A31.16

<sup>317</sup> Ref: MDZ/A28.10

<sup>318</sup> Ref: MDZ/A28.11

<sup>319</sup> Ref: MDZ/A28.11

<sup>320</sup> Seasonal average for 183 days in summer season is up to 0.005%.

<sup>321</sup> Seasonal average for 183 days in summer season is up to 1.6%.

<sup>322</sup> Ref: MDZ/A31.16

<sup>323</sup> Ref: MDZ/A25.12

<sup>324</sup> Seasonal average for 183 days in summer season is up to 0.36%. This was based on 90 dB<sub>ht</sub> (Species) range from the modelling for PTEC for possible strong avoidance, with 610m impact range for one device, therefore 11.7km<sup>2</sup> for 10 devices in 10 arrays.

203. The assessments in the ES,<sup>325</sup> HRA<sup>326</sup> and Underwater Noise Modelling Note<sup>327</sup> indicate, under these circumstances, based on the current SNCB guidance (JNCC *et al.*, 2020), the area of potential disturbance could never – no matter how much detailed modelling was undertaken - exceed 20% of the area of the SAC at any given time or exceed an average of 10% of the seasonal area of the site over a season.
204. This was explained by Dr Learmonth in this way.<sup>328</sup> The entire MDZ area of 35km<sup>2</sup> represents 1.08% of SAC. But that said, the estimated maximum area taken up by all arrays, including spaces between devices would be up to 12.5 km<sup>2</sup> (35% of the MDZ array area of 35 km<sup>2</sup>) for the full 240MW capacity project. If underwater noise modelling impact ranges are applied as a “buffer” around the entire 35km<sup>2</sup> MDZ area, based on the highly precautionary 120 dB threshold preferred by NRW the position is you end up with the 35km<sup>2</sup> for the MDZ and a 1.3km buffer around the entire MDZ that measures 73.02km<sup>2</sup>.<sup>329</sup> That is to say 2.25 % of the SAC.<sup>330</sup> This ultra-precautionary approach shows that the area of potential disturbance would not come anywhere near exceeding 20% of the area of the SAC at any given time or exceed an average of 10% of the seasonal area of the site over a season. As such there would be no significant disturbance of harbour porpoise and no AEOSI for the North Anglesey Marine SAC. No amount of further detailed modelling, even if it were possible, is thus necessary. It is clear that the percentage thresholds for significance which are set out in the conservation objectives could never be exceeded by what is proposed. NRW was, in other words, asking for more proof of something that is clear from the evidence. There is no merit at all in asking for further evidence of something that is clearly already established, but particularly so when in fact no more can be provided.
205. And, there is one further point that kills this off entirely. The concerns that Ms Morris continues to express are based on the full 240MW deployment. But the first phase is likely to be limited to around 10-12MW. Once in place the EMMP requires monitoring and further deployment will be contingent on the results. This is now agreed.
206. Sixth, the other issues raised by NRW with the detailed noise modelling that has been undertaken are of no merit. Dealing with each in turn:<sup>331</sup>
- (i) NRW queried the source of the operational noise levels used: the position is that the outline source of the operational noise characteristics for the noise modelling are given in section 3.1.4 of the Underwater Noise Modelling Report.<sup>332</sup> References for these inputs were not given as the measurements are not formally published or publicly available – they are confidential. As

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<sup>325</sup> Ref: MDZ/A25.12

<sup>326</sup> Ref: MDZ/A31.16

<sup>327</sup> Ref: MDZ/A28.11

<sup>328</sup> See further the note *Potential for Underwater Noise from Operational Turbines to Significantly Disturb Marine Mammals* (Ref: Inquiry Doc – 045). NRW in Ref: Inquiry Doc - 085 acknowledge the provision of this note, but then appear to simply fail to engage with the content of this ultra-precautionary assessment.

<sup>329</sup> Taking into account the overlap with the land as otherwise the figure would be 75.71km.

<sup>330</sup> If you use the more realistic 142 dB threshold this results in only a 70m “buffer”, and thus a total area of 37.23km, or 1.2% of the SAC.

<sup>331</sup> See Ms Morris’ Proof of Evidence at para. 2.120 (Ref: POE021).

<sup>332</sup> Ref: MDZ/A28.10

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noted above Subacoustech conducted the underwater noise modelling for the Morlais Project. The data used in the modelling of the operational turbines was taken from Subacoustech's database which includes (i) an assessment of tidal current turbine noise (11m rotor, 350kW) at Lynmouth site and predicted impact of underwater noise at Strangford Lough; and (ii) measurement and assessment of underwater noise from the Openhydro tidal turbine device (250kW) at the EMEC facility, Orkney.<sup>333</sup> This is clearly the best available scientific information that has been used.

- (ii) NRW questioned whether deriving the source level of a large rotor device by scaling up from a small one is "realistic": Dr Learmonth though has explained that:<sup>334</sup>
- a. The assumption that the sound level of a large rotor device can be obtained by scaling up from a small rotor device is a worst case assumption based on Subacoustech data, with a simple line drawn between source levels of Subacoustech measurements of tidal turbines from Lynmouth and Orkney in order to extrapolate expected noise levels for Morlais, and this would produce precautionary noise levels;
  - b. Subacoustech have recently become aware of Risch *et al.* (2020)<sup>335</sup> which presents measured noise levels for a 1.5 MW, 18m rotor diameter turbine. This is slightly smaller than the large turbine design at Morlais (24m dual rotor, output TBC) but more comparable than the earlier data from smaller designs. Risch *et al.* (2020)<sup>336</sup> measured 138 dB SPL at ~60m. For the slightly larger turbines, Subacoustech modelled 140-145 dB at 60 m. Thus, the projection relied on in the noise modelling appears reasonable, and indeed NRW have acknowledged that Risch supports Menter Môn's position.<sup>337</sup>
- (iii) NRW questioned whether the modelling "*adequately consider the multiple different device types with potentially different noise characteristics*": this has no merit because as Dr Learmonth has explained:<sup>338</sup>
- a. The modelling as based on 120 large or 620 small rotor turbines, a worst case, and the calculation of the noise levels from multi-device arrays uses a dedicated feature of the dBSea model;
  - b. Using this, the interaction of the complex sound field between multiple locations is calculated automatically;
  - c. The dBSea model developed by Marshall Day Acoustics and Irwin Carr Consulting is widely used as a tool for the prediction of underwater noise in a variety of environments by acoustic professionals, such as Subacoustech who undertook the underwater noise modelling for the Morlais site;

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<sup>333</sup> See Dr Learmonth's rebuttal Proof of Evidence at para. 2.120 (Ref: RPE004).

<sup>334</sup> See Dr Learmonth's rebuttal Proof of Evidence at para. 2.121 (Ref: RPE004).

<sup>335</sup> See Appendix 1 of Ref: RPE004.

<sup>336</sup> See Appendix 1 of Ref: RPE004.

<sup>337</sup> Ref: EIC013, dated 27 November 2020, Annex 1 para. 55, albeit still querying how this was calculated or whether this represents a worst-case assumption.

<sup>338</sup> See Dr Learmonth's rebuttal Proof of Evidence at para. 2.122 (Ref: RPE004).

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- (iv) The three solvers used by dbSea are based on codes widely used and tested within the underwater acoustics industry. They have been extensively tested against measured data and analytical solutions, validating the model.

(iv) Acoustic deterrent devices (“ADDs”)

207. The use of ADDs are currently proposed as a potential mitigation measure to emit a sound designed to deter or alert marine mammals from coming into danger of collision with the devices.<sup>339</sup> At the RT it was helpfully confirmed by Ms Morris that NRW supported the use of ADD as mitigation for this scheme. This matter is also now resolved, as we understand it and agreed by NRW.
208. The following analysis may not now be necessary but is included for completeness.
209. The evidence is clear that ADDs have been proven to be effective as mitigation during unexploded ordnance clearance and piling for offshore wind farms and to deter seals from fish farms, where there is a requirement to ensure marine mammals are deterred from a wide area.<sup>340</sup>
210. The information on ADDs in Chapter 12 of the ES,<sup>341</sup> the Marine Mammals Monitoring and Mitigation note<sup>342</sup> and the Underwater Noise Modelling Report<sup>343</sup> has been provided to show the effectiveness of ADDs as mitigation and that they will be audible to marine mammals above ambient noise levels. It is important to note that this is the purpose for which the information is provided. NRW thus support ADDs as a way of deterring marine mammals from going near tidal devices but remain concerned that ADDs will “disturb” these creatures. This is an odd position given that it is the purposes of an ADD to disturb, and thus deter.
211. The issue arises in this way. The examples provided in the evidence indicated that in some studies on the Lofitech type of ADD – which is just one type of ADD - there has been a decline in harbour porpoise PAM detections up to 7.5km from the source.<sup>344</sup> This could thus be seen as a “worst-case” for the impact of an ADD, or the best case if your aim is to deter at a considerable distance. However, it is important to note: (i) the disturbance range of any ADDs deployed in the MDZ would be determined to the lowest source level possible that would ensure any marine mammal is beyond the range of potential collision risk, but without causing any significant disturbance or increased collision risk with other devices; and (ii) therefore, the disturbance ranges would be a lot smaller than the worst-case scenarios.
212. Careful consideration will be given to determine the most appropriate and effective type(s) of ADDs to ensure adequate and effective mitigation for all marine mammal species in and around the MDZ. This could include: (i) the modification or adaptation of existing ADDs and systems and / or the use of different types of ADDs; (ii) taking into account the different species hearing sensitivity; and (iii) ensuring

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<sup>339</sup> See Dr Learmonth’s Proof of Evidence at para. 6.57 (Ref: MDZ/P2).

<sup>340</sup> See Dr Learmonth’s Proof of Evidence at para. 2.94 (Ref: MDZ/P2).

<sup>341</sup> Ref: MDZ/A31.14

<sup>342</sup> Ref: MDZ/A28.13

<sup>343</sup> Ref: MDZ/A28.10

<sup>344</sup> Ref: MDZ/A28.13

that noise levels are high enough, in all environmental conditions to be audible over background noise levels at a distance to alert marine mammals and avoid collision with the tidal turbines, without causing any significant disturbance. Moreover, ADDs would only be activated for very short periods and intermittently. There would be no long term ADD activation over a wide area.

213. Assessments in the underwater noise modelling<sup>345</sup> were conducted for the noise source levels of the Lofitech ADD (so a worst-case, in terms of disturbance, see above) and based on the 142 dB threshold the impact range of this type of ADD is predicted to be up to 0.84km, an area of 2.22km<sup>2</sup> (0.07% of the North Anglesey Marine SAC (which has an area of 3,249km<sup>2</sup>)). For up to 10 ADDs the area would be up to 22.2km<sup>2</sup> (0.7% of the North Anglesey Marine SAC). For up to 40 ADDs the area would be up to 88.8km<sup>2</sup> (2.7% of the North Anglesey Marine SAC).
214. Dr Learmonth in the RT, in response to a question from Ms Morris, clearly explained why the assessments looked at 10 and 40 ADDs. 40 ADDs being the maximum number that would be deployed based on a worst-case scenario of 10 arrays with one ADD on each corner.<sup>346</sup> 10 ADDs being the maximum number of devices that would on a worst-case ever be triggered at one time. Ms Morris then raised a new point as to whether the size of the arrays might mean that more than 4 ADDs were required (this as based on the deterrent range being 840m, rather than greater). The number of ADDs will depend on the size of the arrays, but also the ADD deterrence range, for example, if they have a low range then more ADDs might be required, but if they had a larger range then fewer ADDs would be required to adequately cover each array area. But assuming they just need to cover the turbines on the outer edge of the arrays, allowing marine mammals to be deterred no matter what direction and depth they approach arrays the assumption of 4 ADDs per array is reasonable.
215. Underwater noise modelling was also based on the Southall *et al.* (2019)<sup>347</sup> weighted SEL criteria taking into account species hearing sensitivity, the maximum predicted range for temporary reduction in hearing sensitivity (referred to in Southall *et al.* as a "TTS" = temporary threshold shift) could be up to 5.3km for harbour porpoise. However, it is important to note that: (i) this modelling is based on the high frequency noise levels of the Lofitech ADD, as a worst-case; (ii) as previously explained, the disturbance range of the ADDs would be determined to the lowest source level possible that would ensure any marine mammal is beyond the range of potential collision risk, but without causing any significant disturbance. Therefore, the noise levels modelled for the Lofitech ADD device would not be required for the MDZ, and really are worst-case.
216. Further assessments in the ES<sup>348</sup> again used a worst-case assessment of up to 40 ADDs, based on a more realistic worst-case of 1km disturbance range for each ADD with no overlap, although as already noted it is highly, highly unlikely 40 ADDs would ever be activated at the same time. For 40 ADDs (up to 125.6km<sup>2</sup>) this would be up to 3.8% of the North Anglesey Marine SAC area, with a seasonal average of up to 4%.

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<sup>345</sup> Refs: MDZ/A28.10 and MDZ/A28.11

<sup>346</sup> It could well be less.

<sup>347</sup> Ref: POE049

<sup>348</sup> Ref: MDZ/A31.14

217. In the Information to Support HRA<sup>349</sup> up to 10 ADDs was assessed as a worst-case (1km range) for the maximum number of ADDs that could be activated at the same time.<sup>350</sup> The assessment for 10 ADDs (31.4km<sup>2</sup>) indicates potential disturbance of up to 1% of the North Anglesey Marine SAC (3,249km<sup>2</sup>), with a seasonal average of up to 1% (based on 183 days in summer season).
218. Therefore, the more likely worst-case for potential disturbance of harbour porpoise in the North Anglesey Marine SAC would not come anywhere even near exceeding the SNCB guidance for significance of noise disturbance against Conservation Objectives of harbour porpoise SACs (JNCC *et al.*, 2020), of: 20% of the relevant area of the site in any given day, or an average of 10% of the relevant area of the site over a season.
219. NRW in its response to the further environmental information dated 27 November 2020<sup>351</sup> say that if the assessment was made on disturbance range of 7.5km the area of disturbance for 10 ADDs would be 1,770km<sup>2</sup> and 40 ADDs would be 7,080km<sup>2</sup>. NRW recognise that this is unlikely due to the spacing, and configuration of the ADDs etc. But there is a more fundamental point. This is not even remotely realistic as a 7.5km disturbance range – the kind used for detonations - is not required for ADDs in the MDZ. NRW commented that there was no further information on which to base a more realistic assessment. But this is just incorrect because as outlined above a range of realistic yet precautionary scenarios have been presented.
220. As previously stated, the disturbance ranges of the ADDs would be determined based on noise levels that are high enough, in all environmental conditions to be audible over background noise levels at a distance to alert marine mammals and avoid collision with the tidal turbines, without causing any significant disturbance. Indeed, in Ms Morris' proof at para. 4.2.8 it is said that NRW "*advocates using an ADD with the lowest source level possible, enough to elicit a short-range avoidance of immediate danger of collision, whilst minimising wider disturbance impacts*". This would be the basis of the approach to determine the most suitable ADDs to be used at the Morlais site.
221. The details of ADD deployment, including configuration, which type of ADDs and how many will be developed in parallel with the final design. This needs to be tailored based on the type, number and array layout of the tidal turbines to ensure adequate and effective mitigation. In addition, developing the Detailed EMMP pre-construction will allow the latest technology and information to be taken into account. The options for triggering the ADDs will be researched and developed, based on automation of triggers from the monitoring techniques, such as active sonar, when a possible marine mammal is approaching close proximity and could be at risk of collision. This would be real-time triggers with back-up mechanism based on a precautionary approach, e.g. if it could be a marine mammal or it is unidentified then the mitigation would be triggered. Finally, as outlined in Ms Morris' proof at para. 4.2.8 NRW "*support the aspiration to use an automated 'detect and deploy' system using active sonar to trigger ADDs, thereby ensuring their deployment is limited to only when it is necessary*". The details will be agreed with

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<sup>349</sup> Ref: MDZ/A27.11

<sup>350</sup> e.g. based on number of arrays.

<sup>351</sup> Ref: EIC013 at para 62.

NRW through the EMMP. As noted above provision is made for ADDs in the EMPP<sup>352</sup> in paras. 24, 25 and 51.

222. In conclusion, any concerns about the use of ADDs are not such as to justify not making the Order, and that is now agreed by NRW.

### *Ornithology*

#### (i) Scope and context for the ornithology issues

223. There are a number of points that need to be made as regards the scope and context of the ornithology issues, all of which were explored in the cross-examination of Dr McCluskie.<sup>353</sup>

224. First, it is important to note that impact on birds is a matter that has been explored fully in discussions with NRW Advisory going back over a period of several years. Following this process NRW's Statement of Case and proofs do not seek to allege any adverse impact on birds as a result of the project. Indeed, a SoCG has been agreed between NRW and Menter Môn on ornithology.<sup>354</sup> So, the Welsh Ministers can be advised that NRW, as the relevant statutory nature conservation body, do not have concerns with the potential impacts of the project in relation to ornithology. The ornithology issues were thus pursued only by the RSPB at the inquiry.<sup>355</sup>

225. Second, ornithology has been the subject of very detailed assessment by Menter Môn: see in particular Refs: MDZ/A31.9 – 12.<sup>356</sup> This work which has been accepted by NRW was led by Dr Grant, who was himself a principal conservation scientist at the RSPB for 18 years. Dr McCluskie, who gave evidence on behalf of the RSPB, accepted that Dr Grant was someone he held in high regard, who had an excellent publication record and whom he regarded as a "*very serious scientist*".

226. Third, the issues pursued at the inquiry by the RSPB were related to potential impacts on two species - guillemot and razorbills – from collision.<sup>357</sup> No issues were

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<sup>352</sup> Ref: MDZ/A16.8, latest version Refs: Inquiry Doc – 100 & Inquiry Doc – 101

<sup>353</sup> References to Dr McCluskie's proof below are to his amended proof (Ref: POE007.1) unless expressly indicated otherwise.

<sup>354</sup> Ref: MDZ/L2

<sup>355</sup> With the support of some other third parties in writing e.g. NWWT – to which Dr Grant has responded in the appendices to his Proof of Evidence (Ref: MDZ/P1).

<sup>356</sup> Note also that Dr Grant's evidence in chief began with a detailed overview of the assessment work undertaken to date in respect of birds

<sup>357</sup> Dr McCluskie accepted in XX that displacement and barrier effects were not the issue, nor were any other effects. Moreover, while Dr McCluskie's proof raised the issue of above surface collision in XX he accepted that it was sub-surface collision that was the real issue. See further Dr Grant's rebuttal at paras. 2.3 and 2.4 and his evidence in chief. Moreover, above surface collisions were scoped out of the ES and this was not questioned by the RSPB. In his evidence in chief Dr Grant explained that any displacement effects were likely to be small.

pursued by the RSPB in relation to chough or Manx shearwater.<sup>358</sup> The species in issue, as already discussed above, are not part of or associated with an SPA. Thus, any impacts on these species does not engage Reg. 63 of the Habitats Regulations, and it is not therefore necessary to consider AEOSI and the potential prohibition on consent that such effects give rise to. The fact is that the Habitats Regulations have no bearing at all on these species.<sup>359</sup> The species in issue are associated instead with the Holy Island Coast SSSI. However, while they are part of a breeding seabird colony identified as contributing to the special interest of this site and which should be maintained, neither species are identified as interest features for the site's designation.<sup>360</sup> The protection afforded to these species by the legislation is thus far less than for mammals. Phase One of the project has, as we know, limited any deployment to a scale low enough to avoid the impacts on marine mammals and inevitably this will also avoid predicted impacts on the far less protected and vulnerable seabirds.

227. Fourth, there is agreement by all parties that the proposed Phase One of the development will not have a significant effect on guillemot and razorbill.<sup>361</sup> The relevant modelling note *Marine Ornithology Collision Risk Modelling Note*<sup>362</sup> (the "ornithology modelling note") predicts minor adverse effects – a low magnitude of impact – on these birds; an assessment from which neither NRW nor RSPB in the end dissented.
228. Fifth, this initial deployment and any further deployment is to be strictly controlled, and will depend on the results of monitoring to be undertaken, further modelling etc. This process will be subject to the submission of a Detailed EMMP in accordance with the Outline EMMP and containing matters specified in that condition – secured both in the ML and as one of the Schedule 1, Part 4 documents.<sup>363</sup> This process was enough to persuade NRW that it need not pursue at the inquiry any objection based on the risk of AEOSI from collision risk on highly protected marine mammals,<sup>364</sup> and it does the same for the lesser protected seabirds in issue.
229. Sixth, the RSPB says that it believes that climate change is the most pressing threat to the UK's wildlife and that renewable energy has an important role to play in countering that threat.<sup>365</sup> But Dr McCluskie says that the RSPB will still, despite this, oppose renewable energy if it judges the proposed location to be inappropriate and

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<sup>358</sup> As Dr McCluskie confirmed in his evidence in chief. These bird species and any impacts on them is covered for completeness in the proof of Dr Grant (Ref: MDZ/P1) and in his appendices responding to NRW, RSPB and the NWWT.

<sup>359</sup> Guillemot are listed in Annex I of the Birds Directive, razorbill are not: see Dr McCluskie's proof at paras. 3.15 and 3.21, but the obligations in relation to such bird species is under Article 4 of the Birds Directive to create SPAs. The birds in issue are though not part of or associated with any SPA. Dr McCluskie rightly accepted that this was so in XX.

<sup>360</sup> See Dr Grant's Proof of Evidence at para. 4.4 (Ref: MDZ/P1), Dr McCluskie's Proof of Evidence at para. 3.12 (Ref: POE007.1) and Dr McCluskie's answers in XX.

<sup>361</sup> See NRW's response at FEI Ref: REP004 p. 9 of 23, para. A.29; see Dr McCluskie's Proof of Evidence at para 8.1 (Ref: POE007.1) and his answers in evidence in chief and XX.

<sup>362</sup> Ref: MDZ/A31.10

<sup>363</sup> See Ref: Inquiry Doc - 90 and Ref: Inquiry Doc – 102

<sup>364</sup> See Ref: Inquiry Doc - 85, section 1.

<sup>365</sup> See Dr McCluskie's Proof of Evidence at para 3.3 (Ref: POE007.1), and his answers in XX. See also Chapter 11 of the ES (Ref: MDZ/A31.11) at para. 39 and Mr Bell's proof at para 6.3.3 quoting from UK national policy – the importance of the contents of both of which Dr McCluskie agreed in XX.

to risk significant damage to sites or species.<sup>366</sup> The threat posed to seabirds by climate change is acute. Thus, the ES records that "*[c]limate change is likely to be the strongest influence on seabird populations in coming years, with anticipated deterioration in conditions for breeding and survival for most species of seabirds ... Further declines in numbers of many UK seabird populations are therefore anticipated in the short, medium and long term under a scenario with continuing climate change due to increasing levels of greenhouse gases in the atmosphere*".<sup>367</sup> Moreover, the report by Furness *et al.*<sup>368</sup> is clear that despite the uncertainties: (i) "*there is a very strong consensus in the published literature that these wet renewables technologies are unlikely to represent as great a hazard to seabirds as posed by offshore wind farms*" and (ii) that "*[t]he relatively low risk to seabirds from wet renewables also contrasts strongly with the high impact on seabird populations resulting from depletion of fish stocks by global fisheries... and potentially from climate change...*". And, as Dr McCluskie accepted the potential locations for tidal energy are far more limited than for wind,<sup>369</sup> with the location of the MDZ being one of only three locations around the UK adjudged by The Crown Estate to be especially suitable for such a demonstration zone.<sup>370</sup>

230. Seventh, Dr McCluskie relies heavily on Furness *et al.* and their conclusion that guillemots and razorbill are of high vulnerability in relation to tidal turbines. But he accepted in cross-examination that "*this should not be taken as evidence of established impacts of tidal devices on these species. Rather, Furness et al. (2012) provide a classification based upon such factors as the extent to which the behaviours and habitat preferences of different species mean that they are likely to coincide with, and be exposed to, such devices, so that it identifies those species for which there is likely to be greatest need to investigate potential impacts*".<sup>371</sup> Moreover, as we have seen overall Furness *et al.* considered the risk to seabirds was relatively low and less than for wind farms.

231. Eighth, Dr McCluskie's evidence pointed (rightly) to the fact that "*[w]hile there have been several studies of collision risk with both onshore and offshore wind turbines there is little information on ... sub-surface collisions with tidal turbines, largely due*<sup>372</sup> *to the few devices in place*". The RSPB thus set up a familiar chicken and egg type problem: (i) we have limited information on the interaction between tidal turbines and diving birds largely due to the lack of deployment; (ii) this can only be overcome by allowing more deployment; (iii) this Order which seeks to deploy further turbines but in a phased and controlled way and to monitor these should be refused. Why? Because of the existing lack of information on impact on seabirds. There is only one way to break this vicious circle and that is: (i) to consent and deploy tidal devices initially at a small scale; (ii) to monitor such deployment;

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<sup>366</sup> As above.

<sup>367</sup> See Ref: MDZ/A31.11 at para. 39.

<sup>368</sup> Relied on heavily by Dr McCluskie in his Proof of Evidence (Ref: POE007.1), see e.g. paras. 3.20 and 3.24.

<sup>369</sup> As Dr McCluskie accepted in XX the ability to guide the development of renewables to areas where there are least impacts on the natural environment (see his proof at para. 1.3) is far more limited with tidal given that geography dictates its location very strongly.

<sup>370</sup> See Dr McCluskie's answers in XX, and see above re: Dr Orme's evidence on these issues. RSPB's counsel was present when Dr Orme gave his evidence and did not challenge any of his evidence on these points.

<sup>371</sup> See Dr Grant's rebuttal Proof of Evidence at para. 2.5 (Ref: RPE010), his evidence in chief and Dr McCluskie's answers in XX.

<sup>372</sup> See Dr McCluskie's Proof of Evidence at para. 5.1 (Ref: POE007.1) and his answers in XX.

and (iii) to only allow any further deployment if the result of the monitoring allows regulators to conclude that such can occur without adverse impacts. This is what is proposed here. The logic of Menter Môn's approach - which relies on phasing and adaptive monitoring and management – is inexorable.

232. Indeed, Dr McCluskie says *"I fully support the vital monitoring and research that is proposed, if achievable, as it would increase our understanding of how seabirds interact with, and are impacted by, tidal devices. The evidence that could be gathered, if this proposal was to go ahead would provide much needed clarity on how, and if, this technology can be deployed, increasing certainty for developers and investors whilst ensuring that both nature and the environment is protected."*<sup>373</sup> This is a welcome if belated recognition by the RSPB of some of the benefits of this project. Dr McCluskie then says<sup>374</sup> *"[a]n example of a good Adaptive Management Agreement is the tidal energy development in the Pentland firth, "Meygen", where the Scottish Government's consent was conditional on a limited initial phase development with full and detailed monitoring and all subsequent stages being subject to the prior written approval of the Scottish Ministers"*. In cross-examination I put to Dr McCluskie that this is precisely what is proposed here. In response he floundered badly. He ended up, both in cross-examination and re-examination, trying to argue that the material difference between Meygen and the present case was that here the further approvals would be by NRW, and in the Meygen case by Ministers. For some unexplained reason Dr McCluskie clung on to this idea that approval by Ministers was in some unspecified way better than approval by NRW. But unless RSPB are disputing NRW's competence – and it is strongly denied by RSPB that they are – this is a truly hopeless point. RSPB's position was laid bare in re-examination. The vicious circle it was said could be broken instead by applying only for a first phase and monitoring that and then applying for a separate consent thereafter based on the monitoring. But that is materially different from what is proposed here in only one regard, and that is the identity of the decision-maker for the later phases. RSPB's apparent distrust of NRW is the only thing that can lie behind this.

233. Ninth, the only other issue raised by Dr McCluskie, and the RSPB, in this context is the complaint made that the phases are not set on the face of the Order and do not specify limits on the number of arrays, depths, type etc. such that they are *"limited and immovable"*.<sup>375</sup> In re-examination it was suggested that Meygen was also different in this regard with Annex 1 specifying the maximum number of turbines and their size.<sup>376</sup> But this is a bad point because: (i) the ES in chapter 4 sets the PDE which is consented and does contain a number of device limits and which are secured by the Order; (ii) Meygen were seeking to deploy their own technology that they had developed, it was not a MDZ that seeks flexibility for a range of developers and devices; and (iii) in any event as regards what is proposed here Dr McCluskie's own evidence is that *"[i]t has been explained to me that the current proposed EMMP submitted to the Marine Licence application does address some of these concerns by way of inclusion of a 'Stop' clause and also a 'Removal' clause should an impact, significant or otherwise, be noted through agreed monitoring results."* These clauses have also now been included in the Outline EMMP submitted to this TWAO process.

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<sup>373</sup> See Dr McCluskie's Proof of Evidence at para. 8.4 (Ref: POE007.1).

<sup>374</sup> See Dr McCluskie's Proof of Evidence at para. 8.4 (Ref: POE007.1).

<sup>375</sup> See Dr McCluskie's Proof of Evidence at para. 8.5 (Ref: POE007.1).

<sup>376</sup> Ref: Inquiry Doc - 083

234. Finally, by way of context two points:

- (i) First, what ultimately emerges from the evidence of Dr McCluskie is that he is concerned as to the effectiveness of, and ability to undertake, any monitoring.<sup>377</sup> He accepted that if this was something he could be satisfied on then RSPB's objections would very largely fall away.<sup>378</sup> The issues around monitoring are considered below but what is clear is that:
  - a. Under the Outline EMMP no devices may be deployed unless the regulator is satisfied that there can be effective monitoring (see para. 8 of the EMMP);
  - b. Thus, if Dr McCluskie's concerns on the efficacy of monitoring were justified, (and they are not), then there would be no deployment as the regulator would not approve this;
  - c. There are multiple options for monitoring, including of collisions (see below). Some of the technology has advanced considerably in the last 10 years driven by the deployment of offshore wind (e.g. on tagging technology such as GPS, TDR etc), and there is no reason to think it will not continue to develop;
  - d. Indeed, Dr McCluskie accepted that the making of this Order will act to incentivise the market to improve monitoring as it will be key to unlocking further deployment up to 240MW;<sup>379</sup>
  - e. There are indeed already a small number of operational tidal devices in operation in the UK where monitoring using tagging, video and sonar is actually taking places: e.g. Meygen and Bluemull Sound. There is a growing evidence base in respect of this and which shows at least some level of initial success: see below.
  - f. There is no evidence anywhere in the World of a bird ever having collided with a tidal device – the risk remains a theoretical one;
  - g. Even without a way of monitoring individual collisions between birds and turbines (assuming, of course, there are, any) there are a number of other well-established methods of monitoring any impacts on bird populations e.g., colony counts (see below);
- (ii) Second, in Dr McCluskie's original proof he stated<sup>380</sup> "*[i]t is therefore apparent that the Applicant should, at very least, seek to submit a detailed EMMP to sit alongside the Order which allows scrutiny at this stage and that sets out an effective and achievable monitoring strategy. This should then be updated and amended prior to each deployment Phase and subsequently submitted to Welsh Ministers for scrutiny and approval to ensure an effective mitigation strategy, in the same way that it is proposed for the Marine Licence*". This paragraph was deleted in the amended proof. When I asked Dr McCluskie why

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<sup>377</sup> See Dr McCluskie's Proof of Evidence at para. 8.6 "*without effective monitoring and safeguards I remain concerned about potentially significant impacts on the bird populations using the Application area*" (Ref: POE007.1).

<sup>378</sup> See Dr McCluskie's answers in XX.

<sup>379</sup> See Dr McCluskie's answers in XX

<sup>380</sup> See para. 8.10 in the original unamended proof (Ref: POE007).

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he had deleted this he was unable to give any answer. There can only be one reason why it was deleted and that is because Dr McCluskie realised that what he was suggesting should happen is in fact precisely what is in fact proposed. That did not fit with RSPB's relentless and, we say, wholly unjustified opposition to the project and so it was cut.<sup>381</sup>

(ii) The modelling of the potential impacts

235. It is necessary to consider now the modelling work undertaken to assess the impact on non-SPA birds and the issues that RSPB, but not NRW, pursue in this regard.

236. First, as already noted Dr McCluskie accepts that the proposed scale of deployment at Phase One will not have a significant effect on these species. But despite this Dr McCluskie raises some issues with the assessment which is contained in the ornithology modelling note, Ref: MDZ/A31.10. The issues he raises in this regard are as baseless as they are footling. The key points are these:

- (i) The scale of deployment for Phase One is limited by the 0.7 bottlenose dolphin PBR, and will be very small (between 4 and 21 devices, 5 – 12 MW): see above and see MDZ/A31.13. This looks at a number of potential devices and fixes a set MW for each, and then models the maximum number of each that could be deployed to come in under the 0.7 bottlenose dolphin PBR (see above);
- (ii) In the ornithology modelling note<sup>382</sup> because the number and type of devices is unknown it selects the worst case devices for razorbill and guillemot so device 3F and 6S respectively<sup>383</sup>;
- (iii) It then models the collision estimates based on these worst cases: see Table 3-1 in MDZ/A31.10 (with the outputs of the Population Viability Analysis ("PVA") associated with these collision estimates in Tables 3-2 to 3-5);
- (iv) These impacts as modelled, it is accepted by Dr McCluskie, do not give rise to significant effects;
- (v) Dr McCluskie makes three complaints about this modelling (which he accepted is predicated on a worst case approach):
  - a. He complains that there is postulated to be a linear relationship between MW of deployment and impact and this is unproven and unlikely to be correct: but this point is a bad one, as he accepted,<sup>384</sup> because: (i) there is a linear relationship in the modelling between number of devices and

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<sup>381</sup> Note that the tracking used for additions in the amended proof did not track deletions.

<sup>382</sup> Ref: MDZ/A31.10

<sup>383</sup> In the mammal modelling note these are labelled devices 2a and 5b – see Table 2-1 in that note (Ref: MDZ/A31.13).

<sup>384</sup> See Dr McCluskie's answers in XX:

*"Q: In relation to that – when we assess the devices in the modelling notes, each device has a set MW?*

*A: Yes*

*Q: So it doesn't matter whether one looks at it in terms of numbers or MW – they're interchangeable?*

*A: They're interchangeable if there are whole devices. It's the necessity for realism in the assessment. It's not realistic to have parts of assessments. 0.89 of a device ..."*

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collisions;<sup>385</sup> and (ii) there is a fixed MW rating output for each type of device so that MW and number of devices is thus fully interchangeable in this respect and the relationship is therefore linear;

- b. He complains that the modelling looks at part of a device: this point is, if anything, even worse than the first one. As Dr McCluskie accepted his objection was predicated on no more than an in principle objection related to the complexity of such modelling. He accepted this point: (i) was “academic”, (ii) unsupported by anything in the EIA Regulations or guidance; (iii) made no difference at all to the assessment, and (iv) that in fact, if anything, it made the assessment undertaken even more worst case.<sup>386</sup>
- c. He complains that because the devices ultimately deployed may be different to those assessed, and because the overall limit for Phase One, is based on the 0.7 PBR for bottlenose dolphins the predicted effect on birds might be greater: but in his oral evidence Dr McCluskie accepted that this point fell away given that it was clear from the EMMP that prior to deployment of Phase One there would be modelling of the impact of the specific devices to be deployed in terms of both impacts on birds and mammals: see the EMMP at para. 39.<sup>387</sup> And there is a further point namely that the ornithology modelling note assumes a worst case for guillemots and razorbills in terms of the devices deployed;

(vi) Thus, on the basis of these somewhat footling and very largely academic points Dr McCluskie says<sup>388</sup> “... my examination of the further information supplied by the Applicant has demonstrated an absence of robust calculations for the reduced impact scenarios. I therefore continue to base my conclusions on the results of the Applicant’s modelling of the 240 and 40 MW scenarios” and indeed the majority of his written evidence focusses on this.

237. Second, this leap is in any event wholly unjustified. It makes no sense on any basis. It frankly undermines the credibility of Dr McCluskie’s evidence as a whole. What is proposed here is the deployment of a small initial phase far smaller than the 40MW or 240MW assessed in the ES. These larger phases will never be allowed to deploy unless the monitoring of Phase One establishes that the harm will not be at

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<sup>385</sup> Dr Grant explained this in his oral evidence in detail. If you have 5 devices – 3 of type A and two of type B the model is additive it takes 3 x A and 2 x B. That is how the models work.

<sup>386</sup> See Dr McCluskie’s answers to your questions Sir:

*“Q: But what is of interest to Mr Maurici, and me, is what difference does it make. If the inquiry is concerned with assessing possible effects of the worst proposed. And modelling goes beyond those 5 units that could be in possession, why is the assessment not appropriate? Why would it not give the Welsh Ministers a realistic assessment of the potential effects of the scheme?”*

*A: In part it’s a point of principle that because we deal with so much modelling I’m very keen to introduce realism. This is a step away from physical realism.*

*Q: Right but for the purpose of the inquiry – I understand the wish to keep the modelling as close to the real position as possible, but if that goes to the point of greater assessment and safety, where is the problem?”*

*A: Other than the academic argument that should be as real as possible.*

*A: Outwith the argument that it should be as realistic as possible, it isn’t a problem. But applicant goes on about how much precaution is in the assessment, and precaution is being introduced unnecessarily here.”*

See also Dr Grant’s rebuttal at para. 4.20.

<sup>387</sup> See Refs: Inquiry Doc – 100 and Inquiry Doc – 101, and Dr McCluskie’s answers in XX.

<sup>388</sup> See Dr McCluskie’s Proof of Evidence at para. 5.46 (Ref: POE007.1).

the level very conservatively predicted – and with no mitigation assumed - in the ES. To say that because he has some (ill-founded) concerns with the assessment of the Phase One deployment the RSPB will instead focus on the unmitigated effect of the larger deployments, ignoring the EMMP is a nonsense approach.

238. Third, Dr McCluskie's proof in assessing the potential impacts on razorbills and guillemots is thus focussed on the 40MW and 240MW assessments in the ES.<sup>389</sup> His proof thus states that "*[w]ith the 240 MW proposal the Applicant's own calculations predict that the guillemot population of South Stack and Penlas, using 95% Avoidance Rate, would be 2.4%, of the level it would be in the absence of the development, (i.e., a reduction of 97.6%) after 25 years, and using 98% Avoidance Rate would be 40.5% of the level it would be in the absence of the development. For razorbill, the Applicant's own calculations predict the population of South Stack and Penlas would be reduced to zero (i.e., extirpated) using 95% Avoidance Rate*".<sup>390</sup> The same thing was said by the RSPB in opening and in the media on the first day of the inquiry. While this all makes for a useful soundbite for the RSPB and its cause these statements are highly misleading given that:

- (i) These figures are based on what is a highly precautionary analysis (see below), which in some respects Dr McCluskie in cross-examination "complained" was too precautionary;
- (ii) These figures ignore entirely the EMMP and any phasing, mitigation and other controls;
- (iii) There is accordingly no real-world scenario where deployment would be allowed up to anywhere near 240MW if this sort of level of effects were found to occur as a result of the post Phase One monitoring,<sup>391</sup> so long as NRW is acting competently as regulator. Moreover, of course, the Advisory Group (which RSPB has been invited to join) would act as a filter to prevent such a position even being put to NRW for decision.

239. Fourth, the collision modelling that has been undertaken is in a number of regards highly precautionary:

- (i) **The level of nocturnal diving is assumed to be 90% of daytime which is likely to be an overestimate of at least at the upper end of what is likely:**<sup>392</sup> Dr McCluskie accepted that this aspect of the assessment was "precautionary but realistic";<sup>393</sup>
- (ii) **Dive depths have been assumed to be the same at night as they are in the day even though the evidence shows night dives to be**

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<sup>389</sup> See Dr McCluskie's Proof of Evidence at paras. 5.25 - 5.37 (Ref: POE007.1).

<sup>390</sup> The issue of avoidance rates is considered below, but suffice to say it is Dr Grant's evidence that a 95% avoidance rate is itself highly precautionary.

<sup>391</sup> In re-examination Dr Grant indicated that given the controls to be imposed on the ML and the Outline EMMP the prospects of these impacts ever coming about was "*Highly unlikely, and shouldn't happen*".

<sup>392</sup> See Dr Grant's Proof of Evidence at para. 6.24 (Ref: MDZ/P1) and Dr McCluskie's rebuttal Proof of Evidence at para. 7 (Ref: RPE012).

<sup>393</sup> See Dr McCluskie's answers in XX.

**shallower**.<sup>394</sup> Dr McCluskie accepted that this was “appropriately precautionary”;<sup>395</sup>

- (iii) **All collisions have been assumed to be fatal: Dr McCluskie again accepted that this was precautionary**,<sup>396</sup> as there is with tidal quite a strong prospect that if there ever was a collision it would be sub-fatal;
- (iv) **The ornithology modelling note assumes a worst case for each species in terms of device type and looks at non-whole numbers of devices above what could actually be deployed**: see above, Dr McCluskie bizarrely suggested this was “unnecessarily precautionary” – not a complaint I thought we’d ever hear from the RSPB.

240. Fifth, the PVA analysis undertaken is also highly precautionary because:

- (i) *“they have used starting population-sizes for the South Stack and Penlas guillemot and razorbill populations which are considerably smaller than as currently estimated. Thus, the more recent estimates of the colony population sizes are 75% and 34% higher for guillemot and razorbill, respectively (ES Chapter 11, vol. 3 – Appendix 11.3 .... This will act to reduce the effect of the predicted impacts as determined by the counterfactuals of the population growth rate and population size, with the reduction likely to be considerable in the case of guillemot”*.<sup>397</sup> The RSPB disputed this:
  - a. The only point put to Dr Grant in cross-examination on this was that this would make little difference given the extent of the impacts assessed in the ES. He comprehensively refuted this;<sup>398</sup>
  - b. Dr McCluskie in chief argued that if a higher starting population size was used for the PVA analysis this had to be carried through into the modelling with the result that more birds meant more collisions. Dr McCluskie’s evidence on this point appeared to misunderstand what had in fact been done in the assessment but as this point was never put to Dr Grant in the end little, if any, weight can be attached to it;

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<sup>394</sup> See Dr Grant’s Proof of Evidence at para. 6.24 (Ref: MDZ/P1).

<sup>395</sup> See Dr McCluskie’s answers in XX.

<sup>396</sup> See Dr Grant’s Proof of Evidence para. 6.25 (Ref: MDZ/P1) and Dr McCluskie’s answers in XX.

<sup>397</sup> See Dr Grant’s Proof of Evidence at para. 6.26 (Ref: MDZ/P1).

<sup>398</sup> Having referred to what is said by Dr Grant in his proof at para. 6.26 Ms Lean cross-examined as follows:

*“Q: This may be true as a matter of mathematics but it doesn’t mean you’re going to end up with a different level of significant effect just because you’ve got a difference in the numbers*

*A. It could do. It won’t in this case because there is no significant effect. If you start with 2,000 birds, and assume mortality of 20 p/a, and come to conclusion a significant effect. If you start 4,000 birds and do same work you might find it changes assessment conclusions. Collision mortality is expressed relative to population size and so starting population size is key. In this case I estimate (I haven’t done the modelling, this is an informed guess), where you have - compared to what we’ve done - if you were to do same PVA same collision estimates, but with a starting population that’s 75% higher, you almost half the scale of the impact – c. 40% or so. So starting point is a key part of this process*

*Q: Is that in relation to the 0.7 we’re talking about?*

*A: Yes, but the same applies to 40MW and 240MW deployments. PVAs are based on the same – and by the same scale and magnitude. SO same starting pop sizes used in PVAs for 40MW, 240MW, 0.7pba deployment. That would, in the case of guillemots, redoing PVA with larger population size could affect conclusion. Might bring it down from major adverse to moderate adverse in 240MW. I am saying it could, you’d have to do it to find out. It would improve the assessment for scale of effect on the birds.”*

- c. What was agreed by Dr McCluskie in cross-examination was that:
1. the baseline surveys undertaken between November 2016 – October 2018 were appropriate and undertaken in accordance with industry standards;<sup>399</sup>
  2. The starting population sizes used for PVAs relied on the most recent colony count data available at the time the modelling was undertaken. This comprised 2018 data from some sections of the colony but other sections used 2016. However, the higher (current) population sizes for the colony referred to in Dr Grant's Proof of Evidence represent the estimates as based upon the complete 2018 data (i.e., for all sections of the colony). So, the higher estimates of the population sizes are contemporary with the baseline survey data, such that the baseline data are representative of those population sizes.
  3. the application of a correction factor<sup>400</sup> to the colony count data to give a starting point population estimate followed the recommended method for converting counts of guillemots and razorbills at the colony to actual population sizes. This is also agreed in the Statement of Common Ground with NRW.<sup>401</sup>
- d. Dr McCluskie implied under cross-examination that the correction factor should also have been applied to the baseline survey data. However, as was put to him, this is incorrect. The methods used to collect and analyse the baseline survey data followed recommended industry guidance (as he agreed), which does not involve the application of any such factor.
- (ii) **The assessment used density independent population models and did not take account of compensatory mechanisms for which there is clear evidence of these being widespread in auk populations and in seabird populations more generally:**<sup>402</sup> **This was the subject of much dispute based on the Horswill *et al.* paper,**<sup>403</sup> and a debate around whether the evidence supported compensatory or depensatory mechanisms in such populations. The key points are:
- a. Horswill *et al.* reviewed 89 studies on the issue in seabirds and found evidence of compensatory mechanisms in 67 of 89 of those;
  - b. 15% of those 67 papers (so 10) related to auks;<sup>404</sup>
  - c. In relation to recruitment (5 papers), population growth (3 papers) and survival<sup>405</sup> (2 papers) compensatory mechanisms were found to be

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<sup>399</sup> See Dr Grant's Proof of Evidence at para 5.2 (Ref: MDZ/P1) and Dr McCluskie's answers in XX.

<sup>400</sup> Which Dr McCluskie seemed to be critical of in evidence in chief.

<sup>401</sup> Ref: MDZ/L2 pp. 22-23

<sup>402</sup> See Dr Grant's Proof of Evidence at para. 6.27 (Ref: MDZ/P1).

<sup>403</sup> Ref: Inquiry Doc - 082

<sup>404</sup> See p.1409 of Ref: Inquiry Doc - 082

<sup>405</sup> Dr McCluskie accepted that this was a strong factor in auks as they were a long-lived species: see his answers in XX. The relevance of being long-lived species is that it means that population trends are most sensitive to changes in survival rates.

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present in auk populations<sup>406</sup> and it was only in relation to productivity that papers pointed to compensatory factors for auks (2 papers);

- d. Of the relevant factors "survival" is self-evidently an important one <sup>407</sup> and Horswill *et al.* say that "[t]he evidence for compensatory regulation of survival was mostly noted in studies of...auks ..."; <sup>408</sup>
- e. Horswill *et al.* say that "[i]n the context of offshore wind farms, compensatory mechanisms may allow some losses from the breeding population to be...This potentially includes cormorants, skuas and auk"; <sup>409</sup>
- f. Dr Grant in his evidence in chief explained that where compensatory factors were found this was consistently associated with populations at already low densities, and Horswill *et al.* considered it relevant to depleted populations and endangered species. Dr Grant's view was that this did not apply to the relevant populations at South Stack and Penlas because these are relatively large, numbering approximately 12,000-13,000 guillemots and 2000 razorbills, and the available data suggests increasing numbers in recent years. Thus, he did not consider density compensatory mechanisms to be important in this context. Dr McCluskie's only riposte was to say that this could be relevant if the impacts were as per the unmitigated 240MW deployment assessed in the ES. But as already explained these impacts will never actually occur.

- (iii) The assessment assumed a closed population with no immigration or emigration which is a biological simplification and likely to cause an overestimate of impacts.<sup>410</sup> Dr McCluskie accepted that this was precautionary albeit that the scale of over estimation of impacts could not be determined.<sup>411</sup>

241. Sixth, there is no dispute between the parties that despite the inability to validate the models because of a lack of data resulting from lack of deployment the best way to assess collision risk with tidal devices is by using the CRM and ERM models.<sup>412</sup> These are two of the three models recommended by SNH.<sup>413</sup> NRW recommended the use of these models here, and they were used.<sup>414</sup>

242. Seventh, there was inevitably an attempt by the RSPB to make something of the error in the modelling discovered in late 2020. Dr Grant though explained the very subtle nature of the error and that it was he who spotted it.<sup>415</sup> The error made a marginal difference to the assessment.<sup>416</sup> In no way does this undermine the confidence in the modelling work done to date or that which will come later on.

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<sup>406</sup> See Table 1, p.1409 of Ref: Inquiry Doc – 082 (PDF page 4 of 9).

<sup>407</sup> As Dr McCluskie accepted in XX.

<sup>408</sup> See p.1410 of Ref: Inquiry Doc – 082

<sup>409</sup> See p.1411 of Ref: Inquiry Doc – 082

<sup>410</sup> See Dr Grant's Proof of Evidence at para. 6.27 (Ref: MDZ/P1).

<sup>411</sup> See Dr McCluskie's answers in XX.

<sup>412</sup> See Dr Grant's Proof of Evidence at para. 8.8 (Ref: MDZ/P1), see Ref: MDZ/F15.2 at p. 10, 2nd paragraph and Dr McCluskie's answers in evidence in chief and XX.

<sup>413</sup> See Ref: MDZ/F19.

<sup>414</sup> See Dr Grant's Proof of Evidence at para. 8.8 (Ref: MDZ/P1) and Dr McCluskie's answers in XX.

<sup>415</sup> See Dr Grant's answers in XX and re-examination.

<sup>416</sup> See Dr Grant's evidence in chief.

Despite having had all the data for some months now the RSPB were unable to identify a single further error in the modelling.

(iii) The PDE/adaptive management issues

243. Dr McCluskie's proof makes clear that among the RSPB's key issues was the use of a PDE and adaptive management.<sup>417</sup> These issues are dealt with above in more detail but the following short points can be made:
- (i) The RSPB has no in principle objection to the use of a PDE for consenting tidal energy projects;<sup>418</sup>
  - (ii) The use of both a PDE and adaptive management is supported by NRW in published papers;<sup>419</sup>
  - (iii) To the extent that a complaint is made that the PDE is not properly defined in respect of this project, this view has been rejected by PINS;<sup>420</sup>
  - (iv) NRW has endorsed the use of a PDE and adaptive management both generally for tidal projects and in respect of this project in particular;<sup>421</sup>
  - (v) NRW has satisfied itself that "*securing the DEMMP (and the specified details required), based on the OEMMP, via a condition on the draft marine licence*"<sup>422</sup> is sufficient to give it assurance that there will be no AEOSI on marine mammals and these are far more protected than the bird species in issue.<sup>423</sup> NRW are also apparently content with the Outline EMMP as regards birds.
244. Despite complaints made by the RSPB that the Outline EMMP<sup>424</sup> gives insufficient protection to birds, in fact there are multiple protections contained within it. Thus:
- (i) The commitment of Menter Môn to safeguard the environment explicitly includes diving seabirds (para. 5);
  - (ii) Device deployments will only be allowed at scales at which NRW agree that the best available scientific understanding does not predict adverse impacts upon non-SPA populations of diving seabirds from local colonies (see para. 7);
  - (iii) No device operation will be allowed until NRW is satisfied that effective monitoring is in place that can directly inform the implementation of the EMMP, and inform the agreed aims, objectives and management questions set by the EMMP for the project (see para. 8). And the aims (see para. 75); the objectives (see para 76) and the monitoring questions (see Table 2-2) all feature the protection of non-SPA birds;

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<sup>417</sup> See Dr McCluskie's Proof of Evidence at paras. 4.1, 4.2 and 8.5 (Ref: POE007.1) and his answers in XX.

<sup>418</sup> See Dr McCluskie's answers in XX.

<sup>419</sup> See Ref: MDZ/F15 and also Ref: MDZ/K1 and Dr McCluskie's answers in XX.

<sup>420</sup> See Ref: MDZ/E10, para. 15.

<sup>421</sup> See Refs: MDZ/F15, MDZ/K1 and MDZ/L2 p.5 para. 21 and see Dr McCluskie's answers in XX.

<sup>422</sup> See Ref: Inquiry Doc – 085, point 1.

<sup>423</sup> See Dr McCluskie's answers in XX.

<sup>424</sup> Refs: Inquiry Doc – 100 & Inquiry Doc – 101.

- (iv) One of the main purposes of the EMMP is to avoid significant effects on non-SPA diving birds from local colonies (see paras. 18, 30); and another is to collect data on birds so as to update the collision risk modelling (see para. 21);
- (v) Phase One is explicitly stated to be determined in due course by the outcome of modelling for, inter alia, seabirds (see para. 39);
- (vi) There is considerable provision in the Outline EMMP on monitoring and mitigation in relation to seabirds: see paras. 58, 61, 62 – 63, 67, Table 1-1, 76 (both bullets), paras. 77 – 78, 84 – 87, 100, Tables 2-1 and 2-2, para. 139, Table 4-1, paras. 153, 159 and 167 -169. Moreover, the outline EMMP proposes that RSPB be on the Advisory Group.

(iv) The remaining assessment issues

245. Given all the above, Dr Grant was correct to suggest that many of the detailed assessment issues raised by Dr McCluskie are perhaps of somewhat marginal significance.<sup>425</sup> This is particularly so given that the ES assesses the unmitigated impacts of a 40MW and 240MW deployment in respect of guillemot and razorbill as in a number of respects to be "*major adverse*";<sup>426</sup> that is to say the highest level of significance of impact there is in the ES.<sup>427</sup> Given this even if Dr McCluskie was correct in respect of any of the criticisms he makes, and he is not, it would not change<sup>428</sup> the overall level of assessed significance.<sup>429</sup> Turning then to the issues.
246. First, Dr McCluskie argues that the SNH guidance requires that a full range of avoidance rates (0-99%) must be both presented *and applied*<sup>430</sup> in any assessment. However, the position is that:
- (i) The SNH guidance (properly read) requires that a full range of rates be presented but not necessarily applied to the assessment;<sup>431</sup>

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<sup>425</sup> See Dr Grant's evidence in chief.

<sup>426</sup> See Dr Grant's rebuttal Proof of Evidence at para. 4.23 (Ref: RPE010), ES chapter 11 (Ref: MDZ/A31.11) at paras. 176 – 177 and Dr McCluskie's answers in XX. It should also be noted that for the 40MW deployment, the effect on guillemots is "*moderate adverse*" – see Ref: MDZ/A31.11 at para. 177.

<sup>427</sup> See Ref: MDZ/A25.5 ES Chapter 5 at p.18.

<sup>428</sup> Dr Grant in his evidence in chief said that while not underplaying the importance of the technical details being correct that in many ways Dr McCluskie's issues with the assessment were academic given the overall assessment made of the unmitigated impacts of 40MW and 240MW.

<sup>429</sup> Dr McCluskie in XX sought to deny this saying the effects could be greater, but given that he characterises the unmitigated effects as extirpation it is not clear how that is so. Dr McCluskie's only suggestion was that extirpation may result sooner.

<sup>430</sup> See Dr McCluskie's proof at para. 5.12 and his answers in XX

<sup>431</sup> See MDF/F19 at p.67 "*Given the present lack of knowledge of avoidance behaviour, SNH recommends that all collision risk assessments using an avoidance factor should set out results using six avoidance rates: 0% (i.e., no avoidance), 50%, 90%, 95%, 98% and 99%" (emphasis added)*

- (ii) The SNH guidance also recognises that ultimately which avoidance rate to apply is a matter of professional judgment;<sup>432</sup>
- (iii) It is not disputed that the ES and the ornithology collision modelling note<sup>433</sup> set out the full range of results, the complaint is that a narrower range of avoidance rates (95 – 99.9%) is focussed on for the purposes of the assessment.<sup>434</sup> That allegedly “narrower” range still though encompasses a 50-fold difference in collision estimates;<sup>435</sup>
- (iv) Dr Grant’s professional judgment is that the narrower range of avoidance rates is correctly focussed on because these are the most plausible and he gives two main reasons:
  - a. Both guillemot and razorbill are pursuit divers, using their wings for propulsion as they seek to catch fast moving fish which often use high burst speeds and high manoeuvrability to escape predators. Guillemot and razorbill are also visual foragers, relying on sight when locating, pursuing and catching their prey. As such, these species are capable of making rapid response movements and have high levels of manoeuvrability when swimming underwater, suggesting that higher avoidance rates are likely to be appropriate.<sup>436</sup> Dr McCluskie accepted that it was relevant to consider such factors.<sup>437</sup> But Dr McCluskie never put forward his own view of what an appropriate avoidance rate (or range of rates) was, but surely no one can contend that seabirds such as these would have a 0% avoidance rate. That is preposterous given the abilities of these seabirds. To argue for a full assessment on such a basis is unjustifiable.
  - b. The avoidance rates applied to CRMs for onshore and offshore wind turbines in relation to birds in flight have increased for many bird species (and markedly so in some cases) from initial, precautionary, values of 95% later 98% as data availability and the understanding of interactions of birds with wind turbines has increased.<sup>438</sup> Thus, for many species (or species groups) the avoidance rates that have now been calculated in relation to wind turbines are 99% or higher.<sup>439</sup> It is clearly the case that

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<sup>432</sup> See Refs: MDZ/F19 p.67 and MDZ/F15.2 p.12, 2nd paragraph, and Dr McCluskie’s answers in XX.

<sup>433</sup> Ref: MDZ/A31.11

<sup>434</sup> See Annex 11.3 of Ref: MDZ/A31.12

<sup>435</sup> As Dr Grant explained in evidence in chief.

<sup>436</sup> See Dr Grant’s Proof of Evidence at para. 4.4 (Ref: MDZ/P1).

<sup>437</sup> See Dr McCluskie’s answers in XX.

<sup>438</sup> See Dr Grant’s Proof of Evidence at para. 6.20 (Ref: MDZ/P1), his rebuttal at para. 4.4 (Ref: RPE010), his oral evidence and Dr McCluskie’s answers in XX.

<sup>439</sup> See Dr Grant’s rebuttal Proof of Evidence at Appendix 2 (Ref: RPE010), Table 1 and Dr McCluskie’s answers in XX. See also Dr Grant’s rebuttal Proof of Evidence at Appendix 3 (Ref: RPE010), Table 1 and the Cook *et al.* analysis in Dr McCluskie’s appendices at pp.26 -27 which were looked at in XX of both Dr Grant and Dr McCluskie. The default rate started at 95%, it was later raised to 98% for most species or species groups. Moreover, in relation to onshore wind farms, 9 out of 11 species or species groups now have higher avoidance rates than the new default, with two species still at the original default level of 95% that is kestrel and white-tailed eagles. In relation to offshore wind farms, the SNCBs recommended increasing the default 98% avoidance rate for all five seabird species for which the Cook *et al.* analysis identified sufficient evidence to enable a review of the avoidance rate (although

the range used in the assessment encompasses values considerably lower than the vast majority of the estimates derived for birds in flight in relation to wind turbines. Moreover, there are other factors that are likely to cause avoidance rates for tidal turbines to be higher than those for wind turbines, perhaps most notably: (i) the slower travel speeds of swimming than flying birds; (ii) the slower tip speed of tidal turbines (c 20mph for tidal vs c 100mph for wind); (iii) the greater potential for birds to be swept around the tidal turbine blades due to hydrodynamic forces (because water is much denser than air) and (iv) the fact that foraging activity by diving birds may be lower in those tidal states and rates of flow associated with slow turbine rotation speeds or which are below cut-in speed (see below).

- (v) Dr McCluskie argues for a potentially lower (unspecified) avoidance rate (or range of rates) based on two points:
- a. **Attraction to aggregated prey:** the position is that while there is some evidence of fish being attracted to tidal devices at some sites and thus there is a possibility of birds being attracted to devices there is no actual evidence of this;<sup>440</sup>
  - b. **Reduced visibility due to water clarity:** this seems unlikely given that these are birds who dive and chase fish underwater using sight, whilst it is also the case that avoidance rates as applied to birds in flight in relation to wind turbines also have to account for times of poor visibility (e.g. at night and during periods of low cloud or fog).
- (vi) Moreover, *"the guidance does not state that the assessment should necessarily focus on this wide range of avoidance rates, and SNH do not appear to expect such an approach to be taken. For example, the Habitats Regulations Appraisal (HRA) undertaken by SNH in relation to the proposed additional (sixth) turbine for the Shetland Tidal Array was based upon an assessment of collision risk to diving seabirds using the ERM with a 98% avoidance rate"*;<sup>441</sup>
- (vii) Dr McCluskie complained in his proof<sup>442</sup> that the assessment of avoidance rates in the ES failed to consider uncertainty but he rightly withdrew this criticism, accepting he was mistaken in this regard.<sup>443</sup>

247. Second, Dr McCluskie complains that the assessment used a common avoidance rate applied to average (mean) ERM and CRM outputs rather than using the worst case outputs. There are several points in response:

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in the case of black-legged kittiwake the SNCBs recommendation was for a smaller increase than that suggested by Cook *et al.*).

<sup>440</sup> See the Enfait report in Dr McCluskie's appendices at paras. 3.2.1 and 3.3.3 (Ref: POE007.1 electronic pages 926 and 928 -929) and Dr McCluskie's answers in XX.

<sup>441</sup> See Dr Grant's rebuttal Proof of Evidence at para. 4.3 (Ref: RPE010) and his Appendix 1 internal pp. 9, 13 and 19 and Dr McCluskie's answers in XX.

<sup>442</sup> See para. 5.31 of Ref: POE007.1.

<sup>443</sup> See Dr Grant's rebuttal Proof of Evidence at para. 4.9 (Ref: RPE010) and Dr McCluskie's answers in XX.

- (i) The guidance is entirely silent either way on the acceptability of such an approach;<sup>444</sup>
- (ii) The approach was taken for essentially pragmatic reasons in order to make the outputs digestible given that the assessment was looking at several different species, 9 devices, 2 generating capacities and a range of avoidance rates;<sup>445</sup>
- (iii) The approach is justified given that neither model is identified as being preferred by the relevant industry guidance<sup>446</sup> and there is no basis for assuming that the estimates from one model are any more accurate than those from the other. Although the calculations and approach of the two models differ, in both cases the avoidance rate is applied to the model output as the end point in estimating collision mortality. Thus, it is equally likely that the ERM, CRM or averaged ERM/CRM outputs with a particular avoidance rate applied give the true collision estimate;<sup>447</sup>
- (iv) While RSPB say that using the higher of the ERM/CRM values would be more precautionary, there are already (see above) many precautionary elements and Dr McCluskie himself complained that in places Menter Môn's analysis was too precautionary.<sup>448</sup> The problem is that if an analysis is too precautionary it becomes wholly implausible. The level of precaution to be applied is a judgment;
- (v) Indeed ultimately, this issue involves a quintessential matter of professional judgment on which two ornithologists might reasonably disagree<sup>449</sup> without either holding an unreasonable view;
- (vi) Moreover, in any event Dr Grant, as described in his proof, has undertaken the analysis on the basis of the higher CRM/ERM values advocated by Dr McCluskie for the Phase One scenario and found that it had little impact on the outcome and did not change the conclusion of no significant effect on either the guillemot or razorbill populations.<sup>450</sup>

248. Third, in relation to the PVA analysis:

- (i) It is agreed by Dr Grant and Dr McCluskie that:
  - a. There are two metrics identified as being appropriate in reviews commissioned by the JNCC and Marine Scotland Science namely Counterfactual of Population Size or CPS and also Counterfactual of Population Growth Rate;
  - b. The assessment undertaken by Menter Môn in the ES applies both of these metrics;<sup>451</sup>

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<sup>444</sup> See Dr McCluskie's answers in XX.

<sup>445</sup> See Dr Grant's evidence in chief.

<sup>446</sup> Ref: MDZ/F19

<sup>447</sup> See Dr Grant's rebuttal Proof of Evidence at para. 4.13, bullet 1 (Ref: RPE010) and his evidence in chief.

<sup>448</sup> See above.

<sup>449</sup> See Dr McCluskie's answers in XX.

<sup>450</sup> Dr Grant's Proof of Evidence at para. 6.23 (Ref: MDZ/P1) and Dr McCluskie's answers in XX.

<sup>451</sup> See Dr Grant's Rebuttal Proof of Evidence at para. 4.14 (Ref: RPE010) and Dr McCluskie's answers in XX.

- (ii) Dr McCluskie in his proof <sup>452</sup> says that "*[t]he RSPB welcome the manner in which Population Viability Analysis has been carried out for the guillemot and razorbill populations at South Stack and Penlas and the presentation of the correct, recommended, counterfactual output metrics*";
- (iii) The only complaints Dr McCluskie pursued on the PVA analysis were:
  - a. The PVA analysis did not use the full range of avoidance rates (0-99%): <sup>453</sup> this is dealt with above;
  - b. Menter Môn also used a third metric the "*25-year population relative to current population*": <sup>454</sup> But this was an additional analysis and no sensible complaint can be made about its inclusion alongside the recommended metrics. <sup>455</sup>

#### (v) Monitoring issues

249. In the end it seems that RSPB's case is very much focused on the monitoring issues. Dr McCluskie's proof in considering the EMMP focusses almost exclusively on monitoring. <sup>456</sup> Before turning to the monitoring issues in detail there are a number of points to reiterate by way of context:

- (i) As noted above Dr McCluskie accepted that absent the concern about whether there could be effective monitoring the RSPB's case would largely fall away;
- (ii) If RSPB is correct as regards monitoring (and it is not), then the EMMP is clear that no deployment may take place. That means that irrespective of the merits of the detailed points raised by RSPB there can be no concern at this stage so long as it is assumed that NRW is a competent regulator. Because unless they are satisfied pre-deployment that monitoring will be effective there cannot be deployment. So, in our submission, it is not possible to make any case stand based only on this point;
- (iii) RSPB's concerns are mostly not specific to the site or the project they are issues about the availability of technology to allow monitoring that would apply to any tidal proposal anywhere in the world. The logical conclusion of the arguments RSPB makes is that there should be no more tidal deployment. Indeed, in re-examination Dr McCluskie explicitly advocated this saying that instead monitoring should continue in respect of such limited tidal devices that have already been deployed. There are presently no tidal devices off Wales, and Dr McCluskie's position is directly contrary to Welsh Government policy that seeks to support an MDZ at this location. This argument also ignores the need for more data on the impacts of multiple arrays and which this project would allow for.

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<sup>452</sup> See para. 5.33.

<sup>453</sup> See Dr McCluskie's Proof of Evidence at para. 5.33 (Ref: POE007.1).

<sup>454</sup> See Dr McCluskie's Proof of Evidence at para. 5.19 (Ref: POE007.1).

<sup>455</sup> See Dr McCluskie's answers in XX.

<sup>456</sup> See Dr McCluskie's Proof of Evidence at p.20 onwards (Ref: POE007.1) and his answers in XX.

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250. The EMMP rules out no forms of monitoring. Table 4-1 looks at active sonar, surface infra-red visual spectrum camera, vantage point surveys, underwater video camera, colony counts and tagging.
251. The aim of the monitoring is to look at: (i) potential collisions; (ii) annual numbers/breeding success rates at the colony and (iii) the tracking of movements and diving behaviour.
252. Although no technique is being taken “off the table,” three main monitoring techniques are considered in detail by Dr Grant, and have been given most consideration to date: -
253. First, there are annual colony counts. These aim to estimate the number of breeding birds at a colony and also the breeding productivity. There is nothing novel about these, and it is essentially a proposed extension of what the RSPB already do in terms of colony monitoring.<sup>457</sup> The RSPB fully support such counts being done, and agree these are entirely possible. Further details of what is proposed will be a matter for the Detailed EMMP and the processes it sets in place. In the end RSPB’s only point is that colony counts alone are insufficient in terms of the necessary monitoring and that is agreed.
254. Second, there is tagging and tracking. The purpose of this is not to monitor collisions<sup>458</sup> rather it is to monitor and obtain data on where seabirds from the relevant colony travel to and what their diving behaviour is. This will allow a further assessment of their likelihood of interaction with tidal devices, and will enable refinement of key input parameters used on collision modelling. This data is important and Dr McCluskie recognised that tagging and tracking allowed you to “*get really useful information*”.<sup>459</sup> Moreover, there is nothing novel or experimental about such studies. It is a reasonably well tried and tested approach. Of course, the ability to undertake such work is dependent on conditions and the situation at the colonies in question e.g. in determining which birds are safely accessible for catching on the nesting cliffs. Everyone agrees catching the birds is a challenge. There are though a number of points:
- (i) Menter Môn has engaged with the RSPB to determine the feasibility of catching guillemots and razorbills at the South Stack and Penlas colonies, with RSPB indicating that it may be possible to catch approximately 15 individuals of each species during a single breeding season.<sup>460</sup> The attempt to back-track from this in Dr McCluskie’s oral evidence (his suggestion that this was apparently “very much a maximum”<sup>461</sup>) was lamentable, and somewhat indicative of the generally obstructive approach of the RSPB in relation to this project;
  - (ii) There are two points to make about the size of this tagging study. First, the limit on numbers is going to apply to any such study in this area, whether undertaken by the RSPB or Menter Môn. It derives from the difficulties of

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<sup>457</sup> Dr Grant’s Proof of Evidence at para. 6.10 (Ref: MDZ/P1) and Dr McCluskie’s answers in XX.

<sup>458</sup> See Dr McCluskie’s Rebuttal Proof of Evidence at para. 17 (Ref: RPE012), and Dr Grant’s response in his evidence in chief.

<sup>459</sup> See Dr McCluskie’s evidence in chief.

<sup>460</sup> See Dr Grant’s Proof of Evidence at para. 6.11 (Ref: MDZ/P1), his evidence in chief and also MDZ/A28.56.

<sup>461</sup> Which is not what the advice said.

catching and tagging such birds. Second, c. 15 of each species per year is sufficient given the data sought namely in relation to movements and diving behaviour, and that such data would be collected over multiple years. The numbers are similar to other tagging/tracking studies on which the RSPB has relied;<sup>462</sup>

- (iii) The RSPB emphasises that the period of the year in which birds may be caught is limited to chick-rearing – albeit it is the time when the birds are working hardest in terms of their foraging effort. But again, this is not a site specific issue as it applies to the vast majority of such studies undertaken on breeding seabirds, and it does not mean that useful data cannot be obtained;<sup>463</sup>
- (iv) In terms of the nature of the tags to be used the detail of this is for approval under the detailed EMMP. There is the possibility of attaching both GPS and TDR loggers. Here Menter Môn has engaged with Bangor University who are undertaking similar studies nearby.<sup>464</sup> There is now also at the very least the possibility of a single device that captures both sets of data;
- (v) There is also now the possibility of remote download of data. There is one study of breeding guillemots and razorbills in the UK that is doing this already, while the method has been used successfully on other seabird species. So, it is potentially feasible. But without this a tagging study could still be successful, and many others have been (e.g. as with the Bangor University work on guillemots at a nearby colony referred to above);
- (vi) The issue of the period for which tags would collect data is a matter of detail for a later stage,<sup>465</sup> as would be the decisions on the details of the tags to be used (e.g., single logger capturing both GPS and TDR data or two separate loggers);
- (vii) Other tidal power projects have made use of such studies.<sup>466</sup>

255. Dr McCluskie's evidence was an attempt to play up the difficulties of the use of tagging/tracking. This was disappointing and unworthy. Menter Môn hope that if the Order is made that the RSPB is more co-operative in this regard so that the gaps in data which all are agreed currently exist can be filled. It is galling to be told that this scheme should be refused because at present there is insufficient information to assess impacts and then for RSPB to seek to overplay the difficulties in obtaining this data. What is the alternative? It is no tidal deployment, which would be a real blow to the fight against climate change, something that RSPB say is the greatest threat to the animals that they are supposed to be seeking to conserve.

256. So, in conclusion on tracking/tagging it is important to understand such work on these species has and is undertaken at colonies elsewhere in UK e.g. similar studies on guillemot currently progressing successfully at nearby colonies in North Wales. There are already well-established approaches and methods. It is not particularly novel nor 'experimental'. Indeed, many aspects are tried and tested. The broad

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<sup>462</sup> See Dr Grant's evidence in chief.

<sup>463</sup> See Dr McCluskie's answers in XX.

<sup>464</sup> See Dr Grant's Proof of Evidence at para. 6.12 (Ref: MDZ/P1) and MDZ/A28.56.

<sup>465</sup> Dr McCluskie's Rebuttal Proof of Evidence at para. 15 (Ref: RPE012) and his answers in XX.

<sup>466</sup> See the 'State of the Science' report in Dr McCluskie's appendices to his proof (Ref: POE007.1 at electronic page 1180).

proposal of approach to tracking studies can be set out at this stage with decisions on fine detail of methods and exact equipment to use made at a later stage, and subject to regulatory approval.

257. Third, in relation to video and sonar. Again, the RSPB overplay the difficulties. Much time was spent on this in the oral evidence. What it comes down to is this:

- (i) The technologies are developing in this area, but there are existing tidal deployments which are already using these techniques and with some successes: see the Enfait report in respect of Bluemull Sound;<sup>467</sup> and also, in respect of Meygen.<sup>468</sup>
- (ii) There is no evidence to suggest that the water in the MDZ is such as to rule out the use of video;<sup>469</sup>
- (iii) The possible use of sonar (which alone currently cannot identify bird species) with video or vantage point surveys (or even tagging) for monitoring birds is endorsed in NRW's evidence review<sup>470</sup> and looks at examples worldwide of success with sonar: see Ref: MDZ/F15.2 pp.29 – 30:

*"Acoustic monitoring of seabirds has often been a secondary aim of the hydroacoustic devices deployed at tidal stream projects. This is due to the difficulty in identifying species owing to the relatively small size of seabird compared to marine mammals. However, several hydroacoustic devices have successfully tracked seabirds by tracking dives on acoustic imagery ... The FLOWBEC platform deployed at EMEC was specifically designed to monitor seabirds, by using novel algorithms that aid detection of seabirds within high energy areas (Williamson et al., 2019). Six trials lasting 14 days each detected a single seabird at both the control location and the location with a turbine present. During the short trial period the technology was proven, and the algorithms refined to ensure the technology would be able to record a collision (if one were to happen). Similarly, at the DeltaStream*

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<sup>467</sup> See Dr McCluskie's appendices to Ref: POE007.1. The report starts at electronic page 915 (hereafter internal page numbers used): see section 1.2 p.4; section 2.1 p.4; p.5, section 2.2.2 p.7; p.9 section 3.3.1, section 3.3.2, section 3.3.2, p.13 to 14 and the photographs and section 3.4.2 p.15. See also Dr McCluskie's answers in XX.

<sup>468</sup> See the State of the Science report in Dr McCluskie's appendices to his proof (Ref: POE007.1) electronic pages 1164, 1179 and 1181. The text in relation to Meygen refers to video cameras and acoustic monitoring being used to monitor seabirds including black guillemots and shags.

<sup>469</sup> Indeed, there is contrary evidence in the annex to the ES on benthic ecology.

<sup>470</sup> *"Direct collision monitoring Direct measures to determine collision use technologies which can "see" the device, either through hydroacoustic monitoring (e.g., sonar or echosounders) or underwater video cameras. In theory, these technologies could detect when an object, whether it be debris, or seabird directly collides with the device, but to date this has not happened. The methods that are used to detect seabirds are similar to the methods used to detect marine mammals, with all technologies applicable to both receptors. Please refer to Section 6.1.3 for full explanation of the monitoring approaches used."*

*"A seabird specific limitation of the device, especially hydroacoustic, is that due to the small size of seabirds it is impossible to identify the species of seabird recorded (Williamson et al., 2017). Currently, to understand species specific direct collision monitoring, the use of video cameras is required. However, for future projects hydroacoustic monitoring could be used concurrently with either data loggers or vantage point surveys to identify which species are detected on the hydroacoustic monitoring device..."*

*device in Ramsey Sound, the hydroacoustic device detected seabirds on multiple occasions, with no collision observed."*

- (iv) Moreover, Dr McCluskie accepted that as an alternative the species identification limitation with sonar could be overcome by a precautionary approach whereby any collision was assumed to be of the bird species that was most sensitive in terms of mortality;
- (v) The project is to last for 37 years – there is little reason to doubt that technologies for monitoring will continue to improve, and indeed as noted above granting this consent creates incentives for this.

258. Menter Môn understands the challenges but says that RSPB in its keenness to oppose this scheme is too dismissive of the potential, and has failed to take sufficient account of the successes already achieved with video/sonar at other sites.

### *The EMMP*

259. It is against that considerable background we come to discussion of the EMMP. Now, many of the issues which relate to various criticisms of the EMMP have already been covered above, so we do not propose to say too much more on it here save for picking up a few points not covered elsewhere. Mr Fortune both in his proof<sup>471</sup> and rebuttal proof,<sup>472</sup> and in his evidence,<sup>473</sup> has provided a helpful outline of the EMMP process. The use of adaptive management is not uncommon. It has been used for example the SeaGen Tidal Turbine Project in Strangford Lough, the Meygen Tidal Array Project in Pentland Firth, in the Swansea Bay DCO,<sup>474</sup> and the Skerries Tidal Array Project in North Wales.<sup>475</sup> Nor is the provision of a phased approach to deployment – again Meygen is a clear example.<sup>476</sup> Nor is the use of an outline plan at consent stage, following by later, detailed post-consent plans.<sup>477</sup>

260. As a starting point, our position is this: we are confident that an effective scheme of mitigation and monitoring can be put in place. We have explored the alleged challenges to that above, and we maintain it can and will work. However, what the EMMP provides is a system whereby (i) an Advisory Group is heavily involved in the process, (ii) once the devices are ascertained, and all of the modelling and precautionary assessments undertaken are re-done, (iii) the latest available technology can be taken into account, and (iv) we still have to prove to NRW that mitigation and monitoring can be, and is, effective, and the project can be deployed within the PDE we ask to be approved and without significant effects on seabirds or mammals.

261. Pausing there, the Inspector specifically asked us to make clear how the application of adaptive management sits within the EMMP and approaches the

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<sup>471</sup> Ref: MDZ/P4

<sup>472</sup> Ref: RPE005

<sup>473</sup> Day 13

<sup>474</sup> Swansea Bay Tidal Generating Station Order, Ref: MDZ/B14.

<sup>475</sup> Mr Fortune Proof of Evidence, para. 82 (Ref: MDZ/P4).

<sup>476</sup> Ref: Inquiry Doc – 083, see p.26 Annex 2 Condition 2.

<sup>477</sup> Mr Fortune Evidence in Chief, Day 13 AM Session 1, Ref: MDZ/P4 at paras. 22-24.

different species. We hope that has been covered above in the Marine Mammals and Ornithology sections.

262. That brings us to the position of NRW on the EMMP. The inquiry heard from Mr G Lewis in the EMMP RT <sup>478</sup> that the Inspector has seen "*...that in terms of our own careful assessment of the material with which we're provided, we're content that although the procedures of adaptive management and responsive monitoring and mitigation would not be our preferred course of action or first port of call, in circumstances where one is dealing with a new and experimental technology we accept that this is a case in which that approach can be accepted by NRW Advisory to be appropriate....We hear and take on board RSPB's concerns about a certain lack of detail in OEMMP. We think it is inevitably the position that one will not have the level of detail one would prefer at this stage in process. We have pressed Menter Môn to provide as much details as we think it is feasible and practical to do at this stage. We think we have exhausted that. There are some matters we think it will not be able to resolve – and those relate primarily to underwater noise*" and pausing there, we have covered that. Mr G Lewis continued: "*So we've not reached complete satisfaction but we will identify what areas of outstanding disagreement are. But that is in a context where we have been able, otherwise, to reach agreement on appropriate way forward on what is a challenging context because of experimental nature of technology.*"

263. In terms of the outstanding issues (other than on underwater noise, covered above). First, there were some drafting changes NRW sought. Largely, these have been made.<sup>479</sup> Second, NRW challenges a statement in para. 39 of the current OEMMP that the Menter Môn intends to remove monitoring and mitigation requirements as soon as evidence gained from the EMMP shows it is appropriate and safe to do so, with the agreement of Regulators. NRW's position is, in effect, that it considers it likely that monitoring will be required throughout the project.<sup>480</sup> However we have two responses. First, we do not consider it inevitable that we will have to monitor for the whole of the 37 years. Second (and this is the key point), even with that paragraph in NRW still have complete control over whether the monitoring can be stopped. The ball remains very much in their court – it just allows us to seek to persuade them if we've a basis to do so. So, if NRW's change is not included, we have to monitor unless we can persuade them it is not necessary. If NRW's change is made, we have to keep monitoring even if it becomes unnecessary – which is not, we submit, a good use of anybody's time or resources. The inquiry also has Mr G Lewis' suggestion that, if the Inspector is not going to remove this paragraph, that NRW might take some comfort from a tweak to the wording to make it clearer that any removal would be subject to the agreement of NRW.<sup>481</sup> We have made this tweak – see para. 39 of the OEMMP.<sup>482</sup>

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<sup>478</sup> Day 14, PM Session 1

<sup>479</sup> See Ref: Inquiry Doc – 085 and the EMMP RT Day 14 PM Session. The latest version of the OEMMP is at Refs: Inquiry Doc - 100 & Inquiry Doc - 101. NRW asked for wording on the OEMMP to reflect revised condition 36 on the draft ML. We have done that at para 28. NRW asked for further wording to make clear we would not take any mitigation or monitoring methods "off the table". This is done at para 149. Finally NRW asked for some changes to para. 7 of the OEMMP to make clear that "all phases" includes "Phase One". We have done that.

<sup>480</sup> The challenge is made in Ref: Inquiry Doc - 085, section 3.

<sup>481</sup> EMMP RT, Day 14 PM Session.

<sup>482</sup> Refs: Inquiry Doc – 100 & Inquiry Doc – 101.

264. The Inspector raised a query about air quality assessments. This has been resolved.<sup>483</sup>
265. Against that, a number of complaints were raised by the RSPB about the Outline EMMP. Again many of these have been dealt with above so this is really a “mopping up” section. RSPB raises the concern of project “creep”. This was put in two ways. It was put to Mr Fortune that nothing in the Outline EMMP tied Phase One to the 0.7PBR scenario discussed throughout this inquiry.<sup>484</sup>
266. That is plainly wrong: see para. 39 of the Outline EMMP. A concern was then raised that Phase One would not be tied to there being no significant impact on diving birds – the concerns seem to be twofold. First that para. 39 Outline EMMP is “indicative”, and second that once the devices are ascertained, their collision risk profile may have a greater effect on birds than marine mammals such that significant effects may be reached for diving birds before the 0.7PBR limit is reached for dolphins. However, para. 87 makes very clear that Phase One will be deployed at a level below which significant impacts are predicted “for marine mammals or diving birds”, and as Mr Fortune explained and Plate 2-1 makes clear re-running ERM and CRM modelling for marine mammals and diving birds is part of the process. There is, with respect, no reason for there to be so much concern.
267. RSPB raised a concern with Mr Fortune that there was nothing in the Outline EMMP which says “this will definitely end up in the final Outline EMMP approved as part of the ML.”<sup>485</sup> Again this can be taken shortly – it’s effectively the “nexus” point previously covered with NRW (see above). NRW are satisfied with what we have proposed to ensure that nexus, and the inquiry can be too.
268. RSPB raised a concern about what methods were “in” or “out” when it comes to monitoring and mitigation. Again we can take that shortly – everything will be considered. It is unfortunate that there was some text included in a draft Outline EMMP that indicated otherwise, but Mr Fortune was very clear to correct that in both evidence in chief and cross examination.<sup>486</sup>
269. RSPB has suggested that little weight can be put on what is proposed in the Outline EMMP, because it recognises that assessments will happen in the future taking account of the best available information at that time.<sup>487</sup> This is an utterly (and transparently) baseless point. The Outline EMMP contains technologies for monitoring and mitigation we consider, at this point in time, will work. It recognises that over a 37 year project that technology will advance. It puts in place a clear process by which phasing is controlled by the Welsh Ministers/NRW, by which an Advisory Group (which could include RSPB) has clear input into the project, and by which advances in technology can be incorporated. It is a clear, responsible, adaptive management process. To suggest such a thing should carry “little weight” because it recognises uncertainty (notwithstanding the fact that it puts in place controls to manage that) is simply irreconcilable with the PDE approach and with long-term, developing, technology.

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<sup>483</sup> Ref: REP007 and Ref: EIC013, p. 25 paras. 89-90 and the submission of Mr Maurici QC and Mr G Lewis, Day 15 AM.

<sup>484</sup> Ms Lean’s Cross Examination of Mr Fortune, inquiry Day 13, AM Session 1

<sup>485</sup> Ms Lean’s XX of Mr Fortune, Day 13 AM Session 1.

<sup>486</sup> Day 13 AM Session 1

<sup>487</sup> Ms Lean’s question to Mr Fortune, Day 13 AM Session 1

270. A question was raised about the “trigger points” for implementing mitigation, and Ms Lean spent considerable time in cross examination with Mr Fortune about the extent to which timely retrieval of data is required for that to be effective.<sup>488</sup> We accept that timely receipt of data is important, but we have adopted the collision framework required by NRW for mammals,<sup>489</sup> and the data review by the Advisory Group for birds. As we have said at length, to deploy we need to convince regulators this will work.<sup>490</sup> We think it will, but the call is theirs. Again then, this goes nowhere save collapsing into the question of whether NRW is a competent regulator. We say it is.
271. So in summary, what we have here is a clear, controlled process that will ensure nothing goes into the water unless and until the regulators are satisfied that it will remain within the project parameters, have no AEOSI on marine mammals or significant impacts on diving birds.

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<sup>488</sup> Day 13, AM Session 1.

<sup>489</sup> Ref: Inquiry Doc – 063, Plate 2-2 to 2-3.

<sup>490</sup> Ref: Inquiry Doc – 063, para. 8: *“No device operation will be allowed until Regulators are satisfied that effective monitoring is in place that can directly inform the implementation of the EMMP, and inform the agreed aims, objectives and management questions set by the EMMP for the Project.”*

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### **Main matters 3- 5: general points**

272. We are leaving behind ecology and moving on to character and appearance, socio-economics and navigation. Before we address each of these in turn there are some general points we would like to make, because complaints have been made about consultation and the ES which, though first aired in the socio-economic RT, are threaded through the parties' submissions in a number of different areas. These are primarily raised by the RYA and SCC,<sup>491</sup> and some members of the public. We therefore endeavour to bring these out and deal with them as an overarching point.

#### *Consultation*

273. With regard to consultation:

- (i) We entirely refute the argument that there has been inadequate consultation. No one is suggesting that the statutory notifications required for the Order have not been followed. They clearly have been. Moreover, there was consultation that goes far beyond these statutory requirements much of which is outlined in Chapter 6 of the ES.<sup>492</sup>
- (ii) We refer the inquiry also to the note we have put into the inquiry regarding when consultation with members of the public and local kayaking and sailing stakeholders was undertaken, including details of the public information days.<sup>493</sup> In our submission we have done everything required and far, far more. Indeed, Mr Pattullo for SCC very fairly acknowledged that the consultation "did work".<sup>494</sup>
- (iii) Mr Hill raised a point regarding a particular consultation in 2013, first suggesting that it was not on this project, and then querying why this is not referred to in Chapter 6 of the ES (the Consultation Report).<sup>495</sup> Frankly, this does not go anywhere. Nobody is disputing this consultation happened. It concerned possible tidal site options, one of which was off Holy Island and South Stack.<sup>496</sup> As the principles we have outlined previously show, the ES is not a set of trip wires, nor does it have to include every scrap of information. This is a pointlessly formalistic complaint.
- (iv) There are two particular problems with the RYA making this argument.
  - a. First, the RYA has acted as something of a blocker. Local sailing clubs have not engaged with us, instead going through the RYA. Mr Hill suggested that RYA only suggested clubs came to it instead of engaging

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<sup>491</sup> Mr Hill evidence in the Socio-economic RT, Day 5, AM session 1.

<sup>492</sup> Ref: MDZ/A25.6

<sup>493</sup> Ref: Inquiry Doc – 013

<sup>494</sup> Mr Pattullo's evidence in the Socio-economic RT, Day 5, AM session 1.

<sup>495</sup> Ref: MDZ/A9

<sup>496</sup> See internal p.37.

with us on 22 October 2020 – notwithstanding a screenshot of one local club from 16 October 2020 already being in Cdr Brown’s Rebuttal Proof of Evidence.<sup>497</sup> Mr Hill then revised his date to 09 October 2020. While there is nothing wrong with the RYA acting as a representative body (indeed one can see that would in some situations be helpful), we have had limited responses from the RYA – particularly in relation to the socio-economic assessments - and reaching out to clubs for the purpose of the supplementary tourism and recreation assessment. Moreover, no responses were received to the information we sent to sailing clubs, both individual and via the RYA, with the intention of addressing common misconceptions about the MDZ in the sailing community.

- b. Second, the reason the RYA has claimed that it needed to act as a representative body is because of alleged “*overenthusiastic consultation*”.<sup>498</sup> Mr Hill declined to provide any further substance to what he meant by that. Menter Môn does not need to respond to little more than innuendo – it engaged a local sailor to try and communicate directly with clubs, but the vast majority told us to address our concerns to the RYA.<sup>499</sup> However we are intrigued by the fact that Menter Môn has somehow become Schrödinger’s Applicant, simultaneously undertaking both too much consultation, and too little.
- (v) In any case, we’re not entirely sure where this goes. Everyone is here, they have the opportunity to comment and make submissions. Indeed, again as Mr Pattullo fairly acknowledged, the whole reason SCC is here is because of the consultation.<sup>500</sup>

### *Alleged deficiencies in the ES*

274. With regard to the ES criticisms, SCC’s complaint was that, in broad terms is they were not scoped in and so could not contribute to designing in mitigation.<sup>501</sup> They then complained about Menter Môn’s ongoing programmes of monitoring and mitigation, wanting other changes to the project. Mr Hill’s supplement was to allege that he could not see how we had considered established uses, and therefore could not show this was an appropriate area, was not compliant with the WNMP and was not compliant with EIA processes. Frankly, these can all be dealt with very shortly:

- (i) First, we wholeheartedly refute the argument that these activities were not considered. As we have already outlined the inquiry heard from Mr Bell that recreational boating would be considered through a combination of landscape, navigation and socio-economic evidence. Nobody challenged that professional view, and that is what has been heard and seen through the written and oral

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<sup>497</sup> Socio-economic RT Day 5, PM session1; Ref: RPE006 at p.13.

<sup>498</sup> Socio-economic RT Day 5, PM, Session 1.

<sup>499</sup> Cdr Brown rebuttal Proof of Evidence para. 6.1.2 (Ref: RPE006).

<sup>500</sup> Mr Pattullo evidence in the Socio-economic RT, Day 5, AM session 1.

<sup>501</sup> Ms Wong evidence in the Socio-economic RT, Day 5, AM session 1.

evidence of Mr Bell, Mr Myers, Dr Jones and Cdr Brown, and the documentation on which they rely.<sup>502</sup>

- (ii) Notwithstanding all of this, to be very clear, our willingness to undertake post-consent monitoring is not an indication that something fundamental is missing from the ES, or that there is going to be an adverse impact, but is an attempt to ensure that no adverse impacts arise and provide further assurance to stakeholders.
- (iii) As we have already outlined, an ES is not and cannot be an obstacle course. The question is whether there is enough information for the inquiry to reach a robust view of the project's impacts and that is so here. No clear legal defect has been alleged other than this more generic complaint, and we can see no basis on which one could actually be made.
- (iv) With regard to SCC's mitigation questions in particular, it is difficult to see what further socio-economic mitigation could be included in the project. We have laid out the parameters above within which the project has been designed. Moving, for example, surface emergent elements further away from the coast<sup>503</sup> causes issues for the power generation and flexibility of the project.

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<sup>502</sup> See e.g. Ref: MDZ/A25.25 (Socio-economics chapter of the ES) section 25.4.8, para 131, 139 and 142 looking at kayaking and sailing at both the national regional and local level, and cross-referring to Ref: MDZ/A25.15 (the Shipping and navigation chapter), which includes the NRA and NRAA. That ES was scoped with PINS, who did ask for more information and tourism and recreation but not boating specifically (Ref: MDZ/A8, pp.46-47). Additional information on kayaking and sailing is in the Supplementary Tourism and Recreation Assessment (Ref: MDZ/H1 pp.9, 12, 17, 22, 24, 25), the Supplementary Kayaking and Sailing Activities Assessment (Ref: MDZ/A28.58), two years worth of data looking at recreational kayaking in the vicinity of the MDZ (Ref: MDZ/A28.40), and the creation of yet further documents such as the Further Information on predicted changes in currents (Ref: MDZ/A31.1, see the Summary on p.6 of the PDF), the signposting response to public representations to the ML response (Ref: MDZ/A28.32, in particular at p.5), the Outline Tourism and Recreation and Monitoring Strategy (Ref: MDZ/A28.17 see p.5), the Navigation and Shipping Responses (Ref: MDZ/A28.14, see pp.3-4) the consultation report (Ref: MDZ/A9, see e.g. Table 5-2 p.69, 74, 75,), and the offshore components of the SLVIA (Ref: MDZ/A25.24).

<sup>503</sup> SCC Opening Statement, Ref: Inquiry Doc – 010, p.5.

### **3. Character and appearance of the locality**

#### *Summary*

275. Turning to the character and appearance of the locality, it is Menter Môn's contention, in summary, that a comprehensive, robust and appropriate SLVIA has been undertaken. There has been extensive consultation throughout that process. The project has responded to comments of key stakeholders, particularly NRW and IoACC, throughout the design and evolution process, incorporating mitigation so far as possible. The DDP will provide an effective control to manage the seascape, landscape and visual impacts of the project throughout deployment, and provides for the monitoring of any incremental changes through the requirement for a cumulative assessment. Conditions of the deemed planning permission (including the detailed Landscape Management Plan), provide appropriate mechanisms to deliver mitigation measures for the onshore components of the project. In short, the project has done as much as it can to mitigate the impacts of this project on the landscape and character of the area.
276. There comes a time, however, when accommodating the concerns of stakeholders comes up against the constraints of the project, and that the project cannot go further to mitigate impacts without engendering serious project issues. That is so here. Notwithstanding the significant efforts undertaken, some significant effects on seascape, landscape and visual receptors remain – a conclusion with which NRW and IoACC broadly agree. Where further mitigation cannot be undertaken, as here, Menter Môn has committed to delivering a compensation package through a s.106 agreement, to help offset the potential seascape, landscape and visual effects. In summary, our position is we can do no more – and we note that Mr Solomon for IoACC confirmed in their view too we had done what we can, such that the proposed development was acceptable in planning terms.<sup>504</sup> As we have outlined, it is Mr Bell's view that those impacts which are left are acceptable in the circumstances of this case, where they are a necessary by-product of the project and its attendant benefits. This is particularly so where, as the inquiry heard from Dr Orme there are advantages to floating devices which means they still need to be within the PDE at this stage (see above). Although there are impacts, we submit they are acceptable in planning terms.
277. So that was our position in a nutshell. We now turn to it in slightly more detail, and we will address some of the points made against us. For ease of reference, we first outline how the SLVIA was undertaken, before turning to the mitigation built into the project and the controls on its deployment via the DDP. It is against that background we will outline what the inquiry has heard regarding the impacts of the project on the landscape and character of the area, before turning to the contents of the s.106 agreement.
278. Menter Môn's position was outlined by Simon Myers, an experienced Landscape Architect who not only gave evidence both in written form and through the character

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<sup>504</sup> Character and appearance RT Day 6 AM Session 1.

and appearance RT, but who prepared the SLVIA, post application responses, attended TWG meetings with NRW and IoACC, and attended four of the public information days. He has given a clear and cogent account of the project and his assessment of its impacts and great weight should be given to his evidence.

279. Before we delve into the detail there is one preliminary point we would like to pick up. Evidence for NRW was given by Ms Maidment, very helpfully covering for Mr Sumner. Mr Byass, at the start of the session outlined three key issues position by NRW:

- (i) A suggested extension of the Restricted Area Northern, to the triangle outlined in Mr Sumner's Proof of Evidence in Fig. 5 (the "Triangle");<sup>505</sup>
- (ii) A definition of non-visually prominent devices as submerged tidal devices;<sup>506</sup> and,
- (iii) With regard to the integration and mitigation for landfall cables if HDD cannot be relied upon, the suggestion that the ecological restoration and landscape integration be designed to take account of the SAC and AONB.

280. There were also other minor issues and, of course, we all have NRW's Statement of Case and proof. To the extent Ms Maidment's opinions at the character and appearance RT went beyond those key issues we urge the Inspector to disregard it as an unfortunate result of having to step into a complex case at the last minute. This is meant with no disrespect to anybody involved, but NRW's case is as posited in its Proof of Evidence and largely summarised by Mr Byass. That is what we respond to.

#### *SLVIA - Process*

281. Before we turn to the areas of dispute we wished to highlight certain key points as to how the SLVIA was undertaken.<sup>507</sup> We don't intend to go over that in any detail now but it is recounted in the SLVIA Chapter of the ES,<sup>508</sup> and in the oral evidence of Mr Myers.<sup>509</sup> We also note that the process aspects of the SLVIA have been agreed with NRW.<sup>510</sup> We also note the steer the Inspector provided in the character and appearance RT that, rather than getting into the detail of individual presentations and slides, he wanted to focus on big pictures questions such as whether the development was visible, and whether the effect is acceptable.<sup>511</sup> We highlight the following:

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<sup>505</sup> Ref: POE021, p.71.

<sup>506</sup> As in Fig. 4 of Ref: POE021, p.70.

<sup>507</sup> Day 6 AM Session 1.

<sup>508</sup> Ref: MDZ/25.24

<sup>509</sup> Character and appearance RT Day 6 AM session 1.

<sup>510</sup> Ref: MDZ/L5, Table 4-1 Items 1-10.

<sup>511</sup> Character and appearance RT Day 6 AM session 1.

[Inspector's Note: My comments sought to highlight that the Character and Appearance RT discussion could become focussed on specific detailed potential effects, whereas perhaps there were two questions that, ultimately, would underpin the discussion and the conclusions reached:

- (i) The SLVIA has been produced in accordance with relevant guidance such as GLVIA 3;
- (ii) The scope was discussed and agreed with NRW and IoACC;
- (iii) It covers all elements of the project;
- (iv) The character baseline is informed by studies undertaken or commissioned or published by IoACC, in particular their landscape and seascape character assessments. Where there was overlap between landscape and seascape, preference was given to seascape to avoid double counting;
- (v) The visual impact has involved assessing numerous receptors (both onshore and offshore, day and night) from viewpoints that are specific to different components of the projects. These were selected in the ordinary manner by using zones of theoretical visibility,<sup>512</sup> and were also agreed with IoACC and NRW.<sup>513</sup> They were assessed in the ordinary way, looking at the size and scale of change, geographic extent and duration of the project. Pausing there, a query was raised by Ms Wong during the session about why there were not more viewpoints from areas used by recreational boating users. This has two responses, both outlined by Mr Myers in oral evidence:<sup>514</sup>
  - a. He explained no SLVIA can assess every possible receptor within a 15km study area – what matters is whether representative views have been used and, here, they have been.
  - b. It is acknowledged in the SLVIA in any case that there will be a significant effect on offshore recreational receptors within 2km of the MDZ. This is specifically covered by the viewpoint assessment,<sup>515</sup> with viewpoints 13 and 14 representing offshore receptors at distances of 1.9 and 2.4km respectively, and viewpoint 14 representing people travelling on recreational vessels. No significant effects were identified at either of these viewpoints, so it is reasonable to conclude the significant effects would occur within approximately 2km. It is also reasonable to use other viewpoints to understand the likely effects of the project at other locations as the relative scale and extent of the offshore structures is largely dependent on position, distance and elevation. So their concerns are fully accounted for and the negative effect is acknowledged and so is before the inquiry.
- (vi) In both cases the assessment has assumed a realistic worst case scenario for the full deployment of the project. Within the parameters set out in the MDZ (i.e., a minimum distance of 1km from the coastline and no visually prominent devices in its northern part), it has assumed, for example, that the tidal

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1) are the works there, or are they not? (i.e. parties need to be clear on the scope of the onshore and offshore works proposed, especially as surface emergent works will be visible in a seascape); and if the works were to be there,  
2) would their effect on the character and appearance of the locality be acceptable?]

<sup>512</sup> Ref: MDZ/A26.9, Figure 24-2-2a and Ref: MDZ/A26.9, Figure 24-2-2b.

<sup>513</sup> Ms Wong in the Character and Appearance RT, Day 6 AM session 1, stated that there were no visualisations from viewpoint 14, which is a viewpoint from a recreational sea user. That is not correct, see Ref: MDZ/A27.8, Fig 24-3-14.

<sup>514</sup> Character and Appearance RT Day 6 AM Session 1.

<sup>515</sup> Refs: MDZ/A25.24 and MDZ/A27.8.

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energy devices would be positioned toward the eastern edge of the MDZ, and that a range of device types would be deployed.<sup>516</sup> It has also involved a range of visualisations and photomontages.<sup>517</sup>

(vii) The project has responded to matters raised by NRW and IoACC, as we will come to below.

282. The inquiry also has photomontages produced by Mr Roberts.<sup>518</sup> He has been the first to admit, very fairly, that the image contained in OBJ058 there is (in his words) “no science behind it” and, while Menter Môn understands his genuinely held concerns we submit that image is simply not an accurate representation and can be given only very minimal weight. We will say no more about it. We would refer the inquiry instead to the visualisation from Penrhyn Mawr, Viewpoint 06.<sup>519</sup> The Inspector will also be aware that Mr and Mrs Roberts included some further visualisations in their Statement of Case.<sup>520</sup> The presentation of these images in the Statement of Case does not readily enable understanding of the project and the potential seascape, landscape and visual effects. These visualisations and their limitations, together with broad comparisons with work done as part of the SLVIA are addressed in the Proof of Evidence prepared by Mr Myers, Section 8.6.<sup>521</sup>

### *Mitigation*

283. We would also take this opportunity to remind the inquiry of some of the mitigation measures that have been put in place specifically to reduce the seascape, landscape and visual impact of the project. Again detailed references can be found in the documentation,<sup>522</sup> but we summarise some here as recounted in the oral evidence of Mr Myers.

284. First, with regard to the offshore elements of the MDZ:

(i) There are a number of restricted areas where the deployment of certain types of devices is controlled.<sup>523</sup> Of particular importance, no visually prominent<sup>524</sup> tidal energy devices will be placed in the northern part of the MDZ, to reduce the potential landscape and visual effects in relation to the seascape/landscape and visual receptors to the north west of Holyhead Mountain. This was specifically instituted to respond to the concerns raised by

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<sup>516</sup> See, for how that has been factored in, Ref: MDZ/A28.19 FIG SLIVA POST APP 1.

<sup>517</sup> See e.g. Ref: MDZ/A28.19 and the figures contained therein. You will recall in response to a question from Mr Pattullo, Mr Myers confirmed these assumed lowest astronomical tide.

<sup>518</sup> Ref: OBJ058

<sup>519</sup> Ref: MDZ/A28.19

<sup>520</sup> Ref: MDZ/N10

<sup>521</sup> Ref: MDZ/P5

<sup>522</sup> See e.g. Ref: MDZ/A28.19

<sup>523</sup> See e.g. Ref: MDZ/G13 and Ref: MDZ/A25.4 Fig 4-2

<sup>524</sup> As this is a matter which ties into navigational safety, it should be noted that “visually prominent” means from the shore. They will be prominent to local sea users following the DDP – see the discussion between Mr Bolton of SCC, Mr Maurici QC and Mr Salter of the MCA on Navigation RT, Day 10 AM Session 2.

NRW and IoACC about the relation between the MDZ and Gogarth Bay, the Northwest flank of Holyhead Mountain and South Stack.<sup>525</sup>

Pausing there, NRW asked why “visually prominent” could not be defined in the Order. As Mr Myers outlined,<sup>526</sup> there is no specific definition of visual prominence in the relevant guidance, such as GLVIA 3, but it is an accepted and integral part of SLVIA work. It depends, however, on a range of factors, linked to (e.g.) where devices are positioned (in particular distance from shore), the size of any emergent element, lighting, detail of structure, etc. As we do not know what devices will develop over the next 37 years, we cannot say now which will be visually prominent. To try and define visual prominence now, or to adopt NRW’s requested definition of “anything above the water” would have the effect of limiting the flexibility of the PDE approach. It might also be counterproductive – as Mr Myers outlined, it is highly likely developers will respond to the need to have non-prominent devices by refining their designs. Simply requiring such devices not be surface emergent would detract from that. If such a definition is included, and it is then thought that this has been counterproductive, it cannot be removed – as already noted a TWAO cannot be amended. The crucial point for the Welsh Ministers, however, is that the DDP, including its demand for a SLVIA where required, is a safeguard ensuring nothing will be deployed outside the consented PDE and that visual prominence will be rigorously considered. It is they, or NRW, that makes the decision – not Menter Môn.<sup>527</sup>

- (ii) A minimum separation distance of 1km would be applied from the coastline for visually prominent devices, helping to increase the separation distance between such structures from the coastline.
- (iii) Floating elements elsewhere within the sub-zones are being minimised to help ensure the composition of offshore elements is kept as simple as possible.
- (iv) Following consultation with statutory navigation consultees on colouring and lighting, the colouring on the structures and the lighting equipment can be altered compared with those assumed in the SLVIA. Whereas the SLVIA assumes that the entire structure is to be coloured yellow, in principle this can now be reduced to markings such as a 5m band – though final designs must be agreed with Trinity House and assessed as part of the DDP. Photomontages

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<sup>525</sup> Mr Meyer’s Evidence, Character and Appearance RT Day 6 AM Session 1. Mr Roberts specifically asked why the northern part had been chosen by NRW to be kept free from surface emergent devices, when there were more users in the southern part. In that, we are simply following the requirements of NRW and IoACC. For NRW, Ms Maidment explained that NRW rely on the LANDMAP system, which contains several visual and sentry areas in the northern area. This is to go with the area’s rugged, wild natural appearance and the experience of that when one is in the character area. Part of that is also the views to sea. The area further south is more settled, as there are scattered properties and buildings, whereas Gogarth Bay and Holyhead Mountain are more remote and wild. See Character and Appearance RT Day 6 AM Session 1 and PM Session 1 in the discussion between Ms Maidment and Mr Roberts.

<sup>526</sup> Character and Appearance RT Day 6 AM Session 1.

<sup>527</sup> During Character and Appearance RT Day 6 AM Session 1, Ms Maidment raised concerns implying that there would be disagreement between the various parties as to whether a device is visually prominent. That may be so, but it is not Menter Môn that has the final word and therefore the Welsh Ministers can rest assured there is substantive protection – whether Menter Môn agrees with it or not.

with this revised marking are included in the SLVIA Post Application Consultation Response.<sup>528</sup> With regard to lighting, the inshore side of the MDZ the markers can use 2NM lighting, with 5NM lights on the offshore side. The photomontages have been done, and assessments undertaken, on the assumed basis that navigation lights on the TECs will be visible from the coast. The devices themselves however *may* only need lighting with a visibility of 150m,<sup>529</sup> and if so as Mr Myers confirmed they should not be visible from the coast. The night time photomontages<sup>530</sup> which show lighting on the devices themselves, rather than just the marker buoys, may therefore be very much a worst case. Trinity House has made it clear that they will only be able to assess this when devices are to be deployed,<sup>531</sup> and so the assessment assumes full regulatory illumination of devices. The evidence of Capt. Harris, of Trinity House, in the navigation RT was that while modern LEDs are visible – they appear as a dot rather than projecting like a lighthouse.<sup>532</sup>

285. Second, with regard to the landfall substation:

- (i) A recessive location in the landscape has been selected, in a relatively low lying position. The landform has been used to help integrate the substation, by cutting into the side of a valley rather than building a platform out.
- (ii) The arrangement of plant and equipment within the buildings has been organised to result in a collection of buildings rather than one big one – this breaks up the scale of the development and creates a form and massing comparable with local agricultural buildings.
- (iii) Colours and materials (including natural materials) are proposed that are consistent with the vernacular associated with agricultural buildings, and are recessive in the local context.
- (iv) It is the buildings which are used to define the boundaries of the substation where possible, which reduces the requirement for security fencing.
- (v) Stone walls and stock proof fencing have been used as part of the new boundaries, again to help integrate the building into the locality.
- (vi) Planting has been considered, though it is fairly acknowledged this is of limited assistance in an open and exposed coastal landscape. And
- (vii) The use of external lighting is minimised in this rural location, using sensors to reduce the need for continuous lighting.

286. Third, the Switchgear Building is being positioned within an allocated employment site, adjacent to an existing substation and where surrounding development will be comparable in form, massing and appearance.

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<sup>528</sup> Ref: MDZ/A28.19. Ms Wong queried whether that was suitable for small craft in close proximity to the devices. Capt. Harris of Trinity House confirmed that the guidelines are based on risk assessments taking into account all regular users. Character and Appearance RT Day 6 AM Session 2, and again Navigation s RT Day 10 AM Session 2.

<sup>529</sup> Statement of Common Ground with Trinity House p.10-11 (Ref: MDZ/L9).

<sup>530</sup> Ref: MDZ/A28.19, Appendix 24.4

<sup>531</sup> Discussion between the Inspector, Mr McNamara and Mr Myers, Character and Appearance RT Day 6 AM Session 2.

<sup>532</sup> Evidence of Capt. Harris (for Trinity House), Navigation RT Day 10 AM Session 2.

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287. Fourth, the grid connection substation has been located where industrial structures form an established part of the baseline context, and where established vegetation surrounding the site provides effective visual enclosure.
288. Fifth, of course connecting all these elements are the cables. They have been placed underground, to avoid the need for any overhead lines and cluttering on the Island. They have also been routed along existing roads insofar as possible to minimise any potential disruption to field boundaries, and there is to be reinstatement of the ground and landscape features following construction.

#### *Controls on the project*

289. Turning then to the controls on the project, we have touched on some of these above when outlining how it will be deployed. However, they are particularly relevant here.
290. First, we draw the inquiry's attention to the DDP. A pictorial representation of the process flow is contained in the Appendix R-B to Mr Myers rebuttal Proof of Evidence.<sup>533</sup> As Mr Maile explained in the character and appearance RT, this will have to be submitted prior to the deployment of any tidal device or operational hub which will be surface emergent. It will require a fresh SLVIA undertaken for each deployment, including an assessment of the cumulative impacts of the proposed development with any operational or consented deployment. It will therefore allow the issues discussed during the inquiry to be judged at the stage of deployment, based on the devices proposed.<sup>534</sup> This will ensure that the overall deployment remains within the PDE considered through the EIA process at this stage.
291. Second, the Landscape Management Plan. An outline Landscape Management Plan has been submitted.<sup>535</sup> The Landscape Management Plan itself has been an evolving document to this point, but will be secured through a condition of the deemed planning permission.<sup>536</sup> This will focus on the terrestrial components of the project to avoid overlap and duplication of the DDP. It will include some elements of enhancement (so, for example, it is highly likely features such as field boundaries will be enhanced where they are effected by the project), and there is of course scope for further detail as the outline plan becomes finalised. This of course sits alongside the compensation secured by the s. 106 agreement, to which we will turn below.
292. Third, and tied in with that, other conditions of the deemed planning consent require hard and soft landscaping details to be agreed with and approved by IoACC.<sup>537</sup>

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<sup>533</sup> Ref: RPE007

<sup>534</sup> Paul Maile's Evidence to the Character and Appearance RT, Day 6 AM Session 1.

<sup>535</sup> Ref: MDZ/A28.20

<sup>536</sup> Ref: MDZ/L7, Appendix B condition 6.

<sup>537</sup> Ref: MDZ/L7, Appendix B condition 6

## Assessment

293. It is against that background, of a thorough SLVIA following all required processes and best practice, and those incorporated mitigation measures, that we then turn to the seascape, landscape, visual effects of this project. This is split into two components – the effects on the Seascape and Landscape Character and AONB/Heritage Coast designations (i.e. the seascape/landscape impacts), and the effects on visual receptors (the visual impact).
294. Firstly, turning to the seascape/landscape impacts. These have been comprehensively covered in the SLVIA.<sup>538</sup> That provides important background for consideration of the three issues that were raised in the RT: effects on the special qualities of the AONB, the setting of south stack, and the cable landfall. Effects on seascape and landscape character areas were not really disputed. Table 24-10 lists eight of the seascape and landscape character areas where the effects are predicted to be limited. Table 24-11 then lists the five seascape character areas most likely to be affected by the project, of which only two (SCA 13 – *Holyhead Mountain* and SCA 14- *Rhoscolyn*) are likely to have at least a moderate impact which is significant, with the potential effects mainly associated with the west facing slopes of Holyhead Mountain and coastline between South Stack and Penrhyn Mawr. If we then look at the effect of the project on the special qualities of the AONB (the first main issue at the RT), it is broadly agreed by all stakeholders and Menter Môn that there are predicted significant effects on the AONB.<sup>539</sup> The AONB's special qualities include expansive views and seascapes, and peace and tranquillity. Mr Myers though explained that the effects are localised and apply to part of the AONB (albeit a distinctive one) rather than the whole designation.<sup>540</sup> The construction of the scheme would introduce new man-made elements into the area which would affect its special qualities. Menter Môn accepts that. However, the inquiry also heard from Mr Myers that it would not prevent those from being appreciated – the coastline would remain wild and rugged, the expansive views over the sea would still be available, and the project has a defined life (albeit a long one), so the effects would be reversed.<sup>541</sup> Everything possible has been done to minimise the effects that there are.
295. While we are on this topic, we raise the matter of the Triangle (sought by NRW). Again we heard a very fair assessment from Mr Myers, acknowledging that expanding the restricted zone to the Triangle would make some differences to the impact on the AONB. Moreover, as the Inspector noted it might reduce the views for some very specific receptors.<sup>542</sup> However, Mr Myers also concluded that it would not make a difference to the overall assessment – there would still be a significant effect. Ms Maidment, too, seemed to consider that although there would be an improvement, there would still be a significant effect, although to put NRW's case at its highest it seemed she thought the improvement would be greater than that assessed by Mr Myers.<sup>543</sup> In any case, however, the fundamental equation for the

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<sup>538</sup> Ref: MDZ/A25.24, see paras. 189 – 251

<sup>539</sup> Ref: MDZ/A25.24, see paras. 219 – 251

<sup>540</sup> Mr Meyer's evidence Day 6, and see Ref: MDZ/A25.24 paras. 244-249

<sup>541</sup> Ms Maidment raised the issue that the project could be repowered or another scheme would follow this. That is entirely speculative and we are concerned here purely with the Order before you, which is limited to 37 years.

<sup>542</sup> Mr Meyer's evidence Day 6, AM, Session 2.

<sup>543</sup> Day 6, PM Session 2.

Welsh Ministers remains the same because there is still a significant impact.<sup>544</sup> Against that, the inquiry also heard from Dr Orme on the impacts this would have on the project, and his illuminating campfire kindling analogy. The area in issue is one of the better areas of tidal resource. It is also one of the deepest areas. To help kick-start an entire industry, some of the best areas – such as this one - need to be available to enable floating devices.<sup>545</sup> The project (despite some suggestions from NRW) has already compromised in setting up the MDZ to accommodate SLVIA concerns – the entire Gold Area is a compromise, the area available for visually prominent devices has already been reduced by 73%.

296. Second, turning to the setting of south stack, the key matter between Menter Môn and NRW is again the Triangle. We don't intend to rehearse the argument again - Ms Maidment seemed to suggest that including the Triangle would mean there is not a significant effect on the setting of south stack. Mr Myers' conclusions were that there would be some reduction in the effects of the project on the setting of South Stack, but that these would have limited influence on the overall judgments stated in the SLIVA.

297. Third, with regard to cable landfall, this concerns a particular part of the AONB and again we are dealing with a fall-back option if Menter Môn's preferred HDD approach is not possible. The SLVIA acknowledges that, if the cliff-face option has to be pursued, there would be significant but localised effects.<sup>546</sup> There is a photomontage from Menter Môn illustrating what this will look like from the Isle of Anglesey Coastal Path/Wales Coast Path<sup>547</sup> – a location specifically selected to represent a publicly accessible location relatively close to the cable landfall.<sup>548</sup> If the project must go down this route (and we reiterate this would only be if it had no other choice), then a Landscape Management Plan offers, in Mr Myers' view, a suitable mechanism to secure appropriate mitigation. An outline plan is in the core documents,<sup>549</sup> a detailed one will be secured via a condition in the Deemed Planning Permission.<sup>550</sup> There would therefore need to be approval by IoACC and we expect that to involve consultation with NRW. Turning to particular concerns raised:

- (i) Some concern has been expressed by IoACC and NRW about cables extending by up to 2m over the top of the cliffs.<sup>551</sup> This is still to be worked out – as Mr Myers explained the engineering detail was based on the cliff face being perpendicular – i.e. with a sharp corner at the top. However on more detailed evaluation the clifftop has a more gradual curve, meaning that it is likely they could be integrated more effectively with the landform. Any extension above the cliff face, even one of up to 2m, could be mitigated following construction though measures including small local landform alterations and reinstatement of the adjacent field boundary – this would all form part of the eventual

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<sup>544</sup> Mr Meyer's evidence Day 6, AM, Session 1.

<sup>545</sup> Dr Orme evidence Character and Appearance RT Day 6 PM Session 1

<sup>546</sup> Ref: MDZ/A25.24, para. 327

<sup>547</sup> Ref: REP007, Appendix R-A

<sup>548</sup> We know this view is of particular importance to Mr Llewellyn. We would flag that during the technical working group meetings did NRW or IoACC suggest a visualisation from the platform he refers to or Mr Llewellyn's home. See the evidence of Mr Myers, Day 6 AM session 1.

<sup>549</sup> Ref: MDZ/A28.20

<sup>550</sup> Ref: MDZ/L7, Appendix B

<sup>551</sup> Ref: MDZ/A28.19, para 23

landscape management plan developed, and agreed in the planning conditions.<sup>552</sup>

- (ii) NRW have expressed concern that the mitigation we propose might be difficult having regard to the ecology of the area, but as the inquiry heard from Mr Myers it is expected that the Landscape Management Plan would be integrated with the ecological management plan.<sup>553</sup> This integration would be achieved through the planning condition that requires this plan to be finalised and agreed with IoACC. It is fully expected that, as would be typical, IoACC would consult with NRW as part of this process.<sup>554</sup>
- (iii) Mr Llewellyn and Ms Maidment raised the significant impact on those in the immediate vicinity. Ms Wong added that this affected kayakers. We accept that, but again as Mr Myers has noted this is localised.

298. Turning, then, to the effect on visual receptors, three broad groups have been identified – local residents, people engaged in onshore recreation, and people engaged in offshore recreation. All are addressed in detail in the SLVIA.<sup>555</sup>

299. With regard to local residents, no significant effects were identified in relation to the Holyhead, Trearddur and Rhosneigr settlements, largely due to the intervening distance or landform. During the inquiry the Inspector specifically raised the view from Raven's Point Road, Trearddur, which has been assessed to have a slight to negligible magnitude of change (moderate/minor and not significant effect).<sup>556</sup> Fairly, though, (and notwithstanding the fact that it is not the purpose of the planning system to save a particular person's views) significant effects have been identified in relation to the dispersed properties to the north west of Trearddur, including those within the community of Penrhosfeilw. Crucially, As Mr Myers outlined<sup>557</sup> Menter Môn have not and were not asked to undertake a residential visual amenity assessment because the structures have a limited vertical scale and the separation distances mean they would not have that degree of prominence. As Mr Bell confirmed, we are not dealing with overbearing effects in policy terms that would convert a property into an unattractive place to live.<sup>558</sup>

300. With regard to those engaged in onshore recreation, in particular those using long distance footpaths, promoted cycle routes, public rights of way and Open Access Land, and visitors to the beaches and South Stack RSPB reserve – again the SLVIA fairly acknowledges there will be significant effects on these receptors, though these are more localised in relation to linear/transitory receptors and for visitors to beaches.

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<sup>552</sup> Ref: Inquiry Doc – 098, proposed conditions 5 and 7

<sup>553</sup> Contributions of Ms Maidment and Mr Myers, Day 6 PM Session 1.

<sup>554</sup> Ref: Inquiry Doc – 098, proposed conditions 5 and 7

<sup>555</sup> See ref: MDZ/A25.24 SLVIA para. 252 onward, albeit the receptors are grouped very slightly differently to how they were summarised during the Character and Appearance RT.

<sup>556</sup> Character and Appearance RT Day 6 PM Session 2

<sup>557</sup> Character and Appearance RT Day 6 PM Session 2

<sup>558</sup> Character and Appearance RT Day 6, PM Session 2. For the avoidance of doubt, it is not disputed and Mr Bell confirmed that great weight must be given to the AONB (see PPW Ref: MDZ/D1 para 6.3.7) and Ref: MDZ/D7 the AONB Management Plan Review. It is also the evidence of Mr Myers that the "overbearing" issue has never been a required assessment for recreational receptors on land, as opposed to properties.

301. With regard to offshore recreation, this has been considered in the SLVIA as noted above. The inquiry also heard at length from Ms Wong regarding the views of kayakers.<sup>559</sup> Again, the overall view of the SLVIA, by reference to the agreed viewpoints identified, is that there is the potential for significant effect on offshore recreational receptors within approximately 2km of the MDZ. It should be noted, though, that those engaged in sport or recreation may not be wholly focused on the view.<sup>560</sup> To the extent the suggestion is made that the potential visual effects on recreational offshore receptors has been ignored, it can and should be dismissed.
302. And, just as a quick aside here – of course all of the impacts and benefits of the project are going to have to be weighed up together, but we would refer to the inquiry to the evidence of: Dr Orme which confirms that areas where this technology can be deployed is geographically limited; and, Mr Myers that there is a correlation between the more wild rugged landscapes and areas suitable for tidal projects. He suggests that there are comparisons with consented emergent devices such as the Skerries (also off the Anglesey Coast) and PTEC off the Isle of Wight, where significant seascape/landscape and visual effects were also predicted but, notwithstanding these, the projects were consented. The latter in particular is in a section of AONB close to St Catherine's point, a landmark (like the South Stack lighthouse) which is a focal point. Now, of course, these are not precise analogies (Mr Myers acknowledged, very fairly, that the comparators are not of this scale and that distances offshore may not be the same), but the key point is they were consented notwithstanding the predicted effects.<sup>561</sup>

### *Compensation*

303. One final point to touch on before leaving this section – it has been agreed with IoACC that compensation measures will be paid on a phased deployment basis, delivered through an s.106 agreement. A full version is contained in the documentation.<sup>562</sup> This too will be secured by condition.<sup>563</sup> These measures will be payable toward undertaking landscape improvement works for land owned or managed by the Council, providing funding to projects undertaking landscape restoration of enhancement programmes, directly funding landscape improvement work on third party owned land, and improving public access to land including the provision of new public rights of way or improvement of existing rights of way. It has

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<sup>559</sup> Character and Appearance RT Day 6, PM Session 2

<sup>560</sup> Indeed, as the Inspector raised in the RT, the recreational pursuit itself can and will continue – the enjoyment comes from the pursuit not wholly the landscape in which it occurs. Ms Wong suggested there are concerns about safety – which we don't accept but will come to below - and then that this would detract from the general sense of the area, compared to other places like Oban, Pembroke and Cornwall. She then noted those three are "Threatened" in the same way and that" the interface between recreational users and such structures will have to be addressed in the same way. This, in our submission, simply collapses into the fact that the sea is changing and current users will have to adapt to that. Otherwise, tidal stream energy and the benefits it brings can never develop. Kayakers do not have a monopoly on using the sea.

<sup>561</sup> Mr Myer's Evidence, Day 6 AM Session 1 and PM Session 1.

<sup>562</sup> Ref: MDZ/L7, Appendix C.

<sup>563</sup> Ref: MDZ/L7, Appendix B Condition 21.

been agreed with IoACC that these address its concerns that the proposals could be contrary to the JLDP policies PS 19, AMG 3 and AMG 4.

*Overall*

304. We summarised our position at the start of this section and do not re-state it here.

#### **4. Socio-economic matters**

305. Turning, then, to socio-economic matters, the majority of the time at the socio-economic RT was taken up with matters in issue between Menter Môn and SCC/RYA. This largely focused on the economic impacts on tourism reflected through alleged impacts on marine related activity. We are going to deal with that below and the complaints they make, but it should be noted at the outset that this is a small section both of local tourism and the local economy, as Ms Wong for SCC accepted when the Inspector put that to her.<sup>564</sup>

#### *Summary*

306. We draw our overall summary and big picture points from the evidence of Mr Bell on day 1, Dr Jones on day 5, and keeping in view the fact that there is now agreement between Menter Môn and IoACC on this topic.<sup>565</sup> Key points we put to the inquiry:

- (i) First, the benefits of this scheme, with regard to matters like job creation and indirect benefits, have been outlined in Chapter 25 of the ES.<sup>566</sup> These have been reiterated in the unchallenged evidence of Mr Bell and are referred to earlier in this closing. To recall some highlights – up to 467 jobs per year during construction and 456 from operation and maintenance, utilisation of the local workforce and supply chain, an additional 0.4%-4.0% to the annual economic activity of Anglesey, and a local annual spend of between £3.2m-£41.4m annually for the life of the project. We also refer the inquiry to Chapter 4 of the ABP Mer *Study of the Socio-economic benefits of the Marine Industries* (Feb 2019)<sup>567</sup> which, though not specific to our project, outlines some of the socio-economic benefits of the industry.
- (ii) Second, and almost uniquely in our experience, rather than simply “talking a good game,” Menter Môn is going further and seeking to secure those benefits through conditions on the deemed planning permission.<sup>568</sup> Proposed conditions 17-21 of that deemed planning permission<sup>569</sup> secure a Tourism and Recreation Monitoring Strategy, a Promotion and Interpretation Strategy, a Skills and Training Action Plan, a Task and Finish Group, and a Supply Chain Action Plan, all aimed at mitigating any possible impacts and enhancing the socio-economic benefits of this proposal for the region.
- (iii) These have been agreed with IoACC. Although IoACC had initial concerns, they have now made clear, both in the SoCG and in Mr Solomon’s

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<sup>564</sup> Day 5, PM session 1.

<sup>565</sup> Ref: MDZ/L7

<sup>566</sup> Ref: MDZ/A25.25, see in particular para. 161 onwards.

<sup>567</sup> Ref: POE013

<sup>568</sup> Ref: MDZ/L7, Appendix B

<sup>569</sup> Ref: Inquiry Doc – 098

representations to this inquiry<sup>570</sup> that they are comfortable their concerns have now been addressed though the imposition of the relevant conditions.

307. We outlined the levels of public support for these benefits earlier – we don't go through them again but again simply draw attention to them.
308. Taking that all together, our position is very clearly that the scheme will have a beneficial socio-economic impact on the area. Menter Môn has gone further than many other energy schemes in setting out and agreeing mechanisms to monitor the situation and, if it turns out we are not right and there are adverse impacts, mitigations can be deployed. As Mr Solomon confirmed, IoACC's position is that any negative effects can be monitored, mitigated, and offset by the benefits of the project.<sup>571</sup> That, we submit, is itself enough for the Ministers' decision.

### *Recreational amenity*

309. We will now go on to talk about recreational amenity of sea users and any (potential) effects on the economy, but again we urge the Inspector and the Welsh Ministers not to lose sight of the fact that the time spent dealing with these arguments is disproportionate to the level of socio-economic impact in issue. We also remind the inquiry of the policy steer in NPS EN-1 that alleged socio-economic impacts, unsupported by evidence, should attract minimum weight. This is particularly so where the complaints are made by well-resourced organisations (such as the RYA) who could do their own homework – it is not enough to throw mud at the wall and simply hope some of it sticks.
310. By way of a preliminary observation we would like to remind the inquiry of three key facts which we submit colour how the Welsh Ministers should weigh the arguments put against us. We think it should be possible for all parties to agree that (1) this project would help answer a need for low carbon energy production, (2) that this project presents an opportunity for the Isle of Anglesey to become a low carbon energy centre, and (3) that there is a pressing need for jobs in the Anglesey area, and so the job benefits we have outlined should be considered a benefit. Unfortunately, when you look at how some of the objectors have responded to these (relatively uncontroversial) points, you begin to see that their approach undermines the credibility of their arguments:
- (i) Addressing the first point (low carbon energy production), Mr Hill suggested that the RYA also supported action to address climate change, and that this was the only marine renewables project in which the RYA has formally objected.<sup>572</sup> However,
    - a. when pressed as to why RYA were objecting to this particular proposal as opposed to other projects (like wind) using a PDE it was because of safety issues (we come back to those) and because this was innovative technology whereas others (such as wind farms) were a known

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<sup>570</sup> Day 5, AM Session 1.

<sup>571</sup> Mr Solomon's evidence, Day 5 PM Session 1.

<sup>572</sup> Socio-economic RT, Day 5 AM session 2.

quantity.<sup>573</sup> In our view this suffers from two flaws. First, as we have discussed regarding data gaps in the scientific knowledge (and the opportunity this project provides to remedy that in a highly controlled way) - this project not been done before and there have not been longitudinal studies (a point also made by Ms Wong).<sup>574</sup> This is an opportunity to rectify that. Second, we can see no logical link between the fact that the technology is innovative and whether it will affect the socio-economics of the island. Particularly when matters such as landscape and safety are otherwise assessed and considered acceptable.

b. On questioning<sup>575</sup> it became clear from public RYA documents that the RYA had in fact objected to other tidal projects,<sup>576</sup> and Mr Hill then sought to suggest instead that what he meant was that this is the first time the RYA has gone to a public inquiry level objecting to a TWAO. Given that this is the first TWAO for tidal project that means little.

(ii) When asked to address the second benefit (promotion of the Isle of Anglesey), Mr Hill suggested this was "*beyond the RYA's remit*", and that steps should be taken to ensure it does not damage the UK's "*thriving*" recreational boating industry. When pressed, he could not provide any figures to support the view that the recreational boating industry in Wales or Anglesey was "*thriving*."

(iii) When asked to address the third benefit (job creation), Mr Hill simply said he was not qualified to talk about that and to state that boating had an industry behind it. Again, when pressed, he refused to accept the jobs created were of benefit. We submit that there really is no basis any reasonable party could give for not considering job creation in a deprived area like North Wales is a good thing; Mr Hill's position and that of the RYA in this regard was risible. It is of course of benefit for all of us for the relevant participants to recognise their limitations and not try to give evidence on matters outside their expertise. However, the fact that RYA feels constrained not to agree with such a basic proposition demonstrates the exceptionally narrow view through which it is approaching this case.

311. Drawing all of those threads together it becomes clear that what we have here is a particularly egregious strand of NIMBYism known as NIMBAism – not so much "not in my back yard", more "not in my boating area." The RYA supports renewables, provided they're not where its members want to sail. They consider themselves qualified enough to take a view on the UK's "*thriving*" boating industry, but not enough to discuss promoting employment on Anglesey. They want to support boating industry jobs, but cannot take a view on any others. The RYA might very reasonably say it is the representative body for recreational boating and so that is its concern. That might well be right, but it is therefore important for the Welsh Ministers to appreciate that the RYA's representations are not, therefore, starting from a balanced viewpoint. Indeed while we don't particularly wish to add to an already lengthy closing by belabouring this point, the RYA's obstructive attitude to these proceedings can clearly be seen in the events relating to the Statement of

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<sup>573</sup> Socio-economic RT, Day 5 AM session 2.

<sup>574</sup> Socio-economic RT, Day 5 AM session 2.

<sup>575</sup> Socio-economic RT, Day 5, PM session 1

<sup>576</sup> These objections are referred to in the RYA document attached to its Statement of Case.

Common Ground we failed to agree with them. We sent them a draft on 2 November 2020. No response was received. In the socio-economic RT Mr Hill then announced the RYA would not agree a Statement of Common Ground – with which we expressed strong disappointment. On 28 January, just before 6pm the RYA then returned the draft Statement of Common Ground – from which it was clear almost nothing was in fact agreed. This was one working day before the inquiry was due to resume the navigation session. Eversheds Sutherland responded to say that, given the gross lateness of its return we would not be able to respond.

312. Against that background, we turn to the detail. Chapter 25 of the ES addresses the socio-economic impacts of the development. In broad terms, it establishes a baseline, and goes on to assess the socio-economic impacts of the project. The summary is outlined at Table 25-38, and we have just been through many of the benefits. That is the first key document for Welsh Ministers and pausing there we wish to make three points about this:

- (i) First, the baseline and what was assessed is far broader than recreational water sports. If you look at section 25.4 and in particular para. 62, you will see that this assessment covers Population and Demographics; Employment and GVA; Skills, Training and Education; Housing and Accommodation; Commercial Fisheries; Shipping and Navigation; Tourism; Recreation; and Cultural Heritage. At para. 164 you will see the impacts assessed were in social issues, economic issues, jobs and employment issues, skills and training issues, the effects on tourism, recreation, shipping and fishing and infrastructure issues. The impacts subject to detailed assessment are outlined at para. 171. The key point to highlight is that this is that this is a broad study, to look at all sectors of the economy.
- (ii) A concern has been raised regarding the extent to which water sports recreational amenity users feature in that baseline. We refer the inquiry in particular to section 25.4.8. That looks at the national, regional and local level. At the regional level, it refers to both kayaking and sailing as popular regional activities across North Wales (see para. 131). At the local level, sailing is outlined at para. 139,<sup>577</sup> and kayaking at para. 142.<sup>578</sup> The consideration at para. 139 also cross refers to the shipping and navigation chapter of the ES, where the inquiry will find a significant amount of detail, both there and in the NRA and NRAA on use by boats. That ES was scoped

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<sup>577</sup> "Anglesey has a thriving sailing community. The island is home to six yacht clubs catering for both coastal dinghy sailing to offshore yachting. During August each year, the Island hosts the Menai Strait Regatta, with the 2018 regatta attracting approximately 100 boats. A highlight of this Regatta is the Round Anglesey race which has taken place since 1966 and which is a non-stop circumnavigation of the Island. Much of Anglesey coastline is the subject of low to moderate amounts of nearshore, recreational boating activity (UK Coastal Access Recreational Boating Atlas) – see **Chapter 15, Shipping and Navigation.**"

<sup>578</sup> "Anglesey is a popular destination for sea kayaking for novices and experienced paddlers. Sea kayaking takes place all around the island's coastal waters, but the north coast of Anglesey has a challenging combination of steep cliffs, strong tidal streams, offshore islands and sheltered bays. The area of sea around Holy Island including the MDZ is particularly challenging in nature and generally only recommended for experienced kayakers (Krawiecki and Biggs, 2013). The sea kayaking community, including local clubs and local kayaking training providers, will be kept informed of the development of the site particularly during construction period and the cable laying closer to shore. This will be backed up by the introduction of relevant signage."

with PINS, which did ask for more information on tourism and recreation but not boating specifically.<sup>579</sup>

- (iii) Mr Hill further queried the extent to which long distance cruising from Scotland, Northern Ireland, the Isle of Man and the Republic of Ireland featured in the baseline. Again, to the extent these contribute to the local economy through matters such as job creation and visitor spend, that is caught.

313. Dr Jones then undertook a Supplementary Tourism and Recreation Assessment<sup>580</sup> between January and March 2020. Again we emphasise this should be kept in context – it is purely focused on tourism and recreation, and the fact this has been undertaken does not detract from the validity of the more general ‘big picture’ assessment undertaken in Chapter 25 of the ES. He ran through the key points from this in his oral evidence, and see too section 6 of his Proof of Evidence.<sup>581</sup> In short, this undertook an analysis based on (1) publicly available data published through the NOMIS system (a service provided by the ONS) (2) interviews with local businesses and (3) desk top case studies to complement (2). This assessment, informed by the NOMIS data, acknowledges the importance of tourism and recreation to Anglesey – it accounted for 16.2% of all those employed on Anglesey, and 41% of total employment on Holy Island. Of this 41%, 86% was accommodation and food, the remaining 14% in arts, entertainment and recreation. The study then sought to interview 14 businesses, selected because of their location and because they could provide a broad view of the tourism and recreation sector. Of that fourteen, eight responded. Of those eight, five were land-based, and three marine based. This split, Dr Jones considered, allowed Menter Môn to capture different aspects of the tourism and recreation sector. The main findings of those interviews were that:

- (i) The Morlais project *could* adversely impact the offering of the area to tourists. For example, through restrictions on kayaking routes, the impact on eddy currents, traffic congestion during the construction phase, access to the coastal paths, and the impact on the scenery.
- (ii) Businesses believe the Morlais project *could* have a positive impact on the local tourism sector, and there are businesses that have already experienced this. Contractors and engineers working on the development stay in the local area, which benefits local hotels and restaurants and this trend is only expected to grow as the Morlais development progresses. The importance of ‘business tourists’ was highlighted in the interviews (i.e. those who come to the area on business during the week will return on holidays with their family).
- (iii) There are businesses that believe tourists will be interested in seeing the tidal energy development (i.e. ‘industrial tourism’), and that Morlais is a continuation of Anglesey’s rich history of innovation and relationship with the sea. Experimentarium in Copenhagen was given as an example of how new technology and innovation can be used to attract visitors to the area.

314. The case studies which complemented these interviews indicated that the production of marine energy has no, or a negligible impact, on local tourism

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<sup>579</sup> Ref: MDZ/A8, pp46-47

<sup>580</sup> Ref: MDZ/H1

<sup>581</sup> Ref: MDZ/P6

activities. He highlighted that the Orkney islands, (a helpful comparator as it is also attractive for history and culture) has not suffered a reduction in visitors since turbines were installed there – from 2013-2017 the value of visits to the Orkneys had increased from £31.1 million to £49.5 million. Turning to the Pembrokeshire Demonstration Zone, research by Swansea University's Marine Energy Research Group has found that in an area where the marine environment contributed to 78% of visitors' enjoyment of the area, only 3.5% would be put off from visiting due to marine renewable energy developments. Finally, in Gwynt Y Mor a 576MW offshore wind turbine array has had little, if any, impact on the tourism sector in Llandudno. The Inspector queried whether this last example was a useful comparator given that Llandudno is more built up than the instant area, and we submit that Dr Jones response (that much of the tourism economy of Llandudno is sea-front based because of its open views, now with wind farms) answers that concern. Moreover, the inquiry can take comfort from the fact his research is also based on the Orkneys.

315. Now, the steps taken by Menter Môn do not end there (we will come onto mitigations in a moment), but further queries have been raised about this supplementary assessment by RYA and SCC which it would do well to deal with now.
- (i) First, questions have been raised about the adequacy of the interviews. As Dr Jones made clear<sup>582</sup> he is happy that the interviews with businesses and local stakeholders were properly obtained and taken into account. We need say no more about that.
  - (ii) A question was raised by SCC about the utility of the Marine Energy Research Group paper, given that (a) it asked a hypothetical question and was not itself a longitudinal study and (b) water sports participants were underrepresented in the response. Ms Wong for SCC said that they had put the same question in their surveys and received a different response, and then asked how the two should be balanced. There are three responses.
    - a. First, as already outlined, there are no longitudinal studies – this is a gap to fill, Dr Jones is working on the best available information.
    - b. Second, with the greatest of respect to SCC, if choosing between two surveys precedence should be given to the one published in a leading peer reviewed journal undertaken by academics.
    - c. As Dr Jones pointed out, the authors use both the "travel costs" method and "contingent valuation" method of assessment, the former takes into account actual costs incurred by visitors. There is therefore actual data behind that argument and it is not purely hypothetical, as suggested by SCC.
  - (iii) A question was raised by RYA about the use of NOMIS data. The RYA suggested that the Seabed User and Developer Group considered that the use of Standard Industrial Classification (SIC) codes (used to inform ONS data) does not conform well to marine activities. We have six points
    - a. First, this is a remarkably detailed economic analysis from an organisation that felt constrained not to be able to say that creating jobs in North Wales is a good thing.

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<sup>582</sup> Socio-economic RT Day 5, AM session 2.

- b. Second, NOMIS is a service provided by the ONS, to give access to the most detailed and up to date UK labour market statistics from official sources. It is government data.<sup>583</sup>
  - c. Third, Dr Jones confirmed that NOMIS data is frequently relied upon by academics and other professionals
  - d. Fourth, it captures information from multiple sources.
  - e. Fifth, we note that IoACC's representation of 11 May 2020 supports the use of NOMIS datasets.<sup>584</sup>
  - f. Sixth, we are not entirely sure where this goes. The assessments done indicate an economic benefit to the area. If the RYA are going to assert that is wrong, or that the economy is actually driven by something else (such as recreation), they needed an economic assessment to support that. None is provided.
- (iv) The RYA sought to criticise the number of organisations contacted for interview, in particular suggesting boating and sailing clubs had not been contacted.<sup>585</sup> Our responses are:
- a. there were attempts to contact other businesses (including, for example, sea kayaking UK) but they did not respond;
  - b. as the inquiry heard from Dr Jones – accommodation and food are the main drivers of tourism related economic activity in the area, and so the focus is on ensuring that is properly represented; and,
  - c. the RYA prevented Menter Môn from engaging directly with boat clubs.
316. So, notwithstanding the criticisms made it is our submission that there is ample material on which the Welsh Ministers can reach a considered view of the socio-economic impacts of this project. And we re-emphasise that these should be considered over the entirety of the economy – not one niche, no matter how lengthy its representatives' submissions. It is our view that this project will have a beneficial socio-economic impact, for the reasons outlined above. The inquiry also heard from Dr Jones that there may be the additional benefit of industrial tourism – of people coming to see how energy is made from the sea, as they do in the Orkneys. Indeed, Dr Jones told the Inspector that in the Orkneys local guides have been given additional training because of the interest in this, there is no evidence it has cost jobs.<sup>586</sup> The Inspector queried that, pushing Dr Jones on whether it would not be fair to assume that there must be some degree of loss from that portion of tourism activity that is associated with birds, open space, and an absence of development. However he responded very fairly that there was no clear evidence to suggest a drop in tourists or visitors – there is no evidence elsewhere and no indicators that would happen here.<sup>587</sup> There may well be benefits. However, notwithstanding all of this, a

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<sup>583</sup> Dr Jones Proof of Evidence (Ref: MDZ/P6), footnote 1.

<sup>584</sup> Ref: FEI REPO0, para. 35

<sup>585</sup> Socio-economic RT Day 5 AM session 2.

<sup>586</sup> Socio-economic RT, Day 5 PM session 1.

<sup>587</sup> Socio-economic RT, Day 5 PM session 1.

conservative approach, as outlined by Dr Jones, Menter Môn has assumed a neutral impact on tourism.<sup>588</sup> The overall economic benefits are in any event clearly positive.

317. But what if we're wrong? Well, the third big part of our case on socio-economics is this: the mitigations that Menter Môn has put in place. We have gone further than many other developers and agreed to secure by planning condition surveys by which the socio-economic impacts of the project will be monitored, and mitigated if they are negative. This approach has been agreed with IoACC and has assuaged their concerns.<sup>589</sup> The decision-maker can take comfort from this – a plan is in place. As Mr Solomon confirmed, the IoACC position is that wherever the baseline is considered to be sitting, mitigation is in place to address any potential negative impact of the scheme.<sup>590</sup> The inquiry also has before it a supplementary kayaking and sailing assessment and monitoring plan.<sup>591</sup> We anticipate that specific kayaking and sailing monitoring will form part of the wider plan secured by condition 17 of the deemed planning permission.<sup>592</sup>

318. Finally against that detailed work background, let's talk about actual adverse effects – because frankly there is not a great deal of meat that is provided on that. Limited points have been taken, primarily by SCC and RYA, so the concern is with a small subsection of the economy not the economy as a whole. Notwithstanding that, the Inspector tasked both RYA and SCC, if they were making a positive case that there were to be actual adverse effects, to lay out both the pathway by which that could occur, and the vector (i.e. magnitude of harm) for which they contended. We will address each in turn. However, we take this opportunity to remind the inquiry of two key points that we say bear materially on this. First as already detailed, that the position of the MDZ has been driven by energy and scientific requirements. Second, co-existence is to be encouraged if at all possible. This is recognised by policy ECON\_02 and the supporting text of the WNMP. The nature of the sea is changing. The strong policy imperative toward tidal energy which we have already outlined above necessitates this. If tidal resources are to be used for energy generation, that is something that other users of the sea, such as kayakers and sailors, will have to adapt to. They have no monopoly on this shared resource. This is something Ms Wong very fairly acknowledged when the Inspector put it to her.<sup>593</sup> Let us turn, then, to the alleged harmful impacts of the project – to the extent there are any.

319. For the RYA, Mr Hill started off by saying that pathways can only be demonstrated once a baseline is created, and that it is not for the RYA to demonstrate pathways when data is deficient.<sup>594</sup> When the Inspector pressed him, Mr Hill could not come up with any pathway. The best that was said was that there were 2,500 RYA members there and c. 700 boats, one club was concerned there would be a loss of membership and another club was close by. He stated it would be the impact on those clubs, their membership and what the knock-on effects would be. Those, however, are impacts, not pathways. He did not, in the socio-economic RT, identify how one could get from devices in the water to a reduction in club membership. He

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<sup>588</sup> Socio-economic RT, Day 5 PM session 1.

<sup>589</sup> Evidence of Dr Jones Socio-economic RT, Day 5 PM session 1; Evidence of Mr Solomon Day 5 PM session 1.

<sup>590</sup> Socio-economic RT, Day 5 PM session 1.

<sup>591</sup> Ref: MDZ/A28.58

<sup>592</sup> Ref: Inquiry Doc – 098

<sup>593</sup> Day 5, AM session 1.

<sup>594</sup> Socio-economic RT, Day 5 AM Session 2 and PM session 1.

specifically did not highlight navigational impacts as a pathway (and we highlighted this specifically, so he could have come back on it). Slightly later he raised the prospect of the impact on the long distance cruising market<sup>595</sup> but again did not provide a pathway. The RYA did not provide a pathway until the first navigation RT (a week later) – so clearly they did not think of it before it was specifically raised at the socio-economic RT, and that effects the weight the decision-maker should give to their case.

320. For SCC Ms Wong stated that effectively there would be a period of adjustment and that, while local kayakers could adapt there was a question whether the industry here could recover from that adjustment period because the area would have been rendered less desirable.<sup>596</sup> There seem really therefore to be two issues: first, any issues caused by the adjustment period;<sup>597</sup> second, whether the area would thereafter be perceived as less desirable. As an overarching point, as far as we can tell, with two years' worth of data, there is limited interaction between kayakers and the MDZ.<sup>598</sup> A point was raised about changes to currents. This is dealt with by a report specifically commissioned for that purpose<sup>599</sup> and while we acknowledge there would be some change, there is no real basis for it to have any impact on the socio-economics of the area. As the Inspector pithily pointed out, kayaking can still go on. However, overall we also note that in their most recent response to the FEI SCC have said that nobody expects the area will be unusable by kayakers with the MDZ in place.<sup>600</sup> That is their bottom line and we say it is correct. Really SCC has been very clear about the pathway by which it says the installation of devices will have a negative impact on the local economy: it is the perception of risk. In this case, for reasons outlined below and covered in the navigation session, it is submitted that there is no health and safety impact. The fears are baseless. The question therefore arises to what extent land use consequences would follow from this baseless fear? We submit there is no basis to think that at all:

- (i) As Dr Jones has noted, there is no evidence of there being any negative impact from the installation of these devices. Indeed, the evidence of Mr Dennis was that some kayakers may go to play there.<sup>601</sup>
- (ii) As Dr Jones noted, there is some evidence that even more guides will be required, contributing to the growth of the sector.
- (iii) However, as the Inspector noted: the tidal races will still be there. The shoreline will still be there. All of the matters kayakers are concerned with, and enjoy, will still be there. Kayakers would simply have some devices to the west. There may be a little less flow, but the flows are still there.<sup>602</sup>

321. It is worth spending a moment on the monitoring strategy. This is in development. It can, as Dr Jones indicated, include the involvement of RYA affiliated clubs. It is not denied that further information needs to be collected. It will, again,

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<sup>595</sup> Day 5, PM session 1.

<sup>596</sup> Day 5, AM session 1 and PM session 1.

<sup>597</sup> Mr Pattullo's evidence, Socio-economic RT, Day 5, AM session 1.

<sup>598</sup> Ref: MDZ/A28.40

<sup>599</sup> Ref: MDZ/A31.1

<sup>600</sup> Ref: EIC012, p. 4.

<sup>601</sup> Day 2 PM public speaking session, Ref: Inquiry Doc – 013.

<sup>602</sup> Day 5 PM Session 1.

involve structured interviews and ONS data,<sup>603</sup> alongside data collected using automated technology.<sup>604</sup> Some concerns have been expressed about this, but as the Inspector noted that gets into the detail of the strategy proposed – the details are to be ironed out pursuant to draft condition 17 (?) closer to the time. Our submission is, this remains a smaller part of the economy as a whole, and a strategy already exists to protect it.

322. Finally, let us turn to the steps this project has put in place to maximise local employment opportunities. Not much time was spent on this during the socio-economic RT, but we consider it a key point. Menter Môn has agreed to put in place both a skills training action plan and a supply chain action plan. The Supply Chain Action Plan has been developed through discussion with IoACC and is based on the positive impact of the Gwynedd County Council's procurement strategy "Cadw'r Budd yn Lleol". The inquiry heard from Mr Gleeson how his company has already met with a number of local companies, and are surprised and impressed by what is on offer. Crucially, he also foresaw a possibility of rolling out further projects around the UK and France, using the supply chain around Anglesey if it can be upskilled.<sup>605</sup> There is a significant "first mover" advantage here. The skills and training action plan was also developed through discussion with IoACC and the regional skills manager for the North Wales Regional Skills Partnership. The Inspector asked Dr Jones to put this in context – and he did. There are a large number of suppliers on the island who skilled up and obtained various consents and certificates in preparation for Wylfa. Some skills may need to be tweaked, but businesses here are willing and able to take advantage of the benefits of this project. The action plans exist to ensure that.
323. This has been a long section – primarily because of the disproportionate amount of time spent on the concerns raised by SCC and RYA. We outlined in summary our position at the start of this session and do not intend to do so again.

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<sup>603</sup> Dr Jones in Socio-economic RT Day 5, PM session 1. Ms Wong asked why the views currently expressed could not be used – that would be self-defeating. The point is to see how matters change once the MDZ is installed.

<sup>604</sup> Some concerns were expressed by SCC about the technology planned to be used – this is a minor point is the strategy can be developed in consultation with such stakeholders.

<sup>605</sup> Day 5 PM session 1.

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## **5. Non-biodiversity marine matters - navigation**

324. We come, then, to non-biodiversity marine matters - navigation. Menter Môn cannot really put its position better than was contained in the summary of Cdr Brown, whose qualifications we went through during the navigation RT and which speak for themselves. Menter Môn recognises that this project will introduce items into the sea that were not present before, and that this will inevitably alter the risk profile associated with the West Anglesey sea area. It is committed to maintaining the safety of water users. It has commissioned two full NRAs – an initial NRA (the “First NRA”) and another one (the “NRAA”)<sup>606</sup> following substantial changes to the project (the introduction of an 8m UKC zone and the introduction of the 20m UKC zone)<sup>607</sup> specifically designed to mitigate the risks identified in the First NRA.<sup>608</sup> Notwithstanding clarification being sought over the survey data used and quality of the NRA and NRAA, as agreed by the MCA both of these assessments adhere to the requirements of Marine Guidance Note 543 (“MGN 543”) – the relevant MCA Guidance. The NRAA assessed all risks associated with the project were as low as reasonably practicable (“ALARP”) or lower. We also note the three key propositions the Inspector outlined at the start of the navigation RT – marine safety is also regulated by the ML, there is no reason to doubt a licence would be issued at all,<sup>609</sup> but there is also no reason to doubt the competence of the regulator in this case (so, NRW can be assumed to adequately protect users’ safety). Linked to this, we have addressed above the relevant markings required by Trinity House and how these will be assessed as part of the DDP – we do not propose to say any more here but signpost that for the reader as it was also discussed in the navigation RT, and of course bears on safety.<sup>610</sup> The issues on which the parties have disagreed is:

- (i) Whether there is a loss of amenity;

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<sup>606</sup> Ref: MDZ/I1

<sup>607</sup> There was a request for clarification about the UKC choices. The MCA had asked for some information, but this was provided and the matter with them resolved – see the Statement of Common Ground at Ref: MDZ/L8 pp.16-17. The RYA then sought further clarification regarding how the times of the year were chosen (Navigation RT, Day 10 PM Session 2). Section 10 of the NRAA (Ref: MDZ/I1, pp.74-78) explains that the UKC of 8m and 20m were initially calculated using the MCA Under Keel Clearance Policy Paper, supplemented by a local consultation in order to ascertain UKC that would “allow maintained and safe navigation within the MDZ”. The feedback is summarised in Table 10-2. Cdr Brown also explained a 30% safety margin is applied so that, in the worst storm, with a ship trimmed in the worst way, facing the worst waves, there is still “no chance +30%” of a vessel striking TECs.

<sup>608</sup> During the second Navigation RT (Day 11), PM Session 2, Mr Pattullo for SCC raised a query regarding risk to life. Although the query was not wholly clear, he seemed to be asking about the grading of risks between the NRA and NRAA. Put shortly, the discrepancy arises because the NRAA was assessing a different, safer design than the NRA – it is not the case that a risk was “translated” between the two as seems to have been understood. In closings, SCC, seem to be asking about the grading of risks within the NRA. This is a different point, and is a function of the MGN 543 required NRA process, which this is not the place to challenge.

<sup>609</sup> Mr Pattullo for SCC expressed doubts over whether NRW might issue a ML because of the concerns expressed by SCC. However, when asked by the Inspector, he stated that NRW had given no reason to SCC to think that.

<sup>610</sup> Evidence of Tom McNamara and Capt. Trevor Harris, Navigation RT 1 (Day 10) AM Session 2.

- (ii) Whether there is enough sea room in the inshore passage;
- (iii) The extent to which other vessels are displaced;
- (iv) The extent of collaborative engagement; and
- (v) The interaction of kayakers with the MDZ.

325. None of these, we say, is a reason not to grant consent.

326. As a further preliminary point, statements of Common Ground on shipping and navigation have been agreed between Menter Môn and both Trinity House<sup>611</sup> and the MCA.<sup>612</sup> Reference will be made to portions of this where relevant.

327. With regard to the MCA, the inquiry heard from Mr Salter that, although there were three things still in discussion (space of the inshore route, displacement of vessels, and kayakers risk) only the first and third had not been agreed. The MCA is satisfied on the displacement issue, as we will come to.<sup>613</sup>

328. With regard to Trinity House, the inquiry heard from Mr McNamara that Trinity House has worked closely with Menter Môn to provide suggested marine licence conditions and changes to the Order to address their concerns. This, Mr McNamara confirmed, we have now done, and provided we submit the revisions to the Order and ML conditions Trinity House seeks (which we have), they are content.<sup>614</sup> Mr McNamara confirmed that the areas listed in the Statement of Common Ground as “ongoing” reflect issues that are dealt with under the ML, and that Trinity House wanted to use the forum of the Statement of Common Ground to record that for further reference. There is no suggestion those are a barrier to the Order.<sup>615</sup>

329. In addition, there are no objections from the Chamber of Shipping, Irish Ferries, Stena Line or the RNLI.

#### *NRA's generally*

330. It helps to start by considering what an NRA is and how it occurs. Cdr Brown ran through this, briefly, in his oral evidence.<sup>616</sup> In short, although tidal energy is in its early stages of development the marine approval process for Offshore Renewable Energy Installations (“OREI”) is already quite mature. The MCA, as the UK authority for the safety of navigation has issued MGN 543,<sup>617</sup> which sets out the stages and steps that a developer must pass through in order to meet the standards required for approval. This has been designed expressly with the relevant legislative obligations in mind – see paras. 2.1-2.5. The MGN requires a navigational risk assessment using the International Maritime Organisation (“IMO”) approved Formal

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<sup>611</sup> Ref: MDZ/L9

<sup>612</sup> Ref: MDZ/L8

<sup>613</sup> Mr Salter’s evidence, Navigation RT Day 10 AM Session 1.

<sup>614</sup> Mr McNamara evidence, Navigation RT Day 10 AM Session 1.

<sup>615</sup> Mr McNamara evidence, Navigation RT Day 10 AM Session 2.

<sup>616</sup> Cdr Brown’s Evidence, Navigation RT, Day 10, AM Session 1.

<sup>617</sup> Ref: MDZ/I2

Safety Assessment (“FSA”) methodology. This FSA was in fact developed by the MCA, and later adopted by the IMO.

331. The purpose of an NRA is to capture and describe all navigation hazards associated with a project and to define, quantify and rank the subsequent risks associated. This is all described in detail in Annex A of the NRAA.<sup>618</sup> As Cdr Brown outlined it allows a common frame of reference for all mariners. The ultimate result is to identify and rank the top risks. Where those risks are not ALARP, the NRA should propose mitigation measures to bring them down to an acceptable level. If the risk cannot be bought to an acceptable level, the NRA must conclude the project cannot proceed. Even where the risks are ALARP, the NRA may still propose mitigation measures.<sup>619</sup> A key part of the NRA is data gathering and stakeholder consultation.<sup>620</sup> Each NRA takes 3-4 months.<sup>621</sup>

#### *The Morlais NRA and NRAA*

332. As Cdr Brown outlined, the First NRA<sup>622</sup> was undertaken in 2019, conducted by Marico. Marico is the consultancy brought in by Menter Môn to undertake this work. It is very well qualified to do so, as Marico includes someone who was originally a key member of the FSA development team at the MCA, and was instrumental in taking the concept through to approval by the IMO in 1996. The output from the 2019 NRA was such that Menter Môn opted to redesign large sections of the MDZ to allow for greater UKCs for Irish Sea Ferries passing through its northern sector, and to widen the eastern inshore passage to allow greater sea room for recreational users. Given the scale of these changes, Menter Môn commissioned the NRAA, which updated and extended the First NRA. Both the First NRA and NRAA involved extensive consultation.<sup>623</sup> Indeed there has been engagement with all stakeholders over more than three years.<sup>624</sup>

333. In broad outline, the NRAA concluded:

- (i) That the project is assessed to be acceptable in terms of navigational risk, assuming compliance with the embedded and implementation of suggestion mitigation measures;<sup>625</sup>
- (ii) That of the 85 hazards considered for the construction phase, and 70 of the operational phase, against 7 different types of vessels

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<sup>618</sup> Ref: MDZ/I1

<sup>619</sup> Cdr Brown’s evidence, Navigation RT, Day 10, AM Session 1.

<sup>620</sup> Annex 1 paras. 2a-e of MGN 543 (Ref: MDZ/I2) and Cdr Brown’s evidence, Navigation RT, Day 10, AM Session 2.

<sup>621</sup> Cdr Brown’s evidence, Navigation RT, Day 10, AM Session 2.

<sup>622</sup> That is, an NRA conducted by an organisation with no vested interest in the outcome of the NRA. It does not mean, as the MCA appeared to misunderstand, that the NRAA does not use similar data to the NRA.

<sup>623</sup> See Annex D of the NRA.

<sup>624</sup> See Annexes to the NRA and NRAA, and the Statements of Common Ground with Trinity House (Ref: MDZ/9) and MCA (Ref: MDZ/L8).

<sup>625</sup> Ref: MDZ/I1, p.102

- a. 6 hazards in the construction phase were in the mid-low ALARP range;<sup>626</sup>
  - b. 3 hazards in the operational phase were in the mid-low ALARP range;<sup>627</sup>
  - c. All other hazards were low.<sup>628</sup>
- (iii) The top scoring hazard was a recreational vessel being forced ashore or grounded. This was present with or without the MDZ.<sup>629</sup>
  - (iv) An unpowered recreational vessel being swamped or capsizing was the second highest scoring hazard during the operational phase, only just registering as ALARP and which scoring was unaffected by the addition of the project.<sup>630</sup>
  - (v) In the blue area of the MDZ, where a UKC of at least 8m will be achieved, the navigation of every type of vessel presently using the inshore routeing will still be possible and safe. In the purple area of the MDZ where UKC of at least 20m will be achieved, the navigation of commercial and passenger vessels should be possible and safe. Navigation will be restricted in the Green and Gold areas because of the presence of floating and submerged tidal devices.<sup>631</sup>

#### *Safety of water users, and their controls*

334. A question has been raised over the safety of water users. This overlaps with some of the other topics we will pull out below, but we submit that Menter Môn is firmly committed to ensuring the safety of water users. This is evidenced by:
- (i) The process Menter Môn has gone through to get here: the two NRAs, the extensive project redesign, the ongoing consultation;
  - (ii) Controls placed into the Order itself. In particular,
    - a. The requirement that surface emergent devices are least 1km offshore;<sup>632</sup>
    - b. The device spacing within arrays;<sup>633</sup>
    - c. The need for an NRA before every device deployment.<sup>634</sup> We particularly highlight this because Ms Wong of SCC outlined concerns they have about

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<sup>626</sup> Ref: MDZ/I1, Table 14-2

<sup>627</sup> Ref: MDZ/I1, Table 14-3

<sup>628</sup> Ref: MDZ/I1, Table 14-1

<sup>629</sup> Ref: MDZ/I1, p100 first bullet point.

<sup>630</sup> Ref: MDZ/I1, Table 14-3

<sup>631</sup> Ref: MDZ/I1, p. 101

<sup>632</sup> The Order (Ref: Inquiry Doc – 102) defines the “project parameters” to be the parameters set out in Tables 4-21 to 4-30 of Chapter 4 of the ES (Ref: MDZ/A25.4). Table 4-22 of Chapter 4 of the ES notes that the worst case scenario for surface emergent devices is detailed in paras. 104 and 117 Chapter 4, plus Chapter 24 i.e. the SLVIA (Ref: MDZ/A25.24). Para. 147 of the SLVIA confirms the 1km separation distance.

<sup>633</sup> See Table 4-9 in Ref: MDZ A25.4.

<sup>634</sup> See Ref: ROD001, Schedule 1 Part 4.

particular devices, but these would be subject to further NRA before deployment.<sup>635</sup>

- (iii) The comprehensive set of conditions currently contained in the draft ML.<sup>636</sup> Again we reiterate those three key points the Inspector outlined at the start of the session that these generally control safety but that that largely is a matter for NRW. Furthermore we take this opportunity to note that Menter Môn is committed to East-West channels of at least 500m between arrays, though it is intended this to be secured by the ML rather than the TWAO.<sup>637</sup>

335. The inquiry heard from Mr Salter of the MCA that it is a primary advisor to NRW on the ML side, consulted at each stage of the process. He told the inquiry that any controls not in the Order would be in the ML and he was confident that process would take place.<sup>638</sup> He also said that the MCA agreed the formal safety assessment process had been adequately followed, and that the MCA had “no concerns” on that side. Instead, he said that primarily what was being discussed today “boiled down to” the “tolerability levels of individual stakeholders”. When the Inspector asked him to clarify what he meant, and whether that was the perception of danger, he agreed that it was the “perception of risk”.<sup>639</sup> That is an important point, because although different users of the sea may have different views on the risks,<sup>640</sup> the NRA is the process set up to objectively manage and assess the actual risk, not the perceived risk.

336. It also might be helpful to address here a concern was raised about equipment being torn from its moorings.<sup>641</sup> The inquiry heard from Dr Orme (a mechanical engineer with a PhD in flow modelling of tidal turbines) in broad terms how engineering utilises a safety factor to ensure that the loads each device is calculated to bear far exceed the highest loads they might actually be inspected to bear. This is common in the oil and gas fields. The inquiry also heard from Mr Salter that one of the MCA’s conditions is compliance with all regulatory expectations written by both the HSE and MCA (to be verified by an independent Third Party),<sup>642</sup> and Mr McNamara that provisions such as Article 17 of the draft Order<sup>643</sup> and Condition 25 of the draft ML conditions impose obligations on Menter Môn in the event of damage, decay or deterioration. None of the main regulators are concerned.

### *Quality of the survey data*

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<sup>635</sup> Ms Wong evidence Navigation RT, Day 10 AM Session 2.

<sup>636</sup> Ref: MDZ/I4 Conditions 19-32.

<sup>637</sup> See e.g. Ref: MDZ/P7 Cdr Brown rebuttal Proof of Evidence p.33 item g; Ref: RPE006 Cdr Brown Proof of Evidence section 1.7, point 8

<sup>638</sup> Mr Salter’s evidence, Navigation RT, Day 10, AM Session 1.

<sup>639</sup> Mr Salter’s evidence, Navigation RT, Day 10, AM Session 1.

<sup>640</sup> As became evident, for example, when Ms Wong ran through concerns about particular devices on Navigation RT Day 10 AM Session 2.

<sup>641</sup> Navigation RT, Day 10, PM session 1.

<sup>642</sup> Ref: MDZ/L8 internal p.24.

<sup>643</sup> Ref: Inquiry Doc - 102

337. If we may turn, then, to the first main area that required clarification, which is whether the survey data was an adequate representation of activity and complied with MGN 543.
338. As we have outlined, MGN543, Annex 1 paras. 2a-e contains a set of clear and concise instructions on how they expect surveys to be undertaken. As a starting point, it is agreed with the MCA that the survey data goes "*over and above MGN 543 requirements*".<sup>644</sup> The inquiry heard from Cdr Brown how Menter Môn commissioned Anatec – the gold standard when it comes to this type of survey – to provide that survey data. They undertook 28 days of surveys (AIS, RADAR, and Visual) between August and September 2017 and in April 2019.<sup>645</sup> There was quite some dispute about this at the inquiry but we can confirm that the visual surveys (a) were undertaken and (b) were not merely confirmatory surveys. This has now been agreed by the MCA and RYA.<sup>646</sup> The 2017 surveys included the Bank Holiday weekend of 26-28 August, a period to which Menter Môn was directed by Mr Davis, Commodore of Trearddur Bay Sailing Club.<sup>647</sup> In addition, a further six months of AIS data was sourced from between October 2017 and March 2018, and for the NRAA Menter Môn purchased RYA's own UK Atlas of Recreational Boating information. We are aware that some ships do not carry AIS systems, others are difficult to pick up on radar. That is why we used a combination of all three, and specifically outsourced this to a gold standard company. Of course, no survey can guarantee to ever capture everything. That is why there are standardised procedures to get as best an idea as possible, and ensure that everyone can have faith that the process is, at least, representative. That is what we have done, going over and above MGN 543 requirements.
339. The primary complaint made against us is our surveys have not caught everybody. This is put in varying different ways by varying different parties and we will address each, but none can really overcome the point that we have complied with best practice, caught what we can, and indeed gone over and above what we are required to do – as confirmed by the MCA. We simply cover them off for the Inspector's note. Turning to each in turn:
- (i) Mr Davis, Commodore of Trearddur Bay Sailing club accepts that we have followed the relevant process, but considers we have not caught relevant local usage because the process (i.e. MGN 543) does not capture that. He also suggested the times chosen do not reflect the heaviest periods of usage, and said he would have made himself available for consultation.<sup>648</sup> In response:
    - a. First, to an extent this is an attack on MGN 543 itself. We understand that small boat users do not think it is adequate. This is a point also made by SCC. That, however, is something more properly addressed to the MCA (and is a point with which they appear to wholly disagree)<sup>649</sup> – this is not the forum for collateral attacks on regulatory policy. In any event, and

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<sup>644</sup> Statement of Common Ground between Menter Môn and the MCA, p. 14-15 (Ref: MDZ/L8).

<sup>645</sup> Ref: MDZ/I1 Table 7-1

<sup>646</sup> Ref: Inquiry Doc - 055 and the RYA's letter to Menter Môn of 13 January 2021, copied to PINS.

<sup>647</sup> Ref: MDZ/I1 p.E-8, PDF p.213.

<sup>648</sup> Mr Davis Evidence, Navigation RT Day 10 PM Session 1.

<sup>649</sup> Evidence of Mr Salter in response to the evidence of Chris Brown (SCC), Navigation RT, Day 10, PM Session 2.

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even if it was, having undertaken AIS, Radar and Visual Surveys it is difficult to see what more we could have done.

- b. Second, and linked to that, we turn to the ‘weeks chosen’ problem. There are two. Mr Davis did respond to our consultations, but did not make the point he raised in the inquiry that sailing activity ceases on the first Saturday of the August bank holiday, so we would not have caught any activity on the Sunday or Monday and therefore it is not representative. So, again, Menter Môn has acted on the information it was given. To an extent that does not accord with local conditions, that’s not on us.
  - c. Third, to an extent it is suggested there was inadequate consultation we disagree.<sup>650</sup>
- (ii) Mr Dennis raised the issue of what kayaking or sailing activity which occurred outside of the MDZ but where the participants would end up in the MDZ if they get into trouble.<sup>651</sup> As this is a primarily kayaking concern we turn to it below, but insofar as this is a data question it is submitted it has been considered in the NRAA.<sup>652</sup>

The RYA also raised a query about the quality of the survey data and whether visual surveys were completed.<sup>653</sup> This has now been now resolved.

#### *Quality and adequacy of the NRA and NRAA*

340. A further question, linked to the first but conceptually distinct from it, is the extent to which the NRA and NRAA were adequate and complied with MGN 543. Again, we submit these are perfectly adequate. The two full NRAs followed the FSA methodology approved by the IMO, and are considered compliant with MGN 543 by the MCA.<sup>654</sup> We also note that RYA has made clear in its closing (p.1) that their objection on this ground has also fallen away. That, we say, is the end of it.

341. A concern was raised by Mr Pattullo for SCC about the extent to which kayakers were involved in the Hazard Review workshops.<sup>655</sup> As Cdr Brown explained however, when dealing with a sizeable NRA (as one would do here) which would detail 130 hazards, all of which would need to be discussed with stakeholders and ranked – it would become an unwieldy process. The way that it is done for NRAs of such scale is

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<sup>650</sup> Consultation has been dealt with above but Trearddur Bay sailing club was specifically referenced in Appendix E to the NRAA – see Ref: MDZ/I1.

<sup>651</sup> Mr Dennis Evidence, Navigation RT, Day 10, PM Session 1.

<sup>652</sup> Ref: MDZ/I1 p.35-36

<sup>653</sup> Mr Hill Evidence, Navigation RT, Day 10, PM Session 1.

<sup>654</sup> Ref: MDZ/N6 page 1. For completeness, Mr Pattullo (Day 10, PM Session 1) referred to a set of minutes in Ref: MDZ/N12 p.88 to argue Menter Môn and SCC had agreed that MGN543 did not adequately assess the needs of kayakers. The minutes are in fact slightly ambiguous, but suffice to note for these purposes that this meeting post-dated the NRA but pre-dated the NRAA, Morlais recognised that kayaking would need to be addressed in detail, which it then did in the NRAA. So, threats to kayakers have been considered.

<sup>655</sup> Evidence of Mr Pattullo in the Navigation RT, Day 10, PM session 2. Mr Hill for the RYA made the same point (evidence of Mr Hill, Navigation RT, Day 10 PM session 1), however as noted, the MGN 543 compliance objection for the RYA has fallen away.

through consultation – which is why the kayaking and sailing responses were included as an Annex to the NRAA.<sup>656</sup> This is accepted practice. All will, of course, be able to weigh in for the more confined and focused device specific NRAs.

342. The RYA further expressed a concern regarding whether the NRAA adequately considered non-powered craft other than paddleboards and kayaks. As Cdr Brown outlined Table 11-2 of the NRAA details un-powered recreational vessels, which includes but is not limited to sailing dinghies, kayaks and canoes. This, as Cdr Brown explained, would have taken into account craft such as the 16ft-24ft craft out of Trearddur Bay with which the RYA was concerned.<sup>657</sup>
343. Other than those specific points, the concerns expressed under this topic did not really focus on our NRA and NRAA, but on whether MGN 543 adequately represents or captures unpowered craft such as kayakers. In particular the inquiry heard from Mr Bolton for SCC, who sought to re-write the MGN 543 risk assessment.<sup>658</sup> It was, therefore, a collateral attack on the guidance itself. As we have pointed out above, this simply is not the place for that. Moreover, Mr Bolton sought to pray in aid certain HSE guidance which, as Mr Salter outlined, is not of itself applicable to this type of assessment.<sup>659</sup>

#### *Loss of Amenity*

344. Put shortly, (and being careful not to conflate this with sea room), the loss of amenity refers to the fact that by putting something in the water where people recreate, they can no longer do that. Mr Hill referred to two types of recreational water user - those passing through and those who are more local. We refer the reader to Ref: Inquiry Doc - 043 which gives a fairly helpful indication (albeit only indicative) of just how little water would actually be taken up by the devices, and how much is left. The starting point is that this is not a big imposition, even at full deployment – a point recognised by Mr Salter of the MCA.<sup>660</sup>
345. Regarding what would be lost (and we accept some would be) Cdr Brown has identified that the area is notoriously prone to overfalls, is exposed, and is an area where the wind and sea can become, in his words, “truly ferocious”. We refer to passages in his Proof of Evidence<sup>661</sup> and rebuttal Proof of Evidence<sup>662</sup> where he refers to the fearsome nature of this stretch of water, and quotations from various sailing directions. The overall point of this is that this is not a calm stretch of water regularly used for leisurely cruises. It is difficult and turbulent. So, the amenity value it carries is reduced. This falls against the backdrop of a policy imperative in the WNMP for existing users to share the use of the sea – see above.

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<sup>656</sup> Evidence of Cdr Brown to the Navigation RT, Day 10, PM Session 2 and see Annex A of the NRAA (Ref: MDZ/I1).

<sup>657</sup> Discussion between Cdr Brown and Mr Hill, Navigation RT, Day 10, PM Session 2, and see Ref: MDZ/I1 Table 11-2.

<sup>658</sup> Navigation RT, Day 10, PM session 2.

<sup>659</sup> Evidence of MCA in response to the evidence of SCC, Navigation RT Day 10 PM Session 2.

<sup>660</sup> Day 11, AM Session 1.

<sup>661</sup> Ref: MDZ/P7, p.11

<sup>662</sup> Ref: RPE006, p.10

346. In short, therefore, any argued loss of amenity arising from the limited stretches of water no longer being available to sail should be given very limited weight in the planning balance.

### *Searoom*

347. As a starting point it would help to refer to Ref: Inquiry Doc – 043 as a pictorial (and only indicative) indication of precisely how much room there is here. It is easy to lose sight of this when overlaying the various zones, but Ref: Inquiry Doc – 043 is a good indication. Again as a preliminary point, it should be noted that this assumes the full 240MW deployment. Again, of course, the phased deployment means we start much lower, and so other recreational users will have commensurately more room over a large portion of the project's lifetime.

348. Cdr Brown noted that deciding how much searoom is "enough" is a complex question, likely to elicit four different answers from four different mariners. For each person, it will be a function of a large number variables, included weather, tide, time of day, visibility, type of vessel, height of eye, the navigation equipment fitted, and other traffic. This helps explain why the various requests for searoom tend to vary according to the objector: Mr Carruthers of the RYA told the applicant that 4 cables (732m) was acceptable,<sup>663</sup> as did the Coxswain of the Holyhead lifeboat.<sup>664</sup> The RYA's Statement of Case maintain that searoom should be 4 cables (732m) from the overfalls (and state that is what Mr Carruthers meant – though it's not in the minutes).<sup>665</sup> Mr M Davis originally asked for the eastern inshore boundary to be moved 1,000m offshore, and has since increased that to 1,500m.<sup>666</sup> However, cutting through these various different subjective views – the IMO and MCA in MGN 543 endorse the NRA process to assess, quantify, and answer this sort of complicated question. That is the process Menter Môn has undertaken.

349. It is Menter Môn's position – based on its thorough assessments and detailed evidence - that the current eastern inshore boundary, which is on average 1.9km and has a minimum distance of 1,000m offshore is sufficient searoom. That is what is provided for in this project, and the NRAA has assessed this and concluded that the risks presented in the eastern inshore passage are ALARP.<sup>667</sup> This assessment includes, considering whether users can go through, around, or over a development – and again we'd refer the reader to Ref: Inquiry Doc – 043.<sup>668</sup> The MCA, largely,

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<sup>663</sup> Ref: MDZ/I1, E-17

<sup>664</sup> Ref: MDZ/I1, E-12

<sup>665</sup> Mr Hill, Navigation RT, Day 11 and Statement of Case para. 6.3.4 (Ref: MDZ/N2).

<sup>666</sup> See Mr M Davis letter to PINS, dated 16 October 2019, and his email to Morlais CC'd Philip Thompson of PINS, 22 January 2021 at 17.29hrs, both of which were discussed by Cdr Brown in the Navigation RT, Day 11, AM session 1.

<sup>667</sup> See Ref: DZ/I1, Section 12, and the Hazard Log for the Construction Phase (Annex B) and Operational Phases (Annex C).

<sup>668</sup> While dealing with MGN 543 we should also deal with a minor point raised by the RYA on Day 11, AM session 2: they argued that MGN 543 requires Menter Môn to take the views of the local community into account. We do not dispute that, but as was pointed out during that RT there is a difference between taking views into account, and agreeing with them. Menter Môn

agrees that the risks are acceptable – it notes that the eastern inshore boundary is large enough for motorised vessels and 90% of the transits recorded through this channel.<sup>669</sup> And the traffic survey data shows the majority of craft presently pass between what will be the eastern boundary of the MDZ, and the coastline.<sup>670</sup>

350. The crux of the dispute really relates to boats under sail – and specifically those boats which do not have an engine, given that as Cdr Brown noted a sailing vessel becomes a power driven vessel as soon as it starts its motor.<sup>671</sup> After much discussion, we were able to make some common ground with the RYA in that, basically, this simply comes down to a difference of opinion. We submit it is Cdr Brown's opinion that should be preferred. His view essentially boils down to the following:

- (i) Navigating around well marked and visible static hazards is part of sailing – as the RYA note in its position paper on tidal energy.<sup>672</sup>
- (ii) 1km searoom is clearly adequate in the Hurst Castle/Needles channel. This comparison was contentious: Mr Hill for the RYA considered the area was an entirely different wave and wind situation due to the sheltering effect of the Isle of Wight, arguing that there isn't an intense lee shore and that the coast is lower making rescues more possible.<sup>673</sup> Mr Salter did not quite go that far, but did say the Needles do not have the same tidal conditions in terms of overfalls races and eddies.<sup>674</sup> In response, the inquiry heard from Cdr Brown that the sea is variable and unpredictable and that each mariner will have different experiences. The Needles does contain areas of wind and tide overfalls, and though perhaps not as frequent as those in the area of this site, in his expert view as a mariner they can be as challenging as West Anglesey. Moreover, he continued, the Solent is 3-5 times busier. It is not, he freely admitted, an exact parallel, but nowhere in the world is because land (and sea) are unique. There are, however, valid and useful parallels to be drawn.<sup>675</sup>
- (iii) The conditions under which Cdr Brown considered prudent seamen would normally observe before sailing this stretch of water – which as Vice-Commodore Davis told the inquiry, is "particularly tricky".<sup>676</sup> As a minimum, Cdr Brown expected an up to date forecast covering the time of passage, suitable wind strength for the size of vessel, suitable wind direction with the knowledge of the perils of a lee shore, good understanding of the likelihood of local and diurnal effects, good visibility, timing the passage with the tide in his

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has done the former, it is not compelled to do the latter. The MCA, as parties will recall, is satisfied that the NRAA is MGN 543 compliant.

<sup>669</sup> Ref: MDZ/N19, p.1

<sup>670</sup> Cdr Brown Evidence Navigation RT, Day 11, AM Session 1.

<sup>671</sup> Cdr Brown Evidence Navigation RT, Day 11, AM Session 1 citing Rules 3b and 3c of the International Regulations for the Prevention of Collisions at Sea. It will be recalled that he expected most vessels passing through the area would have at least an auxiliary motor ready, as endorsed by the Yachting Monthly extract in his Rebuttal Proof of Evidence (Ref: RPE006).

<sup>672</sup> Ref: MDZ/N2

<sup>673</sup> Mr Hill at the Navigation RT, AM Session 1.

<sup>674</sup> Evidence of Mr Salter (for the MCA) at the Navigation RT, AM Session 1.

<sup>675</sup> Cdr Brown's evidence, Navigation RT AM session 2.

<sup>676</sup> Evidence of Vice-Commodore Davis to the Navigation RT, Day 11, AM session 1.

- favour, planning to do the passage in daylight (or with aids to navigation such as chartplotter, radar or AIS if undertaking it at night).<sup>677</sup>
- (iv) It appears that most boats which are solely sail powered follow this guidance. The inquiry heard from Vice-Commodore Davis that he considered Cdr Brown to be making “very good points”. When Trearddur Bay yacht club sails its fleet of sail powered heritage craft, it does follow the guidance one would expect (albeit perhaps with some changes which are not quite orthodox, but with good reason). The Vice-Commodore explained that, if the sailors were setting out of Trearddur Bay and conditions changed, they would ordinarily turn back. The difficulty arises if they were seeking to return from Holyhead (and are usually committed to the route), but the inquiry also heard that if the Yacht Club takes its fleet to Holyhead, it takes the additional precaution of usually being accompanied by motorised safety boats.<sup>678</sup>
- (v) As was pointed out during day 11 of the inquiry – there are other options. If we observe for a moment the split the RYA draws between those sailors cruising from one area to another, and the smaller recreational sailors:<sup>679</sup> for the recreational sailors if conditions for entering the MDZ area are not optimal, they can of course recreate elsewhere. Again the inquiry heard from Vice-Commodore Davis that it was more unusual for the Trearddur Bay yachters to sail north, rather than south – and that if conditions changed they would turn back.<sup>680</sup> For passage cruisers, and those larger vessels, they have the option of going around the MDZ. This is not something that smaller 20 foot vessels might attempt, but the larger ones (for example, the 36 footer outlined by Vice-Commodore Davis) very well could.<sup>681</sup> We accept that might cause some displacement – which we come back to below – but in terms of searoom, that is an answer for the larger boats.
- (vi) As Vice-Commodore Davis outlined, the widening of the inshore passage to 1,000m was welcomed and “really helpful to” them. There remains a concern about the “1 in a million” incident, but we are talking here about a 1 in a million incident for 10% of the sea traffic for which the MCA suggested further consideration was needed. That is a small risk.<sup>682</sup>
- (vii) Although the assessment was considered intolerable from the point of view of an Interactive Boundary Assessment (“IBA”) – as Cdr Brown explained this was somewhat inevitable, given that the IBA is designed for commercial shipping routes and offshore wind farms. The IBA itself acknowledges this in stating that the process is “*not a prescriptive tool but needs intelligent application and that advice will be provided on a case-by-case basis*”. The applicant asked for this advice from the MCA and they responded by saying that the Eastern Inshore Channel was “*large enough for motorised vessels and for 90% of the transits that are recorded through this channel*”.<sup>683</sup>

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<sup>677</sup> Cdr Brown’s evidence to the Navigation RT, Day 11, AM Session 1.

<sup>678</sup> Vice Commodore Davis’ evidence to the Navigation RT, Day 11, AM Session 1.

<sup>679</sup> Which, contrary to the suggestion of Mr Hill, was observed in the NRAA – see the evidence of Cdr Brown on Navigation RT, Day 11, AM Session 1.

<sup>680</sup> Vice Commodore Davis’ evidence to the Navigation RT, Day 11, AM Session 1.

<sup>681</sup> Vice Commodore Davis’ evidence to the Navigation RT, Day 11, AM Session 1.

<sup>682</sup> Vice Commodore Davis’ evidence to the Navigation RT, Day 11, AM Session 1.

<sup>683</sup> MCA’s “Response to Statements of Case”, p.1 (Ref: MDZ/N19).

(viii) Of course, as Mr Salter for the MCA pointed out, there is the additional check of the ML process.<sup>684</sup>

351. So, for all those reasons we submit that there is an acceptable level of searoom in the eastern inshore channel.

### *Displacement*

352. There is little to say on displacement. It was considered in the NRA and NRAA, but the MCA sought further information.<sup>685</sup> A clarification note was produced and annexed to Cdr Brown's Rebuttal Proof of Evidence, and Mr Salter confirmed at the start of the first navigation RT session that the issue was resolved. As Cdr Brown outlined, it is expected that the maximum displacement for vessels diverting around the MDZ is likely to be approximately an additional 2.5 nautical miles – or an extra 30 minutes at 5 knots.<sup>686</sup> No party particularly took issue with this. We submit, that this is not a significant amount of displacement, and perfectly acceptable in the context of the benefits this project could bring.

### *Kayakers run out*

353. A great deal of time was spent at the second navigation RT on this topic. However, Menter Môn's case can be relatively shortly stated. The NRAA assesses the risk to kayakers in the MDZ as low,<sup>687</sup> and it is not expected that it will represent an additional danger to life beyond what already exists. We have already covered the pedigree and support for the NRAA above, and won't repeat it again. So it is against that background we must engage with the points raised by SCC, and those broadly fell into two categories: first, whether kayakers would be swept into the MDZ, and second what would happen when they got there. Obviously to an extent these are interrelated (the extent to which kayakers are accompanied may be relevant to both, for example) so splitting them is somewhat artificial.

354. If we may start with whether kayakers would be swept into the MDZ – it is not and never has been Menter Môn's case that this cannot happen. We accept it is possible, we submit however that this possibility is remote. Start with where they travel – most (though admittedly not all) kayaking or canoeing activity takes place relatively close to the shore – within 500-700m of the coastline. Surface emergent devices, by contrast will lie at least 1000m offshore.<sup>688</sup>

355. Even assuming a kayaker is in distress, we still do not accept it is likely they would be swept into the MDZ. The NRAA has been informed by the studies undertaken by HR Wallingford. SCC took issue with that analysis, presenting their own view based on new evidence at the inquiry, and asserting the HR Wallingford

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<sup>684</sup> Navigation RT, Day 11, AM Session 1.

<sup>685</sup> Ref: MDZ/N19

<sup>686</sup> Ref: RPE0006, p.23 onward

<sup>687</sup> Ref: MDZ/I1, p. B-2 Hazard ID No. 6

<sup>688</sup> Cdr Brown's evidence to the Navigation RT, Day 12, AM Session 2.

model was not detailed or precise enough.<sup>689</sup> But, HR Wallingford have been, as Cdr Brown confirmed, world leaders in hydrodynamic modelling for nearly 20 years.<sup>690</sup> SCC have not. We also refer the inquiry to our FEI response on these points.<sup>691</sup> HR Wallingford's view and work is, with respect, to be preferred. So that sets the scene for how far a distressed kayaker may travel, left to their own devices. However, Cdr Brown confirmed that this area is classified by the British Canoe Club as "advanced water", which requires experience and skill to master. It is fair to assume that users of this water will be capable of self-rescue. Moreover, it is not expected canoeists would be in this area alone, so there is a reasonable expectation of mutual support or the activation of external resources.<sup>692</sup>

356. What about when kayakers are within the MDZ? Cdr Brown told the inquiry that surface emergent devices will typically be up to 200m apart and longitudinally<sup>693</sup> spaced up to 500m – at full deployment (of course, in the initial phase of the project there will potentially be only a small number of devices). As the inquiry heard from Cdr Brown, sensible hydrodynamics demands that any surface emergent part of a device will be as small as possible, and streamlined, around which a comparatively light floating object such as a kayak or person is likely to be swept. So, kayakers within the MDZ may well not even have a close encounter with a device. Ms Wong for the SCC raised concerns about the water bubbling or the turbines having reef effect effects.<sup>694</sup> This was a new point, unsubstantiated by any evidence and to which no weight can be attached.

357. Even if they do, we submit the presence of the MDZ is a low risk to a kayaker. There are videos, one of which the Inspector was referred to, of kayakers playing in and around these turbines in Strangford Lough.<sup>695</sup> Moreover, Mr Dennis, in a response to Menter Môn's 2013 consultation, suggested if turbines stood above the water kayakers would use the eddy lines and pillars as a white water training area.<sup>696</sup> In the MDZ, any moving part of a device is likely to be metres below the surface, and kayakers should be wearing specialist kayaking lifejackets or buoyancy aids, the risk of contact with a moving part is therefore extremely small.<sup>697</sup> It is accepted that for SCC Ms Wong pointed out what are perceived to be snagging hazards on certain models of turbines. However, as has been laboured at length in this inquiry we are at a stage where we do not know what devices are actually going into the water. As Cdr Brown highlighted, safety value is going to have to be incorporated into the device design process. It is Menter Môn's hope that devices can be designed to be a refuge for kayakers, but we do not say too much more about that. It is therefore simply too early – and not justifiable – to pick out certain devices, say "we will get injured if we touch these" and therefore try to impose restrictions on the project. That is, at present, an unknown.

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<sup>689</sup> Evidence of Ms Wong and Mr Bolton (for SCC) to the Navigation RT, Day 11, AM Session 2.

<sup>690</sup> Cdr Brown's evidence to the Navigation RT, Day 11, AM Session 1.

<sup>691</sup> Ref: Inquiry Doc – 052

<sup>692</sup> Cdr Brown's evidence to the Navigation RT, Day 12, AM Session 1.

<sup>693</sup> Or "laterally" for those of us not as well versed in navigation.

<sup>694</sup> Navigation RT Day 12 AM Session 1.

<sup>695</sup> Referred to and shown as part of Cdr Brown's evidence to the Navigation RT, Day 12, AM Session 1.

<sup>696</sup> Ref: Inquiry Doc – 013, Appendix 4.8.

<sup>697</sup> We have, of course, taken on board their concerns they raise about the use of 15m tow lines. However, as Ms Wong noted, one can use tow lines that float. This is a reasonable accommodation for kayakers to make.

358. However, this all comes against a background whereby the NRA for the Site will have to be updated every two years (incorporating stakeholder engagement), and each new array will be subject to its own NRA (also with stakeholder engagement). Wrapped up altogether, we remind the inquiry that SCC themselves have said no-one expects the area to be unusable by kayakers.<sup>698</sup>
359. Toward the end of the second navigation RT, SCC, through Ms Wong and Mr Bolton, provided an extensive presentation of where SCC see the risks lying and why they disagree with the NRAA assessment, do not agree that the MDZ would not add to risks, and why the perception of increased risk is not unreasonable. Leaving aside the fact that this was all introduced very late in the day – there was a 35 slide presentation which did, we're afraid, include new evidence – we actually think this can be resolved fairly shortly, for two reasons:
- (i) First, we have considered all of this in the NRAA.<sup>699</sup> The fact we have reached a different conclusion to the SCC does not mean they were not listened to.
  - (ii) Second this was, primarily, about safety. That is considered in the ML process and will be re-examined for any device specific NRAs. All of the regulators are competent – if a particular device really does pose a risk to kayakers (which we don't accept), it can be managed at that stage. SCC can make representations. Neither NRW nor the MCA is not going to let us put something in the water that creates an unacceptable risk. For SCC to be running this argument, or the argument that any perception of increased risk is justified, they have to consider that the regulator will not regulate competently. From the discussion at the very end of this session – that is something SCC might not perhaps have fully appreciated as they missed the Regulatory RT. There is no basis for considering that the relevant regulator will not safeguard their safety. All of these concerns are a matter for NRW. For present purposes, we revert to the point the Inspector made at the very start of the first day of navigation RT: marine safety is also regulated by the ML, there is no reason to doubt a licence would be issued,<sup>700</sup> and there is no reason to doubt the competence of the regulator in this case.

### *Construction impact and timelines*

360. Another particular issue that was raised were the impacts of construction on local businesses and usages, and (linked to that) the impact of the availability of Abraham's bosom.
361. Beginning with the construction timeline, the inquiry heard from Cdr Brown the rough timeline of what would occur: Menter Môn will identify the construction requirements, details of proposed activity during the DDP, in accordance with conditions 1-2 of the draft ML conditions. As part of this it will have to identify the likely length of work and submit a construction environmental management plan

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<sup>698</sup> Ref: EIC012, p.4.

<sup>699</sup> Ref: MDZ/I1, p. B-2 Hazard ID No 6.

<sup>700</sup> Mr Pattullo for SCC expressed doubts over whether NRW might issue a ML because of the concerns expressed by SCC. However, he stated when you asked that NRW had given no reason to SCC to think that.

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(condition 4 of the draft ML conditions).<sup>701</sup> The worst case estimates are in the ES.<sup>702</sup> Menter Môn will then have to consider an array specific NRA, as per condition 27 of the draft ML. This is going to require consultation with both regulators and stakeholders – as we have already discussed. Cdr Brown informed the inquiry that this would normally be expected to identify the optimum time for works in order to minimise disruption, alongside other mitigations and measures, and any other constraints.

362. Provided the NRA concludes the project is ALARP or less, Menter Môn will then apply for the marine safety zones to the Welsh Ministers.<sup>703</sup> This process has information publication requirements, and objection procedures and periods, all laid out in regulations.<sup>704</sup> That safety zone approval process is also likely, in Cdr Brown's experience, to require a construction management plan and emergency response plan, guard vessels, area monitoring by AIS/VHF/CCTV, public notification periods at least a month in advance (and notices to mariners 2 weeks in advance), time windows for work to commence and quite possibly weather or seasonal limitations. Those safety zones are unlikely to extend beyond 100-150m.<sup>705</sup> Menter Môn has spoken to operators of devices in Orkney who advised their zones never exceeded 200m (those that required them, which not all did) – the ones around anchored warships was 50m, and the nuclear deterrent is 200m.<sup>706</sup> So both during the array specific NRA process and the safety zone process, there will be plenty of notice to local businesses and kayakers. Ms Wong very fairly said that SCC were much reassured by that.<sup>707</sup>

363. A particular subset of the concerns raised was the level of disruption at Abraham's Bosom, which SCC repeatedly stated is important for their lunch breaks, and which we all acknowledge is key for kayakers' access to emergency services.<sup>708</sup> This only arises if HDD cannot be used – which we have already dealt with. We will deal with this in two stages. The first and most important aspect is the access to emergency services. As Cdr Brown stated, safety of life overrides every engineering and project concern at sea. So, if emergency access is required at Abraham's Bosom, all other work will cease and every effort will be made to facilitate this. Indeed, he noted that

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<sup>701</sup> Ref: MDZ/14

<sup>702</sup> Ref: MDZ/A25.4, Table 4-17.

<sup>703</sup> As Mr Maile outlined in the Navigation RT, Day 11, AM Session 2, Art. 43 of the Draft Order (Ref: ROD001) provides that the Welsh Ministers may issue safety zone notices. This reflects the position under legislation. Section 41 Wales Act 2017 amended ss. 95-96 Energy Act 2004 such that Welsh Ministers have the functions of declaring safety zones. The Electricity (Offshore Generating Stations) (Safety Zones) (Application Procedure and Control of Access) (Amendment) (Wales) Regulations 2019 (S.I. 0219/293, 2019 W.71) have amended Reg. 5 Electricity (Offshore Generation) (Safety Zone) (application Procedures and Control of Access) Regulations 2007 (S.I. 2007/1948) (the "Safety Zone Regs") to provide that applications are to be made to the Welsh Ministers.

<sup>704</sup> As Mr Maile outlined, Regs. 3-8 of the Safety Zone Regs, applied by Art. 43(3) of the Draft Order (Ref: Inquiry Doc - 102).

<sup>705</sup> Some concern was expressed by Ms Wong and SCC about what happens if they enter the safety zone. As Mr Salter for the MCA pointed out in Navigation RT, Day 11, AM Session 2, the prohibitions on entering a safety zone do not apply if the vessel is saving life or property or is in there due to foul weather or distress – see Reg. 9(g),(h) Safety Zone Regs.

<sup>706</sup> Cdr Brown's evidence to the Navigation RT, Day 11, AM Session 2.

<sup>707</sup> Evidence of Ms Wong (for SCC) to the Navigation RT, Day 11, AM Session 2.

<sup>708</sup> Parties will also note that this was referred to in para. 6 of Ref: Inquiry Doc – 078. For the acknowledgement, see e.g. evidence of Cdr Brown, Navigation RT, Day 11, AM Session 2.

in his experience the presence of construction personnel and safety boats may improve the safety measures in that area. So, for emergencies, the disruption will be minimal – if any.<sup>709</sup> For other elements of disruption – e.g. lunch breaks – Menter Môn acknowledges there will be some disruption. We have already outlined that nine export cables will need to be laid. As a worst case, the ES<sup>710</sup> predicts a total of 32 days per year spent on export cable installation. Approximately 20% of this will occur in Abraham's Bosom so that is, roughly, seven days installation time per year. The Cable Tails add another two days per year – so nine days per year in total of potential restricted access to Abraham's Bosom.<sup>711</sup> These will be limited to certain weather and tidal windows, and as depend on vessels which need to be chartered 3, 6 or even 9 months in advance.<sup>712</sup> So, combining that with the consultation requirements we have already set out above, it is submitted this is not a significant disruption to kayakers in the area, and is one that is eminently manageable such that the uses of the sea can coexist.

364. SCC also raised concerns about the wider disruption from construction, particularly when vessels will be laying cables around south stack, or when Hubs are being installed in the Blue Area.<sup>713</sup> She asked that SCC be able to negotiate when those vessels are there, and whether compensation is due for any disruption faced to kayaking businesses. On the former question our answer is the same as for Abraham's Bosom - there are consultation and notification requirements built into both the device specific NRA process and the safety zone process. On the latter – there is no right to compensation and that is not the purpose of this process, save of course in respect of those whose land we are acquiring – but as will be appreciated, kayakers do not “own” the sea any more than sailors do. It is a public resource. “Co-existence” does not require compensation. In any case, of course, there are the socio-economic mitigations to be put in place.

### *Conclusion*

365. This has been a long section in a long argument, but we submit that for all of the reasons explored and outlined above, non-navigation matters is not a basis to refuse this Order. We have outlined the reasons for this in the summary at the start.

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<sup>709</sup> Cdr Brown, Navigation RT, Day 11 AM session 2.

<sup>710</sup> Ref: MDZ/A25.4 para. 231 onward and Table 4-17, and Cdr Brown evidence to the Navigation RT, Day 11, AM Session 2.

<sup>711</sup> We should flag at this point a slight mistake in Table 4-17 of the ES (Ref: MDZ/A25.4). It erroneously states that Cable Tails installation will take 20 days per year (200 in total). It is in fact 20 days in total, so, 2 per year on average. The wording in para. 233 is correct, as what Cdr Brown outlined in evidence.

<sup>712</sup> Evidence of Cdr Brown to the Navigation RT, Day 11, AM Session 2.

<sup>713</sup> Evidence of Ms Wong to the Navigation RT, Day 11, AM Session 2.

## **6. Compulsory Acquisition**

### *Introduction*

366. We do not anticipate there being a great deal of dispute on the general principles to be applied to the consideration of CPO matters. Where to look for the relevant guidance can be a little bit circular,<sup>714</sup> but we don't anticipate any particular controversy over the following principles:

- (i) Fundamentally, CPOs are granted to facilitate development which is in the public interest. It is intended to be a last resort, where acquisition by agreement has failed.
- (ii) The Welsh Ministers will have to consider:
  - a. Whether attempts have been made to acquire the land by agreement,
  - b. Whether taking the land is necessary to progress a development scheme,
  - c. Whether there is a compelling case in the public interest, and
  - d. There is clear evidence the public benefit in the development scheme will outweigh the private loss.
- (iii) Menter Môn must show the scheme is likely to proceed, including whether there is sufficient funding in place. This is a matter dealt with by Mr Billcliff in his proof<sup>715</sup> and his oral evidence and on which he was not challenged or cross-examined by anyone.
- (iv) The Welsh Ministers recommend that non-public bodies seeking to use and justify CPO powers in Wales do so in accordance with the overarching well-being goals contained in the 2015 Act. Consideration should be given to how the use of CPO powers contribute the well-being goals. Moreover, any acquisition must be a justified infringement with the landowners rights under A1P1. There will be no breach where the acquisition is authorised by law,

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<sup>714</sup> The Welsh Government Circular 003/2019 Compulsory Purchase in Wales and '*The Criche! Down Rules (Wales Version, 2020)* (October 2020) contains detailed guidance on the application of CPO procedures in Wales. However, at para. 24 it states that CPO under the TWA 1992 has its own guidance. Welsh PINS documents *Applications for Orders under the Transport & Works Act 1992* (Sept 2019) does not say a great deal on compulsory purchase, but notes that the DfT's *A Guide to TWA Procedures* (2006) remains relevant and provides more detailed guidance, though should be read bearing in mind more recent legislative changes. *A Guide to TWA procedures* at para. 1.39 states that relevant advice on the use of CPO powers can be found in Circular 06/2004 Compulsory Purchase and the Criche! Down Rules. In England, that has been superseded by MHCLG Guidance on *Compulsory Purchase Process and the Criche! Down Rules* (2018). That, of course, does not take account of Welsh legislative changes, which are reflected only in Circular 003/2019. Overall therefore we submit that you can, and should, have regard to Circular 003/2019 notwithstanding the statement at para. 24.

<sup>715</sup> See Ref: MDZ/P8 Mr Billcliff's Proof of Evidence Section 9.

would be proportionate, would be in the public interest and any landowner would be appropriately compensated. Acquiring authorities should therefore explain why it considers that the purposes for which the land is to be acquired is of sufficient import to justify the taking, the land is needed for the delivery of those purposes, a less intrusive measure could not have been used, and a fair balance has been struck between the rights of the individuals and the interests of the community.

- (v) This, of course, all occurs against the background of the general legal principle that any taking should be compensated for in a manner which will put the landowner into the position they would have been in if it had not occurred (the principle of equivalence). That is more a matter for compensation but should be borne in mind.

367. Against those general principles, we come to the CPO sought in this case. We will deal with Orthios in detail below, but would seek to make the following three preliminary points:

- (i) First, as we outlined at the start, this entire operation has been set up to minimise the land take required from both private landowners and statutory undertakers. As Mr Billcliff recounted, both in his Proof of Evidence and when giving evidence in chief in particular,<sup>716</sup> this has been achieved by burying the cable along the existing road route as far as is reasonably practicable, and utilising a route with the lowest number of private landowners using brownfield sites and public or large company owned land where possible, so that there would be fewer owners with greater land interests and those would be used to handling property deals. Moreover, Menter Môn has taken what steps it can to respond proactively to objections made by landowners. For example, it has realigned cable routes to avoid commercial construction activities, procured the cable in long lengths to reduce the need for joint bays, is undertaking activities at depths and entering asset protection agreements to avoid asset damage, is using temporary powers rather than permanent takings where possible, and has developed a construction programme that will minimise disruption to local businesses.<sup>717</sup> Furthermore, the inquiry heard from Mr Billcliff that the intention at this point is to provide a futureproofed project – laying, for example, larger cables now so that when the project scales up, those can be utilised without further disruption to local residents and businesses.<sup>718</sup> In short it is doing and has done everything it possibly can to minimise the land take and disruption on others.
- (ii) Second, the required procedures and guidance have all been followed – Menter Môn created its book of reference and has engaged with all those within the book.<sup>719</sup> In light of that point and point (i) above, agreement has been reached with almost all of those affected. Ref: Inquiry Doc – 099 has a table outlining the current progress of matters with all parties owning land across the route. However, even where agreement has been reached we are keeping the land in the CPO to cleanse the title of encumbrances and protect

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<sup>716</sup> Mr Billcliff's Proof of Evidence para. 5.2.14, Sections 6 and 10.5 and his evidence in chief.

<sup>717</sup> Mr Billcliff's Proof of Evidence Section 7.

<sup>718</sup> Mr Billcliff's evidence in chief.

<sup>719</sup> Mr Billcliff's Proof of Evidence para. 10.3.9.

Menter Môn in the event of any breach of any agreement or in case any new interests come to light.

- (iii) Third, the scheme meets the tests we have outlined above. There is a clearly compelling case in the public interest where:
- a. The benefits are manifold and largely unchallenged, as we have outlined above.<sup>720</sup> Against that, by working with local landowners and minimising those areas where we do impinge on land the private loss really is minimal.
  - b. Taking the land we seek is necessary to progressing this scheme and delivering those benefits. We are now at the irreducible minimum of land take, beyond which any further reductions would imperil the scheme. We reiterate that the inquiry heard from Mr Billcliff how the land take has been designed to “future proof” the project – so notwithstanding the reduced deployment scale to start with, the infrastructure is available allowing it to scale up as required.
  - c. The scheme is likely to proceed within a reasonable timescale.<sup>721</sup> The inquiry heard from Mr Billcliff that grant funding has been secured, and unchallenged evidence of the proposed sources for the remainder of the funds. So, all resources are likely to be available to achieve what is proposed within a reasonable timescale.
  - d. As Mr Bell has outlined, progressing the scheme is in accordance with the 2015 Act.

368. Also, it should be noted that the special category land application certificate has now been issued by the Welsh Ministers.<sup>722</sup> This authorises the acquisition of new rights over the area of assumed public open space at Abraham’s Bosom.

### *Conygar/ Horizon*

369. It is worth mentioning a brief point on the Conygar/ Horizon land (Plot 39). Conygar owns the land, Horizon have an option. Horizon have an objection outstanding, but submitted a letter noting that positive progress was being made to find a workable solution that meets the needs of both projects. The draft Wylfa DCO has now of course been withdrawn.<sup>723</sup> Conygar, by contrast, did not originally object to the scheme, only submitting a brief letter of objection on 12 January 2021.<sup>724</sup> The inquiry has our response to that,<sup>725</sup> and for brevity we do not repeat it here. Put shortly, this was a grossly late objection, it has not been accompanied by any evidence, and seems to conflict with Horizon’s letter which states it expects a workable solution to be reached. We urge it to be given no weight.

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<sup>720</sup> See, too, Section 10.2 of Mr Billcliff’s Proof of Evidence.

<sup>721</sup> Mr Billcliff’s Proof of Evidence Section 10.7 (Ref: MDZ/P9) and his evidence in chief.

<sup>722</sup> Refs: Inquiry Doc – 077 and Inquiry Doc – 078

<sup>723</sup> Ref: Inquiry Doc – 058

<sup>724</sup> Ref: Inquiry Doc – 060

<sup>725</sup> Ref: Inquiry Doc – 061

## *Orthios*

### (i) Introduction

370. While Orthios pay lip-service to not objecting to the principle of the Morlais project and to supporting it "*in general*"<sup>726</sup> the reality is regrettably somewhat different with Mr LeVasseur in his 2nd proof seeking to suggest, contrary to the wholly unchallenged evidence of Mr Bell and Dr Jones, that the Morlais project is "*nothing more than an energy transmission conduit*" which would generate "*a small number of direct jobs (less than 10?)*"<sup>727, 728</sup> In cross-examination Mr LeVasseur accepted, as he had to, that he could not in fact challenge the evidence of Mr Bell based on the ES that the Morlais project would generate up to 456 jobs in total, 240 of them direct. Mr LeVasseur's evidence is though indicative of the way Menter Môn has been treated in negotiations going back 4 years now, that is to say with a mix of arrogance and derision. The Morlais project is seen by Orthios as little more than a minor inconvenience to be brushed aside in favour of its own grand plans,<sup>729</sup> or alternatively as a means of extracting some cash.
371. Moreover, while ostensibly Orthios' position is that it seeks only amendments to the Order not that it be refused.<sup>730</sup> In actual fact the amendments it seeks, see for example para. 7.25.7 of Mr LeVasseur's first proof (Ref: POE005), would remove Menter Môn's ability to acquire the land needed in Plot 49 to make a connection to the Grid. The amendments are seemingly aimed at instead facilitating (at least in part) Mr Jesson's recently proposed alternatives. But as was readily accepted by both of Orthios' witnesses these are only alternatives if agreement is reached between Menter Môn and Orthios on a whole host of matters, including the price of any land interests to be acquired. The effect of what Orthios propose is that they would be placed in a ransom position that would mean the Morlais project could not go ahead. The whole purpose of seeking powers of compulsory acquisition through the Order was to overcome the fact that agreement could not be reached.

### (ii) Mr Jesson's alternatives, and revised plans submitted on 08/01 and 04/02

372. Mr Jesson may well have been working for Orthios for several years but he has only "*been involved specifically*" with the Morlais project and the discussions around

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<sup>726</sup> Mr LeVasseur's first Proof of Evidence at para. 7.4 (Ref: POE005) and his answers in XX.

<sup>727</sup> Mr LeVasseur's second Proof of Evidence at paras. 3.9.3 and 4.8.2 (Ref: RPE013).

<sup>728</sup> Mr Bell's proof (Ref: MDZ/P9) at para. 7.1.16, 2nd, 3rd and especially the 4th bullet points and the ES chapter 24 (Ref: MDZ/25.25) at Table 25-25, p.59. In his answers in XX Mr LeVasseur explained he based 10 on the number of people who might be employed in Plot 49 by Menter Môn and he was comparing that against the 100 jobs he says will arise from the REP plant (which has no viable extant consent – see below). That is comparing apples and pears. Without Plot 49 the Morlais project cannot happen and that means the loss of up to 240 direct jobs.

<sup>729</sup> The grand plans are discussed below, but in terms of current employment on the entire 213 acre Orthios Mr LeVasseur's evidence on this was confusing and contradictory – it would appear to be somewhere between 20 and 55 "maybe more" (see his first proof at para. 6.3.46 onward and his answers in XX).

<sup>730</sup> Mr LeVasseur's first Proof of Evidence at paras. 2.5 and 7.25.7 (Ref: POE005).

it since August or September 2020.<sup>731</sup> He was only instructed to *“provide Orthios with technical electrical consultancy support in relation to Morlais’ project”*<sup>732</sup> at that very, very late stage, and had at best no more than a general awareness of the project prior to this.<sup>733</sup> He had no role in the many meetings and over 3000 emails<sup>734</sup> to and from between 2016 and earlier this year, and it is only since September 2020 that he has been a main point of contact in negotiations.<sup>735</sup> Prior to September 2020 Orthios lacked any such technical expertise in the discussions,<sup>736</sup> and were instead focused only on the commercial terms – on the money, which they said should be agreed first before any technical issues were explored: see below. The alternatives put forward at the heart of Orthios case to this inquiry were first raised in its Statement of Case in September 2020.

373. It is also clear that Mr Jesson’s understanding of the Morlais project and its evolution is somewhat insecure (not his fault, but a feature of his late appointment and his instructions). Thus:

- (i) He suggests<sup>737</sup> that assumptions made by Menter Môn about the constraints around drilling *“meant that they had no choice other than to plan a position for a grid connection in Parcel 49”* but this is just wrong<sup>738</sup> because in fact Menter Môn *“were told by Orthios that any more land than a tennis court size could not be accommodated in the existing substation”*.<sup>739</sup> Thus, *“Orthios suggested a plot in plot 49 where a ‘planned’ gas peaking plant could be re-sited and a small 150mm gas main could be moved to suit. This all happened in 2019, before Mr Jesson was retained by Orthios. So the substation was sited and then the drill routes were designed to meet the substation not the other way round”*.<sup>740</sup> Thus, Mr Jesson’s underlying premise is wrong regarding the choice of position for a Morlais substation: *“The substation was sited within parcel 49 as agreed with Orthios and was nothing to do with drilling. Menter Môn did however chose the least risk path to drill to the substation once the approximate location of the substation had been set”*;<sup>741</sup>

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<sup>731</sup> Mr LeVasseur’s first Proof of Evidence at para 1.8 (Ref: POE005) and Mr Jesson’s first proof at para 1.8.

<sup>732</sup> Mr LeVasseur’s first Proof of Evidence at para 1.8 (Ref: POE005) and Mr Jesson’s first proof at para 1.8.

<sup>733</sup> Mr LeVasseur’s Proof of Evidence at para. 1.3 (Ref: POE005).

<sup>734</sup> Mr Billcliff’s Proof of Evidence at para. 3.1 (Ref: MDZ/P8).

<sup>735</sup> Mr LeVasseur’s second proof at para. 1.5 in so far as it seeks to suggest otherwise is false (Ref: RPE013), as he accepted in XX.

<sup>736</sup> In XX Mr LeVasseur referred to Richard Court providing such expertise. He said *“He’s an electrical engineer. Was our main point of contact”* but of the 3,000 plus emails between Orthios and Menter Môn Mr Court is copied into two and sent none, and there is no record of him attending any meeting. When asked if this fairly reflected the limited level of involvement of Mr Court in these matters Mr LeVasseur was unable to say.

<sup>737</sup> Mr LeVasseur’s first Proof of Evidence at paras. 4.1.2 – 4.1.4 (Ref: POE005).

<sup>738</sup> See Mr Billcliff’s rebuttal at paras. 4.14 – 4.17 (Ref: MDZ/P8), and supported by Appendix P1.2.2 of Mr LeVasseur’s first Proof of Evidence (Ref: POE005) which at stages 4 and 6 shows Orthios proposing Plot 49 for use by Menter Môn. In XX Mr LeVasseur did not deny that Orthios had at various times proposed Plot 49 to Menter Môn as the location for their infrastructure on the basis that there was apparently insufficient room in the Switchyard. Mr Billcliff’s oral evidence was clear in XX *“Your client told us to go to Plot 49”*.

<sup>739</sup> Mr Billcliff’s Proof of Evidence in the Annex at paras. 4.29, 4.32 and 4.33 (Ref: MDZ/P8).

<sup>740</sup> Mr Billcliff’s Rebuttal Proof of Evidence at para. 4.16 (Ref: RPE011).

<sup>741</sup> Mr Billcliff’s Rebuttal Proof of Evidence at para. 4.17 (Ref: RPE011).

- (ii) Bizarrely, despite Plot 49 being proposed for Menter Môn's use by Orthios. Mr Jesson's instructions appear to have been to design alternative options that avoided as far as possible placing infrastructure in Plot 49.<sup>742</sup> The reason for this is not readily apparent other than the fact that Mr LeVasseur has come to develop somewhat inflated notions of the value of Plot 49 for other wholly speculative developments (see below);
- (iii) In relation to drilling, Mr Jesson's evidence is wholly inconsequential. He says that Network Rail ("NR") "may" be prepared to accept a "less onerous clearance requirement" than 9m but that this depended on the geology and also was in any event "at the discretion of Network Rail and will need to be confirmed".<sup>743</sup> He had no discussion with NR and he was unaware that Menter Môn and NR had reached agreement at 9m and were (at that time) at engrossment stage. This has now been executed and NR's objection is withdrawn.
- (iv) Mr Jesson's feasibility study assumed that all of Orthios many grand plans – as set out in Mr LeVasseur's Appendix P1.2.1 would come to fruition. He confirmed that he used "them as inputs for my study",<sup>744</sup> he used these "as inputs to my design process as Orthios' best view of user requirements over the next 10 years".<sup>745</sup> He didn't exercise any independent judgment on the likelihood of, or timing of, any of these plans in terms of planning, other consent requirements of funding<sup>746</sup> notwithstanding that many are little more than a twinkle in Mr LeVasseur's eye: as to which see below. In terms of these inputs the old adage applies: rubbish in, rubbish out.<sup>747</sup>

374. Mr Jesson says<sup>748</sup> that his alternatives are "no more expensive" than the scheme pursued by Menter Môn through the Order. But he accepts that this suggestion ignores entirely any land acquisition costs necessary for his alternatives,<sup>749</sup> and any sum demanded by Orthios for a connection under Option 1.<sup>750</sup> Option 1 being a connection to the Orthios busbar, Option 2 being a direct connection to National Grid. Both options rely on electrical infrastructure in the Orthios owned Switchyard that do not currently exist.<sup>751</sup> Neither option has any planning permission.<sup>752</sup> But the

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<sup>742</sup> Mr Jesson's first Proof of Evidence at paras. 4.2 and 7.1.1 (Ref: POE005), and his answers in XX.

<sup>743</sup> Mr Jesson's first Proof of Evidence at para 4.3 (Ref: POE005), and his answers in XX.

<sup>744</sup> See Mr Jesson's answers in XX.

<sup>745</sup> Mr Jesson's Proof of Evidence at para. 3.4 (Ref: POE005).

<sup>746</sup> See Mr Jesson's answers in XX.

<sup>747</sup> Mr Jesson did though rightly accept that these plans had changed and may well change again. See further Mr LeVasseur's Proof of Evidence at para 6.3.1 (Ref: POE005).

<sup>748</sup> Mr Jesson's first Proof of Evidence at para. 6.1 (Ref: POE006).

<sup>749</sup> And moreover, Mr Jesson in fact provides no costings for his alternatives at all.

<sup>750</sup> Mr Jesson's first Proof of Evidence at para. 6.1 (Ref: POE006) and his answers in XX.

<sup>751</sup> Mr Billcliff's Proof of Evidence at para. 4.45 "*Signing a connection agreement with Orthios allowing connection apparatus would be easier if the physical assets were already in place, or if any agreement was directly attached to a land purchase. There is currently no physical asset to connect to and Orthios does not wish to sell land or land options for that purpose*" (Ref: MDZ/P8).

<sup>752</sup> See Mr Billcliff's rebuttal Proof of Evidence at para. 5.9 (Ref: MDZ/RPE011), and the answers of Messrs. LeVasseur and Jesson in XX. And on Orthios' case there is no evidence before the inquiry as to the planning issues in relation to these options. That said the JLL letter (see App P4.2.7 to Mr LeVasseur's proof) on its face appears to concern these but Mr LeVasseur in XX denied this.

key issue is agreement. Both of the options – brought forward at the eleventh hour – require agreement to be reached between Orthios and Menter Môn on a range of matters including: (i) the technical details of how these options would work; (ii) the commercial terms which would include the price for the necessary land (which Orthios owns) as well as the cost of any connection in Option 1;<sup>753</sup> and (iii) how Menter Môn's position could be secured were Orthios to default.<sup>754</sup>

375. Just looking at what needs to be agreed under these options in a bit more detail:

- (i) The National Grid infrastructure to which Menter Môn must connect – the 132kV cable sealing ends - lies entirely on, and surrounded by, Orthios land,<sup>755</sup> and it is accepted that Menter Môn needs to make such a connection for the Morlais project to go ahead.<sup>756</sup> The situation is unusual – a National Grid asset land-locked within private land.<sup>757</sup> Thus, without acquiring land or rights over land from Orthios the Morlais project simply cannot go ahead. Without compulsory acquisition powers the only alternative is that a price is agreed for this and after 4 years of negotiation no agreement has been reached;
- (ii) Mr Jesson's Option 1 – a direct connection on to an Orthios busbar. This requires agreement on multiple levels:<sup>758</sup>
  - a. Such a connection itself self-evidently requires agreement including on a price for this;
  - b. The connection requires a cable termination and switchbay<sup>759</sup> to connect<sup>760</sup> – which infrastructure would be sited on Orthios' land and require agreement including on price;
  - c. The secondary equipment required<sup>761</sup> would be located in a proposed shared equipment room – which does not at present exist – again on Orthios owned land and require agreement including on price;
  - d. The auxiliary equipment Menter Môn need<sup>762</sup> - for a battery facility and a statcom - would also be located in the Switchyard either on land reserved

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<sup>753</sup> See Mr Billcliff's Proof of Evidence at para. 4.46 "*Connecting through Orthios at any stage would leave Menter Môn with much greater exposure to risk, than if connecting directly to the National Grid regulated asset*" (Ref: MDZ/P8) and see further below on this.

<sup>754</sup> It was accepted by both Messrs. LeVasseur and Jesson in XX that agreement on all these matters was required for Mr Jesson's options to work.

<sup>755</sup> Mr Jesson in XX accepted the account of the facts relating to the National Grid infrastructure as set out in Mr Billcliff's proof at paras. 4.6.3.1, 4.6.3.2 and 6.6.3.3.

<sup>756</sup> See the answers in XX of Messrs. LeVasseur and Jesson.

<sup>757</sup> The suggestion by Mr LeVasseur in his oral evidence that National Grid's infrastructure is a "guest" on Orthios' land because the registered title discloses no easements is flawed, because there is likely to be a wayleave and these are not registerable as Mr Jesson accepted in XX.

<sup>758</sup> Each point was accepted by Mr Jesson in XX.

<sup>759</sup> Marked MSB1 in Mr Jesson's Appendix P2.2.1 to his first Proof of Evidence (Ref: POE006).

<sup>760</sup> Mr Jesson's first Proof of Evidence at para. 6.3.2 (Ref: POE006).

<sup>761</sup> Mr Jesson's first Proof of Evidence at para. 6.3.3 (Ref: POE006).

<sup>762</sup> Mr Jesson's first Proof of Evidence at paras. 6.3.1 and 6.3.7 (Ref: POE006).

for Menter Môn for this or in shared facilities<sup>763</sup> – so again all on Orthios owned land and thus require agreement including on price;<sup>764</sup>

- (iii) Mr Jesson's Option 2 – a direct connection to National Grid also requires agreement with Orthios on multiple levels:
  - a. This also requires a switchbay<sup>765</sup> to connect –which infrastructure would be sited on Orthios' land and require agreement including on price;
  - b. Again, secondary equipment required would be located in a proposed shared equipment room – which does not at present exist – on Orthios land and require agreement including on price;
  - c. Again, auxiliary equipment Menter Môn need <sup>766</sup> would also be located in the Switchyard – so on Orthios owned land and thus require agreement including on price;<sup>767</sup>
- (iv) Mr Jesson also proposes cables running across Orthios land (Plots 46, 47, 48 and 49) and drilling to be initiated on Orthios land <sup>768</sup> and thus require agreement including on price for this;
- (v) Thus, as Mr Billcliff concludes "*[i]n both options A and B, all but the basic connection itself sit outside the existing limits of deviation of the TWAO therefore either option introduces significant planning risk*" <sup>769</sup> Both options require agreement;<sup>770</sup> and this is accepted to be so by both of the Orthios two witnesses. And the fact is, that no agreement has been reached. The only other way to make the scheme happen is via the grant of compulsory acquisition powers via the Order. Without agreement – and there is none – there are it is agreed no alternatives to the Order. The Orthios proposed amendments to the Order are designed to facilitate their alternatives, but would not confer the necessary powers making it necessary for agreement to be reached on all the above.

376. Mr Jesson has prior to this case had no more than minor experience of CPO proceedings.<sup>771</sup> He was unaware that Welsh guidance Compulsory Purchase in Wales and 'The Crichef Down Rules (Wales Version 2020)' (Circular 003/2019) states at para. 28 <sup>772</sup> (emphasis added):

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<sup>763</sup> Mr Jesson's first Proof of Evidence at para. 7.3.1 (Ref: POE006).

<sup>764</sup> This is proposed in the areas marked with blue and orange hatching in Appendix P.2.2.1 to Mr Jesson's first Proof of Evidence (Ref: POE006) or to be shared.

<sup>765</sup> Marked MSB2 in Appendix P2.2.2 to Mr Jesson's first Proof of Evidence (Ref: POE006).

<sup>766</sup> Mr Jesson's first Proof of Evidence at Appendix P2.2.2 and also section 7.3 (Ref: POE006) and his answers in XX.

<sup>767</sup> Again, this is proposed in the areas marked with blue and orange hatching in Appendix P.2.2.1 to Mr Jesson's first Proof of Evidence or to be shared: see para. 7.3.1 of Mr Jesson's first proof (Ref: POE006).

<sup>768</sup> See the blue line on Appendices P2.2.1 and P2.2.2 to Mr Jesson's first Proof of Evidence and his answers in XX, and also his first proof at para. 7.1.3 (Ref: POE006).

<sup>769</sup> See Mr Billcliff's proof at para 5.9 (Ref: MDZ/P8). The options are called Options 1 and 2 in Mr Jesson's first Proof of Evidence. In Orthios' Statement of Case they are called Options A and B (see Ref: MDZ/N14) and it is clearly these that the JLL letter (see above) is referring to.

<sup>770</sup> Mr Billcliff's Proof of Evidence at para 5.8 (Ref: MDZ/P8).

<sup>771</sup> See Mr Jesson's answers in XX.

<sup>772</sup> Mr LeVasseur in XX was also unaware of this guidance.

*"Compulsory purchase is intended to secure the assembly of land needed for the implementation of a scheme where it cannot be acquired by agreement. However, if an acquiring authority waits for negotiations to break down before starting the compulsory purchase process, valuable time will be lost. Therefore, depending on when the land is required, it may often be sensible, given the amount of time required to complete the compulsory purchase process and the number of plots of land required to be assembled, for the acquiring authority to:*

- *plan a compulsory purchase timetable as a contingency measure; and*
- *initiate formal procedures.*

*This is particularly relevant for large scale infrastructure schemes. These schemes often involve multiple plots and parties which can make it impracticable in terms of both time and resources required for acquiring authorities to reach agreement with individual landowners on the sale of their land in advance of a CPO. Initiating compulsory purchase procedures in these circumstances can help to make the seriousness of the acquiring authority's intentions clear from the outset, which in turn might encourage those whose land is affected to enter more readily into meaningful negotiations" (emphasis added)*

Mr Jesson accepted that given this, and the fact that his options require agreement and that none has been reached, rendered his conclusion in his proof that CPO was not required wholly incorrect.<sup>773</sup>

377. Following completion of evidence Orthios submitted further plans to this inquiry,<sup>774</sup> which have themselves been subsequently revised following the submission by Menter Môn of a unilateral undertaking.<sup>775</sup> We are not able to agree with any of these, and attach at Annex 2 a table explaining specific responses. The plans are supposed to reflect the evidence given and so our case on those is set out herein.

(iii) The Order provides a technically feasible solution for connection

378. Menter Môn's case is that:

- (i) If the Order is made and it is granted the compulsory acquisition powers that it seeks over Plots 46, 47, 48, 48, 49, 50 and 51 it will be able to connect to the Grid. It was accepted by Mr Jesson that "*technically National Grid can definitely do this*".<sup>776</sup> He accepted that his own Option 2 (P2.2.2) shows how such a connection could be made direct to National Grid within Plot 49. He also accepted that there was room, indeed he says more than enough room (see below), to construct all the necessary auxiliary and secondary infrastructure required within Plot 49 and 50. In addition he did not dispute

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<sup>773</sup> See Mr Jesson's answers in XX. Para 7.2.2 of his first proof (Ref: POE006) says "*I have concluded that there is no reason for Morlais to compulsory acquire the land in Parcel 49 and that a separate substation for Morlais' use is not required.*"

<sup>774</sup> Refs: Inquiry Doc – 056 & Inquiry Doc – 057, and see Ref: Inquiry Doc – 091 & Inquiry Doc – 092.

<sup>775</sup> See Refs: Inquiry Doc - 091, Inquiry Doc – 092 and the Unilateral Undertaking at Inquiry Doc – 108.

<sup>776</sup> See Mr Jesson's answers in XX.

that cable routes are secured in Plots 46, 47 and 48, and access comes via the rights to be granted over Plot 51;

- (ii) Moreover, it is accepted that such a solution could be achieved within Plot 49 without disturbing the 132kV cables;<sup>777</sup>
- (iii) Further, the Order confers powers to carry out all the works necessary to make the connection: see Schedule 1, Part 2, Chapter 2. And, at no point has Orthios said further works need to be authorised;<sup>778</sup>
- (iv) Finally, the fact that the Order allows a connection to be made is further evidenced by the fact that Menter Môn benefits from a grid connection offer.<sup>779</sup>

379. Mr Jesson's argument is that despite what is proposed being obviously technically feasible, Menter Môn cannot be sure of connection if the Order is made for essentially three reasons. Dealing with each in turn:

- (i) The Menter Môn solution is a single-user solution and this is inefficient as it will necessitate duplication of infrastructure (e.g. multiple sub-stations) and this would be a breach of the RIIO regulatory model and its statutory duties.<sup>780</sup> The answer to this is simple. A multi-user solution requires agreement between Orthios and Menter Môn (as well as National Grid). There is no such agreement. Such a solution also requires Orthios land, and the price sought for this is directly relevant to what is the most cost-efficient solution.<sup>781</sup> The connection offer that Menter Môn holds is not predicated on a multi-user solution. There is no dispute that National Grid would generally prefer a multi-user solution and shared infrastructure.<sup>782</sup> So would Menter Môn but absent agreement with Orthios this is just not possible. In that case

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<sup>777</sup> Much of Orthios' case focused on Mr Billcliff's rebuttal Proof of Evidence at para. 5.6 (Ref: RPE011) and a possible alternative way of connecting that was considered at a meeting with National Grid. But nothing turns on this as there is accepted to be a technical solution within the lands the subject of the Order. Mr Jesson's point is that a multi-user solution in Plot 49 might require this (see para. 3.1.3 of his second proof). But he accepts that while undesirable it is something that could be done and that is technically feasible. Mr Jesson in his second proof accepts in terms at para 3.1.3 that "[as] Menter Môn's technical consultant (Black and Veatch) have shown, it would be physically possible to effect a single User connection inside land parcel 49" in other words there is a technical solution but that this would in his view be "an inferior technical solution for National Grid".

<sup>778</sup> Contrary to what was suggested in RX of Mr Jesson neither Mr Jesson's first Proof of Evidence at para. 5.6 (Ref: POE006) nor in Mr LeVasseur's first Proof of Evidence at para. 5.7.8 (Ref: POE005) suggest that powers are needed for any additional works to make the connection.

<sup>779</sup> See Mr Billcliff's proof at para. 9.3.5 "Accepted offer with National grid for 180MW transmission connected capacity at Penrhos sub-station. Connection due in September 2023. Offer accepted by Menter Môn 28th August 2020. See Appendix 2" (Ref: MDZ/P8). Mr Jesson accepts there is such an offer – see his first proof at para. 5.1 (Ref: POE006) and his answers in XX.

<sup>780</sup> See e.g. Mr Jesson's second proof at para. 3.1.1 (Ref: RPE014).

<sup>781</sup> In RX, Mr Jesson made the point that National Grid has its own CPO powers, but that is not a cost-free option. There are the costs and risks of that process and the compensation to be factored in.

<sup>782</sup> The email at Mr Jesson's Appendix P3.2.2 does not suggest that National Grid are pursuing a multi-user connection, it states that it was seeking to purchase the Switchyard "in order to connect the Morlais Anglesey Marine Energy scheme". Orthios reply has not been disclosed.

Menter Môn and National Grid are content to proceed with a single-user solution;

- (ii) The solution proposed might require further land beyond the Order for any National Grid infrastructure:<sup>783</sup> but it does not, Mr Jesson's own alternative P2.2.2 (Option 2) shows a solution for the National Grid infrastructure wholly within Plot 49;
- (iii) Menter Môn's solution might interfere with Orthios existing rights to connect:<sup>784</sup> this is without merit. Orthios has pre-existing rights under agreements with National Grid<sup>785</sup> and the Order contains protective provisions in Schedule 10 and 11 to protect National Grid and avoid any impact on its statutory duties and other obligations. No criticism is levied by Orthios of these draft provisions, nor are any suggestions made as to more being needed, Orthios has (see below) withdrawn its request for protective provisions. Moreover, National Grid are not objecting and are thus content that the Order would not cause it to be in breach of its obligations. Moreover, it was accepted in terms by Mr Jesson that there was no physical or technical reason why giving effect to the Order would prevent Orthios connecting to the Grid.<sup>786</sup> It is not the intention of Menter Môn to block Orthios' connection, and the protective provisions will ensure it cannot. The suspicions of Orthios are understandable given its own intentions here, it assumes that with the boot on the other foot Menter Môn would act similarly poorly to the way it has. But Menter Môn is a third sector company not driven by profit, and more importantly the Order has protective provisions that absolutely ensure this will not occur.

380. Finally, Mr Jesson<sup>787</sup> seeks to suggest that the land take proposed "*takes up around 6,000 square metres of land which is, in my view at least 2,000 square metres more than is really necessary*". This is a bad point for a number of reasons:

- (i) Bizarrely, at the same time Mr Jesson argues that to facilitate connection more land may be required than is provided for in the Order for National Grid infrastructure. So, at the same time Orthios argues that the illustrative layout for a sub-station on Plot 49 takes too much land and that more land may be required;
- (ii) The land take is based on four things – acknowledging that the proposed sub-station is illustrative only at this stage – (i) that no agreement with or co-operation from Orthios<sup>788</sup> will be achieved (ii) advice provided by Black &

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<sup>783</sup> See e.g. Mr Jesson's first Proof of Evidence at para. 5.4.1 (Ref: POE006).

<sup>784</sup> See e.g. Mr Jesson's first Proof of Evidence at paras. 5.4.2 and 5.4.3 (Ref: POE006).

<sup>785</sup> See Mr Jesson's second Proof of Evidence para. 2.3 (Ref: RPE014).

<sup>786</sup> See his answers in XX.

<sup>787</sup> See Mr Jesson's second Proof of Evidence at para. 3.1.6 (Ref: RPE014).

<sup>788</sup> See Mr Billcliff's rebuttal Proof of Evidence (Ref: RPE011) at para. 4.11 "*The final size of the substation had to be based on a 'without Orthios co-operation' assumption as there was, and is, no guarantee of this. It was reduced following internal challenge and discussion with B&V to 1.5 acres as it needed to be self-contained and fenced to Electrical Safety Quality and Continuity (ESQC) standards, and contain access roads for maintenance and heavy lifting. Had there been co-operation with Orthios from the outset, and some certainty that this would be secured this may have enabled a smaller footprint to be the subject of the TWAO but there was no co-operation at that time and no guarantee of it now absent a deal being*

- Veatch consultant engineers;<sup>789</sup> (iii) EU, UK and industry standards for construction, installation and operation of high voltage (HV) electrical infrastructure and apparatus<sup>790</sup> and (iv) a “*reasonably envisaged worst case scenario*”.<sup>791</sup> In cross-examination Messrs. LeVasseur and Jesson both accepted all of these were reasonable inputs into a decision on land-take for the Order. The last of these factors is especially important; if Menter Môn is too limiting on its land take and it turns out that more land is needed it hands a ransom to Orthios and that is the end of the project. But despite this, the evidence shows that Menter Môn did all it could to reduce the land take.
- (iii) The requirements for infrastructure on Plot 49 are set out in detail in a table in Mr Billcliff’s Appendix 5 to his rebuttal, which is an e-mail from Black & Veatch and includes an National Grid substation,<sup>792</sup> a Morlais 132kV substation, a Morlais 33kV substation, battery storage, Statcom, a transfer enclosure, harmonic filtration and access roads.<sup>793</sup>
- (iv) Mr Jesson accepts that in terms of footprint, the technology choice can influence the land take<sup>794</sup> and, of course, at this stage the sub-station is illustrative with a final decision on many design matters and also technology yet to be made;
- (v) Moreover, there are other factors that might mean that not all of Plot 49 can be utilised:
- a. Plot 49 is brownfield land within an industrial site and the contamination issues have yet to be resolved. While decontamination work has been undertaken by Orthios: (i) this work has not been produced to this inquiry; (ii) it is yet to be verified/validated;<sup>795</sup> and (iii) it does not have regulator sign-off.<sup>796</sup> Mr Billcliff’s evidence explained why the possibility of contamination remains a reasonable concern for Menter Môn.<sup>797</sup>
- b. There are a number of pre-existing services in Plot 49 (underground) including a 132kV cable easement, some 11kV cables and a small watermain. It is Orthios own case that careful regard must be had to these, and that they might influence the location of any built form.<sup>798</sup>

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*done*”. In XX Mr Billcliff explained that going it alone required car parking, messing facilities, storage, cables, lighting and drainage.

<sup>789</sup> Mr Billcliff’s Proof of Evidence at para. 2.4 (Ref: MDZ/P8).

<sup>790</sup> Mr Billcliff’s Proof of Evidence (Ref: MDZ/P8).

<sup>791</sup> Mr Billcliff’s Proof of Evidence (Ref: MDZ/P8).

<sup>792</sup> It appears to be accepted that the Order as amended would allow transfer of powers in the Order to National Grid if necessary.

<sup>793</sup> Mr Carter XXd Mr Billcliff on the first part of this email but not on the requirements as set out in the table. Moreover, in relation to the first part of the e-mail shows Menter Môn instructing Black & Veatch to look at refining and reducing the area of land sought and not including 415m<sup>2</sup> for harmonic filtration to keep the land take down to the lowest possible level. When it was put to Mr Billcliff in XX that the size of the footprint was driven by the timetable for the ES he denied it saying that “*It was more to do with me not wanting to go further than an acre*”.

<sup>794</sup> Mr Jesson’s first Proof of Evidence at para. 3.8 (Ref: POE006) and his answers in XX.

<sup>795</sup> Mr LeVasseur’s second Proof of Evidence at paras. 3.7.3 and 4.2.3 (Ref: RPE013).

<sup>796</sup> Mr LeVasseur’s first Proof of Evidence at para. 3.6 (Ref: POE005).

<sup>797</sup> Mr Billcliff’s rebuttal Proof of Evidence at para. 2.5 (Ref: RPE011) and his answers in XX.

<sup>798</sup> Mr LeVasseur’s first Proof of Evidence at para. 3.7.4 (Ref: POE005) and his answers in XX

Taking some additional land to account for this cannot be said to be in any sense unreasonable. This remains an issue with Orthios' proposed 2021 amendments.

(iv) The challenges on reaching agreement

381. So, it is clear that compulsory acquisition is needed absent of full agreement being reached between Orthios and Menter Môn. In that context there are a number of key points.
382. First, Orthios is not a statutory undertaker. It is a wholly unregulated group of companies. Menter Môn wanted to price an option to connect to National Grid through Orthios. This was to be one of several options that could be priced, reviewed by Menter Môn and the best option chosen. This is common practice on power projects. Any costs provided by regulated companies such as Scottish Power Energy Networks ('SPEN') and National Grid are formulaic and they are heavily regulated on their charging methodology/price control and other matters such as complaints procedures, outage durations<sup>799</sup>, asset quality, transparency of ownership. That is not the case with Orthios and this is a real concern for Menter Môn.<sup>800</sup> Because Orthios is not a regulated body and therefore does not come with a number of the statutory and legal safeguards that Menter Môn requires to reassure its funders.<sup>801</sup>
383. Mr LeVasseur suggested in his written evidence that while Orthios will not be licensed as an independent network operator ("IDNO") it would publish all its rates and operate in all its capacities as if it was an IDNO.<sup>802</sup> But he accepted in cross-examination that this was wholly meaningless. The standard conditions in an IDNO licence under s. 6(1)(c) of the Electricity Act 1989 run to nearly 300 pages and require approved charging methodologies, compliance with industry codes and standards, auditing etc. The overall aim being to prevent the abuse of any monopoly power and/or dominant position. None of this applies to Orthios who can act as capriciously as they choose in order to maximise their financial gain even if that is highly detrimental to the public good.
384. Second, these issues are especially acute for the Morlais project because it is funded predominantly by the public sector. Because of that every financial decision is under additional scrutiny. This is very different to a privately owned and privately funded company.<sup>803</sup> Not being a regulated body under OFGEM has always meant that Menter Môn has needed to provide an alternative way of securing the protection

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<sup>799</sup> Mr Billcliff's Rebuttal Proof of Evidence at para. 5.2 raises a concern around the risk that unnecessary outages may be required by Orthios (Ref: RPE011).

<sup>800</sup> Mr Billcliff's Rebuttal Proof of Evidence at para 3.7 (Ref: RPE011) and Mr LeVasseur's answers in XX.

<sup>801</sup> Mr Billcliff's Rebuttal Proof of Evidence at para. 4.5 (Ref: RPE011), and answers in XX from Messrs. LeVasseur and Jesson.

<sup>802</sup> Mr LeVasseur's second Proof of Evidence at para. 3.9.4 (Ref: RPE013).

<sup>803</sup> Mr Billcliff's Rebuttal Proof of Evidence at para. 4.2 (Ref: RPE011), and Mr LeVasseur's answers in XX.

it and its funders need to maintain the security of any electrical connection for the full life of the project.<sup>804</sup> That can only mean a comprehensive agreement.<sup>805</sup>

385. Third, the risks are greater here given the nature of the company and the way it has behaved. Thus, it is Mr Billcliff's evidence that "*[t]he dealings Menter Môn have had with Orthios to date add to the risk profile as it has been so difficult to get proper engagement, there must be the risk that this would repeat itself in the future. The complex company structure is also a concern. This is not just a concern for the funders per se it goes to the heart of securing the delivery of the Morlais project and the delivery of all the benefits that flow from it*".<sup>806</sup> On the company structure it is labyrinthine, and the public records show,<sup>807</sup> it has net liabilities of over £33 million. Any joint solution requires Orthios to deliver infrastructure and that there be a guaranteed way of dealing with what happens if it fails to do so, for example if it ceased trading or simply breached any agreement.<sup>808</sup>
386. Fourth, there are restrictions in the title deeds across all the relevant plots that require approval by third parties<sup>809</sup> for disposals of land.<sup>810</sup> These would be overridden by compulsory purchase, but without this agreement is needed by not just Orthios but these third parties to any transfer. They may or may not be obtainable and Orthios led no evidence on the likelihood of such agreements being given.
387. Fifth, the negotiations between Menter Môn and Orthios date back to 2016, but until September 2020<sup>811</sup> Orthios' approach "*had always been about trying to agree key financial terms and financial benefits to Orthios before consideration of both the remaining commercial terms that make up an agreement*" before considering the technical issues.<sup>812</sup> The email in Appendix 1 to Mr Billcliff's rebuttal shows that this was indeed the approach.<sup>813</sup> The demand for £6 million in that email, which was sent

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<sup>804</sup> Mr Billcliff's proof at para. 10.8.12 (Ref: MDZ/P8), and Mr LeVasseur in XX accepted that this was a reasonable position for Menter Môn to take.

<sup>805</sup> Mr LeVasseur in XX suggested (for the first time) that Orthios *might* seek to become an IDNO. But as matters stand, it is not such a body and no evidence has been put forward that it has even started to investigate such a possibility.

<sup>806</sup> Mr Billcliff's rebuttal at para 5.3 (Ref: RPE011).

<sup>807</sup> As Mr LeVasseur accepted in XX.

<sup>808</sup> Mr Billcliff's rebuttal at para. 4.7 (Ref: RPE011) says "*Môn is concerned as to whom the contract counterparty will be if agreement is reached and how Menter Môn's interests will be protected throughout the life of that agreement, the lack of any regulation and the risk on matters such as insolvency of any of the companies, given the very complex company structure.*" And Mr LeVasseur in XX accepted there were genuine concerns.

<sup>809</sup> Mr Robert Colin and Anglesey Aluminum Metal Limited.

<sup>810</sup> Mr LeVasseur's rebuttal at P4.2.1 (Ref: RPE013).

<sup>811</sup> Between the service of the Order and September 2020 Mr LeVasseur demanded all communication be lawyer only. Mr Billcliff in his rebuttal at para. 3.10 says "*Mr Levasseur himself directed Menter Môn to make all communications through the company lawyer on 20th September 2019 following postponement of a technical meeting brought about by receipt of TWAO communications with which all affected landowners were served. The TWAO should have come as no surprise as all the affected landowners including Orthios were told about the Menter Môn order submission and most understood and continued private treaty negotiations without detriment. Instead Orthios reacted badly to the TWAO and this hindered discussions for a lengthy period*".

<sup>812</sup> Mr Billcliff's rebuttal at para. 3.4 and 3.6 (Ref: RPE011).

<sup>813</sup> And Mr LeVasseur accepted this in XX.

on behalf of Orthios, is telling.<sup>814</sup> Orthios purchased land including most of Plot 49 and almost all of the Switchyard for £400,000 in 2015.<sup>815</sup> They are now looking for £6million for a mere fraction of this land. The same theme emerges from the response to the request to do ecological surveys.<sup>816</sup> So, while Orthios say they support the Morlais project, in fact the project is seen as little more than an opportunity to turn a quick buck. There is really no doubt that absent the Order Menter Môn will be held to ransom.

388. Sixth, it is also telling that of the proposed land acquisitions the sole remaining objector (save for the unusual Conygar/Horizon position discussed above) is Orthios. Menter Môn has done everything to reach agreement with all affected landowners, see above. It has been very successful in this regard. But with Orthios this has proved impossible.

389. Seventh, much of the communication has been without prejudice and cannot be shared, but the above gives a flavour of the position. As matters stand it can be reported to the Welsh Ministers that despite 4 years of negotiations, many meetings, over 3000 emails there is no agreement. And thus, the only way to allow the Morlais project to proceed is compulsory acquisition. Without this Menter Môn will be held to ransom and the project will not happen.

#### (v) The necessity for acquisition of the Orthios plots

390. **Plots 46 and 47:** In relation to Plots 46,<sup>817</sup> and 47 it is accepted by Orthios that if there is to be a connection that at least sub-soil rights are required by Menter Môn over these plots.<sup>818</sup>

391. **Plot 51:** In relation to Plot 51:

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<sup>814</sup> Mr Billcliff's Proof of Evidence, Appendix 1 (Ref: MDZ/P8).

<sup>815</sup> Mr LeVasseur's second Proof of Evidence (Ref: RPE013) at Appendix 4.2.1, Title CYM671912.

<sup>816</sup> Mr Billcliff's rebuttal (Ref: RPE011) at para 3.12 "*Menter Môn requested access to the Orthios site to undertake ecological surveys as this was the last area of the whole route to be surveyed. This work had to be done to complete the Environmental study work otherwise the project would be delayed. Orthios responded by email that no access to site would be granted until the deal was signed off. The following is the text from the email response on the same day: 'As per previous emails at the moment we have no agreement in place with Morlais to progress the project and until this is agreed and signed off no access to the site will be granted. We are waiting on Morlais to come back with an offer currently but if it means delays until next year so be it. Regards Sean.'*" In XX of Mr LeVasseur it was put to him that the approach was "*I need to agree the money, financial terms*" and at this point what Sean is saying is you can't come and do your surveys. That's what he says". He replied, "*He says exactly what he says*".

<sup>817</sup> The application version Book of Reference (Ref: MDZ/A16) referred to Plot 46 as being in Network Rail's ownership. Since then, Orthios has succeeded in registering ownership to part of Plot 46, adjacent to its existing landholding in Plot 47. The updated book of reference and plans (Refs: Inquiry Doc – 074 to Inquiry Doc – 076, and see the latest plan at Ref: Inquiry Doc - 097) have redrawn the dividing line between Plots 46 and 47 to reflect the revised ownership, such that Plot 46 is now solely owned by Network Rail, and the part which has been registered in Orthios' ownership has been incorporated into an expanded Plot 47.

<sup>818</sup> Mr LeVasseur's first proof at para. 3.3 (Ref: POE005), his answers in XX and Mr Jesson's alternatives in P2.2.1 and P2.2.2.

- (i) The acquisition here is limited to new rights of access for construction and maintenance which are essential to the project,<sup>819</sup> without it again Orthios would have a ransom;
- (ii) In his written evidence Mr LeVasseur raised the impact on AMG AlpoCo UK Limited's who also use the access<sup>820</sup> but Menter Môn has reached terms with AlpoCo;
- (iii) Orthios have invited further provisions to protect them in relation to their use of the access. Menter Môn has provided a unilateral undertaking to the inquiry for that purpose.<sup>821</sup>
- (iv) Orthios' SoC refers to the construction of a new sub-station in Plot 51 but Mr LeVasseur confirmed that this was just off this plot.<sup>822</sup>

392. **Plots 48, 49 and 50:** for these purposes we can focus on Plot 49. Plots 48 and 50 are small plots which are integral to Plot 49 but are separate as they are under different titles. We should also note here that the border of Plot 49 has been re-drawn to avoid taking a portion of a building owned by Orthios.<sup>823</sup>

393. Mr LeVasseur's position in his written evidence,<sup>824</sup> and initially, in oral evidence was that Plot 49 *"is an active 132kV cable corridor which requires areas of set-back on both sides of the cable route, thus consuming a fair swathe of land. Area 49 also hosts the main water supply line for the Orthios site, as well as the cable route for the 11kV secondary power supply provided by SPEN. The land is not disused; the land is purposely left without buildings or above ground developments to preserve this vital utilities and services corridor"* (emphasis added). This evidence is though wholly unsustainable. Any suggestion the land is not developable is misconceived given:

- (i) It falls within the redline of the extant Biomass permission;
- (ii) Orthios has itself put forward Plot 49 as the location for Menter Môn's infrastructure to be placed on;<sup>825</sup>
- (iii) Orthios were in 2019 proposing a gas peaking plant on Plot 49;<sup>826</sup>
- (iv) More recently, Orthios have sought to place its own commercial battery development on Plot 49.<sup>827</sup>

394. In cross-examination Mr LeVasseur said he had turned down many opportunities to develop Plot 49 and that what this was about was money. It would require a project of significantly high value – multimillion pound annual returns – to develop

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<sup>819</sup> Mr LeVasseur's first proof at para. 6.1.3 (Ref: POE005) and his answers in XX.

<sup>820</sup> Mr LeVasseur's first proof at para. 6.210 (Ref: POE005).

<sup>821</sup> Ref: Inquiry Doc – 108.

<sup>822</sup> Mr LeVasseur's answers in XX.

<sup>823</sup> See Refs: Inquiry Doc – 074 to Inquiry Doc – 076.

<sup>824</sup> Mr LeVasseur's second proof at para. 3.7.4 (Ref: RPE013).

<sup>825</sup> Mr LeVasseur's first proof Appendix 1.2.2 stages 4 and 6 (Ref: POE006), and his answers in XX.

<sup>826</sup> Mr Billcliff's Appendix to his proof at para. 1.429, pp.104 – 105 (Ref: MDZ/P8), and Mr LeVasseur's answers in XX.

<sup>827</sup> Mr LeVasseur's second proof paras. 6.3.35 and 6.3.36 (Ref: RPE013) and his answers in XX.

Plot 49.<sup>828</sup> Not bad for a plot that formed a small part of a larger area of land purchased for £400,000 in 2015. Indeed, as Mr LeVasseur put it for "*I'd consider it for two grammar school girls with a lemonade stand if it made enough money*". This is as clear a ransom situation as can be imagined. Only compulsory acquisition can solve this.

395. Before leaving the plots and turning to the potential impact on Orthios' own grand plans it should be noted that:

- (i) Contrary to suggestions in Mr LeVasseur's written evidence<sup>829</sup> the Order does not seek to acquire the "*whole of Orthios switchyard*" or to control it rather, it takes a small corner of it, say maybe 10%<sup>830</sup> in order to secure the necessary connection;
- (ii) In his oral evidence Mr LeVasseur feigned horror at the extent of the acquisition in the Order e.g. the taking of Plot 49 and which includes only a very small part of the Switchyard and yet in re-examination of Mr Jesson the following exchange took place suggesting that it is Orthios' case that more land should have been sought to be acquired:

*"Mr Carter: In relation to the extent of the Order land, are you aware of any practical or other reason why Menter Môn could not have promoted an order that included switchyard rather than plot 49?"*

*Mr Jesson: I can't think of any reason why they couldn't have done so and promoted a better version of the Order".*

(vi) Orthios' grand plans

396. The case against compulsory acquisition advanced by Orthios through its witnesses seeks to suggest that it will compromise its many, many plans for its site. These plans are, to put it kindly, somewhat fluid. Most are at an embryonic stage and the record of any actual delivery on site is being kind - limited.

397. Before looking at the various proposals the following general points arise.

398. First, the Orthios site is truly vast. 213 acres in total.<sup>831</sup> The full extent of compulsory acquisition is in the order of 3 acres, and likely to be less on a permanent basis – that is to say essentially approximately 1% of the site. And, in terms of the Switchyard – see above – maybe 10% of this at most.

399. Second, at the heart of the case advanced in this regard is Appendix 1.2.1 of Mr LeVasseur's first proof. But this plan has no planning status at all<sup>832</sup> – it is not an approved plan to any consent. Its status is said to be "*For discussion*". It is dated about the same time as Mr LeVasseur's proof and has clearly been produced for the purposes of this inquiry.

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<sup>828</sup> Mr LeVasseur's second proof at para. 3.7.6 (Ref: RPE013) and his answers in XX.

<sup>829</sup> Paras. 4.15.1, 7.25.3, 7.19 and 7.22 of Mr LeVasseur's first proof (Ref: POE005).

<sup>830</sup> Mr LeVasseur accepted this in XX.

<sup>831</sup> Mr LeVasseur's first proof Appendix P1.2.9 (Ref: POE005), and Mr Billcliff's rebuttal at para. 4.13 (Ref: RPE011).

<sup>832</sup> In RX Mr Billcliff referred to it as having no status and being a mere sketch.

400. Third, as matters stand the vast majority of the site sits empty and cleared of a large amount of the buildings and structures that previously stood on the site. It simply beggars belief to suggest, as Mr LeVasseur seemed to, that he would not be able to find space on site for these other projects (to the extent they exist), such as battery storage.
401. Fourth, in evidence in chief Mr LeVasseur, the Chief Operations Officer, was asked how much Orthios had already invested in the site and how much investment they had secured. He was somewhat extraordinarily unable to give any figure for either to his own Counsel. Later in cross-examination he plucked randomly from the air a figure for the latter, but never had one for the former. The lack of evidence to support any of this is telling. His evidence must be treated with considerable caution.
402. Looking then at all the matters set out in the evidence it is necessary to consider:
- a. The Jetty;
  - b. Area 7 Waste to Energy Pellet Facility;
  - c. Area 8 Logistics Hub;
  - d. Area 6 Aquaculture, hydroponics, research and development;
  - e. Data centre;
  - f. Areas 1, 2 and 3: Plastics to oil;
  - g. The extant Biomass permission;
  - h. The proposed Energy Centre Business/RDF facility;
  - i. The gas peaking plant;
  - j. The battery proposal.

*a. The Jetty*

403. The jetty will in no way be impacted by the acquisition of land proposed here. It is at the furthest end of the site and has an extraordinarily limited connection to the land the subject of the Order. It is accepted that the area around Plot 49 holds the 11kV supplies for the jetty, but these will not be affected save for very minor power outages. Raising this is a complete red herring.

*b. Area 7 Waste to Energy Pellet Facility*

404. Any suggestion of an adverse impact on what is proposed here is misconceived. The position is that this large existing A frame building benefits from a lawful development certificate granted as recently as September 2020. It is not though currently in use. Mr LeVasseur in his oral evidence announced funding had been secured but no actual evidence of this has been produced. But in any event, this building is again located on the far side of the site from the land the subject of the Order and not a single potential adverse effect on this proposal was identified by Mr LeVasseur in either his written or oral evidence.

*c. Area 8 Logistics Hub*

405. This is a proposal for which there is no permission, no application for permission and no evidence of any pre-application discussions.<sup>833</sup> It is an empty and unused piece of land at the edge of the site. It has no physical or functional connection whatever to the land the subject of the Order, and is located well away from it. The only potential impact identified by Mr LeVasseur<sup>834</sup> is on the railway sidings owned by Orthios and which he is concerned might be impacted by the proposed HDD. This siding runs parallel to the main line. And the fact is that what Menter Môn has agreed with Network Rail in respect of the latter is a depth clearance of 9m – the maximum clearance. This provision will not just protect the main line it will also fully protect Orthios' sidings. Ironically, despite this apparent concern about the sidings Messrs. LeVasseur and Jesson elsewhere in their evidence both argue less clearance of the railway is in fact possible and hence less protection. Any impact on this proposed Hub, which is at a truly embryonic stage and without any funding, is just non-existent.

*d. Area 6 Aquaculture, hydroponics, research and development*

406. Again, this is a proposal for which there is no permission, no application for permission and no evidence of any pre-application discussions.<sup>835</sup> This part of the site stands empty and unused and is located very far from the land the subject of the Order. There is no issue here at all were this proposal ever to come forward and there is not a jot of evidence it will.

*e. Data centre*

407. This is not a proposal shown on the plan in P1.2.1. It was explained by Mr LeVasseur that this could be located on Area 6 – that is the area proposed for the Aquaculture, hydroponics, research and development. The same points made above apply. Again, this is a proposal for which there is no permission, no application for permission and no evidence of any pre-application discussions.<sup>836</sup> It is pie in the sky.

*f. Areas 1, 2 and 3: Plastics to oil*

408. This occupies Areas 1, 2 and 3 on Plan P1.2.1. Areas 1 and 2 – PDU 1 and PDU2 are located in existing buildings and said to be being installed currently – albeit no actual evidence of this such as photographs, invoices has been produced. Menter Môn is unaware of any planning permission of lawful development certificate in relation to this proposal. In relation to Area 3 – PPC – this is located in a large area of cleared space on the site. Again, as regards the PPC this is a proposal for which there is no permission, no application for permission and no evidence of any pre-

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<sup>833</sup> Mr LeVasseur's answers in XX.

<sup>834</sup> Mr LeVasseur's first Proof of Evidence at para. 6.3.20 (Ref: POE005) and his answers in XX.

<sup>835</sup> Mr LeVasseur's answers in XX.

<sup>836</sup> Mr LeVasseur's answers in XX.

application discussions.<sup>837</sup> It is also unclear whether these activities might need an environmental permit. If so, there is no evidence of one having been applied for let alone obtained. It may be that the very small-scale proposals PDU1 and PDU2 have some funding, but the evidence in support of what is said to be £26 million is non-existent. It seems clear that later stages of this plan do not have funding.<sup>838</sup> None of these areas in issue are directly affected by the land the subject of the Order. Moreover, the only alleged impact of the Order on these proposals is said by Mr LeVasseur to be<sup>839</sup> the impact of an outage when the Morlais project connects but this is undoubtedly capable of being dealt with through proper management. It provides the flimsiest imaginable basis to resist the making of the Order.

*g. The extant Biomass permission*

409. Orthios benefits from an extant deemed planning permission and s. 36 Electricity consent for a 299MW biomass plant. It is agreed though that this is not viable.<sup>840</sup>

410. The red line for this consent includes some of Plot 49 and 50 the subject of the Order. What has been approved in this location is largely a maintenance and contractor's yard with also very much over to one side – and occupying a very small part of Plot 49 - proposed tanks for aqueous solutions etc. including services and char conveyor line, char storage and collection and vehicular access.<sup>841</sup> The deemed permission and the consent were granted as long ago as 2011 and have been amended. They were implemented by the construction of the foundations of a bicycle store.<sup>842</sup> In other words, the most minimal act of implementation imaginable. Save for that the area within the redline lies wholly undeveloped and it is accepted that what is consented is unviable. The majority of the appendices to Mr LeVasseur's first proof are taken up with documentation relating to the extant consent. That is not surprising given that it is one of the only proposals Orthios has that has any sort of consent. But given that it is agreed to be unviable little can turn on this.

*h. The proposed Energy Centre Business/RDF facility*

411. This is a proposal to amend the extant Biomass consent to allow for an electricity generating station for biomass and/or RDF, that is to say to allow for the burning of waste.<sup>843</sup> There is no dispute but that this requires further consent, as the extant Biomass consent limits the fuel type to biomass only.<sup>844</sup> It seems also that changes are also proposed<sup>845</sup> to the infrastructure and processes. Thus, the boilers permitted

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<sup>837</sup> Mr LeVasseur's answers in XX.

<sup>838</sup> Mr LeVasseur's proof at paras. 4.7.2 and 4.7.3 (Ref: POE005).

<sup>839</sup> Mr LeVasseur's proof at para. 6.3.44 (Ref: POE005).

<sup>840</sup> Mr Billcliff's proof Appendix at paras. A3.6 and A3.7 (Ref: MDZ/P8), referring to what is said on Orthios own website; Mr LeVasseur's proof at paras. 6.3.8 and 6.3.9 (Ref: POE005) and his answers in XX.

<sup>841</sup> The approved plans were submitted to the inquiry by Orthios after oral evidence was complete.

<sup>842</sup> Mr LeVasseur's first Proof of Evidence Appendix P1.2.7 (Ref: POE005).

<sup>843</sup> Mr LeVasseur's first Proof of Evidence at paras. 6.3.23 and 6.3.24 (Ref: POE005), App 4.2.6 of his second proof and his answers in XX.

<sup>844</sup> Mr LeVasseur's first Proof of Evidence Appendix P.1.2.6 p.23 (Ref: POE005).

<sup>845</sup> Mr LeVasseur's Appendix 4.2.6 to his 2nd proof (Ref: RPE013).

are to be replaced by "*high temperature pyrolysis (HTP) units*", the steam turbine generators are to be replaced by "*gas engines*" and the hybrid cooling towers replaced by "*syngas treatment scrubbers*". Moreover, it seems that what is proposed now is a 10MWe energy centre and then a further 3 x 30MWe on the broad footprint of the previously proposed virgin biomass energy centres but with a lower height<sup>846</sup> and less of an overall footprint.<sup>847</sup>

412. The proposals are at the earliest possible stage of development thus:

- (i) Contrary to what was said in Mr LeVasseur's first proof<sup>848</sup> no application for a variation of the s.36 consent has been submitted;<sup>849</sup>
- (ii) The proposals require not just variation of the s.36 consent but it seems also in parallel planning permission is being sought from the Welsh Government for a proposal of national significance;<sup>850</sup>
- (iii) An initial (first) meeting was only held with PINS in August 2020, and it was made clear that an ES would almost certainly be required and that a Habitats Regulations Assessment might also be required. This is not very surprising given the emissions will be wholly different from RDF compared to virgin biomass. Burning waste requires an ES. Despite advising that Orthios should make either a screening or scoping request they have in fact done neither. Mr LeVasseur was unable to say if any work had been done in this regard. He was unaware if there had been discussions with NRW or any further ecological work. Mr LeVasseur demonstrated no understanding at all of what an ES might require. That is why any suggestion that this scheme is a few months from submission is laughable;<sup>851</sup>
- (iv) The only evidence put forward to suggest that there will not be any planning issues is a letter from Jones Lang LaSalle Ltd.,<sup>852</sup> but the letter is clearly not about this proposal and Mr LeVasseur's attempt to suggest otherwise only underlines his woeful lack of understanding of these matters;<sup>853</sup>
- (v) It seems inevitable the proposal will also require an environmental permit. But Mr LeVasseur had no understanding of such a possible need or any information about the same. Given that this is said to be the core of the business such a lack of understanding of even the basics by the Chief

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<sup>846</sup> Mr LeVasseur's first Proof of Evidence at paras. 6.3.23 and 6.3.24 (Ref: POE005).

<sup>847</sup> Mr LeVasseur accepted this in XX.

<sup>848</sup> See para 6.3.32 (Ref: POE005).

<sup>849</sup> Mr LeVasseur's second Proof of Evidence at para. 4.5.4 (Ref: RPE013) and his answers in XX. His mistake in the first proof is pretty inexplicable and he constantly mistakenly referred to an application having been submitted in his oral evidence. For the Chief Operations Officer he demonstrated a shocking lack of understanding of consent processes that were relevant to the business.

<sup>850</sup> Mr LeVasseur's second Proof of Evidence at para. 4.5.5 (Ref: RPE013) and his answers in XX.

<sup>851</sup> Mr LeVasseur's second Proof of Evidence at para. 4.5.4 (Ref: RPE013), suggesting a Q2 2021 submission date.

<sup>852</sup> Mr LeVasseur's second Proof of Evidence Appendix P4.2.7 (Ref: RPE013).

<sup>853</sup> The letter is headed "Rectifier Yard options", and the first paragraph refers to proposed options in that Yard. This is clearly about Mr Jesson's two options. The letter is silent on feedstock and refers to s.96A of the 1990 Act non-material amendment as a possible route to consent. Any suggestion that this was possible for the proposed Energy Business Centre would be ridiculous.

Operations Officer is striking, it does not add any credibility to these proposals.

413. Moreover, in terms of any impact on these proposals from the Order the suggestion that is made<sup>854</sup> is that Plot 49 is needed for a contractor laydown. Thus, the following points arise:

- (i) This proposal is years away from any consent, and may well never obtain it;
- (ii) The proposal has a smaller footprint than does the extant Biomass consent meaning that what was proposed in Plot 49 in that extant but non-viable biomass consent could easily be moved;
- (iii) There are clearly other places within the huge site, both within and outwith the redline of the Biomass consent, that could be used for a contractor's laydown;
- (iv) No plans (even early ones) appear to exist or have been submitted to this inquiry for any proposed layout for this proposed Energy Centre Business;
- (v) Little if any consideration appears to have been given to construction matters, and nothing like a construction plan has been formulated;
- (vi) The suggestion that Plot 49 is the only location for the contractor's laydown is without any justification, it is a contention made solely to try and bolster Orthios' weak case against the Order;
- (vii) The funding position on this scheme also remains at best uncertain<sup>855</sup> and unevidenced.

*i. The gas peaking plant*

414. This was proposed on Plot 49 in 2019. It never happened. It has been abandoned.

*j. The battery proposal*

415. Orthios' case on any impact on this proposal is quite hopeless. There are a number of points:

- (i) it was first mentioned to Menter Môn in September 2020, a year after the Order was applied for;
- (ii) again, this is a proposal for which there is no permission, no application for permission and no evidence of any pre-application discussions;
- (iii) it has not even been decided what size of battery is to be proposed with Messrs. LeVasseur and Jesson giving conflicting evidence;<sup>856</sup>

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<sup>854</sup> Mr LeVasseur's proof at para. 6.3.30 (Ref: POE005).

<sup>855</sup> Mr LeVasseur's second proof at para. 4.5.1 (Ref: RPE013) and his answers in XX.

<sup>856</sup> Mr LeVasseur's first proof at para. 6.3.37, 2 hours depth is contemplated (Ref: POE005) and Mr Jesson's first proof at para. 8.2 (Ref: POE006). This is relevant because it goes to footprint. They also seem to conflict on where this is proposed with Mr LeVasseur saying it is in the Switchyard (see his first proof at para. 5.9.3) and Mr Jesson saying it is in Plot 49.

- (iv) it is accepted that this proposal need not go on Plot 49 but could go anywhere on the site;<sup>857</sup>
- (v) the losses alleged to arise from the acquisition of Plot 49 on this proposal only arise if it cannot be located elsewhere and it can on Orthios' own evidence;
- (vi) in any event the losses suggested by Mr Jesson<sup>858</sup> are without any basis – and appear to be the battery project total gross revenue as opposed to the value to the landowner, or even the value to the project owner which would need to take into account cost of the asset, O&M [Inspector's note: assumed to be 'operation & maintenance'], cost of capital, and so is not comparable. Moreover, this figure appears to be reliant on all the other Orthios proposals coming to fruition.

416. We also refer the inquiry to the second of the two paragraphs below regarding the "*Planning permission*", where we address Orthios' request for a restriction on the electrical generation capacity, given that we understand this particular plan lies behind that request.

(vii) Conclusion on Orthios' objection

417. In conclusion, Orthios' many, many grand and shifting plans have little if any sound evidential basis. They are embryonic at best,<sup>859</sup> and many have no real bearing on the land the subject of the Order. And the appreciation for what is required to obtain consent for some of what is proposed is lacking at a fundamental level. Orthios' plans lack credibility. In short, this Order would facilitate the Morlais project – a project that will bring real public benefit - and which will have no real impact on the Orthios' proposals such as they are. But even if it did have any minor effect on these proposals Orthios would in any event be able to claim compensation.

418. [Inspector's Note: Mentor Môn's closing submissions (Ref: Inquiry Doc – 155) include two Annexes:

Annex 1 - provides the Applicant's comments on Orthios' proposed Order and Land Plan changes (contained within Refs: Inquiry Doc – 091 and Inquiry Doc – 056)

Annex 2 - contains the Applicant's responses to points made by parties within their closing submissions, including those on behalf of Orthios, NRW, RSPB, RYA, Mr & Mrs Llewellyn, Mr & Mrs Roberts and MCA. These responses are in addition to the matters dealt with by Mentor Môn in the main body of its closing submissions]

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<sup>857</sup> See Mr LeVasseur's similar comment on the Menter Môn proposal for a battery at paras. 5.9.2 of his first proof, his answers in XX and those of Mr Jesson.

<sup>858</sup> See his first proof at para. 8.3 (Ref: POE006).

<sup>859</sup> Many are in fact half-baked.

## **7. The order and its controls**

419. The latest version of the draft Order is at Ref: Inquiry Doc – 102. Mr Maile and Ms Moss, partners at Eversheds Sutherland, ran the Inspector through the controls at the final Order RT.<sup>860</sup> With the exception of certain CPO matters, no changes have been raised by third parties which have not been either incorporated or addressed by other means.

## **8. The deemed planning permission and s.106**

### *Planning permission*

420. The deemed planning permission has been agreed almost entirely with IoACC. The latest version is at Ref: Inquiry Doc – 098. The sole outstanding matter between us relates to proposed condition 17, and in particular whether it should contain a clause requiring the list of consultees to be agreed with IoACC. Our position on this was outlined in a note from Eversheds Sutherland, which is in the core documents.<sup>861</sup> We have explained how socio-economic impact will be monitored, and how local businesses will be engaged. We do not accept there is a need to agree the list of consultee businesses with IoACC – the concern is that that list will be disproportionately dominated by those who shout the loudest, rather than the preserve of the academics who do, actually, know how to undertake this work.
421. Mr Carter, for Orthios, has raised at the fifty ninth minute of the eleventh hour, a request for whether the deemed planning permission should limit the amount of battery storage.<sup>862</sup> We wholly refute any such suggestion, and our response to that was in a letter submitted by Eversheds which is Ref: Inquiry Doc – 095. We will not lay it out here.

### *s.106*

422. The final draft s.106 agreement is attached at Ref: Inquiry Doc – 079. Again it is fully agreed with IoACC.
423. SCC has raised a query regarding whether businesses should be compensated for the imposition of the project. We have dealt with that, but again submit the answer is unequivocally no. The sea is a shared resource – kayakers do not own it. Business who make money from it do not own it. They do not fall to be compensated because other users wish to make use of it, and have been granted permission to do so in the public interest.

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<sup>860</sup> The Order RT, Day 15, AM session 1.

<sup>861</sup> Ref: Inquiry Doc – 054

<sup>862</sup> Deemed planning permission RT, Day 15 AM Session 1.

424. Ms Wong for SCC also asked if the definition of “receptors” could be rewritten to include sea users. We have little to say on this – it is a matter for IoACC and NRW to decide how they spend the s.106 money.

## **9. Other matters**

425. There weren't a tremendous amount of other matters arising during this inquiry which have not been addressed in the above. Mr Llewellyn raised health and safety concerns regarding EMF and EMR [Inspector's Note: understood to be “electromagnetic radiation”] if the landfall fall-back option was deployed, and sought clarification whether Menter Môn would comply with relevant government guidelines.<sup>863</sup> We have submitted a note to Mr Llewellyn and the inquiry on this<sup>864</sup> and as he confirmed at the start of Day 11 we have picked up productive discussions offline. We do not therefore think this is a matter the inquiry need be concerned with.<sup>865</sup>

## **Conclusion for Mentor Môn Limited**

426. This has been a long closing. The longest closing either of us has ever written (or, indeed, hope to write).

427. The inquiry has before it, an application for a truly ground-breaking project. The first of its kind anywhere in the world. It has extraordinarily strong policy support, as Mr Bell outlined for the inquiry. It would bring millions of pounds in investment into Anglesey, Wales and the UK, at a time when all so desperately need it. It would play a key role in bringing forward tidal stream technology – not just here but the world over – which is a key component in the renewables portfolio and one which, uniquely, can help plug that baseload gap. It also provides the opportunity to learn – to gather the data which absence has caused such problems at this inquiry, to move forward the sum total of human knowledge and to get this technology moving.

428. The arguments arrayed against us have been pressed, at length. In many cases, at significantly greater length than they deserve. None provide a reason for refusing the application. The inquiry has before it clear lines for demarcating the PDE. That has been used to provide an extraordinarily detailed environmental assessment, in full compliance with the EIA and Habitats Requirements.

429. With regard to the ecological impacts of this project, of the many, many impacts assessed, the points taken against us cover, actually, relatively few. We have managed to reach agreement with NRW on the impact on migratory fish, benthic ecology, and, large portions of onshore ecology. Of the impact on marine mammals – which, attract the strongest of European protections and in this case provide the tightest constraint on the project – we are agreed that, through the use of the EMMP, the risk of collisions of such mammals with tidal turbines can be kept at a

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<sup>863</sup> Socio-economic RT, Day 5, AM session 1.

<sup>864</sup> Ref: Inquiry Doc – 053

<sup>865</sup> Statements of Mr Llewellyn, Day 11, AM Session 1.

level below AEOSI. Of the impact on Razorbill and Guillemot – which do not attract European status here, they are but a material consideration - no points are taken by NRW, the relevant regulator, only by the RSPB (and NWWT). But RSPB agree with us, too, that the first phase – that proportionate, scaled back, 10-12MW Phase One, constrained by 0.7 bottlenose dolphin PBR – can be put in the water with no significant impact on Razorbill or Guillemot. Where they struggle is in believing the EMMP can work. We have laid out extensively why we think it can, but the key point is if we cannot prove to NRW and the Welsh Ministers that it can work, they don't let us put anything into the water. It is, really, as simple as that. The risk is on us, but provided the Welsh Ministers trust NRW (which we submit they should), they can be sure (a) what the worst case scenario is, (b) that Phase One won't have a significant impact, and (c) that NRW is never going to let us get to the stage where this project could have such an impact.

430. Concern is, understandably, raised about the character and appearance of the locality, given the undeniably beautiful nature of the location. Again, though, we have done everything we possibly can to mitigate those effects (we have agreed to use HDD unless it is not possible, have designed the onshore works to minimise their impact, and put in place the DDP which will require an SLVIA) and providing compensation where that is not possible (see the s. 106 Agreement). IoACC agrees we have done all we can, and no longer objects on this basis. There are some remaining objections from NRW, but these are fairly minor.
431. We have done all we can, too, to minimise any socio-economic impacts. We have not just undertaken considered, thorough assessments but again agreed with IoACC a package of mitigation measures to be put in place if (contrary to our expert work and predictions) it does have any sort of negative economic impact. A lot of time was spent on sailors and kayakers under this heading but, we urge this to be kept in perspective that is a relatively small part of economy, to the extent that it would suffer any harm (a proposition with which we disagree, given that economic activity is measured on land and so would have fallen to be assessed).
432. With regard to navigational impacts, we have undertaken two NRAs, in full compliance with the relevant regulators guidance – indeed the MCA noted we had gone above and beyond what was required. And please bear in mind that again there will be an updated NRA before anything goes into the water. So, is it unsafe? No, it is not. In terms of navigational safety, the MCA agrees with us the eastern inshore passage is suitable for 90% of traffic – the only, only outstanding potential concern is vessels under sail without a motor. But the inquiry heard from the Vice Commodore of Trearddur Bay that they adopt the very suggestions put forward by Cdr Brown as to why this concern is minimised. Indeed they went beyond that and noted they use RIBs to accompany their fleet of unmotored vessels. We note SCC has concerns but those are largely based on unsubstantiated fears and a distrust of the MGN 543 process – this is not the time to ventilate that. Is it too big of an imposition? No, unequivocally not. The sea is changing, and there is a clear policy imperative that users of the sea must adapt to that. The imposition is, frankly, going to be minimal – look at Ref: Inquiry Doc – 043, and recall the fact that that is a full deployment. The 'NIMBYism' that is present in trying to stop this world-leading, climate change fighting project so that yachtsmen and kayakers can continue to monopolise the sea is not only unjustifiable but is frankly galling. It should be given zero weight.
433. And it's against that background we come to the CPO. We have established that there is a clear and compelling need for this project. We have outlined that

everything has been done to minimise the land take. We can do no more. The primary objector is Orthios. As we have outlined, at length, their basis of objection, and their “grand plans” are wholly illusory at this point in time. Their suggested “alternatives” to safeguard those plans would do nothing more than give them a ransom over this project and the public funds that go to support it. We would urge the Inspector to dismiss their objections.

434. To conclude, this is a truly, truly ground-breaking project, with a huge range of benefits. The objections are all either meritless, or manageable. We urge the Inspector to recommend to the Welsh Ministers that they make the Order sought.

## **The Cases of IoACC, NRW (Advisory) & the Main Party Objectors**

### **Cyngor Sir Ynys Môn / Isle of Anglesey County Council (“IoACC”)**

435. IoACC is the local planning authority for regulating the onshore element of the project should the deemed planning permission be granted and will be the body discharging the planning conditions and monitoring compliance.
436. It is the local highway authority and it is a landowner whose land is subject to the proposed compulsory purchase provisions.
437. The Council has consistently been supportive of the principle of the development, albeit it had a number of specific comments and concerns. These are set out in two representations (Ref: REPO07, dated 1/10/19 and Ref: FEI REPO0, dated 18/5/20), a Statement of Case (Ref: MDZ/N3) and a Proof of Evidence (Ref: POE003) covering seascape, landscape and visual impact matters (character and appearance).
438. Following engagement with the Applicant, the Council were able to agree a detailed Statement of Common Ground (Ref: MDZ/L7) which confirms the Council's support to the proposals, provided the proposals deliver a sustainable form of development that maximises the benefits of the project to the local economy and communities whilst balancing likely environmental and social effects (Ref: MDZ/L7, para. 12).
439. It will be noted from the Statement of Common Ground that all matters bar one, were agreed to the Council's satisfaction and it was able to remove its objection prior to the commencement of the inquiry (by letter dated 27/11/2020 – Ref: Withdrawal – 001).
440. Because it reached this position, as will have been noted, the Council has needed only to play a limited role in this inquiry, focussing on a few specific issues, which are dealt with below. The Council's position has always been that the project objectives would assist in realising the overarching vision in the Council's Energy Island Programme and the strategic policies relating to initiatives based on renewable or low carbon energy technologies as set out in the JLDP (Ref: MDZ/N3, para. 2.2). It would contribute towards the UK 2050 net zero target as well as helping to meet the Welsh Government's *Prosperity for all: A low carbon Wales* (Ref: REPO07, para. 2.4).
441. The aim of the Council through its representations and at this inquiry has therefore been to ensure the proposals deliver on its requirement as articulated in the Statement of Common Ground (i.e. that the project delivers a sustainable form of development, it maximises the benefits of the project to the local economy and communities whilst appropriately balancing environmental and social effects).
442. There has been a lot of evidence and discussion during the inquiry and the Council remains supportive and content that the project is one which is acceptable, will bring forward socio-economic benefits which will be secured through the conditions and that the necessary safeguards will be in place (through the conditions and the Order) so that, as far as possible, the impact of the proposed development on the character and appearance of the area will be minimised.
443. In this regard there are two conditions, in particular, which I want to touch on briefly. Conditions 17 and 23.

444. Condition 17 is the only condition which the Council has not managed to reach agreement with the Applicant on. This was highlighted in the roundtable session on Friday, 05/02/2021). The rest of the conditions are agreed, which of itself provides an endorsement as to the acceptability of the proposals to the Council.
445. Condition 17 deals with the requirement for a Tourism and Recreation Strategy. This is needed to help ensure the socio-economic impacts and benefits are realised. It is an important issue for the Council. At the roundtable session on Friday 05/02/2021, the Council noted that it considers the Applicant should agree (with the Council) a list of businesses and individuals whose views should be taken into account in shaping that Strategy before it is submitted. The proposed change that the Council is seeking can be seen in Ref: Inquiry Doc – 054. (Inspector's Note: this would appear to be possible condition 15 within Refs: MDZ/N3, MDZ/L7 and Inquiry Doc – 054)
446. This, in the Council's view, addresses the points raised in the roundtable session on socio-economic matters regarding the scope of that engagement and the need to consult and engage more widely with the recreation community in particular. The Council wants to ensure that appropriate stakeholders are identified and consulted, and it submits that this is the way to do this.
447. Taking this approach in the condition would also help Menter Môn as it would avoid criticism that they haven't cast their net wide enough, and it gives everyone the confidence that the views expressed to inform the strategy are representative and up to date.
448. The other condition to highlight is condition 23 as this brings into focus the Council's position on character and appearance. Condition 23 is designed to secure completion of a planning obligation (Ref: Inquiry Doc – 079). This condition prevents works being carried out until a party with a registrable legal interest in the land shown for the onshore works enters into a s.106 planning obligation with the Council.
449. Why is this needed? It is needed because character and appearance is the key area of concern to the Council, supported by Ian Gates' Proof of Evidence.
450. The Council's concerns take two forms:
- (1) Impacts from the onshore infrastructure (landfall cable, substation, grid connection substation and switch gear building); and
  - (2) Impacts from the change created offshore through the installation of the array which inevitably changes the view into and out of the coastal landscape areas (Ref: POE003, para. 6.1).
451. The Council's position is that these impacts will have a significant adverse effect on the Anglesey AONB and the Holy Mountain Heritage Coast, in particular. Not disputed (see Ref: POE003 paras. 6.7 to 6.12).
452. The Council accepts, and the inquiry heard, that the Applicant has done what it can to mitigate these effects through designed in mitigation and placement of the devices offshore and through proposed landscaping of the onshore infrastructure – and there are a number of conditions proposed on the deemed planning consent to address design and landscaping issues. The issue for the Council is that, even with

that designed in mitigation, there remains a significant adverse impact on some parts of the AONB and Heritage Coast.

453. With that in mind, as further mitigation is not practical, it is necessary to consider whether the provision of compensation would be appropriate to off-set the harm which would be caused by the project. The Council's position is that it would be appropriate – that "...compensatory provision is necessary...to balance the impacts of the project and make the Project acceptable" (Ref: POE003, para. 9.2).
454. Condition 23, and the section 106 obligation that the condition requires be completed, is therefore considered necessary to deliver the required compensation.
455. It is not our intention to repeat here the detail of the planning obligation (Ref: Inquiry Doc – 079), save to say that it delivers a significant contribution, which is divided into separate payments essentially triggered by the grant of an approval for the deployment of a tidal device of a particular generating capacity. So the more devices which are granted approval, the more money is payable to the Council up to the maximum 240 megawatts which is being sought by the Order.
456. The Council are required to apply the monies towards measures which, in the reasonable opinion of the Council, will compensate for the impacts caused by the development on specific receptors. Those receptors are listed in the Agreement (Holyhead Mountain SCA, Rhoscolyn SCA. The Anglesey AONB, the Holy Island Heritage Coast, some residential properties and minor roads in North West Holy Island, and to specific recreational receptors as listed in the Agreement).
457. The type of measures envisaged by the Agreement include undertaking landscape enhancement works, funding projects for carrying out landscape restoration or enhancement programmes and improving public access land (such as improvements to or provision of public rights of way).
458. Under the Agreement (Ref: Inquiry Doc – 079), NRW are to be consulted on landscape measures which impact the AONB.
459. The Council's position is the obligation complies with Regulation 122 of the Community Infrastructure Levy Regulations 2010. The Council consider that the provision of compensation is necessary to make the development acceptable in planning terms. The proposed compensation monies is directly related to the development in order to address the harm caused by the project to the character and appearance of the area and it is considered that the size of the fund is reasonably related in scale and kind. It is not an insubstantial figure and is payable incrementally on development being approved. A CIL Compliance Statement has been submitted to the inquiry dated 09/02/2021 (Ref: Inquiry Doc – 144), which confirms this position.
460. In terms of the draft Order, this is acceptable and the various amendments made during and leading up to the inquiry are welcomed. In particular the requirement for the Council to be consulted on any device deployment protocol for a surface emergent device before it is approved and to ensure that cumulative impacts of the devices are taken into account. This further helps overcome character and appearance concerns. (Ref: MDZ/L7, Table 5.1, ref. 6).

461. For completeness, use of the public highway for which the Council is highway authority in accordance with the Order is acceptable (Ref: MDZ/L7, Table 5.1, ref. 4).
462. The one issue which was outstanding in the Statement of Common Ground but which is now resolved is in relation to the Council as landowner (Ref: MDZ/L7, Table 5.1, ref. 7). The Council agreed Heads of Terms with the Applicant regulating how the Council's onshore interests will be accessed by the Applicant for the project (Heads of Terms completed 06/11/2020) and that has removed its concerns in that regard.
463. To conclude, it is considered that the proposal is a positive one for Anglesey. It promises to bring a number of benefits to the area and the local communities. Sufficient protections have been built in to ensure those benefits are realised and to ensure adverse effects are kept to a minimum and are addressed appropriately.
464. As such, the Council supports the Order being made in its current form and the Deemed Planning Permission being granted.

### **Cyfoeth Naturiol Cymru / Natural Resources Wales ("NRW")**

465. When the application was received and consulted upon, NRW's advisory arm had significant concerns regarding a wide variety of issues and the associated environmental information submitted with the application. These concerns are set out in NRW's consultation response, dated 31 October 2019. Subsequently, NRW commented (Ref: FEI – REPO04) on the Applicant's further environmental information.

### **The closing submissions of NRW (Advisory Arm)**

466. NRW Advisory's opening statement confirmed that it had outstanding concerns about four aspects of this application:
- (1) The impact of the proposal on the Holy Island Coast SAC, SPA and SSSI, in particular the loss of habitats protected under Annex I of Directive 92/43/EEC ("the Habitats Directive");
  - (2) The impacts of the proposal on marine mammals, specifically (i) the mortality resulting from collisions with the proposed physical development; and (ii) the disturbance from operational underwater noise.
  - (3) The landscape, seascape and visual impacts of the proposal on the Isle of Anglesey AONB.
  - (4) The impacts of the proposal on benthic and intertidal habitats protected under Annex I of the Habitats Directive.
467. In relation to issue (4), the Applicant and NRW have agreed, during the course of the inquiry, the terms of an 'Outline Marine Biodiversity Enhancement Strategy'<sup>866</sup>. The Applicant prepared this document in response to NRW's advice that such a strategy was required, at this stage, in the absence of detailed pre-consent surveys

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<sup>866</sup> Ref: Inquiry Doc - 069

identifying the full extent of potential marine benthic habitat loss or alteration as a result of the proposal. NRW is satisfied that the outline strategy identifies appropriate key principles for implementing any ecological enhancement measures that might be required (paras. 60-66). NRW also notes the Applicant's proposal for a draft condition on the marine licence requiring the submission of a detailed 'Marine Biodiversity Enhancement Strategy' based on the outline strategy (paras. 67-68). The Applicant's constructive engagement with NRW's advice on this issue means that these closing submissions can focus on matters (1) to (3) above.

Matter (1): Holy Island Coast SAC, SPA and SSSI

468. This issue arises due to the need to convey cables from the proposed tidal array to onshore infrastructure. The Applicant's preferred approach – a preference shared by NRW – would be to convey the cables via a technique known as 'horizontal directional drilling', thereby avoiding any material interference with the Annex I vegetated sea cliff habitat of the Holy Island Coast SAC/SPA/SSSI.
469. However, should this technique prove to be impracticable, and the Applicant can demonstrate this to the satisfaction of the IoACC (see draft condition 5 on the 'Proposed Conditions for Deemed Planning Permission' ), the second option would be the worst-case scenario of securing the cables to the cliff face using "J-tubes" secured by rock bolts. It is common ground between the Applicant and NRW that this would involve the long-term loss of some of the Annex I vegetated sea cliff habitat for at least 40 years. NRW considers this loss to be so "long-term", as a matter of degree, that it is tantamount to a permanent loss. The Applicant prefers to describe it as a "long-term, temporary" loss, but such a description is surely self-contradicting.
470. More fundamentally, the Applicant and NRW disagree as to whether the loss should be considered "significant" and/or such as to have an adverse effect on the integrity of the SAC. NRW maintains that the loss should be considered both "significant" and that an adverse effect on the integrity of the SAC cannot be ruled out.

*The law*

471. The Conservation of Habitats and Species Regulations 2017/1012 ("the Habitats Regulations") transpose EC Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive"). They extend to Wales. As "EU-derived domestic legislation", the Habitats Regulations continue to have effect in domestic law following the departure of the United Kingdom from the European Union: s. 2, European Union (Withdrawal) Act 2018.
472. Regulations 63 and 64 of the Habitats Regulations transpose, respectively, articles 6(3) and 6(4) of the Habitats Directive which provide for a system of assessing the implications of a proposed "plan or project" for protected "European sites", which include Special Areas of Conservation (such as the Holy Island Coast SAC): Reg. 8.
473. Regulation 63 states, so far as relevant (emphasis added):
- "(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which –*

a) *is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and*

b) *is not directly connected with or necessary to the management of the site, must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives.*

*(2) A person applying for any such consent, permission or other authorisation must provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable it to determine whether an appropriate assessment is required.*

*(3) The competent authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specifies.*

*(4) It must also, if it considers it appropriate, take the opinion of the general public, and if it does so, it must take such steps for that purpose as it considers appropriate.*

*(5) In the light of the conclusions, and subject to regulation 64, the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).*

*(6) In considering whether a plan or project will adversely affect the integrity of the site, the competent authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which it proposes that the consent, permission or other authorisation should be given.*

*[...]"*

474. Regulation 64 states, so far as relevant:

*"(1) If the competent authority is satisfied that, there being no alternative solutions, the plan or project must be carried out for imperative reasons of overriding public interest (which, subject to paragraph (2), may be of a social or economic nature), it may agree to the plan or project notwithstanding a negative assessment of the implications for the European site or the European offshore marine site (as the case may be).*

*(2) [not relevant in this case]"*

475. Regulation 68 adds that, where a plan or project is to be consented despite a negative assessment of its implications for a European site, *"the appropriate authority must secure that any necessary compensatory measures are taken to ensure that the overall coherence of Natura 2000 is protected"*. "Natura 2000" is the network of protected European sites that includes SACs: Reg. 3.

476. In *R (Mynydd y Gwynt Ltd) v Secretary of State for Business, Energy and Industrial Strategy* [2018] EWCA Civ 231; [2018] Env LR 22, Peter Jackson LJ drew together the requirements of articles 6(3) and 6(4) of the Habitats Directive (as transposed in the Habitats Regulations) as follows (emphasis added):

- "(1) The environmental protection mechanism in article 6(3) is triggered where the plan or project is likely to have a significant effect on the site's conservation objectives: see *Landelijke Vereniging tot Behoud van de Waddenzee v Staatssecretaris van Landbouw, Natuurbeheer en Visserij* (Case C-127/02) [2005] All ER (EC) 353, 1279 para 42 (Waddenzee).
- (2) In the light of the precautionary principle, a project is likely to have a significant effect so as to require an appropriate assessment if the risk cannot be excluded on the basis of objective information: see *Waddenzee*, at para. 39.
- (3) As to the appropriate assessment, appropriate indicates no more than that the assessment should be appropriate to the task in hand, that task being to satisfy the responsible authority that the project will not adversely affect the integrity of the site concerned. It requires a high standard of investigation, but the issue ultimately rests on the judgment of the authority: *R (Champion) v North Norfolk District Council* [2015] 1 WLR 3710, para 41 per Lord Carnwath JSC.
- (4) The question for the authority carrying out the assessment is: what will happen to the site if this plan or project goes ahead; and is that consistent with maintaining or restoring the favourable conservation status of the habitat or species concerned?: see the opinion of Advocate General Sharpston in *Sweetman v An Bord Pleanála* (Galway County Council intervening) (Case C-258/11) [2014] PTSR 1092, point 50.
- (5) Following assessment, the project in question may only be approved if the authority is convinced that it will not adversely affect the integrity of the site concerned. Where doubt remains, authorization will have to be refused: see *Waddenzee*, at paras. 56-57.
- (6) Absolute certainty is not required. If no certainty can be established, having exhausted all scientific means and sources it will be necessary to work with probabilities and estimates, which must be identified and reasoned: see *Waddenzee*, points 107 and 97 of the Advocate General's opinion, endorsed in *Champion's case*, at para. 41, and by Sales LJ in *Smyth v Secretary of State for Communities and Local Government* [2015] PTSR 1417, para. 78.
- (7) The decision-maker must consider secured mitigation and evidence about its effectiveness: *European Commission v Federal Republic of Germany* (Case C-142/16) EU:C:2017:301, para. 38.
- (8) It would require some cogent explanation if the decision-maker had chosen not to give considerable weight to the views of the appropriate nature conservation body: *R (Hart District Council) v Secretary of State for Communities and Local Government* [2008] 2 P & CR 16, para. 49.
- (9) The relevant standard of review by the court is the *Wednesbury* rationality standard (*Associated Provincial Picture Houses Ltd v Wednesbury Corpn* [1948] 1 KB 223) and not a more intensive standard of review: see *Smyth's case* at para. 80."

477. For context, one of the grounds of challenge in the *Mynydd y Gwynt* case was that the Secretary of State had erred in concluding (based on NRW's advice) that the applicant had provided insufficient information to enable an adverse effect on the integrity of a protected European site to be ruled out. The Court of Appeal rejected

that ground of challenge, concluding that the Secretary of State had been entitled to take the view that the information provided was inadequate: [34]. In the High Court below, the judge had observed that “[t]he Secretary of State could not have acted irrationally or otherwise unlawfully in following the reasoned advice of NRW” on this matter: [81].

*Relevant guidance*

478. The Welsh Government has published a series of ‘Technical Advice Notes’ providing guidance on various aspects of planning policy. Technical Advice Note 5, ‘Nature Conservation and Planning’ (“TAN 5”), provides advice on “how the planning system should contribute to protecting and enhancing biodiversity and geological conservation” (para. 1.2.1).
479. Annex 3 to TAN 5 provides detailed advice on ‘Development proposals likely to affect an internationally designated nature conservation site’. It confirms (citing Waddenzee) that a “significant” effect, for the purposes of the Habitats Regulations, is an effect that “could undermine the site’s conservation objectives” (para. 7). Under the sub-heading ‘Ascertaining the effect on site integrity’, TAN 5 then provides this advice (emphasis added):

*“19. The integrity of the site is the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified or listed. In determining the effect on site integrity, the advice of CCW [now NRW] and the citation issued by them saying why the site was classified or listed will need to be carefully considered. Whilst it is the duty of the decision-taker to carry out the appropriate assessment and make a judgement as to the effect on site integrity, it would normally be expected to adopt the advice of CCW on the integrity test. If it does not, the decision-taker should have convincing and exceptional reasons for not adopting the advice, which it should be prepared to explain, and it should be able to show that these reasons are clearly supported by sound scientific evidence.”*

[...]

*21. Compensatory measures (see below) should **not** be taken into account in assessing whether the proposal would adversely affect the integrity of European sites or European offshore marine sites.”*

480. The Applicant has also relied on a report commissioned by Natural England: ‘Small-scale effects: How the scale of effects has been considered in respect of plans and projects affecting European sites – a review of authoritative decisions’ (“the NE Report”) (see Appendix 1 to Mr Campbell’s proof). This “report” prepared by consultants is not guidance adopted by Natural England: a disclaimer in the ‘Foreword’ to the report states that the contents of the report “do not necessarily represent those of Natural England”. In any event, a “report” published by Natural England has no application in Wales. Nevertheless, NRW would not take issue with this extract from the ‘Overall Conclusions’ of the NE Report in attempting to summarize the factors usually considered by decision-makers when assessing whether “small scale effects” on a SAC are sufficient to have an adverse effect on integrity (see the last page of the executive ‘Summary’ at the start of the report):

*"The cases reviewed show that in practice, authoritative decision-makers invariably consider a wide range of factors when determining the significance of small scale effects, including:*

- the characteristics of the qualifying feature (for example, rarity, location, distribution, vulnerability to potential change);*
- how the ecological structure and function of the site might be affected;*
- what ecological function the affected area is performing, or could perform, in terms of the ecological requirements of the qualifying features;*
- the location of the affected area both in terms of its geographic position in the designated site and in terms of its position relative to the project;*
- where a qualifying species is affected, when the activities would occur, the rarity of individuals of the species, its conservation status and future prospects in the location in question."*

*Relevant conservation objective*

481. Against this legal and policy background, it is striking that the Applicant's Proof of Evidence dealing with this issue, by Mr Campbell, contained no meaningful consideration of the relevant conservation objective for the Holy Island Coast SAC, despite the courts making clear that effects on the integrity of a SAC must be assessed by reference to that objective.

482. In her own Proof of Evidence on behalf of NRW on this issue, Ms Heather Lewis made good this omission in Mr Campbell's analysis, citing the relevant conservation objective for the SAC at paras. 4.8-4.10. This is the conservation objective for "Feature 1" of the SAC, "Vegetated sea cliffs of the Atlantic and Baltic coasts", the main component elements of which are described in parentheses after the feature name: "(including cliff & crevice vegetation, maritime grassland and maritime heath)". As Ms Lewis noted, the conservation objective for this "Feature 1" includes, so far as relevant, these statements (emphasis added):

"The vision is for it [Vegetated sea cliffs] to be in a favourable conservation status, where all of the following conditions are satisfied:

- Cliff and crevice vegetation, maritime grassland and maritime heath occurs throughout the site in appropriate areas and their relative extent and zonation are determined by topography, exposure, grazing and natural stochastic events (e.g. storms).
- The cliff vegetation is composed of native plants such as sea spurrey *Spergularia rupicola* Sea lavenders (*Limonium britannicum*, *L. procerum*, *L. binervosum*) and sea samphire *Crithmum maritimum*.
- [...]
- Sustainable populations of the plants which make up the Atlantic sea cliff rare plant assemblage will be present, notably, South Stack fleawort *Tephrosia integrifolia*, Sea lavenders (*Limonium britannicum*, *L. procerum*, *L. binervosum*) Golden hair lichen *Teloschistes flavicans* and Ciliate strap lichen *Heterodermia leucomelos*."

483. One of the relevant “performance indicators” identified in the document to achieve a “good” condition of vegetated sea cliffs is that: “*There will be no anthropogenic activity that could alter the extent of features*” (see para. 4.10, Ms Lewis’ proof [Appendix A of Ref: POE021]).

*The effects on integrity in this case*

484. The evidence in this case does not enable the decision-maker to be “convinced” that the proposal would not have an adverse effect on the integrity of the SAC: *Waddenzee* at [56]-[57].

485. As Ms Lewis explained in her evidence, a botanical survey commissioned by the Applicant has confirmed that the cliff face within the area proposed for attaching cables is a fine mosaic of crevice-and-ledge vegetation, maritime therophyte communities and maritime grassland (para. 5.1.2). Although the Annex I vegetated sea cliff habitat as a whole makes up some 110.59 ha of the SAC, the crevice-and-ledge vegetation and maritime therophyte communities are a very small part of this overall area (para. 5.1.3). The precise extent of this small area cannot easily be measured on the vertical cliff-face, but it is limited to the parts of the cliff-face where the nature of the rock and levels of wave exposure allow shallow soils to form (para. 5.1.4).

486. Whilst NRW accepts that, in simple terms, the potential area of impact would be a small percentage of the vegetated sea cliff habitat *as a whole*, it is a much more significant proportion of the overall area of fragile and spatially-restricted crevice-and-ledge and maritime therophyte vegetation that forms a small part of that larger habitat. It follows that the potential loss of this fragile vegetation, *in context*, cannot be summarily dismissed as “*de minimis*” as the Applicant submits. That conclusion appears to have been reached without having due regard to the conservation objectives for the SAC.

487. Ms Lewis’ assessment that the likely effects cannot be dismissed as “*de minimis*” is consistent with the conclusion reached in the NE Report on “small-scale effects” that regard should be had to *inter alia* the “rarity” and “distribution” of the qualifying feature (with the description of the feature here including, expressly, “cliff & crevice vegetation”). Regard is also to be given to “the location of the affected areas in terms of its geographic position in the designated site and in terms of its position relative to the project”. NRW considers it highly relevant in this case that the protected habitat is ‘positioned’ on a vertical cliff-face where extreme conditions from the sea present particular challenges for surveying work. These challenges make it impracticable to be “convinced” that the proposal would have no adverse effect on the integrity of the SAC. NRW unquestionably has a significant degree of “doubt” about whether such an effect would be avoided: *Waddenzee* at [56]-[57].

488. In support of his view that the effects in this case would be “*de minimis*”, Mr Campbell cited, in his proof, judgments made about the magnitude of adverse effects on integrity in various previous decisions. In truth, none of those previous decisions supported his approach in the present case.

489. *Sweetman v An Bord Pleanála* (para. 4.6): Mr Campbell referred to the reference in the Advocate General’s opinion in this case to a “*de minimis*” threshold for assessing significance, but did not mention how the Advocate General then went on to apply that threshold on the facts of that case. This information is provided in the NE Report: see Appendix E7 (p. 43). This confirms that the case concerned the loss

of 1.47 ha of limestone pavement which was a priority habitat extending to over 270 ha within the site (i.e. a loss amounting to 0.5% of the qualifying feature and 0.006% of the site overall) (section E.7.6). The independent inspector appointed to consider the proposal had advised that “this relatively small loss would not, in terms of quantity, amount to an adverse effect on the integrity of the area”. The matter was referred to the CJEU for a preliminary ruling on what “criteria” should be applied when considering whether a proposal would have an adverse effect on integrity. The CJEU ruled that where an appropriate assessment concludes that a plan or project will lead to “the lasting and irreparable loss of the whole or part of a priority natural habitat type whose conservation was the objective that justified the designation of the site concerned as an SCI, the view should be taken that such a plan or project will adversely affect the integrity of that site”: [46].

490. The NE Report then cites the Advocate General’s opinion in the *Sweetman* case, describing it as shedding “more light on the issue of the scale of the effect in question” (section E.7.8). The Advocate General contrasted a plan or project which may involve “some strictly temporary loss of amenity which is capable of being fully undone” (which would not be an adverse effect on integrity) with “the permanent destruction of a part of the habitat in relation to whose existence the site was designated” which would be “destined by definition to be categorised as adverse”: [59]-[60]. As the potential impact in the present case is in the latter category, amounting to the likely long-term destruction of some of the “cliff and crevice vegetation” on which the designation of the SAC is predicated, it too is “destined by definition to be categorised as adverse”.
491. *North Norfolk Vanguard Offshore Wind Farm* (Mr Campbell’s proof, para 4.16) and *Hornsea Project Three Offshore Wind Farm* (para. 4.20): Mr Campbell cited these projects as examples of cases which indicate “a level at which scale of temporary habitat loss has been determined to be sufficiently small to not have an AEOL” (para. 4.22). These projects are not comparable to the present case. As Ms Lewis explained, they both mainly concerned effects on a very different habitat type (sandbanks), which are highly recoverable due to their reliance on mobile species. Moreover, the effects were, as stated, “temporary”; insofar as there might also be “long term temporary habitat losses”, these were genuinely miniscule in comparison, and known to be so at the time of assessment (0.002% loss of the reef habitat in the Norfolk case; 0.002% of the sandbank in the Hornsea case). In the present case, it is simply not possible to be convinced that any long-term loss of the protected habitat will be similarly *de minimis*.
492. *Walney Offshore Wind Farm* (para. 4.23): In this case, Natural England concluded that there would be no adverse effect on integrity, but again based only on temporary effects. As Ms Lewis explained, these effects would have been very short-term as they related to laying cables on saltmarsh and mud flats, again very different habitats to the habitat at issue in the present case.
493. *Gilwern to Hafod-yr-Ynys* pipeline (para. 4.28): Contrary to Mr Campbell’s evidence, the judgment reached about the magnitude of effects in this case supports NRW’s position in the present case. Two potential losses of European dry heath habitat were at issue: on the one hand, the temporary loss for 1 to 2 years of 1 ha (0.28%) of the European dry heath (which was considered to be *de minimis* and therefore would have no adverse effect on integrity); and on the other hand, the loss for 10 to 12 years of 1.5 ha (0.43%) of European dry heath, which was not considered to be *de minimis* and therefore considered to have an adverse effect. The

potential, long-term loss in the present case is much closer to the latter scenario than the former: any crevice-and-ledge vegetation and maritime therophyte communities lost in the present case would probably be lost for at least 40 years due to the extreme conditions on the cliff-face. This vegetative habitat is also scarcer than the dry heath considered in the Gilwern case.

494. NRW agrees with Mr Campbell that the Gilwern case “makes it clear that factors including endemism and local uniqueness of habitat, recoverability, duration of impact and confidence in mitigation” are relevant when assessing the magnitude of effects (para. 4.29). However, a proper consideration of these factors in the present case can only sensibly point to a single conclusion: that an adverse effect on integrity cannot be ruled out.
495. *Henborth* (para. 4.30): This recent decision by the Isle of Anglesey County Council concerned the creation of a “new” 1m-wide hard-surfaced path and handrail on the coastal cliff within the Holy Island Coast SAC/SPA. In an EIA screening opinion, the Council concluded that the proposal would not give rise to “significant effects on the ecology such that EIA is required”. The Council also concluded, based on an ecological desk study provided by the applicant, that the works would not be likely to have a significant effect on the SAC/SPA. However, as became clear during the roundtable session, this proposal was not for a “new” path in the true sense, but for the restoration of a path that had existed for decades and had fallen into disrepair. The existing path surface was compacted soil and did not support any vegetation of conservation interest. As the circumstances of this case were not remotely comparable to those of the present, Mr Campbell’s reference to it was not instructive.
496. In summary, therefore, NRW maintains that the potential loss of some of the protected Annex 1 sea cliff habitat should be considered both “significant” in EIA terms and that an adverse effect on the integrity of the Holy Island Coast SAC cannot be ruled out. This is because:
- (1) One of the three plant communities recorded on the cliff – the crevice-and-ledge community – is restricted to the southern and western coasts of the United Kingdom.
  - (2) The cliff-face at issue in the present case has a particularly good coverage of crevice-and-ledge vegetation (and maritime therophyte communities), but this makes up only a small proportion of the entire ‘Vegetated sea cliff habitat’ within the SAC, making it a precious commodity within that the wider protected habitat.
  - (3) The potential loss of the crevice-and-ledge vegetation and maritime therophyte communities is long-term, probably in excess of 40 years, with a likely slow recovery time (at best) beyond this if the soils on the exposed ledges of the cliff-face are lost.
  - (4) There is a significant risk of the soils becoming more exposed if shading caused by the J-tubes causes the vegetation currently protecting the soil to be lost.
  - (5) In view of these risks, it is impossible to be convinced (indeed, impossible even to have any degree of confidence) that any crevice-and-ledge habitat or

maritime therophyte communities lost as a consequence of the proposed development would simply recover after decommissioning.

(6) The reality is that the likelihood of any such habitat recovery, and the pace of any such recovery, is simply not known at this stage. It is a matter giving rise to considerable doubt.

497. This is NRW's advice to the decision-maker on the issue of adverse effect on integrity in relation to 'Matter 1'. "Considerable weight" should be given to this advice, there being no cogent reason not to do so: *Hart DC* at [49]. Certainly, there are no "convincing and exceptional" reasons in this case for not following NRW's expert advice on this matter: see Annex 3 to TAN 5 at [19]. If the decision-maker accepts this advice, it follows that regulation 64 of the Habitats Regulations is then engaged, with the competent authority then needing to be satisfied that, there being no alternative solutions, the plan or project must be carried out for imperative reasons of overriding public interest.

498. In apparent, tacit acknowledgment that the decision-maker may consider regulation 64 of the Habitats Regulations to be engaged in this case by virtue of Matter 1, the Applicant has proposed an 'Outline Habitat Enhancement Plan' (January 2021). This document outlines proposals for "enhancement" of an area of clifftop habitat near to the SAC at Abraham's Bosom. The proposals in this document are agreed between the Applicant and NRW. However, it is important to be clear that, following its conclusion that there would be an adverse effect on the integrity of the SAC, NRW does not consider that this document sets out additional "mitigation" measures, as the Applicant would prefer to characterise them (see para. 1 of the document), but compensation measures pursuant to regulation 68 of the Habitats Regulations. NRW confirms that it considers the compensatory measures outlined in this document to be "necessary" for the purposes of regulation 68.

#### Matter 2: Marine mammals

499. The proposal has the potential to have an adverse impact on marine mammal species listed in Annex II and Annex IV of the Habitats Directive. The proposal would be situated within the North Anglesey Marine SAC which is designated for harbour porpoise and it could also affect other species of marine mammals, including those with demonstrated connectivity to other SACs. Two particular issues were of significant concern to NRW at the inquiry: (i) the risk of marine mammals colliding with the proposed development and being injured, possibly fatally; and (ii) underwater noise from the development causing disturbance to marine mammals.

#### *Collision risk*

500. At the start of the inquiry, NRW was encouraged by the progress being made by the Applicant in improving the draft outline Environmental Mitigation and Monitoring Plan ("OEMMP") to incorporate NRW's advice on adaptive management. Whilst adaptive management is not NRW's preferred approach to monitoring and controlling environmental impacts, it accepts that it can, in principle, be appropriate when dealing with an experimental technology which involves unavoidable uncertainty. It is plain that such a technology is being proposed for use in this case.

501. NRW is pleased to note that further progress has been made on the drafting of the OEMMP<sup>867</sup> during the course of the inquiry. In a note dated 1 February 2021, NRW identified its main outstanding concerns in relation to the OEMMP, to which the Applicant has responded positively. On the issue of collision risk, in particular:
- (1) The advisory arm of NRW welcomes the Applicant's willingness to accept a condition on the draft marine licence requiring the submission and approval of a Detailed Environmental Mitigation and Monitoring Plan ("DEMMP") which accords with the requirements of the OEMMP.
  - (2) NRW (Advisory) also welcomes the Applicant's agreement to incorporate its draft wording for the proposed condition in the final draft of the OEMMP, in accordance with the text proposed by the Applicant for the condition in its letter to NRW dated 2 December 2020: see Appendix 4 to the latest draft of the OEMMP.
  - (3) NRW also notes and welcomes the Applicant's confirmation in the final draft of the OEMMP that the EMMP (including its adaptive management provisions) will apply to all phases of the proposal, including the first phase: see para. 7.
  - (4) NRW further welcomes the Applicant's confirmation in the OEMMP that it will retain an open mind when considering monitoring and mitigation technologies (para. 149) and that the text suggesting the contrary in a previous draft of the OEMMP (in particular, in relation to Table 4.1) has been removed.
502. It is important to be clear that, despite these significant improvements in the OEMMP, not all statements in the final draft of the document are "agreed" by NRW. In particular, the Applicant expresses confidence in the draft that further, post-consent modelling will show that marine mammals will avoid the tidal devices at "much higher" rates than were assessed within the Environmental Statement (see para. 77). NRW would not make that statement, based on the evidence currently available. However, it is not necessary for NRW to agree to such statements at this stage. The relevant question for NRW in relation to the potential impacts on the marine mammal features of Welsh SACs (including the North Anglesey Marine SAC) is whether the proposal would have an adverse effect on the integrity of the SACs due to the risk of marine mammals colliding with the development. Given the Applicant's constructive acceptance of NRW's proposals for strengthening the adaptive management mechanisms in the OEMMP, NRW is able to advise the decision-maker that there would be no such adverse effect.
503. Insofar as NRW would have preferred the OEMMP to contain further detail on certain aspects, it accepts that these matters can be progressed further if and when the detailed EMMP is discussed in due course.
504. NRW should also be clear that, so far as monitoring the potential impact of the proposal on birds is concerned (including the risk of diving birds colliding with the development), NRW considers the position to be set out adequately for the purposes of the OEMMP in paragraph 100 of the final draft: i.e. the principle that the collision monitoring should be able to discriminate between marine mammals and other

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<sup>867</sup> Ref: Inquiry Doc – 100 [MMC447(2)]

animals, including birds). NRW does not expect the potential impact on birds to be monitored in exactly the same way as the impact on marine mammals. Rather, the extent of monitoring should be appropriate (and proportionate) to the extent of protection afforded by law and policy. NRW would expect the extent of the required monitoring (for all species) to be agreed by the Advisory Group identified in the OEMMP.

*Underwater noise*

505. Progress was made on this issue in the week before closing submissions.
506. NRW had concerns about the limited underwater noise modelling presented in the Applicant's Underwater Noise Modelling Report.<sup>868</sup> This report contained noise plots which appeared to show ranges of noise disturbance up to 10 to 20km from the boundary of the MDZ. However, as the report did not set out the evidence on which these ranges were based, NRW could not make an informed judgment about how far underwater noise disturbance from modelled arrays would propagate. NRW aired these concerns at the round-table session on marine mammals on 3 December 2020.
507. In an attempt to deal with NRW's concerns, the Applicant provided a new document: a note entitled 'Potential for underwater noise from operational turbines to significantly disturb marine mammals'<sup>869</sup>, 6 January 2021. This note uses a 1.3km buffer around the MDZ to assess the area likely to be impacted by noise disturbance, an approach which was first introduced orally for the first time by the Applicant at that round-table session. However, the 1.3km buffer has been derived from noise modelled for a single turbine to support the Applicant's case that there would be no adverse effect on the integrity of a European site *from the entire array*. This approach conflicts with the Applicant's previous noise modelling which indicated, by reference to the noise plots, that "overall noise levels are louder overall for the small turbines at 620 locations than they are for large turbines at 120 locations" (para. 4.2.3).<sup>870</sup>
508. The Applicant's more recent note, dated 6 January 2021, states (p. 3):
- "It is acknowledged that the underwater noise from multiple tidal devices will interact and the assessments above are simplistic, but precautionary based on the modelling for one device in different areas. However, it is important to note that underwater noise from multiple sources is not additive for each tidal device in an array."
509. Whilst NRW accepts that noise from multiple sources might not be additive for each tidal device, this does not mean that there is not an increase in sound level when multiplying from one device to several hundred. NRW therefore maintains that the modelling work carried out by the Applicant to date does not, *without more*, enable the conclusion to be reached that underwater noise would not have an adverse impact on the integrity of the North Anglesey Marine SAC.
510. *However*, in the week before closing submissions, the Applicant updated the OEMMP in relation to the issue of underwater noise. The Applicant has included the

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<sup>868</sup> Ref: MDZ/A28.10 [MMC139]

<sup>869</sup> Ref: Inquiry Doc-045 [MMC577]

<sup>870</sup> Ref: MDZ/A28.10

commitments to monitoring and mitigation of underwater noise that NRW had suggested, incorporating NRW's suggested text in a revision to para. 27 of the draft OEMMP, which now reads as follows:

"27. Prior to deployment, the array layout will take into account the potential for any barrier effects as a result of underwater noise from operational tidal turbines and the use of any ADDs, as well as the potential of any physical barrier effects. This will also be developed as part of the EMMP. Underwater noise from operational turbines and the activation of ADDs will be modelled, monitored and managed, this will include (i) underwater noise modelling prior to deployment to ensure predicted noise levels would not result in significant disturbance or an adverse effect on site integrity in relation to the conservation objectives of the North Anglesey Marine/Gogledd Môn Forol SAC designated for harbour porpoise; (ii) underwater noise monitoring and measurements to ensure noise levels to not exceed predicted levels; and (iii) mitigation methods if there is the potential that underwater noise could result in significant disturbance."

511. NRW is satisfied that these further commitments to adaptive management are an appropriate response to its concerns about the adequacy of the assessment work done to date in relation to the issue of underwater noise. As a result of these commitments, NRW advises the decision-maker that an adverse effect on integrity as a consequence of underwater noise can be ruled out at this stage.

Matter 3: Landscape, seascape and visual impacts on the Anglesey AONB

512. As set out in NRW's opening submissions, the Applicant's Environment Statement ("ES") concludes that there would be significant effects upon views from the Isle of Anglesey AONB, along a section of coastline between South Stack and the headland of Penrhyn Mawr. The proposal to deploy surface-emergent devices in significant numbers over a sizeable area would significantly compromise the enjoyment of the AONB's special qualities by the public.
513. This section of coastline includes areas assessed by the national LANDMAP system to be of 'Outstanding' and 'High' value for their visual and sensory aspects. South Stack/Ynys Lawd lighthouse, Tŵr Elin/Elin's Tower and the RSPB visitor centre are popular destinations for visitors by car. The Isle of Anglesey Coastal Path, the public rights of way, the open access land, the landmarks and the coastal experience generally in this location make it a popular area for visitors, walkers and birdwatchers within the AONB.
514. The proposal would also have a significant detrimental effect upon the seascape setting of the Isle of Anglesey AONB, contrary to: Planning Policy Wales (Edition 10, December 2018); Policy AMG1 of the Joint Local Development Plan (Anglesey and Gwynedd); the Isle of Anglesey AONB Management Plan 2015-2020; and LANDMAP management guidance.
515. NRW has sought to engage constructively with the Applicant on possible improvements to the current scheme to address better the sensitivities of the AONB and achieve a more sustainable balance with the AONB's conservation and enhancement requirements. Notwithstanding that some improvements were secured as a result of this engagement, NRW retains concerns about the scale of impacts that would occur.

516. During the roundtable session on seascape, landscape and visual effects, NRW identified its three main, outstanding concerns in relation to these matters.
517. First, NRW has suggested the extension of the ‘Restricted Area – Northern’, to reduce seascape, landscape and visual effects on South Stack and the Isle of Anglesey AONB. The extension is that set out in figure 5 of Mr Richard Sumner’s Proof of Evidence on behalf of NRW (page 71). It would be a triangular extension to the restricted area, taking the visually prominent surface-emergent devices further away from the spectacular views experienced from South Stack and its vicinity. This is issue 11 in the Statement of Common Ground – NRW – Seascape, Landscape and Visual Impact (“SLVIA SoCG” Ref: MDZ/L5).
518. As Ms Olwen Maidment (for NRW) explained during the inquiry, the triangular area is particularly sensitive, located as it is off South Stack, and the highly popular views that are available in and around the island and its lighthouse. Seascapes form an essential component of the AONB’s visual and sensory setting. Accordingly, offshore development within this highly sensitive setting has a particularly important bearing on how the public experiences the AONB’s character, special qualities, and views.
519. The Applicant offered two broad responses to this issue at the inquiry. The first of these was to say that significant adverse effects to the AONB would be caused whether or not the triangular extension were made to the restricted area. This was not an answer to the point. It remains necessary to make a judgment about the extent of the significant adverse effects on the AONB. There is no one uniform level of significant adverse effects. The extent of any adverse effects in any particular circumstance requires an assessment of the importance of the landscape and seascape in issue, and how what is proposed will affect those matters.
520. The need to undertake this more nuanced approach is consistent with the Applicant’s own case, specifically its argument that the benefits of the proposed development would outweigh the harm caused. This necessary balancing exercise requires harms and benefits to be quantified and weighed against each other. Given that the extent of these harms (in this instance, the significant adverse effects on the AONB) will undoubtedly be worse without the proposed triangular extension to the restricted area, the claimed benefits of the scheme would have to be greater to outweigh them.
521. The Applicant’s second broad response to NRW at the roundtable session was to say that the triangular area represents a rich source of tidal energy for the scheme. Self-evidently, that response did not seek to gainsay NRW’s case that the triangular area is worthy of additional protection from the proposed development. Indeed, the Applicant did not mount a meaningful challenge to NRW’s evidence on this point. Rather, the response went to the overall planning balance, with the Applicant claiming that the benefits of the scheme are such as to outweigh the case for protecting the triangular area. How to strike the final planning balance between all competing considerations is not a judgment to be made by NRW as an advisory consultee. Suffice to note that, when that final planning balance is struck, NRW would advise the decision-maker to be particularly cognisant of the visual impact on the Isle of Anglesey AONB of allowing the triangular area to be developed and the need (in NRW’s judgment) to give greater negative weight, in the planning balance, to the development of that particular area, contrary to policy AMG1 of the Joint Local Development Plan.

522. Second, NRW is still dissatisfied with the lack of precision over what constitutes a visually prominent surface-emergent device. It will be recalled that the Applicant proposes that there be no such devices in the 'Restricted Area – Northern'. This is issue 16 in the SLVIA SoCG. Additional clarity about the devices in the northern area will ensure greater predictability in future seascape and landscape effects. For simplicity and certainty, NRW has suggested that these be defined simply as submerged tidal devices: see figure 4 of Mr Sumner's proof.
523. Third, there remain issues with integration and mitigation measures for the landfall cables, in the event that the proposal of horizontal directional drilling cannot be relied upon. This is SLVIA SoCG issue 14. NRW seeks to ensure that ecological restoration and landscape integration be designed to take account of the SAC and the visual amenity of the AONB. NRW does not consider that it has been demonstrated, in the mitigation measures so far proposed, that account will be taken of the SAC and AONB in formulating those measures. This may mean those measures cannot be relied upon.
524. NRW was expecting this last concern to be addressed in the most recent version of draft condition 7 of the deemed planning consent,<sup>871</sup> i.e. the condition requiring the submission and approval of details of both hard and soft landscaping works. These details are now to include "(c) Details of biodiversity enhancement measures on land above the cliff face of Abraham's Bosom", but there is no clear requirement for adequate measures for *landscape* conservation and enhancement as part of those details. NRW submits that draft condition 7(c) should be amended to read:
- "(c) Details of biodiversity enhancement measures on land above the cliff face of Abraham's Bosom, including measures for landscape conservation and enhancement"
525. NRW welcomes the Applicant's agreement to provide a financial contribution through the s. 106 agreement, to secure compensation for the significant adverse effects that will be caused, no matter what conditions and mitigation are put in place. It would maintain, however, that the proposals should have been further modified by a triangular extension of the '*Restricted Area – Northern*', to reduce the degree of harm caused to views from the AONB.
526. These are the closing submissions of NRW's advisory arm at this inquiry.

### **North Wales Wildlife Trust**

527. As NWWT chose, as a Main Party, to proceed by written representations, its case is provided within the NWWT Statement of Case (Ref: MDZ/N11). The Applicant responded to NWWT's Statement of Case prior to the opening of the inquiry.<sup>872</sup>

### **RSPB**

#### Introduction

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<sup>871</sup> Ref: Inquiry Doc – 067 [MMC289(2)]

<sup>872</sup> The Applicant's response to the Statement of Case is in Ref: MDZ/N15

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528. These Closing Submissions are submitted by the Royal Society for the Protection of Birds Cymru ("the RSPB").
529. Through this application, Mentor Môn seeks an Order providing, in effect, the "permissive framework"<sup>873</sup> for an offshore tidal energy generating station with a gross output capacity of up to 240 MW, provided by up to 620 tidal devices ("the Project").<sup>874</sup>
530. As set out in Opening, the RSPB fully supports and recognises the need for more renewable energy generation as part of a range of measures to address climate change.<sup>875</sup> As Dr McCluskie acknowledged in cross-examination,<sup>876</sup> climate change is a real, serious threat to bird species, and renewables have an important role to play in countering the effect of climate change.
531. The RSPB objects, however, to the scale of the Project for which consent is sought through this application, given:
- (i) That tidal energy technology is still its infancy.
  - (ii) The corresponding lack of empirical data to inform and/or validate the assessment of likely interactions with, and impacts on, diving birds; with assessment of the collision risk of tidal generating devices itself being a 'topic' which is still in its infancy.<sup>877</sup>
  - (iii) The magnitude of the potential impacts on bird populations of a 240MW deployment<sup>878</sup> as assessed and reported in the ES, based on the modelling work undertaken to date.<sup>879</sup> For the avoidance of doubt, the RSPB acknowledges and accepts that those reported significant effects do not take into account the mitigation which is proposed through phasing and the EMMP.
  - (iv) The lack of detail as to what is proposed to be provided in any particular phase; the uncertainties, inadequacies and questionable effectiveness of what is proposed by way of monitoring, management and/or mitigation either during the indicative first phase or thereafter; and the extent to which such matters are left over for determination at a later stage through a separate consenting regime.
532. The RSPB's position remains that, given the uncertainties associated with this trial scheme, the scale of the development for which authorisation is sought is too large, and the potential impacts too significant. The RSPB considers it would be more appropriate for a smaller scheme to have been brought forward in the first instance to allow the technology, monitoring and mitigation methods to be assessed more

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<sup>873</sup> Para. 17 of the Applicant's note on the draft Order, the controls that it provides and its relationship with other consenting regimes (Ref: RPE008)

<sup>874</sup> The worst case scenario assessed in the ES (see para. 60 of Ref: MDZ/A25.4)

<sup>875</sup> Ref: Inquiry Doc – 008, para. 9

<sup>876</sup> 3 February 2021, and via an updated proof (Ref: POE007.1) at para. 3.3

<sup>877</sup> SNH Guidance Note '*Assessing collision risk between underwater turbines and marine wildlife*' ("the SNH Guidance") (Ref: MDZ / F19)

<sup>878</sup> And 40MW deployment

<sup>879</sup> The RSPB also has concerns with how some of the assessment work has been carried out – discussed below at paras. 34-8.

thoroughly, and their effectiveness reviewed, before seeking consent for the deployment of up to 620 devices.

533. In the RSPB's submission, it is at least questionable what confidence – if any – the Inspector, and subsequently Welsh Ministers, can have that this project would proceed beyond its indicative first phase (assuming that that phase can itself be deployed).
534. Further, as outlined in Opening, the RSPB questions whether the Inspector, and subsequently the Welsh Ministers, can reach a properly informed view as to whether the public benefits associated with the proposed development would outweigh the adverse impacts or other harms associated with the Project, given the inherent uncertainty as to effects on ecology and whether those effects can be satisfactorily mitigated, on the basis of the evidence currently before the inquiry.

*The proposed development: location, and species of concern*

535. The proposed demonstration zone, and its surrounding area, are of European and national importance for the conservation of birds:<sup>880</sup>
- (i) **Glannau Ynys Gybi / Holy Island Coast SPA**: originally designated for 22 pairs of breeding and 48 individual wintering chough.
  - (ii) **Glannau Ynys Gybi / Holy Island Coast SAC**: designated for its Annex 1 coastal and heathland habitats.
  - (iii) **Glannau Aberdaron and Ynys Enlli / Aberdaron Coast and Bardsey Island SPA**: originally designated for its Manx shearwater breeding populations.
  - (iv) **Sgomer, Sgogwm a Moroedd Penfro / Skomer, Skokholm and the Seas off Pembrokeshire SPA**: originally designated for its ornithological interest including breeding seabirds. It is particularly important for its Manx shearwater breeding population.
  - (v) **South Stack part of Glannau Ynys Gybi / Holy Island Coast SSSI**: a coastal area noted for its biological, botanical and ornithological value. The SSSI has 11 notification features, including chough. The SSSI also supports a breeding bird assemblage of razorbill, guillemot and puffin, referred to as important colonies in the description of the SSSI.
536. The RSPB, through both ownership and management agreements, manages the South Stack Reserve ("the Reserve"). The sea cliffs within the Reserve provide nest sites for over 8,000 seabirds, (with additional numbers nesting on the adjacent South Stack) including puffins, guillemots, razorbills, kittiwake and fulmars. The Reserve is important for its choughs, with 10 breeding pairs recorded on the Reserve and a further 4 breeding pairs on neighbouring land in 2019.

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<sup>880</sup> Described in more detail in RSPB's Statement of Case paras. 12-21 (Ref: MDZ/N5) and paras. 3.8-3.12 of Dr McCluskie's updated proof (Ref: POE007.1)

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537. By the time of the inquiry, the RSPB's principal concerns with the proposed development related to its potential impact on the guillemot and razorbill populations of South Stack and Penlas.<sup>881</sup>
538. As Dr McCluskie acknowledged in his evidence,<sup>882</sup> the guillemot and razorbill populations of South Stack and Penlas are not identified as an interest features for the Holy Island Coast SSSI designation, and the populations are not part of, or associated with, an SPA. The impacts on those populations are not, therefore, ones which could give rise to an adverse effect on the integrity of a European Site, such as to engage regulation 63 of the *Conservation of Habitats and Species Regulations 2017*.<sup>883</sup>
539. That does not mean, however, that those impacts can be effectively discounted, or put to one side, in considering whether the Order should be made.
540. Directive 2009/147/EC on the conservation of wild birds<sup>884</sup> – The Birds Directive - provides for the protection, management and control of all species of naturally occurring wild birds in the European territory of Member States.<sup>885</sup> As is apparent from the Directive, and its recitals, a key objective was to arrest the decline in bird populations in Europe, which represented a "*serious threat to the conservation of the natural environment*"<sup>886</sup>, with the measures to be taken needing to apply to "*the various factors which may affect the numbers of birds, namely the repercussions of man's activities*".<sup>887</sup> The conservation of wild bird species was identified as necessary to meeting the Community's objectives regarding the improvement of living conditions and sustainable development,<sup>888</sup> and aimed at the long-term protection and management of natural resources as an "*integral part of the heritage*" of the peoples of Europe.<sup>889</sup>
541. Unlike most species protection, the Birds Directive provides protection for all wild birds (Article 1). By Article 2, Member States "*shall take the requisite measures to maintain the population of the species referred to in Article 1 at a level which corresponds in particular to ecological, scientific and cultural requirements while taking account of economic and recreational requirements, or to adapt the population of these species to that level*".<sup>890</sup> Article 5 requires Member States to take "requisite measures" to establish a general system of protection for all species of

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<sup>881</sup> The RSPB's position in respect of chough is set out in section 6 of Dr McCluskie's Updated PoE, and he confirmed in XIC (3 February 2021) that the RSPB had sought additional information in respect of Manx shearwater and it was content that impacts were not of concern for that species.

<sup>882</sup> During XX on 3 February 2021, updated proof paras. 3.8-3.12 (of Ref: POE007.1)

<sup>883</sup> Ref: MDZ/B6

<sup>884</sup> The Birds Directive is discussed here by way of context only for [the following paragraphs dealing with relevant legislation and the populations of guillemots and razorbills at South Stack and Penlas]

<sup>885</sup> Ref: MDZ/B8

<sup>886</sup> Recital 3

<sup>887</sup> Recital 6

<sup>888</sup> Recital 5

<sup>889</sup> Recital 7

<sup>890</sup> There has not, as yet, been clear guidance on the interpretation of Article 2 (See, for example, what was said by Carnwath L.J. at para.38 of *Sustainable Shetland v Scottish Ministers* [2015] UKSC 4, and at para. 17 identifying some apparent inconsistencies in CJEU case law. There are no set 'levels' in the UK for the purposes of Article 2.

birds referred to in Article 1 prohibiting, amongst other things, deliberate killing or capture by any method, or deliberate disturbance particularly during the period of breeding and rearing in so far as disturbance would be significant having regard to the objectives of the Directive.

542. Article 4 requires Member States to identify areas to be given special protection for the rare and/or vulnerable species listed in Annex 1 (Article 4(1)) and regulatory migratory species (Article 4(2)) – Special Protection Areas (SPAs). Annex 1 species include guillemot but not razorbill. Article 4 does not, however, displace the wider, more general obligations, contained in Articles 1-2 and 5-9, but rather makes specific provision for birds within Annex 1 and migratory birds: see para. 19 of the CJEU's judgment in *R v Secretary of State for the Environment* [1997] Env LR 55.
543. Those obligations are generally implemented through the protections contained in the *Wildlife and Countryside Act 1981*, but are also given effect through the obligations on appropriate authorities, nature conservation bodies and, in relation to marine areas, competent authorities in regulations 9 and 10 of the *Conservation of Habitats and Species Regulations 2017* and regulation 6 of the *Conservation of Offshore Marine Habitats and Species Regulations 2017*.<sup>891</sup> The RSPB would highlight, in particular, the obligation in regulation 9(3): "*a competent authority, in exercising any of its functions, must have regard to the requirements of the Directives so far as they may be affected by the exercise of those functions*".<sup>892</sup> That sits alongside the more general obligations in respect of biodiversity in s.6 of *The Environment (Wales) Act 2016*<sup>893</sup> and relevant policy guidance – including para 6.4.5 of Planning Policy Wales (cited at para. 4.7 of Dr Grant's Proof of Evidence) that "*Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means development should not cause significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity*".
544. As acknowledged above, the populations of guillemot and razorbill at the South Stacks and Penlas are not identified with the interest features of an SSSI, or associated with an SPA, and thus it is not necessary to consider whether the potential impacts on those populations could give rise to potential adverse effects on the integrity of European Sites. However, as Dr McCluskie explained in evidence (in response to a question from the Inspector) whilst losses of the scale reported in the ES may not be of "*great significance*" at a national level, they would be "*locally very significant*".
545. The RSPB submits that the potential impacts on – and harm to – those populations are matters which should be given significant weight when assessing, and balancing, the benefits and harms of the Project, even though not falling under regulation 63.

*The proposed development: consent sought through the Order*

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<sup>891</sup> Ref: MDZ/B7

<sup>892</sup> The terms of regulation 9(3) are not amended by the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations* although it needs to be read with the amended definitions of the relevant Directives and with the new reg 9(4A) (Ref: MDZ/B10)

<sup>893</sup> Ref: MDZ/B9

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546. Although the indicative first phase of the Project has been scaled down significantly from the 40MW deployment assessed in the ES,<sup>894</sup> the fact remains that through this application Mentor Môn seeks consent for a 35km<sup>2</sup> demonstration zone, of up to 620 devices, generating up to 240MW of energy. Despite the reduction in scale of the indicative first phase, in circumstances where consent is sought for the Project as a whole, it is clearly appropriate that the potential effects of the Project at that scale are considered and appraised.
547. As reported in the ES, the potential effects as a result of collision risk on the guillemot and razorbill populations at South Stack and Penlas of the Project are significant<sup>895</sup> – if not mitigated. The mitigation proposed in the ES essentially consists of two processes:
- (i) A phased approach to development; and
  - (ii) The development of an EMMP, including amongst other things, a monitoring strategy.<sup>896</sup>
548. No ‘substantive’ mitigation of the effects reported is proposed in the ES. The phases are neither defined nor assessed in the ES - the assessment being limited to the indicative 40MW and 240MW deployment scenarios, with an assessment of a reduced indicative Phase One deployment subsequently provided as FEI.<sup>897</sup>
549. This is an “EIA Order” for the purposes of Part 1 of the Transport and Works Act 1992. By s.13B, the Welsh Ministers must (a) consider the EIA information provided (s.13B(1)(a)); (b) following that consideration, reach a reasoned conclusion about the likely significant effects of the proposed works or other projects on the environment (s.13B(1)(b)); and (c) take that reasoned conclusion into consideration in making a determination under s.13(1) (s.13B(3)). By s.13C(1), the Welsh Ministers:
- “...must consider whether monitoring of the significant adverse effects of the works or other projects on the environment to be authorised by the order is appropriate and, if so, must consider:*
- a) whether it is appropriate to impose a monitoring measure;<sup>898</sup> and*
  - b) whether it is appropriate to impose a requirement to take remedial action”.*
550. By s.13C(4), a requirement under s.13C(1) may be imposed in the Order, or if a direction is given under s.90(2A) of the *Town and Country Planning Act 1990* by way of condition specified in that direction. S.13C(4) does not apply to the tidal works at issue on this application: to the extent that monitoring requirements (and/or remedial action) is to be secured by way of condition, such condition would need to

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<sup>894</sup> As detailed in the Marine Mammals Additional Collision Risk Modelling Note (Ref: MDZ/A31.13) and Marine Ornithology Revised Collision Risk Modelling Note (Ref: MDZ/A.31.9)

<sup>895</sup> ES Vol. 1 Chapter 11, paras. 159 - 164, 176 (Ref: MDZ/A31.11), summarised in Dr McCluskie’s updated proof at paras. 5.34 – 5.57 (Ref: POE007.01)

<sup>896</sup> ES Vol. 1 Chapter 11 paras. 178 & 179 (Ref: MDZ/A31.11)

<sup>897</sup> Marine Mammals Additional Collision Risk Modelling Note (Ref: MDZ/A31.13); Marine Ornithology Revised Collision Risk Modelling Note (Ref: MDZ/A.31.9).

<sup>898</sup> Subject to the qualification in s.13C(5)

be imposed on the Marine Licence – which is not currently before this inquiry for determination.<sup>899</sup>

551. Whilst the submission of an EMMP<sup>900</sup> prior to the commencement of any related tidal works or repowering of any related tidal work is a requirement of the draft Order,<sup>901</sup> the Order neither secures defined phases of the Project<sup>902</sup> nor identifies monitoring measures. The phases of the proposed development, and the contents of the (detailed) EMMP (with its critical monitoring, management and mitigation provisions) are left over for determination, and control, through the Marine Licence process.<sup>903</sup>
552. The RSPB acknowledges that a decision maker considering an EIA development may take into account the fact that a further consent will be required through a separate regime, which will impose certain controls on environmental effects. That does not mean, however, that the decision-maker is entitled to take the view that simply because consent is required from some other responsible body that will be sufficient. Per George Barrett QC in *Atkinson v Secretary of State for Transport* [2007] Env LR 5 at 29-30:

*“29. The position, therefore, as I understand it, is this. The decision maker must make his decision in the light of an environmental statement that describes the likely significant effects of the project and the measures to be taken to avoid, reduce or remedy any significant adverse effects. In determining whether the statement does provide the necessary description he is not entitled, in relation to a particular area of potential impact, to take the view, simply because subsequent consent from some other responsible body will be required, that no consideration needs to be given as to whether there are likely to be significant effects in that area or what they will be or what mitigation measures are needed. What he is entitled to do, however, is to reach the conclusion, on the basis of such information as he has that is of relevance to the particular area of potential impact, and in the light of the need for subsequent consent from the other responsible body, that the effects in that area are unlikely to be significant or that appropriate mitigation measures will be taken. He must, that is to say, have some information before him that, when coupled with the need for subsequent consent, enables him to conclude that the effects will not be significant or that appropriate mitigation measures will be taken. As Sullivan J. put it in *Milne* (at [114]) in relation to reserved matters in a planning permission:*

*“The local planning authority are entitled to say, ‘We have sufficient information about the design of this project to enable us to assess its likely significant effects on the environment. We do not require details of*

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<sup>899</sup> In contrast to the request for deemed planning permission (Ref: MDZ/A19).

<sup>900</sup> Which the RSPB understands would, in practice, mean the detailed EMMP referred to in the outline EMMP and draft Marine Licence Condition 36 (appended to the most recent version of the oEMMP at Appendix 4), having regard to Article 3(7) of the draft Order.

<sup>901</sup> Article 3(4) read with Schedule 1 Part 4 (Ref: Inquiry Doc – 071)

<sup>902</sup> Compare the Meygen consent, discussed at para. 29 of Dr McCluskie’s rebuttal proof (Ref: RPE012). A copy of the consent is Ref: Inquiry Doc - 083.

<sup>903</sup> See, in particular, Article 3(7) and paras. 17, 23 and 24.9-13 of the Applicant’s Note on the draft Order, the controls that it provides and its relationship with other consenting regime (Ref: RPE008)

*the reserved matters because we are satisfied that such details, provided they are sufficiently controlled by condition, are not likely to have any significant effect.”*

30. For the Secretary of State to have relied as he did on the need for subsequent approvals to be obtained would only have been unlawful, in my judgment, if he had had no information before him that, when coupled with the need for such approvals, was capable of enabling him to reach the decision that he did. The question thus comes down to the adequacy of the information.” (Underlining added as emphasis)

553. The question as to whether there is such adequate information in this case will no doubt be a question which the Inspector, and subsequently Welsh Ministers, will wish to critically consider.<sup>904</sup>

554. The RSPB would, however, stress the following:

- (i) The documents submitted in support of this application do not define the proposed phases of the Project– either in terms of number of phases, scale of deployment in those phases, or detail of those phases. The number, scale, detail, location and consideration of the potential impacts or significant effects of each phase are therefore left over for consideration through the Marine Licence process.
- (ii) The documents submitted in support of this application, including the revised draft outline EMMP (oEMMP), provide very little by way of information as to what the Applicant is actually proposing in order to monitor, manage and mitigate the potential environmental effects of the different phases, and thus very little information on which to base an assessment of the likely adequacy or effectiveness of those measures.<sup>905</sup> The RSPB acknowledges that the draft oEMMP is, necessarily, an outline document; that the detailed EMMP is to be developed in due course; that it is anticipated it will be informed by input from an Advisory Group (which may include the RSPB)<sup>906</sup>; and that it will need to be approved by NRW. However, the fact remains that in terms of the information before this inquiry, it is at best limited - and, at times, rather unclear<sup>907</sup> - as to what is being proposed.

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<sup>904</sup> The RSPB has set out, in its Statement of Case (Ref: MDZ/N5) and Comments on other Parties’ Statements of Case (As Amended) (Ref: MDZ/N23) the information and level of detail which it would have wished to see provided as part of this consenting process.

<sup>905</sup> It is, for example, unclear whether – and how – the ‘stop’ mechanism in the proposed collision decision framework process illustrated on plate 2-3 of the oEMMP would, or could, apply in respect of diving birds.

<sup>906</sup> The RSPB has not yet been formally invited to participate in an Advisory Group – no doubt given the status of the draft oEMMP - but would actively welcome such involvement: see RSPB’s Comments on other Parties’ Statements of Case at para. 2.6 (Ref: MDZ/N23)

<sup>907</sup> The RSPB would highlight, in particular, the discrepancy between Dr Grant’s evidence and the text in Version F7 of the draft oEMMP, being the most recent version of the document then before the inquiry (Ref: Inquiry Doc – 063) as to whether the use of underwater cameras was being considered – it being explained by Mr Fortune in evidence in chief (3 February 2021) that the reference in Table 4.1 to such technology not being considered for the EMMP was “legacy text”, and incorrect. However, Mr Fortune’s rebuttal proof also suggests, at para. 89, that the (then) latest version of the oEMMP “does not advocate monitoring of collision but

555. Further, as Dr McCluskie highlighted during cross-examination, the process which is envisaged – with the different phases being controlled through the EMMP – does not provide for the same degree of public participation in decision making as is afforded through the current application process.<sup>908</sup> The RSPB acknowledges that the two regimes have to be considered as they are – and is not suggesting there should be some sort of inquiry every time Mentor Môn wishes to deploy a device, or that there should be some sort of general legislative change. However, in the context of considering whether to grant consent for this EIA Order, the Inspector, and Welsh Ministers, will no doubt wish to be cognisant of the extent of the matters left over for determination at that later stage through that other process.
556. For the avoidance of doubt, the RSPB does not suggest that the ‘project design envelope’ is legally deficient for the purposes of the *Transport and Works Act (Applications and Objections Procedure) (England and Wales) Rules 2006*;<sup>909</sup> or dispute that a ‘project design envelope’ or ‘Rochdale envelope’ may be used in the context of consenting major development schemes where the final details of the development are not yet known. The RSPB is, however, concerned as to whether the Inspector, and subsequently Welsh Ministers, can be satisfied that they have sufficient information about the Project now to enable them to reach a properly informed decision as to whether consent should be granted for the Project at the scale for which it is sought.

### **The RSPB's specific concerns**

#### **Scale of the Project**

557. Tidal energy is a new and emerging technology. The generation of energy through tidal arrays is not without precedent: see, for example, para. 82 of Mr Fortune's Proof of Evidence. However, consent for such development on the scale sought through this application is, the RSPB believes, unprecedented in the UK.<sup>910</sup>

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*instead proposes a series of other monitoring methods to refine consideration of collision risk and wider colony health" including maintaining an "open mind" to possible collision monitoring using active sonar and video. The Inspector will recall that Dr McCluskie expressed some concerns about a monitoring strategy that did not include monitoring of collisions with devices during his evidence in chief (3 February 2021).*

<sup>908</sup> Public participation being one of the protections secured through the EIA provisions of the *Transport and Works Act (Applications and Objections Procedure) (England and Wales) Rules 2006* (Ref: MDZ/B3).

<sup>909</sup> Ref: MDZ/B3

<sup>910</sup> The SeaGen Tidal Turbine Project was for a single 1.4MW device; the Skerries Tidal Array Project was for a 10MW array (Mr Fortune's proof at para. 82) the Meygen Tidal Array Project was for 86MW conditioned on a phase one deployment of 6MW (Dr McCluskie's rebuttal proof at para. 5.27); the Perpetuus Tidal Energy Centre was for 30MW. Confirmed by Mr Orme in evidence on 1 December 2020); the Nova project (Bluemull Sound, Shetland) originally installed a 30KW demonstration turbine, then installed two 100KW turbines, followed by a third, with a view to installing an additional three turbines bringing the total capacity to 600KW (2020 State of the Science Report p.35, Appendix 34 to Dr McCluskie's proof, PDF p.1149 at 1165)

558. The understanding of the potential impacts of such technology on diving birds is also at a relatively early stage of development.<sup>911</sup> There are high levels of uncertainty associated with the modelling of such impacts – which, at present, with the lack of real-world evidence regarding collision risk is the best available means of assessing collision risk to birds.<sup>912</sup> There is also a lack of empirical evidence available to validate the outputs of such modelling work.<sup>913</sup>
559. The RSPB acknowledges that such ‘real world’ data, or evidence to validate modelling assumptions, cannot be obtained without actual deployment of devices. It does not seek to resist deployment of devices because of a lack of such evidence. What it resists, however, is a suggestion that granting consent for this Project – at the scale for which authorisation is sought – is either necessary or appropriate to ‘break the circle’.<sup>914</sup> As Dr McCluskie made clear in re-examination,<sup>915</sup> there are existing deployments that data can be obtained from, and if deployment of more devices is required to obtain more data, that could be done by granting a smaller consent.
560. In short, the RSPB’s position is not that it resists, or objects to, the deployment of tidal devices, or deployment of tidal devices on an experimental or demonstration basis to test emerging technologies. The RSPB’s position is simply that granting consent for a project of this scale would be on too large a scale too soon.

Assessment work and modelling

561. The RSPB has a number of concerns with the modelling and assessment work which has been carried out in respect of collision risk, as detailed more fully in Dr McCluskie’s updated proof and rebuttal proof.<sup>916</sup> Those concerns have not become ‘academic’, in light of the significant reduction in scale of the indicative first phase of the development.<sup>917</sup> As Dr McCluskie explained in evidence in chief:
- (i) There still are methodological issues of assessment with indicative Phase One; and,
  - (ii) Consent is still sought for the full deployment, and not for the indicative first phase.
562. Further, given the reliance placed on further modelling work to be undertaken in identifying, and assessing, future phases of the Project<sup>918</sup> - and indeed, in assessing

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<sup>911</sup> Discussed at Section 5 of Dr McCluskie’s updated proof. See also p.1 of the SNH Guidance on ‘Assessing collision risk between underwater turbines and marine wildlife’ (Ref: MDZ.F19) “The whole topic of assessing the collision risk of tidal generating devices is still in its infancy.”

<sup>912</sup> Dr Grant in cross-examination & Dr McCluskie updated proof para. 5.1.

<sup>913</sup> See, for example, section 3.6.3 of the 2020 State of the Science Report (Appendix 34 to Dr McCluskie’s proof, PDF p.1149 at p.1182); and the Executive Summary (p.10) of the 2020 ABP Mer ‘Review of potential collision between tidal stream devices and marine animals’ (Ref: MDZ/F15.2)

<sup>914</sup> Compare the suggestion put to Dr McCluskie during cross-examination on 3 February 2021.

<sup>915</sup> On 4 February 2021

<sup>916</sup> Updated proof paras. 5.25-5.46 (Ref: POE007.1); Rebuttal proof paras. 2-11 (Ref: RPE012)

<sup>917</sup> Compare what was suggested in evidence in chief of Dr Grant on 2 February 2021.

<sup>918</sup> See, for example, Plate 2-1 of the oEMMP (Refs: Inquiry Doc – 100 & Inquiry Doc – 101)

the detail of the first phase of deployment<sup>919</sup> - which is not proposed to differ substantively in approach from the modelling and assessment work undertaken to date,<sup>920</sup> it is important to ensure that that work is sufficiently robust so as to be able to properly inform that future decision making.

563. The RSPB does not take issue with the choice of the ERM and CRM models. The RSPB has concerns, however, regarding:

- (i) The decision to average the outputs of those two models. This is not supported by the SNH Guidance,<sup>921</sup> or indeed any other guidance of which Dr McCluskie or Dr Grant were aware. It is also without precedent - neither Dr McCluskie nor Dr Grant were aware of such an approach being adopted on other projects. With respect, it is no defence to say that the guidance does not expressly advise against such an approach.<sup>922</sup> In the absence of tangible, real world evidence, modelling is the best available means of assessing collision risk between birds and tidal devices. As Dr Grant accepted in cross-examination, there is no suggestion in the SNH Guidance that you would not get something of value from both models and, taking a robust approach, that you could look and assess both models separately.<sup>923</sup> Further, as Dr McCluskie explained in evidence in chief, a key issue in this context is the high degree of uncertainty in these models and how their outputs are used in assessments, and *"by carrying out an averaging as done for this without reference to the biological meaningfulness of the modelling, that actually acts to increase that uncertainty"*. It is (at least in part) in response to such uncertainty that the need for precaution arises.<sup>924</sup> To the extent that the decision was justified by reference to the need to take a "pragmatic" approach, or to make a decision at some point to stop adding in more precaution, it follows from Dr McCluskie's evidence that it has, in fact, had the contrary effect. Further, as Dr Grant accepted in cross-examination, although the use of the averaged outputs did not alter the conclusions of the assessment work undertaken to date (as opposed to using the worst case outputs of the CRM model), it cannot be assumed that that will always be the case.
- (ii) The application of a common Avoidance Rate to the two models. It is common ground that the Avoidance Rate is intended to allow for not only the probability of avoidance of the devices by diving birds, but also error within the model used to assess likely collision. Whilst the inputs for the models

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<sup>919</sup> See para. 87 of the oEMMP

<sup>920</sup> As distinct from refinements to its inputs and parameters. Dr Grant in cross-examination (on 2 February 2021)

<sup>921</sup> SNH Guidance Note 'Assessing collision risk between underwater turbines and marine wildlife' (Ref: MDZ/F19)

<sup>922</sup> Compare what appeared to be suggested during Re-examination of Dr Grant

<sup>923</sup> Question: "No suggestion that you would not get something of value from both models when using both?" Answer: "No, not at all". Q: "Taking robust approach, look at and assess both models separately" A: "Could do, depending on the circumstances".

<sup>924</sup> As Dr McCluskie explained in XIC, "The use of precaution in an assessment is a direct result of the uncertainty inherent in designs and other aspects of the assessment, and as such directly proportionate to that uncertainty. Anything that increases uncertainty, such as using unverified techniques like [taking] the mean actually increases the need for precaution. Should be aiming to reduce uncertainty in this assessment, and in that manner reduce the need for precaution".

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overlap to a degree, they are not the same in all regards – as Dr Grant accepted in cross-examination.<sup>925</sup> It cannot, therefore, be assumed that the model errors will be the same, and that the correction factor will therefore be the same. This is simply not accounted for in the approach which the Applicant has adopted.

- (iii) In respect of the assessment of the reduced indicative Phase One,<sup>926</sup> the RSPB remains concerned that this has been modelled by reference to incomplete devices. The RSPB acknowledges, and recognises, that this is a modelling construct – and that modelling 5.89 devices would, therefore, present a more precautionary worst case assessment than if only 5 devices had been modelled (assuming that only 5 devices could thereafter be deployed).<sup>927</sup> However, the RSPB's concern remains that given the inherent uncertainties involved in the assessment work which needs to be undertaken, the decision to model a situation which would not occur in reality (i.e. deployment of 5.89 devices) adds further unnecessary uncertainty into the assessment; and
- (iv) The fact that the PVA analysis has not been carried out for the full range of Avoidance Rates referred to in section 2.4 of the SNH Guidance.<sup>928</sup> The RSPB acknowledges that the guidance does not expressly require a PVA analysis to be carried out for that full range (the guidance instead advises that a range of avoidance rates "*should be applied to the results of both the ERM and CRM, so as to generate a range of estimates of the potential collision rate*"). However, given the uncertainties around the appropriate level of avoidance rate (discussed further below under "*A phased approach...*"), the RSPB considers it would have been helpful if this could have been provided.

564. Much is made in the Applicant's evidence of the precautionary nature of the assessment that has been undertaken, and that the actual impacts are likely to be rather less than have been reported. The RSPB agrees that the assessment has - to an extent - taken a precautionary approach. For example, Dr McCluskie acknowledged that using the more recent population data in respect of the guillemot and razorbill populations in the PVA would result in lower predicted population scale impacts than reported in the ES;<sup>929</sup> that the assumption that all collisions would result in death was precautionary;<sup>930</sup> and that the assumption as to nocturnal dive depths was "*appropriately precautionary*".<sup>931</sup> Dr McCluskie has, however, set out in

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<sup>925</sup> See, in this regard, Table 2 of the SNH Guidance (Input parameters required for each model) (Ref: MDZ/F19).

<sup>926</sup> Ref: MDZ/A31.10

<sup>927</sup> Although the RSPB has also noted the suggestion from Dr Grant in cross-examination that (in the example discussed at para. 5.45 of Dr McCluskie's updated proof) this could result in a 5 + device deployment – comprising 5 of the '6S' device together with an additional device which would, overall, remain within the assessed 'risk window'. The RSPB further notes in this regard that the Phase One assessment work has assumed only one type of device being deployed – there has not been any modelling of the potential effects of a mix of different devices, as confirmed by Dr Grant in cross-examination.

<sup>928</sup> Ref: MDZ/F19, p.14

<sup>929</sup> Rebuttal proof para. 8, although, as he explained in his oral evidence, the PVA analysis could not simply be carried out by substituting the higher starting population: that would also need to be factored into the CRM and ERM modelling.

<sup>930</sup> During cross-examination on 3 February 2021

<sup>931</sup> During cross-examination on 3 February 2021

his evidence those areas where he considers the assessment work has not been as precautionary as is claimed: see in particular his rebuttal proof paras. 3-10.

565. For the reasons set out in its evidence, the RSPB's concerns as to the potential scale of impacts on these diving bird populations, if the Project is deployed beyond the indicative Phase One and if not effectively monitored and mitigated, remain. The RSPB would stress that it in no way doubts NRW's competence as regulator under the Marine Licence regime, and is grateful both for NRW's statement as to its position in respect of birds and the changes it suggested to the draft oEMMP during the EMMP roundtable session,<sup>932</sup> which make clear that consideration of the potential effects on diving birds should not merely be seen as a "sense check"<sup>933</sup> on the marine mammals assessment. However, any decision as to future deployments can, necessarily, only be based on the best scientific understanding available at the time,<sup>934</sup> and it will be critical to ensure that the monitoring adopted is in fact effective both to inform any such future assessment, and to enable any effects arising during deployment to be mitigated, in the event that reality does not reflect the theoretical modelling.

*A phased approach to the Project: deployment*

566. As identified in Chapter 11 of the ES, and in the draft oEMMP, it is the Applicant's expectation that monitoring and the phasing of the development will enable the models to be refined "to allow demonstration that predicted collisions are at a level that would not result in an ecologically significant adverse effect on razorbill and guillemot",<sup>935</sup> or as described in the draft oEMMP, "updated, with the expected output of reducing the predicted significance of operational collision effects".<sup>936</sup>

567. As the Applicant was at pains to stress, even the first phase of development would be dependent on it satisfying NRW that that effective monitoring would be put in place.<sup>937</sup>

568. For the reasons explained by Dr McCluskie in his evidence, the RSPB has very real doubts as to whether either of those expectations will be realised. This clearly has ramifications not only for the indicative Phase One deployment,<sup>938</sup> but also – and perhaps more pertinently for the consent sought through this application – the assessment of whether, and to what extent, a larger commercial scale deployment

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<sup>932</sup> 4 February 2021. It should also be apparent from that session that the RSPB's position is not "at odds" with that of NRW, as suggested in XXC of Dr McCluskie (3 February 2021). Rather, as NRW's counsel explained, although adaptive management would not be NRW's preferred approach, or first port of call, this was a case in which that approach could be accepted by NRW Advisory.

<sup>933</sup> Mr Fortune's phrase in cross-examination

<sup>934</sup> See, for example para. 7 of the oEMMP

<sup>935</sup> ES Chapter 11 para. 178

<sup>936</sup> Draft oEMMP para. 21

<sup>937</sup> Draft oEMMP para. 8, and it was of a scale which did not predict adverse impacts upon marine mammals or upon non-SPA populations of diving seabirds from local colonies (oEMMP para. 7).

<sup>938</sup> The RSPB would note, in this context, the position expressed in NRW's Note of 1 February 2021 (Ref: Inquiry Doc – 085) as to the likely scale of any such deployment needing to be considerably smaller in order to achieve the commitment to deploy at a scale below predicted adverse effect on site integrity (AEOSI).

of the Project is likely to be realised. The Inspector will recall, in that regard, Dr McCluskie's evidence, in evidence in chief, that:

*"I can't see given my knowledge of the lack of tech[...] ability to achieve those monitoring measure that it can be rolled out. I can't see how the detail that is required to refine the predicted impacts can in the short term given the current state of technology be fulfilled"*

and that it

*"Exists as an issue even before Phase 1 is in place. Will take some number of years before we are in a place that the technologies are suitable to collect the information either to refine the model or to provide evidence of collisions or lack of collisions".*

569. The Inspector will also, no doubt, recall Dr McCluskie's evidence as to the work that has been ongoing since 2012 in respect of seeking to define avoidance rates in the context of off-shore wind farm developments, discussed in his oral evidence, and at para. 8.17 of his updated proof.

570. In respect of Avoidance Rates to be applied to the collision risk modelling for tidal devices and diving birds, this was explored at some length during both Dr Grant's and Dr McCluskie's oral evidence. The RSPB does not seek to re-canvass that debate in detail in these closings. It would, however, stress the following 5 points:

- (i) There is, as yet, no recommended default avoidance rate to be used in collision risk modelling for tidal devices as there is for wind farms;<sup>939</sup>
- (ii) Although there are a number of factors which may be considered to indicate a higher avoidance rate than for wind farms, there are also a number of factors which may pull in the opposite direction;<sup>940</sup>
- (iii) Even in the wind farm context, judgments as to the appropriate level of avoidance rate have varied<sup>941</sup> - and recommended defaults - have gone both up and down;<sup>942</sup>
- (iv) Ultimately, the determination of an 'appropriate' avoidance rate level is a matter of professional judgment, based on expertise and taking into account all relevant factors including biological characteristics of the birds in question. It is a matter on which reasonable experts may reasonably differ.

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<sup>939</sup> The clearest guidance is that in section 2.4 of the SNH Guidance (Ref: MDZ/F19) which recommends that a default range of avoidance rates to be applied to the results of ERM and CRM modelling to generate a range of estimates of collision rates, and states, "*That recommendation is not implying any view on the appropriateness of any of these avoidance rates for any species: they should be used to underpin discussion of the level of avoidance most appropriate to expect in the light of the most up-to-date information.*"

<sup>940</sup> See, for example, §5.11-15 of Dr McCluskie's Updated PoE; ES Chapter 11 §147 (MDZ A31.11); 2020 ABP Mer 'Review of potential collision between tidal stream devices and marine animals' §5.2 (MDZ F1.52);

<sup>941</sup> The RSPB highlights, in particular, in this context, the reports in Cook *et al* (2014) of the range of avoidance rates utilised (although not always accepted by decision makers) in collision risk modelling for 35 consented or proposed offshore wind farms. Appendix 9 to Dr McCluskie's proof, internal page 26 (PDF p.242 at 282).

<sup>942</sup> Dr McCluskie in cross-examination on 3 February 2021

- (v) The adoption of an avoidance rate higher than 95% based on observations at a particular development <sup>943</sup> cannot simply be extrapolated to other tidal array developments as a matter of generality. As identified in the 2020 State of the Science Report at 3.6.2, research by Waggitt et al (2017) suggests that species habitat use of tidal-stream environments may vary greatly between development sites.<sup>944</sup> It is notable, in that regard, that the Y3 Environmental Monitoring Report for the Shetland Tidal Array<sup>945</sup> - relied on by Dr Grant in his rebuttal proof as an situation in which a 98% avoidance had been used in the HRA for a future phase - highlighted that the vantage surveys demonstrated a low presence of diving birds in Bluemull Sound, a presence lower still in the area immediately around the turbines, which results indicated that the likelihood of near-field encounters between diving birds, and risk of negative environmental effects was very low.

571. Dr Grant very fairly accepted during cross-examination that it was not possible to be "*certain*" that a higher avoidance rate would be established as appropriate - (although, in the interests of being fair to Dr Grant, he also drew a distinction between "*certainty*" and "*confidence*"). The RSPB, however, maintains that, for the reasons explained by Dr McCluskie in his evidence, it cannot confidently be assumed that a higher avoidance rate will be able to be adopted,<sup>946</sup> particularly in the earlier stages of the Project.<sup>947</sup>

572. In respect of monitoring, as Dr McCluskie sets out at para. 8.4 of his updated proof he - and the RSPB "*fully support the vital monitoring and research that is proposed, if achievable, as it would increase our understanding of how seabirds interact with, and are impacted by, tidal devices. The evidence that could be gathered, if this proposal was to go ahead would provide much needed clarity on how, and if, this technology can be deployed, increasing certainty for developers and investors whilst ensure that both nature and the environment is protected*".

573. The critical issue, however, is whether the monitoring proposed is "*achievable*". Monitoring is addressed at paras. 5.20-5.24 and paras. 8.16-32 of Dr McCluskie's updated proof and paras. 12-18 of Dr McCluskie's rebuttal proof. It was canvassed in considerable detail during oral evidence:<sup>948</sup> for example, Dr McCluskie gave a detailed account of the processes involved in tagging birds to obtain data from GPD /

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<sup>943</sup> Specifically, the Shetland Tidal Array – discussed at para. 4.3 of Dr Grant's rebuttal proof

<sup>944</sup> Appendix 34 to Dr McCluskie's proof, internal page 50 (PDF p.1149 at 1180)

<sup>945</sup> Appendix 25 to Dr McCluskie's proof, internal page 12 (PDF p.915 at 927).

<sup>946</sup> The RSPB highlights, in this regard the indicative levels of avoidance rates discussed in paras. 178 and 184 of Chapter 11 of the ES in the discussion of potential refinements to the CRM / ERM models that would allow demonstration that predicted collisions would be at a level that would not result in ecologically significant adverse effects on razorbill and guillemot for the 240MW and 40MW scenarios respectively.

<sup>947</sup> See Dr McCluskie's evidence, in two quotations above.

<sup>948</sup> For example, during his evidence in chief on 3 February, Dr McCluskie explained in detail the challenges associated with obtaining information through tagging, and likely limitations on the data which could be obtained, and the use of underwater video / sonar was explored in some detail during cross-examination on 4 February. It was also explored in evidence in chief and cross-examination with Dr Grant on 2 February 2021 and, briefly, with Mr Fortune on 3 February.

TDR tags, and the potential limitations<sup>949</sup> of the data obtainable from a sample set limited to a brief window within the breeding season.<sup>950</sup> The key debate, however, concerned the monitoring of near-field interactions / direct collisions. By way of summary of the RSPB's position in that regard:

- (i) Monitoring of near-field interactions will be critical to understanding, and being able to assess, interactions between diving birds and the tidal devices.<sup>951</sup> Any suggestion that this may not form part of the monitoring strategy at the first phase of deployment is therefore a matter of some concern.<sup>952</sup>
- (ii) There are considerable uncertainties as to the availability and/or effectiveness, of the technologies identified as being under consideration in the draft oEMMP – whether viewed in isolation or in combination.<sup>953</sup> Dr Grant fairly recognised in evidence in chief that this component of the proposed monitoring would *"get more into the realms of new technology, methodology and such like"*; that *"there are undoubtedly technical challenges here"*; that *"technology is to a degree unproven, at the moment"*; and *"there could be limitations on what is feasible to achieve with it"*. In fairness to Dr Grant, he also drew attention to its use at other sites, which he considered showed output of some use / some evidence of success *"albeit limited"*. The RSPB maintains, however, that based on the evidence before the inquiry, that there can be very little confidence, based on the current state of development and knowledge of those technologies and evidence as to their effectiveness (or otherwise), that they would provide effective monitoring for the impacts, and potential significant effects, of the Project on diving birds;
- (iii) Monitoring by underwater camera may not be possible due to poor underwater visibility and/or turbidity.<sup>954</sup> The highest that it can be put in respect of the application site is that it has not yet been established that those constraints do not apply here – indeed, there was, in fact, a suggestion that they did in earlier drafts of the oEMMP.<sup>955</sup>

574. The RSPB maintains, therefore, that there is considerable uncertainty as to whether the near-field monitoring which is so critical to understanding, and assessing, collision risk will be able to be brought forward in this location – at least, in the short term. Whilst the RSPB fully supports the proposal for monitoring, if

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<sup>949</sup> And implications for potential refinements of the inputs into the CRM and ERM models envisaged in the oEMMP.

<sup>950</sup> Based on the sampling discussed in para. 6.11 of Dr Grant's proof.

<sup>951</sup> This is also recognised in the 2020 State of the Science report at p.52 (Appendix 34 to Dr McCluskie's proof, PDF p.1149 at 1182)

<sup>952</sup> Dr McCluskie in evidence in chief

<sup>953</sup> See, for example, pages 29-30 of the ABPMer 2020 Review of potential collision between tidal stream devices and marine animals (MDZ/F15.2) and Section 3 of Hutchings et al (2020) "Review of underwater video data collected around operating tidal stream turbines" (Appendix 19 to Dr McCluskie's PoE, PDF 633 at pg 657) (referred to by Dr McCluskie during XIC) and Dr McCluskie's explanation in oral evidence as to the difficulties of trying to verify a sonar / hydroacoustic encounter through (for example) a vantage survey, particularly given the distances likely to be involved in this location.

<sup>954</sup> See also in this context p.52 of the ABPMer Review (2020) (Ref: MDZ/F15.2)

<sup>955</sup> See p.38 of version 7 of the draft oEMMP (Ref: Inquiry Doc – 063)

achievable, it considers that, at the very least, further work needs to be undertaken on the proposed potential monitoring methods as there is insufficient information and evidence on how these methods will be developed and applied. On the basis of the evidence currently before this inquiry, therefore, the RSPB submits that there is at least considerable uncertainty as to whether, and to what extent, the anticipated phases of the Project can realistically be expected to be deployed.

### Conclusion

575. The RSPB reiterates that it fully supports and recognises the need for more renewable energy generation as part of a range of measures to address climate change. It does not oppose the deployment of tidal devices *per se*. Nor does it oppose, in principle, a phased approach to a project – as was, for example, the case with the *Meygen* consent.<sup>956</sup> It recognises, and appreciates, that if empirical evidence is to be obtained to inform assessment of risk, that can only be obtained through actual deployment of devices and welcomes the evidence that would be obtained from monitoring and research proposed in respect of the Project, if that were achievable.
576. Its objection to the current Project may, however, be shortly stated. This Project is simply too big, too soon, at a time when both the technology and the understanding (and tools for assessing) impacts on diving birds are in their infancy, and the uncertainties around the availability and effectiveness of monitoring and mitigation measures simply too great.
577. Further, in light of the uncertainties around collision risk assessment, and the effectiveness (or otherwise) of the potential monitoring proposed, it is, in RSPB's submission, at least questionable whether – and to what extent – it can realistically be expected that the Project would be deployed beyond the indicative first phase, and up to the full capacity for which consent is sought.
578. The RSPB maintains, therefore, that it would have been more appropriate for a smaller scheme to have been brought forward in the first instance to allow the technology, monitoring and mitigation methods to be assessed more thoroughly, and their effectiveness reviewed before seeking consent for the deployment of up to 620 devices. It therefore maintains its objection to the proposed Order.

### **Maritime & Coastguard Agency (“MCA”)**<sup>957</sup>

579. The MCA's remit for offshore renewable energy development is to ensure that safety of navigation and a Search and Rescue service is preserved, as progress is made towards government targets for renewable energy. The MCA is content on this occasion that the Navigation Risk Assessment (“NRA”) was conducted in accordance with MCA published guidance. It is important to note that this refers to the process undertaken and does not necessarily guarantee acceptance of the NRA results. It is the risk scores and the conclusion that the risk will be tolerable that has been challenged by other stakeholders regarding the safety of navigation and safety of recreational users.

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<sup>956</sup> Ref: Inquiry Doc – 083

<sup>957</sup> These closing submissions are contained within Ref: Inquiry Doc – 149

580. The nature of this examination has meant that the consent Order made under the Transport and Works Act (TWA) and marine licence under the Marine and Coastal Access Act 2009 were not examined concurrently. As such, our requirements for post-consent conditions have not been discussed with either the Applicant or NRW. This puts the MCA at a disadvantage and the implication is that we are not fully satisfied at this stage that the site will have the necessary risk controls and management systems secured to ensure safe operation throughout the lifetime of the MDZ.
581. Assuming development consent will be granted, there will be a greater level of responsibility placed on NRW during both the site-wide marine licence application and array-specific marine licence applications, for ensuring the risks are acceptable. The MCA still has concerns regarding the safety of recreational users and expects the same stakeholder concerns will be raised during the forthcoming marine licence consultations. However, MCA is keen to discuss appropriate risk controls with the Applicant and relevant stakeholders for the site-wide marine licence and subsequent tidal array proposals, provided the Applicant is willing to continue these discussions. It must be recognised that any risk control proposed by MCA may not align with, or may not appear consistent with, those agreed within the Order. The features of the proposed test arrays and content of the array-specific NRAs will determine the most appropriate risk controls for the safety of navigation and recreational users.
582. Subject to the above, the MCA believes it may be possible to satisfy navigation stakeholder concerns and that the risks can be either acceptable or tolerable (if ALARP).

### **Trinity House**

583. Trinity House is a General Lighthouse Authority (“GLA”) responsible for lighthouses and marine aids to navigation around the coastline that would include the MDZ. Initially, Trinity House expressed concerns regarding the effect of the proposed works on the ability to navigate around South Stack lighthouse (Ref: OBJ026).
584. Subsequent comments raised concerns in relation to: possible restrictions on navigation within the MDZ due to the additional risk mitigation measures and uncertainty on which would be taken forward as part of the works; the need for a further NRA prior to deployment of each ‘site’ within the MDZ; and, the scope and wording of conditions (Ref: OBJ076). Standard navigation conditions agreed between Trinity House, the Marine Management Organisation and the MCA are appended to Ref: OBJ076. Trinity House has also provided its view on the width of the yellow banding that would be appropriate on the surface emergent devices (Ref: Inquiry Doc – 015).<sup>958</sup>
585. As a main party to the inquiry, Trinity House produced a Statement of Case, dated 17/09/2020 (Ref: MDZ/N13). It includes the following summary of the case, that Trinity House:

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<sup>958</sup> [Inspector’s note: NRW administers Marine Licensing for Welsh Government, and this includes the imposition of associated conditions. Regulatory responsibilities for the proposed works were the subject of an inquiry roundtable session and are dealt with in my conclusions].

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- (i) Considers that there is currently a lack of clarity regarding the interface between the draft Order and the Applicant's associated Marine Licence application. In particular, whether conditions relating to navigation would be included in the Marine Licence and if so, the terms of those conditions and how they would interact with Part 2 of the Order.
- (ii) Would like the requirement for further site and device specific navigational risk assessments drafted into Art. 21 of the draft Order.
- (iii) Would also like to see the scheme for safety of navigation incorporate all of the requirements of an aids to navigation plan, which are a standard feature of recent deemed marine licences in the DCO regime and, in Trinity House's experience, function well in practice;
- (iv) Has concerns about the proposed safety zones in Art. 43 of the draft Order and the absence of any exception to the offences in paragraph (1) for Trinity House exercising its functions as GLA;
- (v) Has further concerns regarding future access arrangements to South Stack Lighthouse. In particular, the alternative access arrangements discussed with the Applicant do not currently appear to be secured by the draft Order; and
- (vi) Has a number of further comments and suggestions regarding the current drafting of the draft Order. Specific attention is drawn to Trinity House's comments in relation to Art. 49 (Arbitration).

586. A Statement of Common Ground between the Applicant and Trinity House has been provided and is dated 02/11/2020 (Ref: MDZ/L9). It confirms that the matters which remain to be agreed between the two parties rely on conditions that NRW would consider when preparing any Marine Licence for the proposed works. While Trinity House contributed to the inquiry sessions, given the matters covered by the Statement of Common Ground and the positions recorded in relation to them, no closing submissions were made by Trinity House.

587. Trinity House withdrew its objection to the application prior to the vPIM in November 2020 (Ref: Withdrawal – 012), but attended and contributed to inquiry sessions on matters of relevance to its interests.

### **Royal Yachting Association**

588. As set out in the opening paragraphs of our Statement of Case:

*"The Royal Yachting Association actively supports renewable energy projects as we recognise that they are an essential element of our pathway to zero carbon. We do not object to projects lightly, and only where there are significant navigational safety concerns arising from the proposals, and those concerns are expressed by our local members and clubs."*

589. Our objection to this project was founded on four key issues:

- (i) The design options had not been finalised, making it impossible to assess the full impact of the project on recreational boating activity;

- (ii) The Navigation Risk Assessment (and its Addendum) and the Interactive Boundaries Assessment did not comply with MGN543;
- (iii) The Navigation Risk Assessment (and its Addendum) and Interactive Boundaries Assessment apparently relied exclusively on AIS and radar data to provide information about boating activity in the vicinity, which risked overlooking the significant proportion of recreational boats which do not carry AIS and offer a small radar silhouette; and
- (iv) The Environmental Statement did not consider all potential impacts of the project on recreational boating activity.

590. During the course of the inquiry, it has been clarified that the making of the order would not displace the statutory marine licensing process, in which the detail of the design options for the project would be considered, so our objection in this regard has fallen away.

591. Similarly, the MCA has since confirmed that, in its view, the Applicant had done all that was required of it under MGN543 so our objection in this regard has also fallen away.

592. In January 2021, during the hiatus in the inquiry, the Applicant provided us with evidence that a visual survey of vessel traffic had been carried out by the Applicant's contractor during August and September 2017. The importance of the visual survey was highlighted by the Applicant's contractor itself, which made the following observation about the vessels identified in its survey:

*"These targets were not broadcasting on AIS and were not able to be reliably tracked on radar for at least part of their transit, mainly due to their small size".*

593. It is not clear to us how the visual survey data was eventually incorporated into the Applicant's various vessel traffic assessments, since no reference is made to it anywhere. It is also unclear as to how the Applicant has distinguished local and national recreational craft to take account of local amenity use by craft not readily identified by AIS and Radar.

594. It is also not clear to us how the Applicant subsequently assessed the risks to recreational vessel traffic as being "As Low As Reasonably Practicable" because, as far as we are aware, the methodology and algorithm used by the Applicant for this assessment have not been reviewed for recreational craft by the MCA or peer-reviewed by anyone else within the context of this order application. Nevertheless, we do now acknowledge that a visual survey was carried out.

595. However, our fourth key issue remains a cause for concern, for two reasons.

596. Firstly, as set out in the MCA Statement of Case and the MCA/Applicant Statement of Common Ground (Ref: MDZ/L8), the MCA recommends that the views of recreational users should be taken into account and that the Applicant should reach agreement with the RYA and local users, particularly with regard to the navigation of the inshore passage by sailing vessels.

597. We expressed the view in our Statement of Case that the width of the inshore passage should be increased to between 1 to 2 nautical miles clear of overfalls and headlands. We maintain our view that such a modification to the MDZ is necessary to facilitate safe transit through the inshore passage by sailing vessels. The RYA is of

the view that this could be achieved through the use of submerged arrays within the current boundary of the MDZ.

598. Secondly, the Applicant's submitted Environmental Statement indicated that amenity issues would be dealt with within the Navigation Risk Assessment Addendum (Ref: MDZ/11), while contrastingly, the NRAA states that amenity issues are not investigated within its assessment. This contradiction suggests that the impact of the project on recreational boating amenity has not been formally assessed at all.
599. The implication is that loss of open water used for recreation (the pathway) has not been considered, along with any resulting loss of recreational opportunities to the receptor activities of training, general boating, racing and cruising, together with the related sailing clubs. The unconsidered impact being that the loss of previously available recreational open space reduces user participation and recreation opportunities for Anglesey. This impact would then have economic implications to the maritime recreation industry for the area due to loss of revenue (membership fees, equipment purchases, launch or mooring fees, etc.) or as a result of the boating community perceiving the MDZ and surrounds being unsafe to use and avoiding the area.
600. In the Marine Matters Round Table (Day 11, 01/02/2021) the Applicant asserted that the previous Navigation Risk Assessment ("NRA") had effectively been superseded by the NRA Addendum (Ref: MDZ/11) because the Morlais Demonstration Zone was an "amended scheme". Nevertheless, the Applicant has sought to rely on statements made by RYA officers and volunteers regarding the impact of the scheme on recreational boating amenity, despite the fact that these statements were made prior to the submission of the ES (Ref: MDZ/A25) in 2019 and the NRA and NRAA in 2020. Given the limited consultation for hazard identification within the NRAA for this amended scheme, it is the RYA's position that our objection (Ref: FEI-OBJ013), Statement of Case (Ref: MDZ/N2), Proof of Evidence (Ref: POE008) and Rebuttal (Ref: RPE001) supersede any contradictory statements made by RYA officers and volunteers prior to the amendment of the scheme (in 2020).
601. The RYA therefore maintains its position that the present layout of the MDZ, combined with the narrowness of the proposed inshore channel and the proximity of natural hazards (the overfalls) and choke points around South Stack and Penrhyn Mawr, will make what is an already hazardous area for recreational craft more dangerous.
602. The RYA also, however, maintains its position that its objection in this regard would fall away if the width of the inshore passage were to be increased to between 1 to 2 nautical miles clear of overfalls and headlands.

### **Snowdonia Canoe Club ("SCC") & Canoe Wales**

603. We are a group of volunteers representing Snowdonia Canoe Club, which is the largest of the canoe clubs local to Holyhead, and Canoe Wales which is the National Governing Body for Paddlesport in Wales. We are all sea kayakers but with no funding, no experience of Public Inquiries and with no access to legal representation

or advice. We would like to thank the Inspector and PINS for their patience and tolerance of our, at times, inexpert approach to the presentation of our case.

604. Within the corpus of documents we have submitted to the inquiry our case is laid out in our Statement of Case (Ref: MDZ/N12) with some additional detail provided in our response to the Statements of Case made by the Applicant and other main parties (Ref: MDZ/N21). Within the Inquiry sessions we made an opening statement (Ref: Inquiry Doc – 010) and presentations of the main points of our case in three sessions:

- Day 5, 10 December 2020 – Socio-economic matters – Ref: Inquiry Doc – 020
- Day 6, 11 December 2020 – Seascape
- Day 10, 18 December 2020 – Marine matters (navigation) – Ref: Inquiry Doc – 026 & Ref: Inquiry Doc – 027
- Day 11 – 1 Feb – Marine matters (continued) – Ref: Inquiry Doc – 094<sup>959</sup>

605. There are also various rebuttals and counter-rebuttals detailing exchanges between the Applicant and ourselves within the Inquiry documents.

606. The Applicant presents, for the first time, a proposal which would impose a sizable offshore renewable energy installation (“OREI”), close to the coast and within an area of high recreational use. Holyhead is an internationally recognised centre of excellence for sea kayaking focussed on the three tide races adjacent to the inshore boundary of the MDZ. This activity supports numerous local kayak guide and coaching businesses specialising in advanced level skills in addition to local hospitality businesses.

607. We summarise our case according to the severity of the consequences to kayaking activities and to demonstrate how these cascade to impact on the whole sector. However, for ease of reference the headings reflect the titles of the Roundtable sessions at which they were discussed.

#### Marine matters – navigation (Day 10 & 11)

608. This is the issue of most concern to kayakers as it impinges directly on safety of life as well as potentially interfering with the ability to navigate and use features such as races, overfalls and eddies.

#### *Risk to life*

609. Our Statement of Case was based on the incorrect assumption that it would be evident to anyone competent with marine navigation and safety that arrays of surface-breaking devices would be a potentially fatal hazard to drifting vessels and particularly to small craft such as kayaks. However, the Applicant indicated that kayakers in distress in the runout of the tide races, where capsizes are most likely to occur, would not enter the array and that there was no risk to life. In the Roundtable on Day 11 we presented our case in step-by-step detail (Ref: Inquiry Doc – 094) to illustrate the nature and severity of the risks posed to kayakers by the surface breaking devices across the whole of the MDZ area. The Applicant now accepts that kayakers will enter the MDZ but maintains that kayaking is already risky and the risk

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<sup>959</sup> Document number confirmed following closing submissions

of capsize and collision is already present and would not be increased by the MDZ. We refute these comments:

- (i) Sea kayaking is not a 'high risk' sport. Competent sea kayakers are well trained and equipped and generally make carefully considered, managed and manageable risks. Evidence for this is the low number of RNLI callouts to groups of kayakers compared to the number of kayakers in the area. Further evidence comes from accounts of real incidents that have been successfully managed with the casualty secured and extracted by the peer group with the assistance of the RNLI.
- (ii) The imposition of surface-breaking devices represents significant new hazards to an area of sea devoid of collision risks within which competent groups can safely manage rescue scenarios in present conditions.
- (iii) We have shown through exposition of a detailed causal chain as used in navigational risk assessment how an incident involving the most common paddler injury would play out if the rescue party were carried into collision with one of the proposed surface devices. A fatality is a reasonably foreseeable outcome of such an incident.
- (iv) The only mitigation proposed by the Applicant for those in distress on the sea was to suggest that the devices themselves could be provided with a means for a swimmer to board them so they can serve as refuges. We have explained that this is neither practical nor useful and may even attract people into danger.

#### *Risk assessment within NRA*

610. We have concerns that the procedures used by the Applicant's consultants have obscured the risk to life, which they themselves record as 1 fatality in 10 to 100 years, within a low overall risk score. The Applicant has used this overall result to erroneously declare that the project does not present any risk to life. We accept that investigation into the mechanism of the risk assessment is not a matter for the Order or this Inquiry. We therefore refer these matters to the MCA and note that until they are resolved to our satisfaction we do not accept the conclusions of the navigational risk assessment insofar as they pertain to sea kayaks.

#### *Quality of survey data* <sup>960</sup>

611. MGN543 provides some guidance regarding the collection of data to inform the assessment of impacts on navigation. None of the prescribed methods are suitable for recording the numbers and routes of kayaks. To fill this gap the Applicant has prepared a map purporting to show kayak tracks downloaded from 'Strava' (a public online record of GPS tracks) for consideration. This map is a reasonable representation of routine kayak passages in the area but there are a number of caveats which mean this is an unreliable source of information on kayaking. We conclude that further work is needed to determine the numbers of kayaks and the area of sea used for different activities. These data should then be used in a comprehensive navigational risk assessment for recreational vessels across the MDZ.

#### *Sea room*

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<sup>960</sup> With reference to slide 2 of Ref: Inquiry Doc – 094

612. We consulted with local kayak guides regarding the sea room they require for safe working. One responded saying the tracks provided by the Applicant corresponded well with his 'working area' which has been risk assessed for the training he provides for his clients. Each guide makes their own assessment based on the nature of the activity they provide and the competency of their clients. Notwithstanding our view of the use of 'Strava' data we took the Applicants' representation of 'kayak tracks' and overlaid this over the worst-case scenario for surface devices. This exercise indicated kayaks passing 200m from proposed surface breaking devices at the nearest approach. In our judgement as experienced kayakers, taking account of the effects of wind, our limited range of sight and the lack of confidence in the hydrodynamic model predictions, this is not nearly enough. However, we refer the matter to MCA and await their determination of a safe clearance between OREIs and kayak routes and working areas.

*Hydrodynamic modelling* <sup>961</sup>

613. Of particular concern to kayakers is the area inshore of the MDZ where we make use of small-scale hydrodynamic features. Examination of hydrodynamic model information provided by the Applicant suggested the 2-D model used was inappropriate for assessment of surface behaviour, or effects outside the MDZ. It also misrepresented known features especially in the area of the Penrhyn Mawr tide race. Without access to appropriate modelling we continue to have grave concerns about loss of amenity (continued enjoyment of current use) and safety in the area between the MDZ and coast. Any loss of amenity will likely have a negative impact on businesses using the area.

*Kayak navigation in the 8m UKC zone* <sup>962</sup>

614. The Applicant has proposed that small vessels including kayaks can pass unhindered through the 8m UKC zone. However, they were unable to furnish us with supporting evidence when this was requested. Our own searches have not been able to reveal any reported studies on this matter for single turbines or arrays. Consideration of the physics of moving water suggest there should be some changes and that arrays may be expected to act as a porous reef which could form new features, for example overfalls which could have consequences for passage within the 8m UKC zone by kayaks and other small craft. Further studies, most likely involving 3-D modelling, are required to demonstrate that small vessels can pass safely and without hinderance over arrays of sub-surface tide turbines.

Socio-economic impacts (Day 5)

615. Safety as expressed in trip risk assessments, unimpeded access to the area and potential changes to hydrodynamic features on the sea surface close to the coast are the main concerns of the sea kayak community. If any of these are compromised in a negative manner then in the assessment of the guides and their clients there is likely be a reduction in amenity and use of the area with consequent loss in income for guiding businesses and the hospitality sector serving visiting kayakers. It should be noted that we acknowledge the principle of co-existence and accept that if the proposal is to go ahead then negative impacts are inevitable. Our request was that foreseeable negative impacts should be mitigated insofar as possible through

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<sup>961</sup> With reference to slides 14 & 8 of Inquiry Doc – 094

<sup>962</sup> With reference to slides 4, 5 & 6 of Inquiry Doc – 094

consultation and careful planning with advance notice on any major works with a mechanism for fair compensation where negative impacts are inevitable.

616. These issues were addressed in the Applicants' supplementary socio-economic and tourism reports (Refs: MDZ/H1 and MDZ/H4). In our assessment the recommendations made in these reports do not meet accepted standards for socio-economic assessment, contain no provision for consultation with local stakeholders and proposed opaque procedures for determining loss of income and compensation. The Isle of Anglesey Country Council have requested an amendment to proposed planning condition 17 (Ref: Inquiry Doc – 098) to secure consultation with a named list of local stakeholders. If the IoACC proposal is accepted by the Applicant and sea kayaking businesses are included, then we would be content that our concerns could be properly represented and addressed as they arise. Without this, our objection on the grounds the proposal will result in business-threatening impacts on income remains unchanged.

#### Seascape (Day 6)

617. Our representation on seascape revolved around three issues, as set out below.

##### 1) Insufficient SILVA seascape assessment points

618. There is an apparent bias in the seascape assessment towards land-based receptors as the SILVA includes no seascape assessment points within 2.4 km of the MDZ.

619. The Applicant responded by pointed out their consultants had agreed the location of the seascape assessment points with NRW Advisory. Nevertheless, the Applicant acknowledged that the highest visual impacts are to those on board recreational vessels within 2 km of the surface-breaking elements of the MDZ. However, this considerable loss of amenity is not reflected in any mitigation. We have suggested this could be rectified by extending the definition of Receptors to include people on recreational vessels in Schedule 2 of the s.106 Agreement (Ref: Inquiry Doc – 079) and to facilitate some suitable form of mitigation by inserting the words "and sea" into clause 3.1.4 so it reads "improving public access to land and sea".

620. At the Roundtable we made the further point that the impact of surface devices would not just be degradation of visual amenity; kayaks on normal passage could pass as close as 200 m from surface devices, from this distance they would be perceived by many kayakers as an intimidating and overbearing hazard.

##### 2) The appropriateness of the visual markings for surface installations

621. These have been agreed between the Applicant and Trinity House, but we have concerns regarding their appropriateness for passing kayakers.

622. Trinity House: pointed out that IALA guidelines include all passing vessels regardless of size; and, invited further consultation with kayak representatives on what would be appropriate hazard markings on surface breaking elements of the MDZ. Consequently, appropriate device marking for passing kayakers are yet to be determined.

##### 3) Onshore cable tails at Henborth beach

623. These cable tails would cause visual intrusion through their surface mounting on a beach that is as a popular lunch stop for kayakers.
624. We are also concerned that structures crossing the foreshore may impede safe landing on the beach. The beach is used by kayakers for emergency egress.
625. It seems that NRW Advisory were not previously aware that the beach is in regular use from the sea. Since the Roundtable we note that a new Clause 5 has been added to the Proposed Conditions for Deemed Planning Permission (Ref: Inquiry Doc - 067) to require approval from IoACC for any deviation from the preferred option of Horizontal Directional Drilling (HDD). we are content that these provisions should safeguard the amenity of the beach and request that kayaking representatives are consulted by IoACC in the event HDD is not feasible.

#### Closing position of SCC and Canoe Wales

626. We reiterate our Opening statement that we are not opposed to the development of tidal power in the seas around Anglesey. However firstly, this must be safe, which we take to mean the risk to life of navigating in the area should not be increased. Secondly, and in a spirit of co-existence, efforts should be made to allow continued enjoyment of the area for established uses (and users) and to mitigate or compensate where this has to be curtailed. We continue to object to the making of the Order in its present form (dated 25 January 2021) for the Morlais Demonstration Zone on the grounds it does not secure these basic conditions.

#### **Mr & Mrs Roberts**

627. Concerns raised in our original objection letter remain as we consider the developer (Menter Môn) not to have addressed the fundamental issues raised.
628. In relation to our concern around the consultation process, and specifically the lack of openness in sharing with the public true accurate representations of the visual impact on the seascape around South Stack, we consider Menter Môn's follow up document to the Public Speaking Session (Ref: Inquiry Doc – 013) only serves to reinforce the point made. None of the images Menter Môn has shared in the inquiry enable the public to see an accurate visual representation of the proposed development at sea (unlike the 3d georeferenced images we have provided to the inquiry and Menter Môn).<sup>963</sup>
629. We believe this was very deliberate as Menter Môn did not wish to raise public concern.
630. We heard during the inquiry NRW explain their rationale as to why the floating devices were pushed south and would not be permitted in the northern zone. We consider this still to make no sense and would question the scoring mechanism and weighting used by NRW when assessing the impact on businesses and users of the area.
631. It's also very disappointing to hear Menter Môn reject proposals to protect the views around the lighthouse itself by accepting a proposed triangular exclusion zone.

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<sup>963</sup> See Ref: MDZ/N10

This additional exclusion zone would not negate the visual impact on our business but it would help and if permission is to be granted we would urge the Inspector to make this additional exclusion zone part of the conditions.

632. Menter Môn arguing that they have already made concessions is nonsense as the only concessions they have made have been forced by NRW or other regulatory bodies, Menter Môn have never been willing to listen to our concerns about the visual impact and adjust their project to mitigate them. The Menter Môn approach and attitude toward the visual impact on the area is very clearly in direct conflict with the Minesto visual impact assessment that focuses on the very same seascape. See extract from Minesto's visual impact assessment, how can we have two assessments that draw different conclusions ...?

*"The sea is an important backdrop in the views of the lighthouse contributing to its aesthetic value"*

*"Views of the sea and of the tower as a picturesque feature with the sea as a backdrop contribute to the towers aesthetic and historic value"*

633. Concerns over the landfall cables running up the side of the cliff also remain unaddressed as its very clear that Menter Môn do not even have a specific design approved by engineers for this option and therefore Menter Môn sharing images of what they think it might look like are pure speculation. The cliff is fully visible from our business and the coastal path and development like this should simply not be permitted. HDD should be the only option.
634. Like the RSPB and Marine mammal societies we remain concerned about the impact on the unique ecology and wildlife, there are much lower risk green energy projects that could be considered. Wind energy is far more efficient and lower risk to wildlife, just 32 wind turbines could produce the same amount of power as the proposed 620 tidal devices.
635. We are very disappointed in our local council who during the visual impact round table session spoke just a few sentences all day, and only to highlight that they did share a significant concern about the visual impact but were willing to turn a blind eye to this concern if the developer put money into other community projects. This is a disgrace and is totally against their own reports on the importance of protecting our wild spaces.
636. Information and links already shared in our original objection letter support this argument.<sup>964</sup>
637. We remain concerned about the roadworks and the impact this will have on repeat bookings once regular guests start to see and feel the impact of the development on what was their quiet wild retreat.
638. The long term impact of the development on our business and the value of our business and properties is also a big concern and with no current re-course or

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<sup>964</sup> [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010007/EN010007-002423-Isle%20of%20Anglesey%20County%20Council%20-%20Local%20Impact%20Report%20Annex%205C%20-%20Anglesey%20Tourism%20Topic%20Report%20%20by%20Swansea%20University%20\(November%202018\).pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010007/EN010007-002423-Isle%20of%20Anglesey%20County%20Council%20-%20Local%20Impact%20Report%20Annex%205C%20-%20Anglesey%20Tourism%20Topic%20Report%20%20by%20Swansea%20University%20(November%202018).pdf)

<https://www.gwynedd.llyw.cymru/en/Council/Documents--Council/Strategies-and-policies/Environment-and-planning/Planning-policy/Inspectors-Report-2017/1.-Anglesey-and-Gwynedd-JLDP-Inspectors-Report.pdf>

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compensation offered all of this risk is placed on individual property and business owners like us who have spent hundreds of thousands of pounds building successful businesses that attract significant numbers of tourists to the area every year. If the project is to be approved there should be compensation for impacted businesses and the developer should be thinking about how they could support local impacted businesses with innovative ideas like free or cheap green energy from the development that businesses could try and use in their marketing.

639. To conclude we remain firmly opposed as we believe the project is too high risk, we believe that there are more efficient and lower risk green energy projects that could be considered by Welsh Assembly Ministers that would make a much faster contribution to our climate crisis.

### **Mr & Mrs Llewellyn**

640. We have been actively involved in the virtual public inquiry and have been a party to the roundtable sessions and public speaking presentations. Our closing statement is an informed response to the Applicant's mitigation in respect of 'NDF Policies on renewable energy projects' i.e. policies within *Future Wales – The National Plan 2040* ("NDF").

641. We have presented information to the inquiry in respect of the proximity of the Morlais Project to our family residence and have submitted written objections (dated Oct 2019 and Sept 2020) in respect of the Project's unacceptable potential adverse effects on biodiversity, its transgression into designated areas of special conservation & scientific interest and its significant intrusion into an Area of Outstanding Natural Beauty (in relation to potential effects on visual landscape and seascapes).

642. It is clear that the Morlais Project is well intentioned and that the theme of 'renewable energy sources development' is in line with NDF strategy however, taking the NDF as an index document it quickly becomes evident that the Morlais Project is a 'large-scale renewable energy project' which comprises very large and visually prominent industrial equipment both on-shore and off-shore (1000m) further; it is located outside of a Priority Area (as defined in the NDF) and inside a well-established AONB. The project therefore contravenes NDF Policy 11, 12 and 13 and taken in the context of the Welsh Government traffic light approach puts the Morlais Project (as currently planned) into the RED section which states that such a project is not appropriate to be located in an Area of Natural Beauty or National Parks. Indeed, the actual ongoing relevance of this application should be brought into question in light of the significant progress that has been made in 'wind -solar renewables' against Welsh Government targets weighed against the high level of objections and negative public sentiment to the application.

643. Of course the Applicant is aware of the policy definitions/conditions and has set about mitigation to accommodate. Indeed, if the Project were fully sub-surface (on-shore and off-shore) as originally presented to many residents in this geographical area, then the mitigation work that the Applicant has conducted would be appropriate and many of the significant objections and public petition would never have been made or would have fallen away.

644. Our objections (dated Oct 2019 and Sept 2020) still stand and have now also been put into the context of Policy 11 (by reference to Policy 13) and in respect of the Application and the Applicant's mitigation:

1. Landscape, Seascape and Visual Impacts, AONB Setting and Visual Dominance:

- a. The Applicant had contracted an independent landscape architecture company (SLR Consulting Ltd) to create photomontages (Seascape and Landscape Visual Impact Assessment documents) in an attempt to mitigate against '*unacceptable adverse visual effects on*' the AONB. These will no doubt be presented to the Welsh Ministers however, as a resident of the coastal shoreline of South Stack it is very much still our position that these images are simply not credible and/or representative of the *unacceptable and adverse effects* that the below outlined highly *visually dominate* industrial equipment will have in and on the AONB:
  - i. Surface Penetrating Tidal Devices: Potentially 120 (75m long x 3.5m high) surface mounted tidal energy devices floating on the sea starting at 1000m from the coast. The near shore devices would be (without question) a highly visually dominant aspect of the seascape when viewed from the Anglesey Coastal Path and South Stack RSPB Reserve (180,000 tourists/year visit the reserve) and/or could be viewed from cruise ships/ferries entering and leaving Holyhead port. (SLR and the Applicant presented these images to residents at a face-to-face meeting (in the presence of Alberts Owens – Labour MP) and were told at the time that the images were simply not credible or representative.
  - ii. Cable Routing Option B: 9 x 350mm diameter electrical cables secured to and routed down a visually prominent SSSI protected cliff edge, then routed across a visually prominent intertidal area using rock bags and/or concrete mattress structures. The cliff edge cables and intertidal rock bags and concrete mattresses would be without question a highly visually dominant aspect of the AONB seascape and landscape when viewed from the Anglesey Coastal Path and also highly visible from a council-maintained path and viewing area which is enjoyed by 1000's of visitors/tourists each year. (Cabling would be approximately 50m from the viewing area).
  - iii. Put in combination, the near shore surface penetrating devices and the nine cables/rock bags and concrete mattresses would be a continuing visually dominant aspect of the AONB landscape and seascape from the Rifle Range, along the Anglesey Coastal Path and connecting council paths and viewing points, to the South Stack Reserve. This without doubt will have significant *unacceptable and adverse effects on and within the AONB and its seascapes and landscapes*.

2. Electromagnetic Disturbance:

- a. Nine landfall cables (Option A or B) carrying 240MW of electricity can create significant EMF [Inspector's Note: understood to be "electromotive force"] disturbance resulting in personal/residential social, economic

(satellite broadband for business continuance and Wi-fi for security systems) and negative health impacts (childhood leukaemia):

- i. Option A and Option B cables will come within 35m of our property (the beach and the house) and generate significant electromagnetic disturbance. The Inspector instructed the Applicant in respect of this issue and a short report, in memo format, was created by Black and Veatch (Ref: Inquiry Doc - 053). This was welcome and we had requested to be statutory consultees in respect of Option A (HDD) section 5 [Inspector's Note: assumed to be proposed 'condition' 5] of the Morlais proposed planning conditions document (Ref: Inquiry Doc – 067). In the event of HDD failure then this would precipitate option B and the potential for EMF surveys. The Applicant has only committed 'to liaise with us in this matter' even though we have requested to be 'statuary consultees' due to the proximity of the works/cabling. As there are significant unacceptable adverse effects associated with electromagnetic disturbance, (significant concern of Policy 11) we would have expected the Applicant to be more responsive/committed. This would have allowed our objection to fall away under the knowledge that we would have to be consulted. We do appreciate that there would be further safety assessments/notifications if the application were to be consented, but we have significant concern that that process would not afford us the required visibility and notifications of this process. A case in point being the due process of the issuance of Ref: Inquiry Doc - 078. Section 11 [of Ref: Inquiry Doc – 078] states the methods of notification such that members of the public could object. We live within 35m of the works proposed yet were not notified as a 'third party' and have not seen or been made aware of any of the pre-approval notifications. Being granted statutory consultant status for option A and B would accommodate this requirement.

645. In summary, we ask the Inspector to reject this application as submitted. It is an application made for the 'right reasons but the wrong location'. Public sentiment is significantly against this project, evidenced by a 'STOP' petition started in mid-October 2020 and signed by over 11,500 concerned members of the public (see Figure 1 of Ref: Inquiry Doc – 145).

646. From the Applicant's expert testimony we are aware that the full 240MW of renewable electricity could be delivered from 'sub surface devices only' and that the HDD option at landfall is technically feasible allowing for sub-surface landfall. If both points were made conditions of approval, then it is our belief that this application and its mitigation strategies would meet the 'other renewable energy policies of the NDF' and our objections would be retracted.

### **Orthios Eco Parks (Anglesey) Limited and Orthios Power (Anglesey) Limited ("Orthios")**

647. When these submissions refer to plot numbers, they do so by reference to the plot numbers and areas as Menter Môn proposes that they should be modified, as shown on Ref: Inquiry Doc - 066, unless the contrary is stated.

648. These closing submissions are made on behalf of Orthios Eco Parks (Anglesey) Limited and Orthios Power (Anglesey) Limited. For the purpose of these submissions, it will be unnecessary to distinguish between the two companies and the objectors will be referred to simply as “Orthios”.
649. Orthios has no objection to the principle of the Demonstration Zone. Indeed, the project is supported. However, Orthios have concerns about the way the Menter Môn has gone about seeking to justify the interference with Orthios’ land ownership to facilitate the connection of the scheme to the National Grid.
650. It has been a large part of Menter Môn’s case, as put forward by Mr Billcliff and Mr Maurici QC, to seek to blame Orthios for the lack of agreement of terms which would have allowed the objections to be resolved. Menter Môn refers obliquely to the without prejudice discussions that have been had with the implicit, but clear, implication, that if only the Inspector and Welsh Ministers could see the content of the documents relating to those discussions, that it would easily be seen that Menter Môn was not to blame for the current impasse. That point should be ignored, for 3 linked reasons:
- a. Orthios do not accept it (indeed, they contend the opposite is the case); but
  - b. Equally, Orthios cannot put their side of the story whilst preserving the confidentiality of the without prejudice discussions; and
  - c. In any event, however it has occurred, the objections are presently maintained and need to be considered on their merits based on the evidence before the inquiry.
651. There has also been a regrettable tendency on the part of Menter Môn to suggest that Orthios has delivered nothing on its own site, as if to suggest that it was of reduced concern that Orthios could be compulsorily deprived of its property. Again, that point is disputed, but the dispute can be resolved because it is clear, as will be shown below, that Menter Môn have challenged Orthios’ progress in a far from satisfactory and fair way. Mr Billcliff even stooped to playing the player rather than the ball with incorrect and irrelevant suggestions that Orthios wished to house refugees on the site. Such an assertion can have served no legitimate or useful purpose. Menter Môn also seeks to put Orthios “to proof” of certain matters as though this was formal court litigation. It is not.
652. Even had the assertions about Orthios’ delivery and progress so far been correct, they would not have helped Menter Môn, because a similar point can be made about Menter Môn itself. It has no track record of delivering anything remotely similar to the scheme here. If Menter Môn pursues its point about Orthios, then the logical consequence is that its ability to deliver its own scheme must be in doubt. It is a point that takes Menter Môn nowhere.

*The general approach to assessing Menter Môn’s case and Orthios’ objections*

653. Menter Môn has pursued its case against Orthios in a way that conflicts with the proper approach to assessing proposals for compulsory acquisition. Orthios say that for three reasons.
654. First, the way that Menter Môn’s case has been pursued implies that Orthios has to show good reason for keeping its own land. That is not so, as Mr Billcliff readily

conceded in cross-examination. He correctly accepted all of the following propositions:

- a. It is for Menter Môn to show that it has a compelling case in the public interest for compulsory acquisition;
- b. That is so as regards any proposed compulsory purchase as well as the specific plots and areas proposed to be acquired;
- c. The burden on Menter Môn exists whether or not the landowner has specific proposals for its own land;
- d. It is not for Orthios to justify keeping its own land;
- e. It is not for Orthios to disprove Menter Môn's case on the means of grid connection;
- f. It is not for Orthios to demonstrate that alternative means of connection exist, but for Menter Môn to justify its case for acquisition;
- g. It is for Menter Môn to justify its case for the permanent and temporary acquisition of rights to Orthios' land; and
- h. Menter Môn's proposals ought to interfere or conflict with Orthios' rights in its own land and its proposals to the minimum extent necessary to secure Menter Môn's scheme.

655. It is also immaterial what proportion of Orthios' landholding is comprised within the Order Lands. The tests for acquisition are the same whatever the proportion.

656. Second, Menter Môn relies upon the need for flexibility in seeking to justify the extent of land acquisition. Orthios does not disagree that *some* degree of flexibility can be sought when seeking to justify the extent of the proposed land acquisition. However, the need for flexibility cannot be used as an excuse for a failure to demonstrate a clear justification for the extent of the land which it is proposed to acquire. That has happened here, as is set out below. Nor can Menter Môn's willingness to offer back land which is not required justify a failure properly to make its case for acquisition in the first place. Menter Môn has also resorted to references to flexibility when challenged about the proposals themselves, such as the debate over prescribing parameters for battery storage. Flexibility might be permissible when deciding how a clearly identified scheme can be executed. It is not permissible to use an alleged need for flexibility to avoid having to identify the specific project in the first place. A person's<sup>965</sup> entitlement to the reasonable enjoyment of their land is an important basic human right which is given qualified protection such that flexibility has to be clearly justified. It is wholly inappropriate for Menter Môn to indicate its plans with such a level of generality, having regard to the tests to justify interference with their land, which must not be confused with the parameters that are justifiable in the determination of a planning application.

657. Third, it is not appropriate for Menter Môn to seek to justify over-acquisition of land as a result of its own choices to limit capital spending on site investigations. This point will be returned to below.

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<sup>965</sup> Which means any legal person, not just an individual, and so includes companies.

The Orthios' site

658. The Orthios site was formerly an aluminium smelting business and one of the largest consumers of electricity in the country. To provide it with the necessarily massive amounts of energy it required, it was served by two sets of 132kV cables direct from Wylfa power station. They terminated within a switchyard which is, to Orthios' knowledge, unique in being a privately owned 132kV switchyard connected to the National Grid. So unusual, in fact, that National Grid seem to have believed that they owned it in the past,<sup>966</sup> which they never did.
659. Orthios acquired the site in 2015 after it had been used for aluminium smelting operations for over 30 years. Orthios has undertaken an extensive programme of testing for contamination and remediating discovered contamination, which has been monitored on an ongoing basis, and is awaiting final regulatory approval – a fact ignored by Menter Môn, which seeks to suggest in its evidence that the question of contamination on the Order Lands is an unknown, justifying, they contend, the flexibility inherent in the Order. In fact, the Orthios site has been comprehensively examined for contamination: see Mr LeVasseur's supplementary proof at 3.7.3.
660. Orthios have also demolished redundant buildings and stripped out others ready for their re-use.
661. Orthios' proposals for the site can best be related to the plan in Appendix P1.2.1 to the main evidence of Mr LeVasseur ("the proposals plan").<sup>967</sup>
662. The areas marked 1 and 2 on the proposals plan are extant buildings whose former use would have fallen within Use Class B2. They are earmarked for use to develop a business producing chemicals and oil from waste plastics, similarly within Use Class B2 and so no planning permission for the use is required. Orthios has secured investment of £26m for those operations. The process would also create gas, which would be used to create electricity to be exported to the National Grid.
663. Buildings 1 and 2 on the proposals plan would contain 4 units for processing plastics. The very large former smelting buildings in area 3 on the proposals plan would accommodate a minimum of a further 5 units. Work on the first unit is under way and can be seen on site.
664. Area 4 on the proposals plan would be used for product storage and distribution. It is presently a cleared site: see the aerial photograph at Appendix P1.2.4 to Mr LeVasseur's main evidence (Ref: POE005).
665. The area marked "5" on the proposals plan is the red line boundary of the Renewal Energy Plant which was given consent under section 36 of the Electricity Act 1990 and deemed planning permission on 4th April 2014: see Appendix P1.2.5 to Mr LeVasseur's main evidence. The consent and permission were later varied: see Appendix P1.2.6 to Mr LeVasseur's main evidence (Ref: POE005).
666. Condition 10 of the deemed planning permission was a Grampian condition preventing the commencement of the development unless and until a scheme dealing with various matters had been submitted to and approved by Anglesey

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<sup>966</sup> National Grid email of 19th October 2020 at Appendix 3.2.2 to Tim Jesson's further evidence Ref: RPE014 (the front cover / page of which contains the reference "OBJ040-P3.1").

<sup>967</sup> Appendix P1.2.1 of Ref: POE005

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Council. Among other topics, that condition required details of the siting, design, external appearance, dimensions and floor levels of all new or modified buildings or structures which were part of the development.

667. An application to discharge that requirement, and the rest of the requirements of condition 10 and of two other conditions was submitted to the Council in an application dated 29th April 2016.<sup>968</sup> The submission included the following drawings:
- a. A plan showing the overall proposed layout for the site: Dwg 4140/1A(200) 01 Rev E;<sup>969</sup>
  - b. A series of plans showing the detailed layout proposed for the site<sup>970</sup> and a key to how those plans relate to each other;<sup>971</sup> and
  - c. A design statement which explained the rationale for the site layout.<sup>972</sup>
668. Drawings 4140/1 A(200)08 Rev D <sup>973</sup> and 4140/1 A(200)09 Rev C <sup>974</sup> showed the southern part of the site with the north-east boundary of Order Plots 49 and 50 lying next to the south-western side of the circulatory road around the ash collection facilities, hydraulic pump building and compressor building shown on those plans. Plot 50 is shown as a contractor's yard and most of Plot 49 is within that proposed contractor's yard, with a small part of Plot 49 within the extant switchyard, which is outside of the red edge of the Renewable Energy Plant ("REP") consent.
669. Those details were approved: see the Council's notice of discharge at ID041. The layout of the REP was therefore fixed.
670. All other conditions precedent were discharged and the REP consent has been lawfully implemented and is legally extant: see the Lawful Development Certificate 19C1160M/LUC issued by the Council.<sup>975</sup>
671. It is accepted that the consent will not be implemented in its approved form given market and policy changes that have occurred since it was issued. However, Orthios have plans to seek new consents for a varied scheme, following the same general layout. It is accepted that they are at an early stage, so far as securing permissions and consents is concerned, but Orthios' intention is to adhere to the same general layout, given that it has been found to be acceptable in the past. Heads of Terms with an overseas Funder/Developer have been drawn up. The letter from Oak at Appendix P4.2.5 to Mr LeVasseur's evidence gives further detail on the status of the project. The new proposals would incorporate built form which would be lower in height than those consented. Menter Môn are unable to offer any evidence that begins to show that there would be any serious planning objections to such a proposal.

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<sup>968</sup> Ref: Inquiry Doc – 028

<sup>969</sup> Ref: Inquiry Doc – 031

<sup>970</sup> Refs: Inquiry Doc – 032 to Inquiry Doc – 038

<sup>971</sup> Ref: Inquiry Doc – 039

<sup>972</sup> Ref: Inquiry Doc – 040

<sup>973</sup> Ref: Inquiry Doc – 036

<sup>974</sup> Ref: Inquiry Doc – 037

<sup>975</sup> Appendix P1.2.7 of Ref: POE005

672. If there were to be modifications to the layout, they might be to accommodate commercial battery storage of up to 100MW on plot 49/50 in conjunction with the proposed Energy Centre, given its location close to the 132kV switchyard. Such battery storage would also be of importance for the planned Data Centre that Orthios is currently discussing with third parties.
673. Area “6” on the proposals plan is the area previously reserved for aquaculture and hydroponics.
674. The area marked “7” on the Proposals Plan has been the subject of a Lawful Development Certificate by Anglesey Council for the processing of refuse derived fuel. Some material extracted would be used as biomass, polymers could be used in the plastics to oil operation and other recyclables would be processed back into the industry. Orthios hope to start work on that proposal by July 2021. That element of the business creates 21 jobs. Funding for the proposal has been agreed in principle: see Appendix P4.2.8 to Mr LeVasseur’s supplementary proof.
675. Area “8” on the proposals plan has been used for the assembly of multiple units of railway rolling stock and is proposed to be further used as rail connection for the activities on site. It would also be used to accommodate large amounts of feedstock to supply the raw materials to various of the activities on site.
676. Area 9 would be used for waste handling and processing.
677. Overall, Orthios has made real progress on delivering its aspirations on the site. It has secured investment for many aspects of its proposals and its evidence shows it has secured the confidence and support of investors. Physical works have been carried out. Orthios has spent or secured funding for a total of £74.6m of development thus far.<sup>976</sup> Orthios has contributed over £12m to the local economy through its activities to date.<sup>977</sup> Menter Môn challenged, in great detail, Orthios’ proposals and whilst it drew out the various consents that some of its activities have still to secure, it fell very far short of showing that “*Orthios’ track record on delivery of its plans to date is non-existent*” as Mr Billcliff contends.<sup>978</sup> But, as he admitted, he has not been on the Orthios part of the Order Lands for 2 years, has only been driven once around the wider site at the same time as his last visit and did not ask Orthios about their plans when preparing his evidence. His claims are seemingly based on researching planning documents, on talking to Anglesey Council and on what he could see from a bridge to the south of the site. That is not an adequate basis for making such disparaging and plainly erroneous claims.

*Orthios’ Need for the switchyard.*

678. Orthios’ current operations and future proposals will require continued control over the existing switchyard. Orthios will require new grid connections for the importation and export of electricity. When Mr Billcliff was asked in cross-examination if he accepted that was the case, he answered “absolutely”. Whereas the prior use of the National Grid connection was purely for energy importation, Orthios proposes activities which will require the importation and exportation of energy from and to the National Grid. Orthios has secured funding for the necessary

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<sup>976</sup> Mr LeVasseur’s XX.

<sup>977</sup> Para. 6.3.5 of Mr LeVasseur’s proof (Ref: POE005)

<sup>978</sup> Mr Billcliff’s rebuttal at para. 4.8

redesign of the switchyard <sup>979</sup> and National Grid have assembled a team to help Orthios with the required changes.<sup>980</sup> Orthios have secured agreements with National Grid to secure both grid connections as generator and as consumer of electricity. Both of them include commitments by National Grid to provide those connections by dates earlier than the connection agreement which Menter Môn has secured with National Grid.

679. As will be explained below, Mr Billcliff's concession that Orthios will require a grid connection is a crucial one.

*The Grid Connection proposed by Menter Môn*

680. Whilst the full detail of the dealings between the parties will not be possible or of assistance for the reasons given in the fourth paragraph of these closing submissions, some rehearsal of the details of the history of the matter will illuminate Orthios' contention that Menter Môn has no clear proposals for how to secure the grid connection.

681. In January 2019 Menter Môn discussed a proposal for a 'tennis court' sized area of land within the existing switchyard, as shown on the plan marked "Stage 1" in Mr LeVasseur's main appendices.<sup>981</sup> There was no proposal for accompanying equipment at that stage and Menter Môn provided no technical justification for what they were proposing.

682. Menter Môn then moved to suggesting locating the substation outside the existing switchyard in the location on what is now plot 49 shown as 'Stage 2' in the same Appendix. Again, there was no technical justification to explain the proposal at that stage, other than a reference to a need to provide power factor control, meaning that the site area requirement had increased: see the second substantive paragraph of Ed Bailey's email of 16 May 2019 in that Appendix.

683. That proposal was then translated into the draft order plan marked 'Stage 3' in that Appendix, which came with no explanation of what was proposed in detail.

684. 'Stage 4' comprised Orthios drawing up a plan to show its understanding of Menter Môn's requirements as at November 2019, which introduced the 'lozenge' shaped area, which was then extended in 'stage 5' as a result of Menter Môn saying it needed a further 0.25 acres in area, but that change was again unexplained by Menter Môn in terms of the technical engineering reasons, if any, which drove that change. Orthios again illustrated that requirement on a plan it prepared as what Mr LeVasseur characterises as 'Stage 6'.

685. At no stage, even during the inquiry, has Menter Môn proffered a full explanation of its use of all of Orthios' land contained in the Order. This is addressed further below.

686. Mr Jesson's evidence shows that two options exist for a grid connection using the existing switchyard which are preferable to Menter Môn's proposals. However, they were put forward in a bid to secure agreement by Menter Môn which, to date, has not occurred and would, as both Mr Billcliff has confirmed and Orthios accepts, both

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<sup>979</sup> Mr LeVasseur's supplementary proof (Ref: RPE013) at para. 4.2.1

<sup>980</sup> Mr Jesson's supplementary proof (Ref: RPE014) para. 2.3

<sup>981</sup> Appendix P1.2.2 in Mr LeVasseur's proof (Ref: POE005)

require agreement relating to land outside the scope of the Order. These options were put forward to highlight that much less land-intensive options to deliver an electrical connection exist whilst avoiding or minimising the impacts on Orthios' proposal for other land in the Order, namely Plots 49 and 50. It is not satisfactory for Menter Môn to say or imply, as was attempted during the inquiry, that Orthios directed Menter Môn to avoid or stay out of any part of the existing switchyard. This is not accepted and, in any event, it is for Menter Môn to justify the land take it proposes.

687. These submissions deal with the merits of Menter Môn's proposals in the Order.
688. Menter Môn propose bringing cables under the A55 and railway by horizontal directional drilling below plots 43, 45, 46 and 47 of the Order Lands. They would then construct a new substation on part of plot 49 which would be connected to the National Grid by some means. The Menter Môn evidence is extremely opaque as to the mechanisms, both practical and legal, that would be used to secure the connection.
689. No work was done by Menter Môn to try and establish the ground conditions on plots 48, 49 and 50 prior to the making of the order. Menter Môn only sought invasive ground condition surveys from November 2019, after the application for the Order had been made on 16th September 2019. The only surveys Menter Môn sought to carry out on Orthios' land prior to the making of the application for the Order were:
- a. Walkover ecological surveys;
  - b. Walkover survey of the weld points in the railway lines; and
  - c. Visual inspections of the culverts under the A55 and railway.
690. The indicative layout of the substation which Menter Môn proposes is shown on the drawing at Ref: MDZ/A21.10. It shows, as Mr Billcliff accepted, a single user grid connection. Mr Billcliff's rebuttal at paragraph 4.11 says that its layout and size as shown was based on advice from Black & Veatch, relevant Standards, on the assumption of "no co-operation" from Orthios and on a "reasonable worst case scenario". That is an incomplete picture. Appendix 5 of Mr Billcliff's rebuttal appendices shows Black and Veatch's summary of events. It clearly shows that work was halted on reducing the size of the substation because of the need to finalise the Environmental Statement in line with the chosen deadline for its submission. That is an important omission from Mr Billcliff's evidence.
691. Further, it was suggested during the evidence that these factors justified the requirement for the extent of acquisition proposed in Plots 48, 49 and 50. That is not correct. The points to which Mr Billcliff's rebuttal draws attention justify the size of the footprint of the substation, not the size of the plot to be acquired. There is no real prospect of the substation location moving, given that its proposed location has clearly been chosen to avoid the buried services shown on the plan at Appendix 10 to Mr Billcliff's rebuttal.<sup>982</sup>
692. There is no evidence before the inquiry to justify the acquisition of any part of Plot 49 or 50 north-east of the proposed substation location. There is no reason to

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<sup>982</sup> Mr Billcliff's rebuttal Proof of Evidence (Ref: RPE011)

suggest that the substation might need to be located further north east and no evidence (as opposed to assertion) that the area might be needed for materials storage or contractor parking or the like. Indeed, given Menter Môn's case that Orthios has limited prospects of achieving all of its proposals, it ought to have investigated whether other parts of the Orthios site could have been made available to it for such purposes.

693. Nor is there any reason for Menter Môn to acquire the remainder of Plot 49 to the south west of the proposed substation. All that is needed in that general location is the right to lay and maintain cables, together with any necessary easements and covenants to protect them in the future.
694. The details of the proposed Grid Connection have been poorly thought through by Menter Môn. Appendix 9 to the rebuttal proof of Mr Billcliff is a note of a meeting with between Menter Môn and National Grid. The project, as explained by the note and by Mr Billcliff in cross-examination, was for National Grid to build the substation and for there to be a connection up to the substation fence.
695. There are two critical and connected points to note as regards Menter Môn's grid connection proposal:
- a. Menter Môn accepts that Orthios will require a new grid connection for its own operations. That connection would require substation buildings and power conditioning similar to that proposed by Menter Môn for their connection; and
  - b. Menter Môn's proposal is for a single user connection.
696. Those points are critical because, taken together, they demonstrate the inherent unsuitability of what Menter Môn propose. Nowhere in its case or evidence has Menter Môn properly grappled with the consequences of promoting a single user connection when it accepts that two connections will be needed. Nowhere has Menter Môn presented evidence as to what National Grid's preference would be in a dual user scenario. It is certainly not satisfactory for Menter Môn, as Mr Billcliff appeared to do in evidence, to suggest that this is a matter for National Grid to address as part of providing a connection for Menter Môn and any other parties. Menter Môn's Order must reflect the reality of the situation. It is not sufficient merely to demonstrate a theoretical scenario which assumes that only its own project need be accommodated, when that is not the reality. Otherwise, Menter Môn's Order amounts to nothing resembling what will happen and essentially leads to the potential for blighting land held by Orthios without justification (a matter to which we return in these submissions).
697. The only evidence as to National Grid's position on the way to connect dual or multiple users is given by Mr Jesson, producing what National Grid have said.
698. A multi-user substation with its lower land take, scope for sharing buildings and equipment and the like would achieve costs savings to National Grid, Menter Môn and Orthios. For National Grid, that is a key matter because National Grid's funding mechanisms incentivise them to keep costs down, as they receive funding by reference to the MW capacity they connect, rather than the number of substations they provide. National Grid are also under a statutory duty in section 9(2)(a) of the Electricity Act 1989 to develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

699. The clear evidence is that National Grid would not favour constructing Menter Môn's proposal in the light of Orthios' requirement for a grid connection. That is the reality. That is clear from the email exchange between Mr Jesson and National Grid at Appendix 3.2.1 to Mr Jesson's supplementary evidence.<sup>983</sup> National Grid agreed that they will seek to build the most economic and efficient solution for all relevant parties. They have approached Orthios to purchase the Orthios switchyard for such a purpose. Lastly, they agree that disturbing the old 132kV cables would be technically viable but would not be National Grid's preference if an alternative economic and efficient design could be developed.
700. On the evidence, it is wholly unlikely that National Grid would create a grid connection for both Menter Môn and Orthios that involved constructing a single user substation on Plot 49. It is submitted that this does not reflect the reality of the situation and it is the real world situation against which the case for acquisition should be considered, particularly having regard to the connection offer that Orthios has with National Grid for its own requirements.
701. Mr Billcliff has provided details in paragraph 5.6 of his rebuttal of how Menter Môn consider that National Grid would expect to connect Menter Môn as a single user which relies upon connecting into the existing 132kV cable circuits that lie underground in the south western part of Plot 49, between the site of the proposed Menter Môn substation and the railway. Mr Billcliff's evidence on how the substation would be connected to the grid is specific and is *not* the way that the point was later put to Mr Jesson in cross-examination. Mr Billcliff's rebuttal provides only the single scenario for the connection based on the connection point 276m east of the substation, outside the Order Lands. He does not present it as one option of a number. He gives that evidence to counter the argument that Menter Môn's connection is not guaranteed and so he presents that one solution as an allegedly guaranteed means of connection. The proposal involves rolling back (i.e. removing) the existing 132kV cable along an alleged easement and creating a new stop joint where the old oil filled cable is connected to cable comprised of more modern materials. This stop joint would be located at the location about, his written evidence says, 276m "west" of the existing substation.
702. There are manifold errors in this statement, which are critical to understanding the defects in Menter Môn's approach:
- a. Most basically, the connection point would be 276m east, not west, of the existing substation;
  - b. Mr Billcliff contends that this is the approach referred to in Appendix 9 to his rebuttal, referred to above. It patently is not. That Appendix is silent on the detail of the connection of the new substation to the existing National Grid infrastructure. There is no evidence from National Grid that supports this idea at all and it conflicts with the evidence Mr Jesson has secured of National Grid's view;
  - c. The connection point 276m east of the substation, and much of the line of the works of removing the extant cable, are outside the Order Lands;

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<sup>983</sup> Ref: RPE014

- d. The reference to an existing easement is entirely unsupported by any evidence whatsoever. There is no easement referred to in any of the Registered Titles to the relevant parts of Orthios' land (see the Titles in Ref: Inquiry Doc – 017);
- e. Even if the reference was intended to be to a wayleave which, it is accepted, do not appear on Registrations of Title to land, there is not a shred of evidence that any such wayleave exists in this case;
- f. The prospect that the existing cables were laid at the invitation of the former owner of the land rather than secured by some legal mechanism by National Grid's forerunners would make sense given that the cables only served the smelting business and were crucial to its functioning – in other words, there may never have been an easement or wayleave at all; and
- g. As a result, there is no evidence that National Grid have any lawful ability to work on the cables in the absence of Orthios' consent to do so.

703. Those difficulties are compounded by the way in which the Order in this case has been drafted and in the light of what powers are sought by Menter Môn. Menter Môn are clear that National Grid would undertake the works. That is an important admission. However:

- a. The Order, if made, would secure no powers for National Grid at all;
- b. The Order would obviously not confer powers on anyone outside its geographical limits;
- c. As originally sought, the Order provided no power of assignment for onshore works: see Article 6 of the Order;
- d. As now sought to be amended, Article 6 would provide for the transfer of the benefit of any part of the Order to anyone, with the consent of the Welsh Government. The process of giving such consent is not merely mechanical and would be subject to further determination. The Explanatory Memorandum for the amendments does not explain the rationale for this change at all,<sup>984</sup> let alone say it was intended for National Grid's benefit and Mr Billcliff was unable to explain the position in cross-examination. Further, the transfer of the benefit of the Order would carry with it the transfer of the corresponding obligations, such as the payment of compensation. There is no evidence that National Grid would wish to take the transfer of the powers at all, let alone on the terms set out in the Order;
- e. Being a proposal under the Transport and Works Act 1992, the Order is designed to confer powers, not just land acquisition, as it is not a CPO. The Order ought to have secured powers for National Grid but has not.

704. As a result of the way that the Menter Môn has chosen to promote the application, National Grid's involvement in laying the cables to effect a grid connection would largely depend upon powers outside the scope of the proposed Order. However:

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<sup>984</sup> Ref: ROD003: This relates to an earlier set of amendments, but is the memorandum that relates to the changes proposed to Art 6.

- a. Although National Grid has powers to compulsorily acquire land or compulsorily acquire wayleaves in, over or under land, the exercise of those powers is open to objections and the outcome cannot be sensibly described as “guaranteed”;
- b. Menter Môn may contend that the powers of compulsory acquisition conferred by the Order would allow them to take the land and then, as landowner, allow National Grid to lay cables in what would then be Menter Môn’s land. But that solution does not work either. That is because there would still be the question of how National Grid could lay cables outside<sup>985</sup> the Order Lands without breaching planning control. Whilst National Grid have permitted development rights to lay cables,<sup>986</sup> those rights do not exist where the development would be EIA development.<sup>987</sup> Given that the grid connection forms an integral part of the proposed MDZ project (as confirmed by Mr Billcliff in cross-examination) and that project is EIA development, the permitted development right would not exist in this case, as it would form an integral part of a wider project which is accepted by Menter Môn to be EIA development.

705. In short, the only means of connection which is given any detail by Mr Billcliff is a means of connection which the Order does not permit and for which other permissions would be required, but do not exist for it. In any event, it still only provides for a single user connection. Mr Billcliff did not spell out any other means of securing the connection – the scenario put to Mr Jesson in cross-examination (a connection across Plot 49 to the existing Wylfa tail terminations) is not Menter Môn’s evidence.

706. The upshot is that, on the evidence, confirming the Order as sought is unlikely to confer all of the necessary powers to make a grid connection of the sort which Mr Billcliff’s evidence discusses and which is the only means of connection discussed in any detail in Menter Môn’s evidence. It is far from “guaranteed” as Mr Billcliff contends. It is uncertain.

707. The difficulties inherent in accommodating Menter Môn’s grid connection proposal in a context where Orthios also require a connection is illustrated by National Grid asking to buy the switchyard.

708. As such, the powers sought by Menter Môn in Orthios’ land for the purpose of bringing about a connection to the National Grid will not in reality lead to a connection without further interventions by National Grid which are subject to separate processes. It is contended that Menter Môn has not produced evidence, if any, which even comes close to demonstrating that there are reasonable prospects that National Grid can make a connection that it would expect to make to meet its connection offer to Menter Môn and certainly not sufficient to justify the interference with Orthios land (and certainly not all of its land) at this time, pending determination of National Grid’s proposals and greater certainty as to how National Grid would effect that connection, whether a single or multi user connection. It is

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<sup>985</sup> The laying of cables within Plots 48 to 50 would be within the power conferred by Art. 3 and Schedule 1, Part 2, Chapter 2 of the Order.

<sup>986</sup> Class G of Part 17 of Schedule 2 to the Town and Country Planning (General Permitted Development) Order 1995

<sup>987</sup> As above, Article 3(10)

further contended that such connection would in reality need to be a multi user connection.

Orthios' Case in Relation to Plot 46 and Plot 47

709. There is no need for the drilling under these plots to be limited to occurring not less than 9m below the surface. Mr Jesson's evidence is that HDD would be feasible at a depth of only 5m. Whether at a minimum depth of 5m or 9m, the cables can emanate from the surface of the land much closer to the railway than Menter Môn's proposals presuppose. Indeed, it is clear that the emanation point of the cables proposed by Menter Môn is the result of it assuming that it has the complete run of Plot 49: see paragraph 4.14 of Mr Billcliff's rebuttal (Ref: RPE011), illustrating its rather blasé attitude to the need to justify the extent of proposed land acquisition.
710. Menter Môn suggests that it is limited by restrictions put in place by Network Rail on adjoining land. Orthios is not privy to the detail of all matters between Network Rail and Menter Môn, however it is contended that Menter Môn's stance is wrong for the following reasons:
- a. No such restrictions have a bearing on the depths that can apply in relation to Orthios' land; and
  - b. It has been open to Menter Môn to contest Network Rail's stance (and for the Welsh Ministers to nevertheless determine). Orthios understand that Network Rail's stance reflects their adherence to a precautionary depth subject to investigation and approval by them.

Orthios' Case in Relation to Plot 48

711. Plot 48 should be modified as shown in Orthios' proposals on the plan at Ref: Inquiry Doc – 056 for the purposes set out in the schedule at Ref: Inquiry Doc – 057:
- a. Plot 48A and 48C should be confined to a right to lay and maintain subterranean cables to be laid at least 5m below the surface; and
  - b. Plot 48B should be limited to a right to pass and repass between Plots 49A, 48B, 49C and 51, subject to adequate measures in place on the use of the access road for which protective provisions have been proposed, in the event that settlement is not reached between the parties on appropriate measures to protect the on-going use of the access road in common with Menter Môn and Orthios' tenant, Alenco. (to which we return further below).

Orthios' Case in Relation to Plots 49 and 50

712. In the light of what has been set out above, Orthios does not accept that Menter Môn is able to make out a cogent case for making a connection to the National Grid pending resolution of the details of how that connection would be made by National Grid. It is Orthios' contention that any connection by National Grid, even the single user connection solution put forward by Mr Billcliff, requires other powers and land not within the Order Land that will need to be secured by National Grid. This does not assist Menter Môn in seeking greater flexibility, rather the opposite. It is Orthios' primary contention that a case for the compulsory acquisition of Plots 49 and 50 is not made out until or unless this detail is known and demonstrates how the land is required.

713. In any event, as a minimum, Plot 49 should be cut down in extent and powers specified as shown on Orthios' plan at Ref: Inquiry Doc – 056 and schedule at Ref: Inquiry Doc – 057 to prevent unnecessary land take but facilitate the connection to the Grid as explained in paragraph 5.6 of Mr Billcliff's rebuttal (Ref: RPE011). Orthios should not have to rely upon the vague assurance at paragraph 10.5.4 of Mr Billcliff's main proof (Ref: MDZ/P8) that surplus land would be returned to Orthios. That is because Orthios would not be able to seek any form of compensation or redress for the sterilising effect the Order would have upon any plans Orthios would have for Plot 49 as the statutory conditions for making a blight claim would not be satisfied. That situation could endure for up to five years, given the proposed time limits in the Order for exercise of the powers it confers. In those circumstances, it is not appropriate for Menter Môn to be given free rein over Plot 49. Orthios has commenced construction on the 299 MW virgin biomass power plant. Part of this planning consent includes the designation of much of Plot 49 to be used as a maintenance and contractor's yard, products storage including tanks for aqueous solutions, char conveying, storage and collection facility. Execution of the Order as presented would significantly compromise Orthios' ability to develop any project which adopted the same general layout. It is of critical importance that the ability to develop projects in line with the existing consent is maintained.
714. Plainly, Menter Môn should have made more effort to arrive at more definitive plans for its grid connection.
715. There is a further point. Orthios' proposals would not just be for its own good. They would bring economic and social benefits through bringing the site back into use, creating jobs, wealth and other benefits of direct application to the local and wider population. To allow Menter Môn unnecessarily to hinder Orthios' proposals by allowing Menter Môn to acquire land which has not yet been shown to be required to make a connection that reflects reality or to acquire too much land and/or too extensive rights by conferring powers which may not be exercised for up to five years risks those benefits being fully realised. However, by limiting Menter Môn to the acquisition which they can justify, the Welsh Ministers have an opportunity to secure not just the benefits of the Menter Môn scheme but also the full potential of the Orthios site.
716. Orthios' suggestion of reduced land take reflects its understanding of the land required to effect Menter Môn's single user connection, as proposed in its evidence, and described by Mr Billcliff, and is proposed in the event that its primary contention is not accepted.
717. The resulting Plot 49A corresponds to the area which Menter Môn said it required for the substation and its location corresponds to that on the plan at Ref: MDZ/A21.10.
718. Plot 49B should be limited to a right to lay and maintain cables to connect into the existing 132kV cables.
719. Plot 49C should be limited to providing a right to pass and repass between that plot and Plots 49A, 48B and 51.
720. Plot 49D should be limited to a right to lay and maintain subterranean cables at least 5m below the surface.
721. Plot 50 should be removed from the order.

Orthios' case in relation to Plot 51

722. Plot 51 is the access road. It is an important access into the Orthios site as it is the emergency access and is the only access suitable for large or wide loads. Orthios and Menter Môn have reached Heads of Terms as to the protection to be afforded to Orthios as regards the availability and use of that road during the period of construction and operation of the works. These terms have been committed by Menter Môn in the form of a unilateral undertaking (that is acceptable to Orthios) and as such can take the place of the protective provisions proposed by Orthios in Ref: Inquiry Doc – 057, if acceptable to the Welsh Ministers. No more need be said about that matter in closing.

Parameters for the battery storage element of the scheme

723. Eversheds responded to Orthios' concerns about the vagueness of the battery storage element of the proposal in a letter dated 9th February 2021. The response is neither constructive nor helpful. It tries to distract from the issues by making irrelevant points about way in which the battery storage element of the scheme should be addressed. The motivation for Orthios seeking parameters for the battery storage is irrelevant. So is the terms of planning policy on the relevance of competition. This is an issue relating to the justification for compulsory purchase, nothing else. There must be a cogent justification for depriving Orthios of land in order for Menter Môn to provide battery storage. Giving Menter Môn *carte blanche* to acquire land without having any idea of the parameters for that storage (either in terms of (i) how much of the substation area needs to accommodate that use or (ii) its electrical capacity) is wholly unjustifiable.

724. The letter reminds the reader of the importance of evidence. Orthios raised, during the session on 5th February, whether there was any evidence of the capacity needed for the battery storage other than page 60 of 82 of Appendix 5 to Mr Billcliff's rebuttal evidence, which refers to a capacity of 13.5 MVA. It is notable that that point is simply ignored in Eversheds' letter. It can be inferred that Menter Môn do not challenge the point that the only evidence of the need for battery storage capacity is that 13.5 MVA capacity is required. If that is so, in order to ensure that unnecessary land acquisition does not occur, the Order or deemed planning permission ought to include that as a parameter of the scheme. The battery storage element of the scheme is to account for peak tidal generation and to store energy which would exceed Grid capacity at the time it was generated. The Order and deemed planning permission ought to ensure that that is the purpose to which the battery storage is limited. Battery storage which exceeded what the Order scheme required would plainly not be justified.

Conclusion

725. There is: no compelling case for the compulsory acquisition of Orthios' land, as has been promoted by Menter Môn; and in the alternative, no compelling case for the acquisition of the full extent of land and rights sought by the Order in respect of the Orthios land; and, the Order ought to be amended in the terms sought by Orthios.

## **Written Representations**

### **CADW**

726. CADW has confirmed that it agrees with the ES's conclusions regarding heritage assets that would be impacted by the proposal. Specifically that "*...There will be some negligible and minor impacts on the settings of a number of designated heritage assets during the construction phase of the development but these will be temporary. However, the proposed development will have a permanent minor to moderate adverse impact on the settings of Listed Buildings 5713 Ellins Tower, 5284 South Stack Lighthouse and a minor adverse impact on Listed Building 20081 Tany-y-Cytiau. It will also have permanent minor adverse impact on the settings of scheduled monuments AN011 Trefignath Burial Chamber, AN012 Ty-Mawr Standing Stone, AN016 Holyhead Mountain Hut Circles and AN017 Penrhosfeilw Standing Stones. None of these adverse impacts will be significant...*".<sup>988</sup>
727. While the FEI includes an assessment of the potential impact of the offshore elements of the scheme, the FEI assessment does not change CADW's advice on the likely effect of the proposal on heritage assets as set out above. CADW also noted [FEI-REP001] that until the results of the geophysical investigation and archaeological evaluation are known, it would not be possible to determine if there would be any direct impact on archaeological sites of National Importance. CADW has now withdrawn its initial objection (Refs: OBJ079 & Withdrawal - 004)

### **North Wales Wildlife Trust**

728. As noted above, NWWT is a Main Party that instead of providing oral evidence to the inquiry, decided to proceed by written representations and in doing so, relies on its Statement of Case (Ref: MDZ/N11) and previous representations (Refs: OBJ073 and FEI– OBJ015). The Applicant responded via document Ref: MDZ/N15.
729. NWWT are the only local organisation dedicated to conserving all habitats and species across North Wales for the enjoyment of people and the benefit of wildlife. This Statement of Case is collated and presented on behalf of NWWT's Marine Advisory Group (MAG).
730. It should be noted that NWWT fully support the sustainable development of marine renewable energy generation as part of Wales' and the UK's energy policy, if taken alongside measures to reduce demand, conserve energy and promote microgeneration. NWWT believes that marine renewable energy generation can be compatible with a healthy natural environment, but that this should not be at the expense of our most important wildlife sites and species.
731. Additional information has been provided and amendments made to the proposal. Nevertheless, NWWT remains concerned about the environmental impacts of the Morlais application, especially as it would be located in an area of strong currents and turbulence that supports very rich marine wildlife.

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<sup>988</sup> Application consultation response from CADW, dated 31 October 2019.

732. Detailed information in support of the NWWT's case is contained within the Annexes to its Statement of Case (Ref: MDZ/N11). In summary, NWWT concludes that:

1) Marine Mammals

- (i) Our specific concerns about the long-term impacts on the protected Cardigan Bay population of Bottlenose dolphin have not been addressed. We believe that it has been clearly demonstrated that the development has the potential to adversely impact the integrity of Cardigan Bay Special Area of Conservation ("SAC") and in our opinion, the revised Outline Environmental Mitigation Monitoring Plan ("OEMMP") has not provided the detail required by the Marine Licencing Team in their letter to Menter Môn dated 05/06/2020 or addressed our concerns (as referred to in Annex 1). We question some of the methodology enclosed therein. We are also concerned that details on the deployment and timescale continue to be described as indicative and therefore might change.
- (ii) The only mitigating action that would facilitate continued operation of the site (see OEMMP) should there be impacts on Bottlenose dolphins is to install more acoustic warning systems. It remains a concern that this approach would add additional marine noise causing further impact on Bottlenose dolphin and other cetaceans, and it may not prevent further collisions. A second option of reducing the speed of the devices following a collision by other cetaceans is untested and we're unsure of the extent to which this would be successful.
- (iii) We question whether the proposed trigger points can be detected with the monitoring methods described, and are concerned that it is stated that '*The absence of evidence of collision and / or evidence of avoidance of the array or of devices within the array would be expected to lead to agreement for deployment of a further phase*'. With such a finely balanced trigger for Bottlenose dolphin, it is a concern that it will not in reality be possible to provide accurate enough monitoring data and thus absence of data cannot be used to ensure the next phase goes ahead.
- (iv) NWWT is not listed as an organisation likely to be invited to join the Advisory Group described in the OEMMP – we would like to re-iterate our offer of expertise to this group should consent be given.

2) Sediment Transport

- (i) We continue to be unclear as to whether consideration has been given to the impacts of tidal surges caused by extreme low-pressure weather systems coinciding with a spring tide.

3) Benthic Ecology

- (i) We remain concerned about potential damaging effects of unintentional introduction of invasive non-native species into this crucially important coastal and marine environment during the deployment and servicing of tidal devices.

4) Terrestrial Ecology

- (i) The only mainland Wales wild population of the Welsh leek (*Allium ampeloprasum* var *ampeloprasum*), grows adjacent to the site of the proposed transformer building. As well as being rare, this population is believed to have key historical and cultural importance and NWWT would urge that part of the site mitigation measures includes the use of appropriate experts at the right season to safeguard these culturally significant and genetically isolated plants.
- (ii) We support the conclusion that if Horizontal Direct Drilling (HDD) is not feasible and cabling does need to be fixed to the cliff then it may be possible to microsite cabling on the face to minimise impacts on vegetation.

#### 5) Seascape Landscape and Visual Impact

- (i) We recommended that the Seascape Landscape Visual Impact Assessment (SLVIA) needs to consider visibility during different tidal states and swell, where wake flowing around the structures would make them more visible. We also recommended the visual impact of associated service vessels needs to be accounted for. As these points were not referred to in the additional information provided, our concerns with regard to visual impact have not been addressed.

#### 6) Additional Information – Financial Viability

- (i) Our point on the relative cost of wind energy and the financial validity and ongoing energy relevance of the project still holds and our opinion has not changed. We strongly recommend that should planning consent be given, a full cost-benefit analysis which includes environmental as well as economic factors is undertaken prior to commencing Phase 3 and 4 developments.

733. Other concerns include those in regard to:

- a. trenching where the export cables come ashore;
- b. the ES's assessment methodologies and seabed/ benthic habitat descriptions; and shared with RSPB,
- c. those regarding seabird mortality, the assessment methodology used, and the lack of a precedent for mitigation and monitoring.

#### **Other written representations**

734. A variety of other written representations were received in response to the application, including from parties objecting to the works and/or the information supplied in support of the application. These written representations raised matters that: were taken into account in preparing for the PIM and vPIM; shaped the Statement of Matters (Ref: Inquiry Doc – 160); assisted the identification of main issues for the inquiry; and subsequently, were addressed during the inquiry sessions through the comprehensive evidence produced, associated documentation, the contributions made by interested parties, and the questions put to and between the parties.

735. Also received prior to the inquiry, were a number of written representations that support the proposal.
736. As a consequence, the inquiry procedures have enabled all of the matters raised in written representations to be aired, tested, and then incorporated into the detail of the cases provided in the above closing submissions. As such, they will be taken into consideration in my closing submissions.

## **Withdrawals**

### **Mrs Kathleen Davies**

737. Mrs Kathleen Davies (Ref: OBJ020) withdrew her objection to the Order via her agent's e-mail correspondence, which is understood to date from, on or around, 29/10/2020 (Ref: Withdrawal – 006).

### **Dr R Davies & Ms C Lynes**

738. Following negotiation with the Applicant, the parties agreed terms which enabled Dr Davies and Ms Lynes to withdraw their objection (Refs: OBJ036 & Withdrawal – 005).

### **Mrs Nelson**

739. Mrs Nelson (Ref: REPO01 & REPO01(1)) withdrew her objection via undated correspondence that is understood to have been received in October 2020 (Ref: Withdrawal - 002).

### **Mr Tuke**

740. Mr Tuke had raised concerns regarding the possible effect on his tourism related business(es). However, he withdrew his objection after disposing of his interests in the property concerned (Ref: (Refs: FEI – OBJ009 & Withdrawal – 007).

### **Network Rail**

741. Network Rail Infrastructure Limited provided a Statement of Case (Ref: MDZ/N7) which noted its intention to rely on it during the inquiry. The Statement of Case seeks the Applicant to enter into the agreements that Network Rail considers to be necessary to protect its assets.<sup>989</sup>

742. On 02/11/2020, Network Rail confirmed (Ref: POE001) that it would be relying on its Statement of Case and other representations while seeking agreement on measures to safeguard Network Rail assets.

743. Correspondence dated 11 January 2021 (Ref: Withdrawal – 009) confirmed that Network Rail had reached agreement with the Applicant regarding the safeguarding of its assets and was withdrawing its objection to the Order (Refs: OBJ003, MDZ/N7 & POE001). The Protective Provisions for Network Rail assets are provided by Part 2 of Schedule 11 of the Order (Refs: Inquiry Doc – 071 & Inquiry Doc – 072).

### **Land & Lakes**

744. Land Lakes withdrew its objection to the Order on 11/12/2020 (Ref: Withdrawal - 003).

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<sup>989</sup> See section 2 of Ref: MDZ/N7.

### **Dwr Cymru**

745. Dwr Cymru provided a Statement of Case (Ref: MDZ/N4), but subsequently withdrew its objection to the Order (Ref: Withdrawal – 013).

### **Wales and West Utilities Limited**

746. Agreement was reached between Wales and West Utilities Limited and the Applicant that enabled the company's objection to be withdrawn (Refs: REP003 & Withdrawal – 008)

### **National Grid Electricity Transmission plc**

747. An agreement between National Grid and the Applicant was completed to enable withdrawal of its objection in August 2020 (Ref: Withdrawal – 014)

### **SP Energy Networks**

748. Agreement was reached between the parties regarding the protection of SP Manweb assets that led to the withdrawal of SP Energy Networks' objection (Refs: REP004 & Withdrawal - 011).

### **AMG Alpoco UK Limited**

749. After reaching an agreement with the Applicant, AMG Alpoco UK Limited withdrew its objection to the proposed works (Refs: OBJ038 & Withdrawal – 010).

### **Fibrespeed**

750. An initial objection (Ref: OBJ002) to the proposed works due to the potential for existing infrastructure to be affected was withdrawn in December 2019.

## **Public Speaking**

751. Parties that contributed to the public speaking session, on the evening of 02/12/2020, included objectors and supporters of the application. The Applicant provided its response, via Ref: Inquiry Doc – 013, to concerns raised in the public speaking session regarding: the extent of public consultation on, and awareness of, the proposal and the works within it; and, the presence of a public viewpoint above the bay in which the export cables would reach land.
752. Points of objection included regarding:
- (i) possible effects on wildlife and biodiversity;
  - (ii) possible effects on the character and appearance of the locality, including the use of surface 'emergent' devices;
  - (iii) the potential loss of 'wild' open space;
  - (iv) possible socio-economic effects, including those on tourism;
  - (v) potential effects of electromagnetic forces on human health;
  - (vi) that the polluter pays principle and other mechanisms be used to protect the environment, and that there be sufficient funds for 'clean-up';
  - (vii) potential effects on recreational uses of land and sea;
  - (viii) possible risks to marine navigation and craft; and,
  - (ix) the potential alternative ways of providing renewable energy and the other benefits of the scheme.
753. Those who spoke in favour of the proposal did so by noting:
- (i) their support for tidal energy development;
  - (ii) their readiness to deploy various turbine designs;
  - (iii) their readiness to provide the onshore infrastructure;
  - (iv) their readiness to address regulatory requirements, including 'clean-up';
  - (v) the role of Morlais in assisting the demonstration of technologies, economies of scale and mitigation of national and international relevance;
  - (vi) the readiness of the local academic and business environments to support Morlais through the provision of a suitably qualified and trained workforce;
  - (vii) that the proposal would support well-being goals of the Well Being of Future Generations (Wales) Act 2015; and
  - (viii) the proposal would provide good jobs to local people and enable them to continue to live and work in their local area or return to do so.

## Inspector’s Conclusions

*Square brackets in these conclusions contain numbers which refer to earlier paragraphs in this report that contain material of relevance to my conclusions. A number of inquiry documents are also referred to.*

### **The Main Considerations**

754. The Order, if made, would enable works both offshore and on land. It would address both the control of development on land, and interferences in rights resulting from the works proposed.
755. Once the application and representations in relation to it had been considered, expected main issues were provided to parties at the PIM in November 2019. Procedural Note No.2 listed these expected main issues and added an initial issue to specifically address policy and legislative matters. In November 2020, the Statement of Matters (Ref: Inquiry Doc – 160) reflected the expected main issues previously notified to parties and provided greater detail on them.
756. Consequently, the main issues set out at the opening of the inquiry were:
- a) The policy and legislative background to the proposal;
- and possible effects of the Order on,
- b) Biodiversity – including for example, matters relating to birds, marine mammals, fish and their habitats;
  - c) The character and/or appearance of the locality – including matters in relation to landscape and seascape;
  - d) Socio-economic matters – including for example, on tourism and the local economy; and,
  - e) Marine matters – those not dealt with under the ‘biodiversity’ issue, such as navigation.
- Also, matters in relation to:
- f) Compulsory Acquisition;
  - g) the Order and the controls that it would provide; along with,
  - h) any other matters relevant to the deemed planning permission sought by the application.
757. These main issues provided a themed structure for the inquiry. The unresolved matters within each issue informed the choice of format used for the individual inquiry sessions.

## **Legislation and Policy**

### **UK Policy**

758. The Applicant has drawn attention to the potential relevance and significance of UK National Policy Statements (“NPS”); and associated Planning Inspectorate guidance on the use of the “*Rochdale Envelope*” approach to major developments, which in this case is referred to as the Project Design Envelope (“PDE”). These submissions include the case law relevant to the PDE approach. A number of parties, including the RSPB [546-555], have questioned the level of detail supporting the application and this is dealt with below. However, the appropriateness of using a PDE approach for this application is clear from the case law. [88-93, 556]
759. None of the parties to the inquiry sought to cross-examine the Applicant on its policy evidence, and after that evidence was heard, the Applicant provided an update of its policy case prior to the final sitting week of the inquiry. [102]
760. In doing so, the Applicant drew attention to recent the UK Energy White Paper of 14 December 2020 entitled “*Powering our Net Zero Future*”, and matters in the Secretary of State’s decision letter on the Hornsea Wind Farm Development Consent Order regarding the existing NPSs, the weight attributed to them and the review of the NPSs. [102] Of course in determining this application, matters of weight lie with the Welsh Ministers.
761. Section 29 of the Environment (Wales) Act 2016 includes a target for 2050 of an 80% reduction in greenhouse gas emissions from the 1990 baseline level. In May 2019, the Committee on Climate Change (“CCC”) recommended the UK reach the “net zero” target by 2050, with Wales reducing greenhouse gas emissions by 95% by that date, to deliver obligations from the ‘Paris Agreement’. An associated Cabinet Statement from Welsh Government, dated 11 June 2019, addressed these matters. [103-105, 108, 440]
762. During the inquiry CCC provided advice to the Welsh Ministers, dated 17 December 2020 and entitled “*The path to Net Zero and reducing emissions in Wales*”, details of which are provided in Ref: Inquiry Doc – 046. [105 (v)] It is apparent that Morlais would contribute to the meeting Net Zero greenhouse gas emissions by helping to expand low-carbon energy supplies, when electricity demand in Wales is expected to double by 2050.<sup>990</sup>

### **National Policy Statements**

763. In July 2011, UK Government published *The Overall National Policy Statement for Energy (EN-1)* (“NPS EN-1”) and the *National Policy Statement for Renewable Energy Infrastructure (EN-3)*. The focus of these documents are applications (to UK Government) for Development Consent Orders under the Planning Act 2008 for energy infrastructure and generating stations of the scale proposed by Morlais. Paragraph 1.2.1 of EN-1 notes that it is likely to be a material consideration in decisions for application that fall under the Town and Country Planning Act 1990. [110, 113] The Morlais application would provide deemed planning permission in

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<sup>990</sup> The CCC’s *The path to Net Zero and reducing emissions in Wales*, as quoted in Inquiry Doc - 046, see pages numbered “5” and “6” (i.e. PDF document pages 7 and 8)

regard to the Town and Country Planning Act 1990. However, the application is made under the TWA Act 1992.

764. It is the Applicant's case that relevant policy at all levels, recognises the urgent need for more renewable energy generating capacity. [111] That view is supported by the policy documents and contexts referred to in relation to international and UK policy; the key themes of which are now reflected and expressed in relevant and much more recent, Welsh policy. It is therefore a matter for the Welsh Ministers to come to a view on as to what extent their decision relies on the relevant, but older, policies within the NPSs.
765. So, turning now to the Welsh legislative and policy context.

### **Welsh Legislation and Policy**

#### Well-being of Future Generations (Wales) Act 2015

766. The definition of sustainable development in Wales, and the requirement for public bodies to carry it out, are contained within the Well-being of Future Generations (Wales) Act 2015. [106, 107]
767. Of the seven well-being goals within the Act, the Applicant puts forward six as being most relevant to the proposal. [107] Conclusions below on the possible effects of the proposal will address their relevance. However the seventh well-being goal, *A Wales of vibrant culture and thriving Welsh language*, is also relevant. The population of Anglesey has a significant proportion of Welsh speakers. Parties speaking in support of the proposal highlighted that Morlais would provide additional opportunities for local people to find skilled and well-paid employment on the island. Evidence to the inquiry also highlighted sporting and recreational groups that contribute to the island's communities, and in that regard, to its seafaring and contemporary culture.

#### Environment (Wales) Act 2016

768. As noted above, the need for reductions in greenhouse gas emissions is recognised within the Act. [108 and 103-105]
769. Meeting such targets for 2050, along with the growing demand for electricity, will require the development of generating capacity to deliver renewable low-carbon energy. Morlais could make a predictable and significant contribution to that low-carbon generating capacity, while assisting the development, and proving, of technologies that enable further energy capture from suitable tidal streams around Wales, the UK and beyond.
770. Welsh Government's declaration of a 'climate emergency' in April 2019 has provided additional focus on this matter. [109-111] The need to develop sustainable, low-carbon energy supplies in Wales, set within the context of the well-being goals clearly provides very significant weight in favour of Morlais.

#### Welsh National Marine Plan

771. Relevant planning policy for the marine environment includes that contained within the UK Marine Policy Statement (2011) ("MPS") (Ref: MDZ/D4). It has been adopted by the Welsh Ministers (along with other devolved nations and the

Secretary of State) as a framework for the preparation of Marine Plans and for decisions affecting the marine environment. The MPS sets out the role of its policies within the wider marine planning system and how they interact with existing planning regimes.

772. The section of the MPS entitled "*Scope of the MPS*" states that "...*The Marine and Coastal Access Act 2009 requires all public authorities...taking authorisation or enforcement decisions...that affect or might affect the UK marine area to do so in accordance with the MPS unless relevant considerations indicate otherwise...*".
773. The proposed works seek to harness tidal energy. Recent policy regarding the sustainable development of the seas around Wales is contained within the Welsh National Marine Plan ("WNMP") (Ref: MDZ/D5), which was adopted in November 2019. The Introduction to the WNMP notes it: to have been prepared and adopted under the Marine and Coastal Access Act 2009; and, to be in conformity with the UK MPS.
774. The MDZ lies within the Inshore Region of the WNMP i.e. within 12 nautical miles of the mean high-water spring tides ("MHWST").
775. Table 1 of the WNMP lists 13 "Plan Objectives" which are overarching UK High Level Marine Objective ("HLMO") themes, as applied in Wales. The first of these WNMP objectives is "...*Support the sustainable development of the Welsh marine area by contributing across Wales' well-being goals, supporting the Sustainable Management of Natural Resources (SMNR) through decision making and by taking account of the cumulative effects of all uses of the marine environment...*". This, and the other 12 WNMP objectives, are relevant to the proposed works through their support for well-being goals and matters in relation to them.
776. The WNMP vision is for Welsh seas to be clean, healthy, safe, productive and biologically diverse. While all of these factors are relevant to the consideration of this application, the latter three (i.e. ensuring Welsh seas are safe, productive and biologically diverse) are especially so to main issues identified above.
777. WNMP Figure 2, entitled "*Overview of Resource Areas*", indicates "*Areas of Potential Sector Resource*" around the Welsh coast. "*Tidal stream energy*" is shown to be potentially available in a number of locations around Wales, including to the north and west of Anglesey and in the area of the MDZ. WNMP Figure 2 also confirms these locations, with peak spring current of  $\geq 1.5$  m/s, to be limited in number and geographic area. [114]
778. It is apparent that tidal stream energy is a focussed and geographically specific resource. The inquiry heard that the MDZ is a prime location for tidal stream energy capture within one of the identified resource areas shown on WNMP Figure 2. [31, 34, 35]
779. The WNMP includes "General Cross-Cutting Policies" and "Sector-specific Policies".
780. Policy GEN\_01 confirms there to be a presumption in favour of sustainable development of the plan area in order to contribute to Wales' well-being goals. Policy SCI\_01 states that relevant public authorities should make decisions using sound evidence and a risk-based, proportionate approach; and where appropriate, should apply the precautionary principle and consider opportunities to apply adaptive management.

781. WNMP policy ENV\_01, entitled *Resilient marine ecosystems*, is supportive of proposals that would contribute to the protection, restoration and/or enhancement of marine ecosystems. It states that if significant adverse impacts cannot be avoided, minimised or mitigated, a proposal must present a clear and convincing case for proceeding.
782. Potential impacts on “Seascapes” are the subject, and title, of WNMP Policy SOC\_07. It states that proposals are to demonstrate how potential impacts on seascapes have been taken into consideration and should avoid adverse impacts, then minimise adverse impacts where they cannot be avoided and finally, mitigate impacts that cannot be avoided. Where significant adverse impacts on seascape cannot be avoided, minimised, or mitigated, a proposal must present a clear and convincing case for proceeding. While this policy has been included in the Applicant’s comparison note of the final versions of the WNMP, consideration of this policy is not apparent in the relevant part of the ES chapter, or the Applicant’s Proofs of Evidence or the closing submissions. Given the nature of the proposal and the potential impacts from it, WNMP Policy SOC\_07 is relevant to the consideration of the offshore works proposed.
783. A number of WNMP “Sector” policies address low carbon energy, including policy ELC\_03 entitled *Low carbon energy (supporting) tidal stream*. As its title suggests, WNMP Policy ELC\_03 is directly relevant to the proposed works, and it has two parts. The first part, WNMP Policy ELC\_03 a, is supportive of proposals for tidal stream energy generation where they contribute to the objectives of the WNMP. The second part, WNMP policy ELC\_03 b, encourages relevant public authorities and the sector, in liaison with other interested parties, to collaborate on matters to support the sustainable development of the sector through marine planning. [114]
784. A conclusion on compliance with WNMP policy ELC\_03 a will be informed by the following main issues that deal with the possible effects of Morlais. If the proposal complies with the first part of policy ELC\_03, to be a sustainable form of development, the works would comply with the second part of the policy as the purpose, operation and associated outcomes of the MDZ would align with the objectives of WNMP policy ELC\_03 b.

#### Future Wales – The National Plan 2040

785. Parties’ cases were able to address the working draft of *Future Wales* during the inquiry. The final version of *Future Wales* was published after the sitting weeks of the inquiry. It now forms part of the development plan for the locality that includes the proposed works and parties were given the opportunity to provide final comments on any changes from the working draft that could affect their case.
786. The introduction to *Future Wales* confirms the strategy of the plan to include sustaining and developing a vibrant economy, achieving decarbonisation and climate-resilience, developing strong ecosystems and improving the health and well-being of communities. Submissions to the inquiry recognised these matters and how they were addressed within the working draft *Future Wales*, [116, 117] and the final version of the plan retains them.
787. The final published version of *Future Wales* confirms: the WNMP to have informed its drafting; it is vital that emissions are reduced, and global responsibility demonstrated; and, the inclusion of Policy 18 to specifically deal with *Renewable and Low Carbon Energy Developments of National Significance*. Morlais is an application under the TWA, rather than the procedure for Developments of National

Significance. Within the context of the TWA, I concluded the Morlais proposal to be of national interest and of regional, rather than national, 'significance' due to its generating capacity.<sup>991</sup>

788. Nevertheless, *Future Wales* Policy 18 is clearly of relevance to the type of development proposed by Morlais, even if its scale and legislative context are not the intended subject of the policy. Policy 18 is permissive of proposals for renewable and low carbon energy development where certain unacceptable effects are avoided, and other criteria are met.

789. *Future Wales* Policy 24 – *North West Wales and Energy* is directly relevant to Morlais. It supports North West Wales as a location for new energy development and investment. [116] Policy 24 also states that new energy-related development in the region should support local and regional communities, provide jobs and investment in training and skills, and work with universities and businesses to co-ordinate and maximise new investment to support the wider region.

790. The Applicant has set out the benefits of the scheme which include:

- (i) the provision of renewable energy with a predictable and consistent daily cycle of generation with sufficient power for 188,000 homes i.e. more than would be needed for the dwellings in Anglesey, Gwynedd and Conwy; [59]
- (ii) the MDZ, as the name suggests, would enable the tidal energy sector to prove and develop its technologies in these waters; [60, 114] and,
- (iii) the MDZ would be expected to assist economic growth and result in associated socio-economic benefits, [62, 63] although concerns have been raised regarding possible disbenefits to certain business sectors.

#### Planning Policy Wales ("PPW") (11<sup>th</sup> edition)

791. Parties' cases were able to address Planning Policy Wales (10<sup>th</sup> edition). [114, 134] PPW (11<sup>th</sup> edition) was published alongside *Future Wales* after the inquiry sat, and parties also had an opportunity to comment on any the changes to PPW that might affect their case.

792. The 11<sup>th</sup> edition of PPW reflects relevant key themes in *Future Wales* by including, for example, a specific section on *Climate Change, Decarbonisation and the Sustainable Management of Natural Resources*. PPW also: supports securing "...an appropriate mix of energy provision, which maximises benefits to our economy and communities whilst minimising potential environmental and social impacts..."; and, confirms that "...the benefits of renewable and low carbon energy, as part of the overall commitment to tackle the climate emergency and increase energy security, is of paramount importance...". PPW also notes that energy storage "...has an important part to play in managing the transition to a low carbon economy...".<sup>992</sup> Morlais would contribute to the provision of renewable and low carbon energy in North West Wales for its communities and aims to provide battery storage as part of its works.

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<sup>991</sup> Through s.9 of the TWA, a TWA proposal of national significance would have a specific and differing context to that of a proposal for a Development of National Significance under *Planning (Wales) Act 2015* and *The Developments of National Significance (Wales) Regulations 2016* (as amended) and subsequent regulations.

<sup>992</sup> Paragraphs 5.76 and 5.77

### Joint Local Development Plan

793. The Council withdrew its objection prior to the inquiry. [439] If the requested planning conditions were to be imposed, no conflict has been identified with the policies of the JLDP. This includes JLDP Policies PS 19, AMG1, AMG 3 and AMG 4 which would be addressed by possible planning conditions (within Appendix 1 below). [303, 440]

### **Initial policy conclusion**

794. Existing strategic policies referred to above provide strong support for Morlais, as a project that would provide regionally significant levels of additional low-carbon energy generation capacity. It would make a potentially very significant, predictable, daily contribution to both energy provision and the decarbonisation of our energy supplies, while also enabling the suitability of the devices to be demonstrated for, and within, Welsh and UK coastal waters.

## **Regulation and Mitigation**

795. The Applicant produced Ref: RPE008, to inform the inquiry on matters relevant to the controls that the Order would provide, and its relationship with other consenting regimes. In doing so, the Applicant sought to address Items 1(ii), 5(iv), 5(v) and 7 of the Statement of Matters (Ref: Inquiry Doc – 160), which are:

Item 1 ii. The relationship between the Order, marine licensing and the deemed planning permission, and their controls for the works proposed (see also items 5) iv., 5) v. and 7) below);

Item 5 iv. Whether the Order, and associated processes e.g. marine licensing, would provide adequate controls, conditions and consenting process(es) to fully address the range of potential device designs and deployment (see also items 1) ii., 5) v. and 7));

Item 5 v. In relation to these matters, and the biodiversity topic above, the inquiry needs to be clear on: the differing regulatory controls that would apply and the extent of their coverage for works within the Order; and, matters regarding the possible use of an adaptive management approach for environmental mitigation and monitoring of works under the Order (see also items 1) ii., 5) iv. and 7)); and,

Item 7 The Order and the controls that it would provide (see also items 1) ii., 5) iv. and 5) v. above).

[68-70, 139]

796. Subsequently, the differing regulatory functions that would be relevant to the works, the responsibilities of the regulators and how their function would be expected to be applied to the works, were the subject of an inquiry RT session. This RT confirmed that a competent regulator can be expected to act competently. [95, 96, 97, 140]

797. The Applicant has provided its view on the need for this Welsh Ministers' decision to address matters that would be dealt with under an associated Marine Licence. Given the decision-making and regulatory roles in this case, it should be assumed that NRW would competently regulate through a ML that would provide for adequate safety of water users. [141, 143]

798. Exchanges during the inquiry provided clarification of the areas of difference between parties, the nature of potential impacts and the means of possible mitigation of those impacts. Core document Ref: MDZ/A16.7 provides the *Morlais Mitigation Route Map*, which summarises the proposed and potential means of regulation and mitigation. [139]<sup>993</sup> It includes reference to suggested conditions for the Marine Licence for which the Marine Licensing Team at NRW would be the determining authority. My report does not offer a view on the potential appropriateness of the suggested Marine Licence conditions. However, the potential scope, nature and effectiveness of the mitigation either within the suggested

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<sup>993</sup> Parts of the *Morlais Mitigation Route Map* (Ref: MDZ/A16.7) refer to the *Environmental Management and Monitoring Plan* rather than the *Environmental Mitigation and Monitoring Plan*. These are understood to be the same document i.e. the EMMP.

conditions, or that would be provided by other Marine Licence conditions, is set out to inform the Welsh Ministers' consideration of this TWA application.

799. The Applicant has sought to clarify what it sees as contrasting interpretations of its case regarding the possible effects of the proposal on biodiversity. The Applicant considers there to be sufficient information before the Welsh Ministers to determine the case without reliance on further consents. Possible effects on biodiversity, along with the sufficiency of the information provided, are addressed below. [142]

## **Possible Effects on Character and Appearance**

800. The Isle of Anglesey Area of Outstanding Natural Beauty (“AONB”) *Management Plan Review 2015 – 2020* (Ref: MDZ/D7) confirms much of Holy Island and the proposed onshore works, to lie within the AONB. Areas of Holy Island omitted from the AONB include Holyhead and Trearddur Bay. The proposed works would be in AONB lands between the export cable landfall near South Stack to where power cables would finally cross the A55 / railway corridor to access the substation site at Penrhos on the eastern side of Holy Island. [11, 13]
801. The Special Qualities of the AONB that are relevant to the proposed works include: coastal sea cliffs and rocky shores; agricultural landscapes with stone walls and cloddiau; expansive views; peace and tranquillity; biodiversity; archaeology and ancient monuments; rural agricultural and coastal communities; and, Welsh Language.

### **Seascape**

802. The MDZ, [15] principally would appear to lie within WNMP Marine Character Areas 8 and 9 i.e. “*West Anglesey Open Waters*” and “*Holy Island West and Penrhos Bay*”, as shown on WNMP Figure 5. (Ref: MDZ/D5) The ES’s SLVIA adopted the Anglesey Seascape Character Assessment 2013 as its baseline, and confirms the MDZ principally would be within seascape character area SCA 31 – *West of Anglesey* and next to the shoreline areas of SCA 13 - *Holyhead Mountain* and SCA 14 - *Rhoscolyn*. [281, 294] <sup>994</sup>
803. At present the offshore seascape in the area of the MDZ is one of open waters, along with the coastal cliffs and bays that extend around Holyhead Mountain toward the rocky shore and beaches at Trearddur Bay. Peace and tranquillity are a Special Quality of the AONB that is evident on the coast next to the MDZ. However, the open waters off South Stack are not wholly quiet.
804. I carried out unaccompanied site visits during daylight and after sunset. My evening site visit confirmed there to be activity after dark too, with what appeared to be two illuminated substantial vessels anchored, or fishing, to the northwest of the MDZ and a smaller craft traversing through the MDZ toward South Stack.
805. Concerns have been raised regarding the number and location of viewpoints used to consider seascape within the ES. The inquiry enabled these issues to be heard and for additional evidence to be provided by parties if they wished to do so. In addition, the open and unrestricted nature of this seascape allows it to be observed from many locations, including from the shore. Evidence to the inquiry noted the types of recreational and commercial use made of the MDZ and the waters around it. It included SCC presentations of trips around this coastline that included photographs taken from a sea kayaker’s perspective which communicated the AONB and seascape qualities SCC spoke about (for example slide 7 of Ref: Inquiry Doc – 026). [618, 619]
806. The appearance of surface emergent devices deployed within the MDZ, and visible offshore supporting infrastructure, are yet to be known. These matters would be determined through the Marine Licensing process, along with the DDP for each

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<sup>994</sup> Paragraphs 123-128 of Ref: MDZ.A25.24, and PDF p.6 of 75 of Ref: MDZ/A26.9

device. Contributions to inquiry RT sessions indicated that measures to provide safe navigation around and through the MDZ may well include yellow banding and lighting of differing strengths on tidal energy devices and associated surface emergent infrastructure. [33, 55, 275, 284, 621, 622]

807. The actual visibility distances of lighting attached to surface emergent devices and MDZ infrastructure would be determined through the Marine Licensing and DDP approval processes. However, given the expected need to illuminate surface emergent devices and infrastructure, it would seem that any emergent device / infrastructure could be reasonably expected to be “visually prominent”, at least during the hours of darkness, through its design and the associated regulatory requirements that it would be seeking to meet.
808. Therefore, even though the proposed works would be the subject of further consenting, at this stage it is clear that the proposed works, through their physical presence and designs, would be visible and perceived in views of the seascape. And that awareness of marine development would occur to people taking views across the MDZ from locations both on land and at sea. It is only the extent of that awareness of the works that remains to be determined.
809. It is accepted that the proposed works would introduce new devices and infrastructure in open seas that would be expected to cause significant effects on the AONB. [294] These effects would cause a reduction in the expansiveness of views / seascape to the south and west of South Stack due to the presence of surface emergent tidal energy devices and associated surface emergent infrastructure. This would fail to meet the vision for the future of the AONB within the AONB *Management Plan Review 2015 – 2020* (Ref: MDZ/D7), which seeks to preserve and enhance the unique landscape/seascape, natural beauty and special qualities of the Isle of Anglesey AONB.

#### Mitigation of effects on seascape

810. Turning now to the proposed mitigation for these effects. In regard to seascape, discussions during the inquiry, and representations to it, were based on the assessment in the application’s SLVIA in ES Chapter 24 Vol 1 (Ref: MDZ/A25.24). [53] This assessment includes the “Embedded Mitigation Measures”, the relevant section beginning at para. 147 in section 24.6.2.1 of ES Chapter 24 Vol (Ref: MDZ/A25.24). The offshore embedded (or designed-in) mitigation measures (listed in para. 147) are noted to include: no visually prominent devices would be placed in the northern part of the MDZ; visually prominent devices would be placed at least 1km offshore; and, minimising floating elements elsewhere within sub-zones to keep the composition of offshore elements as simple as possible.
811. The plan that communicates embedded mitigation, and the coordinates of the restricted areas, is Figure 4-5 within Ref: MDZ/A28.1. That Figure appears to have been the source of the restricted area plan now proposed for the Order. However, the text in the Legend of Figure 4-5 that describes the devices in each restricted area has not been included in the “restricted area plan” now proposed for the Order (Ref: MDZ/G13). While explanations are given in Ref: Inquiry Doc- 103 for many of the changes to the Order, that is not so for the deletion of the reference to Figure 4-5.<sup>995</sup>

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<sup>995</sup> See page 8 of Ref: Inquiry Doc – 103 regarding “...Definition of “restricted area – UKC 20m”...”

812. Paragraph 8.1.5.6 of the evidence of Dr Orme (Ref: MDZ/P10), the Applicant's Project Witness, is dated 02/11/2020, and notes "...*The exclusions on visually prominent device from the Restricted Area Gold is also defined in the TWAO...*". I note the version of the Order submitted with the application (Ref: MDZ/A2) stated "...*"northern zone" means that part of the array area established as the northern zone in Part 3 of Schedule 1 and shown shaded purple and gold on Figure 4.2 of the environmental statement;...*". Figures in ES Chapter 4 Vol II (Ref: MDZ/A28.1) include the following text in their Legends "...*Restricted Area (Gold) - No visually prominent emergent tidal devices...*".
813. In contrast, the "restricted area plan" now proposed for the Order (Ref: MDZ/G13) only includes the text "*Restricted Area – Northern*" in its Legend, and the version of the Order submitted in 02/11/2020 (Ref: MDZ/A16.2) has no reference to a "northern zone" instead including:
- "... "restricted area plan" means the plan marked 'Restricted Area Plan' and carrying reference MORMSDRW0001 and certified by the Welsh Ministers as the restricted area plan for the purposes of this order;*
- "restricted area – northern" means that part of the array area established as the restricted area – northern, in Part 3 of Schedule 1 and shown shaded gold on the Restricted Area Plan;...*
814. While the "project parameters" provide a "*Worst case scenario...*" of surface emergent devices in numerical terms of "*Up to 130*" devices, the project parameters do not define an area, or maximum parameters, that would be used for surface emergent devices. [Footnote 632] Relevant other controls include the Device Deployment Protocol ("DDP"). [284, 290, 334]
815. Therefore, the form of the proposed Order at the end of the inquiry (Ref: Inquiry Doc – 102) would cause the location(s) of surface emergent tidal devices and operational hubs to be controlled through: the *restricted area plan* (Ref: MDZ/G13), as defined by Article 2 of the Order; and, the Welsh Ministers' approval of each DDP, the context of which would be through Articles 3(4) & 3(5) and Part 4 of Schedule 1 to the Order. The timing of the approval by the Welsh Ministers prior to each device deployment is the subject of Article 3(4) of the Order. [290, 334, Footnote 523, Footnote 632, 460, 732] <sup>996</sup>
816. As currently proposed, each DDP would need to clearly address, amongst other things, the location of the deployment and where relevant, its likely visual prominence, to inform the Welsh Minister's DDP decision within the context of the application and ES before this inquiry. The proposed Art.3(5) requirement for IoACC to be consulted on any DDP (and its SLVIA) submitted to the Welsh Ministers, should ensure that issues relevant to the local planning context of the application (and its ES) are commented upon. Nevertheless, on the face of it, the Order, the works that it would enable, the context of the application and the expectations of the DDP process, would be more clearly communicated if the text from the "Legend" of Figures in Ref: MDZ/A28.1 were to be included on the "*restricted area plan*".

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<sup>996</sup> In relation to [290 and Footnote 534], "Mr Maile's Evidence..." to the Character & Appearance RT was a verbal contribution from a member of the Applicant's legal team (there is no Proof of Evidence from Mr Maile).

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817. The “Legend” text on the Figures in Ref: MDZ/A28.1 includes reference to devices being “visually prominent”. The copy of the Order (Ref: MDZ/A16.2) submitted on the same date as that ascribed to Dr Orme’s Proof of Evidence, and in its final form (Ref: Inquiry Doc – 102), appears not to include any reference to visual prominence.
818. Whether or not the offshore works would be “visually prominent” was the subject of discussions during the inquiry, and the IoACC Proof of Evidence notes the failure to reach agreement on wording to address restrictions relied on by the SLVIA.<sup>997</sup> If a definition of “visually prominent” were to be included in the Order, and that definition were later to be found unhelpful, the Order could not be changed to rectify the matter. [284, 522]
819. “Visually prominent” is defined in the *Glossary of Terminology* within ES Chapter 4: Project Description (Ref: MDZ/A25.4),<sup>998</sup> and NRW had raised concerns regarding its use and interpretation within DDPs (paragraph A.75 of Ref: FEI REPO04). As “visually prominent” is not defined in the proposed Order, the appropriateness of the meaning given to “visually prominent” in a DDP would fall to be considered as part of the Welsh Ministers’ DDP approval process. [284, Footnote 527, 290]
820. That approach would result in device designers working with less clarity on which designs are likely to be acceptable in any area where visual prominence is to be avoided. However, a simple dictionary-based definition would appear to be the most suitable approach. This is especially so, given that the ES Chapter 4 *Glossary of Terminology* definition is based on the proportion of supporting structure that is visible, whereas it should focus solely on the likely effect of what would be seen above the water.<sup>999</sup>
821. If the Welsh Ministers were to make the Order (and in doing so, come to a view on the suitability, or otherwise, of the ES Chapter 4 definition of “visually prominent”), it I would recommend that the Legend text from the Figures in Ref: MDZ/A28.1 be included on the “*restricted area plan*”. This would provide a clear link between the Order, and the context of the application and its ES. It also would ensure that the Order is clear regarding the relevance of visual prominence to decisions on surface emergent device deployment and infrastructure within the MDZ.
822. However, potentially there is one exception to the inclusion of that text. NRW suggests that the use of “*submerged tidal devices*” to describe the works in “*Restricted Area – Northern*”. Including this text would provide additional clarity on the nature of the works expected through the Order. Given the matters set out above regarding the possible use of “visually prominent” and the resulting judgements that would have to be made, I agree with NRW’s suggestion. Not using “visually prominent” and being clear on the restriction that would apply in the northern area would provide all parties with greater certainty on the scope of those works and the likely visual impacts from them. [522]

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<sup>997</sup> Para. 8.7 of the IoACC Proof of Evidence (Ref: POE003)

<sup>998</sup> The *Glossary of Terminology* within ES Chapter 4: Project Description (Ref: MDZ/A25.4) defines “visually prominent” as: “...A *visually prominent tidal device* is a tidal device where the large proportion of the support structure is visible above the water, to the extent it is visually prominent, together with ancillary elements such as navigation lights, railings and mast...”

<sup>999</sup> Despite the proportion of the surface emergent tidal energy device, or associated infrastructure, that lies below the surface of the water, any visual prominence normally would be expected to result from the part that can be seen above the water.

Conclusion on character and appearance in relation to seascape

823. It is not contested that there would be significant effects on seascape, including that within seascape character areas SCA 31 – *West of Anglesey* and SCA 14 – *Rhoscolyn* [276, 451, 452] and no evidence in this case would cause me to take a different view.
824. The potential significance of these effects could be reduced by making the changes suggested by NRW.

**Landscape**

825. Likewise, it is not contested that some views in the AONB, including those of the seascape, and the AONB's special qualities, would be significantly impacted by the works. [123, 124, 135, 276, 294, 449, 451, 452, 512-514] It is the scale of, and weight that should be attributed to, the seascape and landscape impacts, and the balance struck with other matters, that some parties dispute. [515, 630-633, 636]
826. In addition to imaging submitted in support of the proposal, a number of independent photomontages / visualizations have been provided by an objector.<sup>1000</sup> [628] These appear not to have been prepared with the same professional reference points as those submitted by the Applicant. [282]
827. Visualisations (photomontages and the marking out of sites) are often sources of debate and disagreement between parties in cases such as this. [628, 644] In this case, the appearance and locations of surface emergent devices and infrastructure is yet to be confirmed. This highlights the importance of the DDP process and matters dealt with above concerning the role of visual prominence in the consideration of DDPs.
828. The annotated visualisation contained within Ref: OBJ058 (on PDF p.10 of 16) should be considered with these factors in mind, and how the control of devices that would be visually prominent would be expected to alter the visualisation. [282] The effect of the NRW suggested additional triangular area of restriction (dealt with below), would clarify the control sought in this area of the sea close to South Stack lighthouse.
829. Application documentation, and the assessments within it, have visually prominent surface emergent devices and infrastructure concentrated in the southern part of the MDZ. This is challenged by parties who wish to preserve the open aspects across the southern part of the MDZ. [630] However, the most open and undeveloped parts of this Heritage Coast lie around Holyhead Mountain to the north of South Stack. Therefore, I consider the AONB's Heritage Coast designation to provide great weight in favour of protecting the northern MDZ area from visually prominent tidal energy devices and infrastructure.
830. Of the works on land, the visible elements would be concentrated: if HDD is not possible, within the bay where the export cables would come ashore, on the cliff rising up from the shore, and where the cable ducts would rise over the cliff top in J-tubes; at the South Stack substation; at the Parc Cybi switchgear building; and, at the grid connection substation at Penrhos on the Orthios site. [14, 294]

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<sup>1000</sup> See Refs: OBJ058 and MDZ/N10

831. If it is shown that HDD would not to be feasible (through proposed planning condition 5)),<sup>1001</sup> for some or all of the nine export cables between Abraham's Bosom and the South Stack substation, the export cables that are not in HDD boreholes would be expected to come ashore under concrete. Then, they would be taken up the cliff face in cable ducts and over the cliff edge in 'J-tubes'. From the cliff edge above Abraham's Bosom, the cables would be taken to the South Stack substation in a corridor to the north of the dwelling at Henborth.<sup>1002</sup> [46, 47, 147-149]
832. Visual impact associated with the HDD boreholes would be minimised through the positioning of the borehole openings within Abraham's Bosom. Proposed ecological restoration and landscape integration would provide a degree of mitigation for any cable ducts rising up the cliff face and over the edge in a J-tube. Also, the significance of the visual impact reasonably would be expected to diminish with distance. Nevertheless, cables ducts on the cliff face and J-tubes on the cliff edge would cause a significant visual impact to viewers in close proximity to them due to their form, size and the potential number of cable ducts. [149, 150, 279, 623-625]
833. The landfall substation would introduce new structures into part of the AONB that experiences high levels of tourist activity, with associated business, recreational and agricultural land uses. This part of the AONB is strongly coastal with fields of agricultural grassland, often enclosed by stone walling, extending from the cliff tops to the rugged exposed higher slopes of Holyhead mountain. It is a landscape that includes some communication, energy and transport infrastructure, along with a number of dwellings, tourist related businesses and farms with substantial agricultural buildings.
834. The proposed South Stack substation location is set back from the cliff tops and away from the main focuses of tourist activity around South Stack, and heritage assets. It would be located in a dip in the landscape that would ensure visual separation from the area immediately around South Stack, and visual continuity with nearby farm (type) buildings of similar scale. In this landscape, the proposed site appears be the most appropriate position for the intended use and buildings of the scale and type proposed. With appropriate building design, the landscape context should enable the proposed structures to be successfully assimilated into this environment. [285]
835. However, the application would place substantial new structures onto open farmland, and the works could include cable ducts and J-tubes on and over the cliff at Abraham's Bosom. This would increase the perception of development in this part of the AONB. In that regard, the works could not conserve and enhance the natural beauty of the AONB, nor would the use of sympathetic design and characteristic features for the South Stack substation site provide mitigation for the reduction in the natural beauty of the AONB. [291, 292]
836. The other land-based components of the works either would be underground, or in less sensitive locations. The Parc Cybi switchgear building would be set within an area intended for employment development, and the grid connection substation would utilise land within an existing industrial site. These would be forms of

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<sup>1001</sup> See Ref: Inquiry Doc – 098

<sup>1002</sup> Work Nos. 3, 4, 5 and 6 of Schedule 1 to the Order (Ref: Inquiry Doc – 102), and as shown on TWAO Map 1 Location Plan (Ref: MDZ/A17.1).

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development expected in such areas and confirmation of the final designs, determined through proposed planning condition 6),<sup>1003</sup> would ensure the structures are appropriate for their contexts. [288, 286, 287]

Mitigation of, and compensation for, effects on landscape

837. Proposed planning conditions, and the associated planning obligation, would address mitigation of the landscape impacts of the proposal. NRW's expectation for the controls, and the mitigation that would be possible in this case, would be met by the suggested amendment to proposed planning condition 7). [523, 524]
838. The Applicant and IoACC have agreed compensation measures that would address the Council's concerns that the works proposed could be contrary to JLDP policies PS19, AMG3 and AMG4. It is intended to provide these compensation measures through a planning obligation that is the subject of proposed condition 23).<sup>1004</sup> A copy of the agreed planning obligation is contained at Appendix C of the Statement of Common Ground between the parties.<sup>1005</sup> The planning obligation would: provide landscape restoration and enhancement programmes; improve access to public land; and provide new, and improve existing, public rights of way. While other parties may not agree with the balances that are struck in relation to these matters, planning decisions require such balances to be made in decisions and in the cases that are put to the Welsh Ministers. However, the appropriateness of the proposed condition requiring the planning obligation and the weight that can be ascribed to the unexecuted deed are addressed in the relevant sections below. [303, 451-458, 636]
839. Nevertheless, significant adverse effects would be caused to the AONB and the seascapes viewed from it in the vicinity of the MDZ.

Conclusion on character and appearance in relation to effects on landscape

840. Despite the mitigation that would be provided through measures embedded within the proposal, the conditions that would apply to it and the expected planning obligation, significant adverse impacts would occur to the AONB, its special qualities and this section of its Heritage Coast. [123, 124, 135, 276, 294, 449, 451, 452, 512-514]
841. The proposal would fail to preserve and enhance the natural beauty of the AONB, this section of its Heritage Coast, and its special qualities through a reduction in expansive views. However, the application and evidence in this case clearly addresses the AONB Management Plan ensuring there is no conflict with JLDP Policy AMG1: *Area of Outstanding Natural Beauty Management Plans*. The MDZ works would cause harm to the character and appearance of the South Stack area, but with the mitigation proposed, that harm would not be such for it to be unacceptable and, in that regard, for the proposal to conflict with JLDP Policy AMG 4: *Coastal Protection*. Nor would the impact of the works on local landscape character be sufficient to conflict with JLDP Policy AMG 3: *Protecting and Enhancing Features and Qualities that are Distinctive to the Local Landscape Character*.

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<sup>1003</sup> See Ref: Inquiry Doc - 098

<sup>1004</sup> See Ref: Inquiry Doc - 098

<sup>1005</sup> Ref: MDZ/L7

### **The NRW suggested addition to “Restricted Area – Northern” / “The Triangle”**

842. In addition to the controls already proposed within the Order, NRW has suggested an amendment to ES Chapter 4 Vol. II Figure 4-5 (Ref: MDZ/A28.1). The suggested amendment sits within Figure 5 of NRW’s Proof of Evidence entitled “*Visual effects on the Anglesey Area of Outstanding Natural Beauty*” at Appendix D to Ref: POE021.<sup>1006</sup>
843. The proposed works would fail to preserve or enhance the natural beauty of the AONB, its Heritage Coast and special qualities; and above, I have given my view on the need for the Order, through its “*restricted area plan*”, to be clear on the relevance of visual prominence to DDP decisions. That recognises the AONB as a designation based on natural beauty, where the views across it are especially important. The evidence confirms “The Triangle” area to have some of the best tidal energy resource. However, it is not the only area within the MDZ in which surface emergent devices could be located, nor has it been shown that The Triangle would be unsuitable for submerged devices. [279, 295] Therefore, if The Triangle area were to be added to the “*Restricted Area – Northern*”, the tidal energy resource flowing through that area could still be captured by devices that are not visually prominent.
844. NRW’s suggested addition to the “*Restricted Area – Northern*” would provide greater protection for the open sea to the southwest of South Stack lighthouse. It would be important to the enjoyment of the AONB, and a very recognisable and valued feature within it, through views taken north-westward past South Stack and of the open sea around and beyond the lighthouse. As a consequence, I find NRW’s case convincing for the inclusion of the suggested triangular addition to the “*Restricted Area - Northern*”. [512-521, 525]

### **Overall conclusion on possible effects on character and appearance**

845. The proposed works would introduce new devices and infrastructure in open seas that would be expected to cause significant effects on the AONB through a reduction in the expansiveness of views / seascape to the south and west of South Stack. This would fail to meet the vision for the future of the AONB within the AONB *Management Plan Review 2015 – 2020*, which seeks to preserve and enhance the unique landscape/seascape, natural beauty and special qualities of the Isle of Anglesey AONB.
846. In addition, the proposal would fail to preserve and enhance the natural beauty of the AONB and its special qualities through the introduction of built development and a reduction in expansive views. However, with the proposed mitigation the works would comply with relevant JLDP policies, and the failure to preserve and enhance the AONB and its special qualities would be limited to this part of the AONB’s Heritage Coast.
847. Accordingly, the “*restricted area plan*” should be modified to include: in “*Restricted Area - Northern*” the additional area suggested by NRW (and also referred to as “The Triangle”); and, the Legend text from the Figures in Ref: MDZ/A28.1, except for the Legend text in relation to the “*Restricted Area –*

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<sup>1006</sup> And as Issue 11 in the SoCG between NRW and the Applicant (Ref: MDZ/L5), it is noted to be a matter not agreed.

*Northern*" which should be changed to be "*Submerged tidal devices*" to be clear on the restriction that would apply to that area.

## **Possible Effects on Historic Environment**

848. In responding to the application, CADW concluded that the proposed works would have:

- (i) a permanent minor to moderate adverse impact on the settings of the Grade II Listed Buildings known as 5284 South Stack Lighthouse, 5713 Ellin's Tower and 20081 Tan-y-Cytiau;
- (ii) a permanent minor adverse impact on the settings of scheduled monuments at AN011 Trefignath Burial Chamber, AN012 Ty-Mawr Standing Stone, AN016 Holyhead Mountain Hut Circles and AN017 Penrhosfeilw Standing Stones.

CADW noted that none of these impacts would be significant. [726, 727]

849. The FEI provided a further assessment of these and other onshore heritage assets that would be in the vicinity of the proposed works (Ref: MDZ/A28.61 – *Settings Assessment for Offshore Infrastructure*). The Applicant responded to comments received in relation to the FEI in section 3.12 – *Archaeology and Cultural Heritage* of Ref: MDZ/A28.60, entitled "*Morlais Project Additional Environmental Information*".

850. Following the receipt of the FEI, CADW confirmed that there would be no significant effects on known heritage assets, and it would only be possible to determine any direct impact in archaeological sites following further survey work and evaluation. Proposed condition 14) would address a written scheme of investigation that would follow the geophysical investigation and trial trenching carried out in 2020. [632, 726, 727]

851. There are a considerable number of heritage assets in the area around South Stack and on the route between the export cable landfall and the grid connection substation. The offshore works proposed for the MDZ have the greatest potential to affect heritage significance due to a change in setting. Prior to the inquiry opening, the Applicant had offered additional mitigation to reduce visual impacts that could affect the settings of heritage assets.

852. It is clear that the proposed works would cause minor to moderate adverse impacts on the settings of a number of heritage assets, and as such, these settings would fail to be preserved. Given the 37 year 'project life',<sup>1007</sup> these impacts could be considered to be 'permanent' (unless visually prominent surface emergent devices and infrastructure are not, or cease to be, deployed). CADW's advice has been provided on the basis of permanency of effect, and the ES's conclusions are on the basis of permanence for the duration of the project.<sup>1008</sup> While these impacts on the settings of heritage assets reasonably would be expected to persist for the 37 year 'project life', no evidence demonstrates that significant adverse impacts on heritage assets would be likely to result from the works proposed.

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<sup>1007</sup> The "Maximum value" given for the "Project life" within Table 4-21 – *Generic Project Parameters* (Ref: MDZ/A25.4). The "project parameters" are defined in Art. 2 of the draft Order (Ref: Inquiry Doc – 102).

<sup>1008</sup> For example, at para. 156 of Ref: MDZ/A25.20

## **Possible Effect on Socio-economic Matters**

### **Tourism, marine related businesses and recreation**

853. Tourism is clearly very important to the economy on Anglesey and to those who visit. Representations to the inquiry expressed concerns regarding the potential impact of the MDZ on tourist related businesses and the sector as a whole. [606, 637, 638, 644]
854. Objections also suggested the ES had failed to adequately address the potential impacts of the works on marine recreational users and the associated business sector. However, it was explained that in relation to marine businesses the “NOMIS” data, normally used in such studies and as used in this application, does not differentiate between sectors in that level of detail. And in relation to recreational amenity, where these concerns relate to the scope of matters covered by the application and its ES, this inquiry enabled all those issues to be heard and for additional evidence to be provided where the Applicant wished to do so. [312-315, 589, 595-598]
855. The Applicant considers a disproportionate amount of time was spent on the recreational amenity of sea users. [309] Significant time was taken up addressing these interests. However, the existing recreational users of the MDZ and the coastline next to it, along with the associated guiding / training and equipment businesses that support them, contribute to the local economy and the well-being of their members / clients. While they form a relatively small sector within the local economy, they are nonetheless distinct parts of it and the tourism and recreational opportunities on the island. In that regard, these are matters that contribute to well-being on Anglesey and beyond, and consequently are considerations that the Welsh Ministers should be aware of. [16]
856. It is apparent that there are genuine concerns regarding the possible effects of the MDZ on certain maritime recreational groups and businesses. However, evidence has not been produced by those objecting to demonstrate that the MDZ would be likely to cause significant impacts on these groups and businesses. The MDZ would be one area of (formerly) open water on a coastline with many other boating opportunities for those who would consider the operational MDZ to be unsafe. In addition, open waters and those next to the coast would remain immediately around the MDZ. [344-346]
857. As noted above, if HDD is unable to be used to route cabling under the beach at Abraham’s Bosom, export cables would have to be taken up and over the cliff in that location. Neither this, nor the laying of offshore MDZ infrastructure, would be likely to cause significant disruption to other sea users, including those seeking to land at Abraham’s Bosom. [363, 364, 615]
858. Deploying surface emergent devices and infrastructure within the MDZ would cause the users’ experience of this coastline to change, but the recreational pursuits would continue. Also, the inquiry heard evidence that some water users have been attracted to certain tidal flows caused by man-made features. The tidal flow changes that would result from Morlais, and the causes of them, would be focussed within the MDZ. While all the relevant matters raised during the inquiry have been taken into account, it has not been shown that the proposed works would be likely to cause a

significant reduction in recreational amenity. [309, 310, 311, 318, 320, 599, 600, 615, 616]

859. ES Chapter 25: *Socio-Economics, Tourism and Recreation* addresses the economy as a whole on Anglesey, in Wales and in the UK. It comments on the range of maritime recreational activities that contribute to the island's economy, specifically mentioning the six yacht clubs, kayaking, diving and other coastal / maritime pursuits. [312, 315]
860. The *Supplementary Tourism and Recreation Assessment* (Ref: MDZ/H1) adds to the evidence already within the ES by providing further detail on the tourism and recreation sector, including through interviews with businesses and relevant bodies. Contained within the supplementary assessment is analysis of the segments that combine to form the marine recreation sector. It also provides suggested mitigation actions to address any adverse impact on Holy Island's tourism and recreation sector due to deviations from the trend expected to result from the Morlais works. As such, it would enable steps to be taken to address the adverse impacts identified. [313, 589, 596-599, 616, 626]
861. If the Order were to be made, proposed planning condition 17) would require the provision of a *Tourism and Recreation Monitoring Strategy* substantially in accordance with Chapter 10 of the *Supplementary Tourism and Recreation Assessment* (Ref: MDZ/H1). IoACC's requested amendment of condition 17) address the scope of consultation and engagement through an agreed list of parties. Chapter 10 deals with monitoring, but in its last paragraph notes the *Tourism and Recreation Monitoring Strategy* would also provide further detail on mitigation. Therefore, the Strategy under condition 17), if amended as requested, would enable an agreed list of parties to be consulted through the Strategy, while providing a means of delivery for any mitigation that is found to be necessary. [317, 318, 442-447, 589, 596-599, 616, 626]
862. The *Tourism and Recreation Monitoring Strategy* would be informed by the evidence in this case, which includes the *Supplementary kayaking and sailing activities assessment* (Ref: MDZ/A28.58). That assessment specifically addresses the recreational boating economy, monitoring and any mitigation that may be required. These details also would fall to be included within the Strategy, and the mitigation determined through and within the context of the discharge of proposed planning condition 17). [317-321, 442-447, 589, 596-599, 616, 626]<sup>1009</sup>
863. The Applicant's closing submissions in relation to the s.106 and objectors' requests for compensation has responded to concerns about the possible effect of the works on local businesses. If the Order is made, the works would provide public benefits from a legitimate use of the sea and land in this location. [364, 616]
864. There is no evidence that offshore energy developments have had a significant adverse impact on tourism. While existing winds farms along the North Wales coast obviously result in a visual impact to viewers and a change to the seascape, the things that attract tourists remain and Morlais could become one of them. I understand that to hold true for the Orkney Islands and other locations where tidal energy has been implemented or trialled. [313, 314, 316]

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<sup>1009</sup> The evidence also includes Ref: MDZ/H2 - *Economic evaluation of the recreational value of the coastal environment in a marine renewables deployment area* and Ref: MDZ/H4 - *Supplementary Socio-economic Assessment*

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865. Morlais would diminish a limited area of open sea and the views of it. However, the controls discussed in the Character and Appearance section above would ensure that opportunities remain to experience the seascape, landscape and heritage assets on this coast in the absence of visually prominent tidal energy devices and infrastructure. [316, 320]
866. The application after the inquiry now includes a range of studies and assessments to address the proposal's potential socio-economic impacts, including on offshore recreational amenity, tourism and the rest of the economy. The Applicant has responded to the concerns raised and presented evidence to demonstrate the likely impacts of the proposed works and the means of monitoring and mitigating any impacts that do occur. No likely impacts from the works on tourism, marine related businesses or recreational amenity and have been shown to be unacceptable, monitoring and mitigation has been planned-in, and the works might add to the tourism offer on the island. [441, 442, 626, 637, 638]

### **Skills, employment and new industries**

867. Job creation would be one of the socio-economic benefits of the proposed works. Morlais would be expected to create up to 467 jobs per year during construction and up to 456 jobs per year from the operation and maintenance of the works. Of those, 137-228 jobs could be on Anglesey. In addition, the proposal would provide action plans for skills and training and a supply chain. [62, 63, 126, 322, 442]<sup>1010</sup>
868. The view was also expressed during the inquiry that a better balance should be struck, through schemes such as Morlais, to diversify the island's economy. In support of this, M-SParc would seek to link universities to the industry and this proposal. Some of those who spoke in favour of the proposal noted their need to leave the island to find employment in the renewable / tidal energy sector. Morlais would provide opportunities for people who live in North West Wales to find employment close to their homes in renewable energy and related industries. The project would also have an international footprint through its suppliers and tidal energy device developers, some of whom contributed to the inquiry. [58, 60, 62-65, 322, 438, 753]

### **Decarbonising to provide an energy mix**

869. Morlais would provide economic resilience through the diversification of Anglesey's economy. Also, there would be significant socio-economic benefits from the diversification and decarbonisation of the energy supply in North West Wales. Creating an innovative, productive and low carbon society is integral to the well-being goal of *A Prosperous Wales*. Morlais sets out to, and would, contribute to these elements of the well-being goal, along with developing the skills and job opportunities referred to above. [26, 101-111, 114, 116, 125]
870. As such, the proposal attracts significant policy support, including that from the WNMP, *Future Wales* and PPW (11<sup>th</sup> edition), and as noted in the initial policy conclusions above.
871. It would also contribute to the Council's Energy Island Programme and strategic policies in the JLDP that support renewable and low carbon energy technologies. [440]

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<sup>1010</sup> The action plans would be provided through proposed planning conditions 19) and 21).

## **Possible Effects on Marine Matters / Navigation**

872. A Marine Licence application has been made to NRW in regard to the offshore works that are the subject of this application. That process has been running in parallel to this TWAO application. Matters that may be relevant to the Marine Licence have also been the subject of representations in relation to the TWAO application. Consequently, during this inquiry I have sought to ensure that any documents within the TWAO application that have been updated for the Marine Licence also have been submitted for, or to, the TWAO inquiry.

### **Oceanography**

873. Initial objections to the application raised concerns about the possible effect of the works on the strength and nature of the existing tidal flows as energy is extracted from them.<sup>1011</sup> Although it was suggested that the modelling in ES Chapter 7 may be deficient, no evidence has been provided to demonstrate that to be so. The Applicant has (through Ref: MDZ/N16) responded to these concerns, explaining the robustness of the modelling and the limitations to conclusions drawn from it given the complexity of this a high energy marine environment and the factors that contribute to conditions in the sea and its tidal race. [16, 31, 345, 613]

874. Also, the Applicant has provided a full response to NWWT's concerns regarding sediment transport via Ref: MDZ/N15. It confirms the limitations of the modelling and the nature of sediment transport during and after extreme weather / storm events. There is no evidence that indicates sediment transport would be expected to change significantly in this tidal race due to the proposed works. [732]

### **Navigation**

875. Trinity House's Standard Navigation conditions for inclusion within Deemed Marine Licences for offshore renewable energy installations are appended to representation Ref: OBJ076. The Applicant responded to Trinity House's Statement of Case (via Ref: MDZ/N20). The subsequent Statement of Common Ground between the two parties (Ref: MDZ/L9) confirms that following the resolution of key matters of concern to Trinity House, it now looks to and relies on the parallel decision-making processes for the Marine Licence and the DDPs. [141, 324-326, 328, 583, 584-586]

876. As a consequence, and as noted in Trinity House's closing submission, Trinity House withdrew its objection to the proposal prior to the opening of the inquiry but continued as a Main Party to advise on matters relevant to its functions. [583, 587]

877. As noted above in relation to possible socio-economic impacts and the assessment of recreational boating in the ES, this inquiry enabled all those concerns to be heard and for additional evidence to be provided where the Applicant wished to do so. [589]

878. The challenging nature of the sea conditions within and around the MDZ, and especially during storm events, was clearly communicated during the inquiry. Details are provided within the evidence, with a useful descriptive summary in the second bullet point of the "Conclusions and Recommendations" of the Navigation Risk Assessment Addendum ("NRAA") (at PDF p.114/255 in Ref: MDZ/I1). [345]

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<sup>1011</sup> Ref: OBJ083

879. Turning to whether it is possible to assess the effects on recreational boating without the design options for the works having been finalised. The PDE project parameters provide the maximum extent of the works proposed. If the Welsh Ministers were to make the Order, each subsequent DDP and the associated Navigation Risk Assessment (“NRA”) would address the potential effect of those works on recreational boating. If the works under a DDP would (alone or in combination with other deployments) have an unacceptable impact on recreational boating, the DDP decision-making process would provide the Welsh Ministers with a means to consider and address those effects. [9, 41, 334, Footnote 632, 589]

The Navigation Risk Assessment (“NRA”) and its Addendum (“NRAA”)

880. MCA has been clear that both the NRA and its Addendum are compliant with the requirements of Marine Guidance Note 543 (“MGN 543”), which is entitled “*Safety of Navigation: Offshore Renewable Energy Installations (OREIs) - Guidance on UK Navigational Practice, Safety and Emergency Response*”. MGN 543 is a MCA guidance note. [324, 341-343, 589]

881. Despite the Applicant having demonstrated the NRA and NRAA processes to have been in accordance with the requirements of MGN 543, parties can, and are, disagreeing with the risk scores and the conclusion that the risk would be ‘tolerable’ / as low as is reasonably practicable (“ALARP”).<sup>1012</sup> The inquiry heard that due to the diversity of the marine environment, mariners can be expected to have differing views on perception of risk and what is tolerable, hence there is an NRA process to inform decision-making. The process for this application resulted in the NRA Addendum. And if the Order were to be made, subsequent DDP NRA’s would inform decisions on the offshore elements of the scheme going forward. [54, 55, 143, 330-335, 340-342, 348, 579, 591, 610, 614]

882. As might be expected, the Applicant considers that by committing to provisions within the NRA, the proposed works would be navigationally safe. [132]

883. The RYA is concerned that: the NRAA’s Interactive Boundary Assessment relied exclusively on AIS and radar data to provide information about boating activity in the vicinity; and, this risked overlooking the significant proportion of recreational boats which do not carry AIS and offer a small radar silhouette. However, during the inquiry the Applicant confirmed how its contractor carried out the survey, including the recording of vessels off the coast. It was done over 28 days with AIS and RADAR data, RYA information and visual observations. Neither the competency of the survey company nor the work carried out in relation to it, have been shown to be deficient. [338, 579, 589]

884. The Applicant considers its survey to exceed what MGN 543 asks for. While parties have challenged the survey’s data, coverage and results, no evidence has been provided to demonstrate that survey falls short of what MGN 543 expects. Nor was this an inquiry into MGN 543 and how and what it sets out to do. [339, 343, 579, 592-594, 611]

Searoom

885. The Applicant included the topic of “searoom” in its closing submissions. It provides a useful summary of issues and informs the consideration of related

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<sup>1012</sup> See NRAA section 12 and Tables 12-2 and 12-3 (Ref: MDZ/11)

- concerns raised by other parties to the inquiry. It refers to Ref: Inquiry Doc – 043, which provides an indicative layout for a full 240MW deployment and the open water / searoom that would remain. [347-351]
886. MGN 543 and its Annexes have been written within the context of, and refer to, offshore wind farm turbines. Even so, the principle of applying a device 'boundary' to a shipping route width and the traffic within it is relevant to the MDZ and the perception of risk expressed by sea users during the inquiry.
887. Evidence indicates that a 1000m channel kept free of surface emergent (/shallow) works between the coast and the MDZ would provide a suitable navigable channel for motorised craft. The NRAA found the risks on this eastern inshore route would be ALARP. [349]
888. Trearddur Bay sailing club has a considerable number of sailing boats that do not have an alternative form of motor driven propulsion. Therefore, the club already take motorised RIB escorts when sailing as a group to Holyhead. It is these sailing boats without motors that in an emergency would be most likely to need to use routes through the deployed surface emergent devices to move away from the coast. [342, 349, 350]
889. Kayakers are also concerned at the potential need to escape through the devices if they were to get into difficulty in the proposed eastern inshore channel, which is where they would normally paddle. While an inshore channel would be provided, the MDZ would introduce devices and infrastructure that would be additional hazards in these waters. At surface, these devices could appear as large barge-like structures and while they would be fixed / tethered in location, they would be in a dynamic high energy marine environment. Consequently, the perceived risk to sea kayakers is understandably heightened due to the difference in scale between their vessels and the examples of surface emergent devices provided. [349, 353-359, 608, 609, 612, 620]
890. In relation to the NRAA's Interactive Boundary Assessment, the RYA has asked for the inshore channel to be extended from the 1km proposed to between 1 and 2 nautical miles clear of overfalls and headlands. The effect of meeting this request would be to significantly limit the area available for surface emergent devices. And in this regard, the RYA notes that its concerns could be met by removing surface emergent devices from the MDZ. [350, 351, 354, 597, 602] <sup>1013 1014</sup>
891. For any vessel that would choose to divert around the MDZ, it would add an additional 2.5 nautical miles to its journey, which would take approximately 30 minutes at 5 knots. [352]
892. Agreement has not been reached in relation to the tolerability of the proposed eastern inshore channel. However if the Order were to be made in its current form, the final judgement on this would occur when the Welsh Ministers' consider DDP proposals for surface emergent devices next to the inshore channel. Such decisions would control the number of surface emergent devices, their locations and the channel widths / searoom around them. [341, 350, 351, 595, 596, 611, 612, 614]

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<sup>1013</sup> Figure 4 of Ref: Inquiry Doc – 043 may assist with the consideration of this request as it includes a scale (in kms rather than nautical miles), the MDZ, the inshore channel and the coast (along with an indicative layout of arrays within the MDZ).

<sup>1014</sup> See points 8 a. and b. on page 5 of Ref: MDZ/N2

### Marine Licensing

893. Suggested Marine Licence conditions have been provided by the Applicant,<sup>1015</sup> but these are a matter for NRW Regulatory to consider and conclude on when carrying out its marine licensing function.
894. As noted above, the offshore works would be subject to the controls of a Marine Licence, which would sit alongside the DDP process within the Order. The MCA has yet to discuss its requirements of Marine Licence conditions with the Applicant and NRW, but has concerns that the necessary controls might not be in place to ensure safe operation throughout the lifetime of the MDZ. Evidence to this inquiry has addressed the nature of potential significant effects and the mitigation that likely would be required. Therefore, the MCA's position does not appear to accord with the principle of assuming that a regulator will regulate competently. [95-97, 141, 579]
895. In addition, s.69(1) of the Marine and Coastal Access Act 2009 sets out what matters NRW Regulatory are required to have regard to when deciding on the issuing of a Marine Licence. These matters encompass the areas of concern expressed in representations and contributions to the inquiry. [98, 590]

### **Conclusion on marine matters / navigation**

896. The MDZ would lie within waters that are known for their tidal races, coastal features such as overfalls, and the difficult navigation that results. These conditions result in the tidal energy that the MDZ seeks to capture. They also attract some sea users to the area, while others have to navigate through the conditions due to their circumstances and geographic location. All seek to get through the area safely and will have differing perceptions of risk. [601]
897. The MDZ would introduce works into the sea off South Stack that would increase risk through the presence of devices and infrastructure in what are currently open waters. However, it has not been shown that, given the nature of the potential significant effects from the works and the mitigation that would be reasonably expected to result from approval under the requirements of the Order or marine licensing, the risks to navigational safety would be unacceptably harmful to users of the sea around this part of Anglesey.
898. RYA's request for only submerged devices in the MDZ, would remove many of the perceived risks expressed by the existing users of these waters. However, possible risks from the presence of surface emergent devices have been found to be acceptable. And if, following the making of the Order, they ever were to be considered potentially unacceptable, the DPP process would enable the appropriateness of such devices to be addressed.

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<sup>1015</sup> Ref: MDZ/I4 and at Appendix 4 to the oEMMP (Ref: Inquiry Doc – 101)

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## **Biodiversity**

### **Benthic and intertidal habitats**

899. Marine biodiversity matters, including features of conservation importance in the intertidal and sub-tidal area, are the subject of the *Outline Marine Biodiversity Enhancement Strategy* (“OMBES”) (Ref: Inquiry Doc – 069). Its scope and possible requirements were discussed during the inquiry roundtable session on benthic and intertidal ecology, along with the relevant parts of the SoCG between the Applicant and NRW *on Other Topics excluding ornithology, marine mammals and seascape, landscape and visual effects* (Ref: MDZ/L6).
900. Paragraph 5 of OMBES notes that “...*The Morlais ES had assessed that without mitigation measures, the long-term loss of benthic habitat (more specifically, Annex 1 reef features) via initial placement of project infrastructure (and any subsequent re-powering) would result in a moderate adverse impact. To mitigate this impact, micro-siting of devices away from the most high-quality habitat was proposed...*”.
901. Section 1.1 of the OMBES describes the context for the works and the additional survey evidence that would be gathered to inform decisions on micro-siting. Each micro-siting would have to be agreed between the parties after the making of the Order and within the context of a Marine Licence. Neither the Applicant nor NRW foresee any difficulty in reaching decisions on suitable micro-siting for the protection of benthic (and intertidal) habitats.
902. It also notes that where it would not be feasible to micro-site away from Annex 1 reef features, additional mitigation would be required, and this may take the form of marine biodiversity enhancement. In that regard, the full title of the OMBES (see above) confirms that it intends to provide such an enhancement strategy.
903. Concerns have been raised regarding the potential for invasive non-native species to be introduced into the MDZ when tidal devices are being deployed and serviced. On land, invasive non-native species would be addressed through a proposed planning condition, but offshore it would be a matter for the marine licensing process. [732]
904. The Applicant and NRW (Advisory) have reached agreement on the OMBES and that benthic ecology would not be reason to refuse the application. None of the matters raised in this case would cause me to take a differing view. [169-173, 466, 467, 733]

### **Marine mammals**

905. The MDZ would lie within the North Anglesey Marine/Gogledd Môn Forol Special Area of Conservation (“SAC”), which is designated for the protection of harbour porpoise (*phocoena phocoena*). As a result, the proposed works could have an impact on this species, which is listed in Annex II and Annex IV of the Habitats Directive, and other marine mammals. Conservation Objectives for this SAC designation focus on matters that could affect site integrity by: significantly damaging relevant habitats; significantly reducing the availability of prey;

preventing the harbour porpoise using significant areas of the SAC; and, killing or injuring harbour porpoise (directly or indirectly).<sup>1016</sup> [174-176, 499]

906. In relation to these Conservation Objectives, NRW (Advisory) had concerns in relation to the risk of marine mammals colliding with the works and their disturbance due to underwater noise. Both of these matters are covered by site level Conservation Objectives for the SAC with, for example, Conservation Objective 2 defining significant noise disturbance in terms of the percentage of the SAC area affected on an individual day or over a season.

#### Noise

907. Both the Applicant and NRW (Advisory) have addressed the potential effects of underwater noise on the SAC and the progress made on it prior to closing submissions. [176, 184, 193-222, 505-509]
908. Between the hearing of the evidence in this case and the closing submissions, the Applicant updated the OEMMP (Refs: Inquiry Doc – 100 & Inquiry Doc – 101) to reflect NRW (Advisory)'s position on the monitoring and mitigation of underwater noise. NRW advises that with these amendments an adverse effect on site integrity due to underwater noise can be ruled out at this stage. No evidence in this case would cause me to disagree with this advice. [187, 189, 190-222, 466, 467, 510-511, 732]

#### Collision risk

909. NRW (Advisory) notes that: adaptive management would not be its preferred approach to monitoring and controlling environmental impacts, but adaptive management can be appropriate for works that include an experimental technology which involves unavoidable uncertainty; and, it is clear that the MDZ would have such technology deployed within it. [500]
910. Also, discussions between NRW (Advisory) and the Applicant in regard to the OEMMP have resulted in a proposed Marine Licence condition being included in Appendix 4 of the OEMMP (Ref: Inquiry Doc – 101). The suggested condition would require a Detailed Environmental Management and Monitoring Plan ("DEMMP")<sup>1017</sup> to address the possible effects of the works on marine mammals and diving birds. Adaptive management provisions and the EMMP would apply to all phases of the works, and the EMMP will consider all mitigation and monitoring technologies, including those still being developed. [501]
911. The outputs of the collision risk modelling take no account of the mitigation proposed and the DEMMP that would follow. [183]
912. NRW (Advisory) would not agree with some of the statements in the OEMMP and the need for further detail will be discussed at DEEMP stage. However, NRW

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<sup>1016</sup> Ref: POE038 entitled *Harbour Porpoise (Phocoena phocoena) Special Area of Conservation: North Anglesey Marine/ Gogledd Môn Forol Conservation Objectives and Advice on Operations*

<sup>1017</sup> The text of the draft condition refer to "*Detailed Environmental Management and Monitoring Plan (DEMMP)*" and "*Outline Environmental Management and Monitoring Plan (OEMMP)*", whereas the correct title should be as in the title of the OEMMP in Ref: Inquiry Doc – 101 i.e. "...*Environmental Mitigation and Monitoring Plan...*".

(Advisory) has confirmed that the strengthening of the adaptive management proposals within the OEMMP ensures that there would not be an adverse effect on the integrity of the SAC due to marine mammals colliding with the proposed works. Given the evidence submitted to and heard during this inquiry, I have found nothing that would cause me to take a differing view. [177, 179, 185-187, 466, 467, 502, 503, 732]

### **Fish**

913. Initial concerns regarding the possible impacts of underwater noise on fish and their movements have been resolved. Monitoring measures for migratory fish are now included within the OEMMP. [144, 429]

### **Ornithology**

914. NRW (Advisory) has confirmed: that paragraph 100 of the OEMMP (Ref: Inquiry Doc – 101) sets out adequately the monitoring for potential impacts on diving birds; that monitoring should be appropriate and proportionate to the extent of protection afforded to the species by law and policy; and, OEMMP paragraph 100 includes the principle that the proposed monitoring regime should be able to discriminate between marine mammals and other species, including diving birds. [224, 225, 504]
915. No issue in relation to potential impact on chough in the SPA is being contested by parties. Nor has RSPB any concerns regarding the effects of the works on Manx shearwater. Nevertheless, these SPA species are fully addressed in the Applicant's evidence (Ref: MDZ/P1). [86, 226, 535-537]
916. The RSPB note their principle concerns relate to the possible impact of the works on the guillemot and razorbill populations of South Stack and Penlas. Neither species are protected by the SPA and effects on them do not engage regulation 63 of *Conservation of Habitats and Species Regulations - Statutory Instrument 2017 No.1012* ("the Habitats Regulations"). Guillemot and razorbill are part of the breeding seabird colony that contributes to the SSSI and therefore should be maintained, but they are not named as interest features of the SSSI designation. [226, 537, 538, 544, 546]
917. As wild birds, the guillemot and razorbill populations are provided with protection under the *Wildlife and Countryside Act 1981*. It implements the Birds Directive 2009/147/EC, which seeks to stop the decline in bird populations across Europe. The parties are agreed that Phase One of the works would not have a significant effect of guillemot and razorbill. [226, 227, 540, 541-543]
918. The RSPB's first point of objection is in relation to tidal energy technology being in its "infancy". That in itself would not be a reason for refusing the application or a cause of unacceptable harm. However, the RSPB links this to what it considers to be: a corresponding lack of empirical evidence to inform and/or validate the assessment of likely interactions with, and impacts on, diving birds; and, the assessment of collision risk still being in its infancy. These are dealt with below. [531]
919. In addition to these matters, the RSPB objects on the grounds of: the magnitude of potential impact from a 240MW deployment, whilst recognising that its position on the ES takes no account of mitigation through phasing and the EMMP; and, the lack of detail on any particular phase and the reliance on monitoring, management and/or mitigation. [531, 546]

### Scale of the project

920. The RSPB considers the proposed works to be too large and the impacts too significant. However, the works would only be allowed to deploy at scales that are considered to be appropriate by NRW. [226, 231, 244, 532]
921. The first major tidal energy project would always be a first. The current proposal would enable a phased increase in generation capacity as the technology, and the mitigation and monitoring for it, are proven to be suitable and effective. [557, 559, 560]

### Assessment work & modelling

922. These matters were addressed during the inquiry sessions and have been effectively rebutted by the Applicant, although the expected linearity of any relationship between the scale of deployment and resulting impact remains to be demonstrated. The need for that demonstration is recognised within RSPB's case, and it is what the proposed works would provide. [236, 558]
923. Inquiry sessions explored the complexity and detail of modelling for ornithological and other potential impacts. Such modelling seeks to understand and predict potential impacts, and the modelling in this case has not indicated that the impacts of the proposal would be unacceptable. [236]
924. The initial Phase of the deployment would be smaller than the 40MW and 240MW scenarios modelled in the ES, but the larger deployments would still be the objective for the works to realise the benefits they would seek to provide. Any conclusions on modelled effects should take into consideration the mitigation included within the proposal and that would be delivered through the EMMP. [58-65, 237, 238, 561, 562]
925. There is no dispute about the appropriateness of the ERM and CRM models used. The Applicant used an average of the outputs from the ERM and CRM modelling. Doing so evens out any difference between the outputs of the models, but it did not alter the conclusions of the modelling. [241, 247, 563]
926. The RSPB has noted where it considers the assessments not to have been as "precautionary" as claimed. Exchanges during the inquiry explored these matters, and the factors that the RSPB agreed to have been precautionary are summarised by the Applicant at [239]. [564]
927. There were also areas of disagreement in relation to matters including: PVA analysis, which the Applicant considers to be highly precautionary due to increased populations; and, avoidance rates, which the evidence indicates ultimately to be a matter of judgement. [235-242, 246, 248, 563-565]
928. During the inquiry, the RSPB confirmed the predicted loss of guillemot and razorbill not to be of great significance nationally, but locally very significant which RSPB considers should attract significant weight in this case. [544, 545, 547]
929. The ES assesses the effect of the works on guillemot and razorbill as "*major adverse*". While RSPB raises a number of concerns about the Applicant's modelling, these are detailed points that if substantiated, would not change the significance of the impact identified within the ES, except perhaps the timing of it. In addition, the RSPB has accepted that the proposed Phase One deployment would not have a significant impact on these species. The suitability of any further deployments would

be considered in their own right and within the context of the knowledge gained and the effectiveness of the EMMP. [236, 242, 245]

#### PDE and the phased project deployment

930. The Order would not secure defined phases of the project. That would be done through the Advisory Group and NRW reviewing the significance of the EMMP outputs. It was clear that RSPB wish to be on that Advisory Group and the OEMMP would facilitate that. [49, 142, 244, 551]
931. The issues relevant to the application have been thoroughly aired during this inquiry. There is no evidence that NRW would fail to regulate competently, and any future decisions in relation to the works would be done within the context of this report, the submissions within it, the evidence behind it, the Welsh Ministers' decision, any future proposals, associated mitigation and monitoring, the representations received from the Advisory Group and any others that are sought. There is no convincing evidence that indicates the marine licensing and/or other decision-making processes that would follow any making of the Order, would fail to be properly informed or fair. [142, 243, 554, 555, 566]
932. NRW are sufficiently content with the EMMP and DEMMP process to have not pursued a case regarding AEOSI for marine mammals, nor for the impact on guillemot and razorbill populations. The RSPB's position on the ability of the proposal to proceed past the indicative first phase appears somewhat premature given that the purpose of the works is, in part, to test and develop approaches for the monitoring and development of tidal energy capture devices in Welsh and UK waters. [228, 233, 533, 575-578]

#### Monitoring

933. The Applicant has provided a summary of its case in regard to monitoring. It is clear and has merit for the reasons within it. [234]
934. The Order would not identify monitoring measures as these would be set within the other controls on the works, including the EMMP. The Applicant is unambiguous on this matter (i.e. "...a TWAO cannot be amended..."). While monitoring has been of concern to the RSPB, if NRW regulate competently, the EMMP would prevent any deployment until effective monitoring is in place. [284, 551]
935. The RSPB has no "in-principle" objection to the use of a PDE for tidal energy works, but its concerns on monitoring appear relevant to the principle of adaptive monitoring / management and on which this PDE relies. Adaptive management is endorsed for assessing projects of this type in Wales and is adopted policy. [37, 38, 39, 51, 52, 114, 243, 556]
936. The RSPB doubts that even Phase One of the works would be deployed. Reference has been made to, amongst other things, ongoing work since 2012 on defining avoidance rates in relation to offshore wind farms, and the lack of a recommended default avoidance rate to be used for tidal energy proposals. However, the proposed works specifically set out to help to resolve these issues, and Welsh Government policy seeks tidal stream energy capture in this location. [249, 567-571]
937. Table 4-1 of the OEMMP (Ref: Inquiry Doc -101) would allow all forms of monitoring to be considered. It would aim to monitor potential collisions, annual numbers / breeding success rates in the colony, while also tracking movements and diving behaviour. Of the mitigation and monitoring methods listed in Table 4-1, the

Applicant's case focuses on: annual colony counts; tagging and tracking; and, video and sonar. [250-258]

938. The RSPB are supportive of colony counts, while noting the limitations of access to the birds and the numbers that reasonably could be expected to be caught, and the need for other means of monitoring to be used alongside it. Whereas colony counts record the number of birds, tagging and tracking would address their movements and the likelihood of them coming into contact with devices. It is hoped that video and sonar would enable the identification and recording of interactions with devices. The Applicant has described how these methods would be approached and the expected challenges in implementing them. [253-257]

939. The RSPB questions what would be achievable in seeking to provide effective monitoring for the MDZ and provides details to support its view. However, the Applicant considers the RSPB to be too dismissive of the potential for these techniques to provide suitable monitoring of the bird colony and its activity in the vicinity of deployed devices and infrastructure. As noted above, one of the purposes of the MDZ would be to explore these challenges and identify appropriate methods of monitoring. It not apparent that the challenges would be likely to be insurmountable. [258, 572-574]

#### The EMMP

940. The EMMP, with its monitoring, management and mitigation, would be delivered through the Marine Licence. For the determination of the application, the OEMMP is provided as Ref: Inquiry Doc – 101.

941. Criticisms aimed at the EMMP appear not to recognise the protections for birds within the outline document that have enabled NRW to adopt its position in relation to it. A summary of these protections has been provided by the Applicant. [244]

942. In addition, the detail sought by the RSPB at this stage would appear to run counter to the intentions for adaptive management in cases such as this and the role it would have in developing new forms of low carbon energy capture. This application is supported by extensive information on the possible environmental impacts of the works. The details that remain to be provided, and in some instances established, are those that reasonably would be expected in a proposal of this kind. NRW has recognised that and found the proposal to be appropriate within the context of adaptive management. [259-271] [551, 554]

#### Sufficiency of information to inform the decision

943. The RSPB's view is that the Welsh Ministers will not have sufficient information on the works to reach a properly informed decision for a project of up to 240MW in scale. However, worst case scenarios have been used when assessing potential impacts. [235, 236, 534, 556]

944. Rather than detailed mitigation being set out in the ES, it principally would be provided through the phased approach to implementation of the works and the associated EMMP. The Applicant's position is unambiguous in relation to *Atkinson v Secretary of State for Transport [2007]* Env LR 5 and RSPB's expectations for the information within the ES. Rather than the Applicant relying on further consents, it considers that more than sufficient environmental information has been provided to inform the Welsh Ministers' decision. [142, 547, 548, 552, 553]

945. Section 13B of the TWA requires the Welsh Ministers to: consider the EIA information prior to making a determination; and, come to a reasoned conclusion on the likely significant effects of the scheme. For this application, worst case scenarios have been used in the ornithology modelling. And if the Order were to be made, the marine licensing process (and DPPs) would continue to provide oversight of the impacts on birds and the effectiveness of the EMMP. [236, 243, 549, 550]

#### Conclusion on ornithology

946. The RSPB considers the proposed scheme to be too big, too soon, and at a time when the technology and understanding are in their infancy. However, the MDZ is specifically intended to address all of these issues. While the RSPB questions whether the proposed works would progress beyond their first phase, the full proposal is before the Welsh Ministers and the necessary checks would be in place to ensure that the power output is only extended when it would be appropriate to do so.

947. RSPB's closing submissions do not mention "adaptive management" even though that is the specific regulatory context for the works and would be a means of addressing many of the matters that are of concern to the RSPB. The closing submissions state that the RSPB's case is not that the use of the PDE is legally deficient, but RSPB does question if the decision will be properly informed.

948. Given the nature of the proposal, the application cannot provide full details of the works. However, I am very clear on the nature of the works proposed.

949. The Applicant has provided cogent reasons why the RSPB's case fails to recognise the safeguards that are built into the proposal and the regulatory framework that would oversee its implementation. That implementation would not be without risk to sea birds, but no such works would be. And the issues the phased introduction of the works would address are integral to determining the most appropriate way(s) to harness tidal energy resources in locations such as that proposed. [230, 231, 232, 554, 575-578]

#### **Terrestrial ecology**

950. The Glannau Ynys Gybi / Holy Island Coast Special Area of Conservation SAC / SPA and SSSI includes land where the export cables would come ashore if HDD were not to be used. The above ground (over the cliff) route for all or some of the nine export cables, would cause the export cables to cross Annex I vegetated cliff habitat within the SAC designation. Details of the habitat and the works that might affect them have been provided. [150-152, 468, 469]

951. Conservation objectives for the Holy Island Coast SAC are provided within Ref: MDZ/F2. The relevant section of the NRW Proof of Evidence (PDF page 23/92 of Ref: POE021) notes the vision for the SAC to encapsulate and summarise its detailed conservation objectives into a simple statement that:

*"...The vegetated coastal cliffs should remain largely undisturbed and support the endemic South Stack fleawort, golden samphire, rock sea lavender, hay scented buckler fern, juniper, ciliate strap-lichen and golden hair lichen..."*

[158, 481-483]

952. Securing cable ducting on the cliff face and over the edge in J-tubes could result in the loss of protected habitat for a period of almost 40 years. NRW considers a

habitat loss of that length of time to be tantamount to a “permanent”, rather than “long-term, temporary” loss. [146-149, 154, 468, 469]

953. A dictionary definition of “permanent” could be something that is either “long-lasting” or “forever”. A “permanent” job often would be a period of continuous employment within someone’s working life. For some human lifespans, the near 40 year Project Life of Morlais could be considered to be “permanent”. An ecological habitat would be expected to be continuous many times beyond such a relatively short timescale, and especially if that habitat were to be protected. However, I am unaware of habitats that could be considered to be “forever”. They are dynamic environmental systems that change over time, perhaps subtly or even significantly, in response to factors affecting them. Some habitats, such as the Holy Island Coast SAC, are valued and have become protected.
954. If the physical conditions on the cliff were not to have changed, and if any area of damaged habitat were to be next to, or near, other areas of valued undamaged habitat, the damaged habitat would be reasonably expected to recover. However, that may take many years or even decades to occur. While I understand how the Applicant arrives at a view that the effects could be considered “long-term, temporary”, for the works proposed and the possible effects of them on the SAC vegetated cliff, I prefer the NRW’s interpretation of “permanent” for the reasons given above. [154, 469]
955. Moving on from how the temporal change that may result from the works should be considered, the Applicant and NRW disagree on whether the loss, if it were to occur, should be considered significant and/or to have an adverse effect on the integrity of the site (“AEOSI”) i.e. of the SAC. [155, 470]
956. NRW and the Applicant have provided summaries of relevant legislation and case law. The Applicant accepts that percentage of habitat lost is not the only factor to consider in significance. [157, 162, 471-477]
957. Attention has been drawn to judgements where habitat impacts have been found to be so small there is no AEOSI and effects would be “*de minimis*”. It is clear from the evidence provided that an effect could be *de minimis*. The question in this case is whether that would be the conclusion on the likely effect of the possible works on the Holy Island Coast SAC vegetated cliffs. [156, 487, 489]
958. The Applicant considers that any loss would be recoverable in the long-term. While I agree that should be the case, it is the timeframe for that recovery that also separates this habitat from many others referred to in the evidence. Examples referred to of judgements and decisions regarding AEOSI determinations tend to be sandbanks, intertidal mud flats and dry heaths.<sup>1018</sup> These would appear not to be comparable to the Holy Island Coast SAC in terms of, for example, substrate, speed of habitat re-establishment / recovery or agreement regarding likelihood of significant effect. [154, 156, 157, 485, 490]
959. NRW has appraised the cases in referred to in Mr Campbell’s evidence and concludes the cases fail to support the Applicant’s approach. [156, 488-494]
960. So, turning to the cases that NRW have commented on. The possible effects of the proposed works on the Holy Island Coast SAC vegetated cliffs, and the potential

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<sup>1018</sup> Appendix 1 to Mr Campbell’s Proof of Evidence (Ref: MDZ/P3).

time for the habitat to recover, do not sit easily with possible effects that were described in the **Sweetman v An Bord Pleanála** case as either "...strictly temporary loss of amenity which is capable of being fully undone..." or with "...the permanent destruction of part of a habitat..." as the effects would be long term but this habitat would be expected to recover. However, the CJEU judgement that "*the lasting and irreparable loss of the whole or part of a priority natural habitat type whose conservation was the objective that justified the designation of the site concerned as an SCI, the view should be taken that such a plan or project will adversely affect the integrity of that site*", is germane to this case. [489, 490]

961. NRW notes the examples given (in Appendix 1 to Mr Campbell's Proof of Evidence) are within a report for Natural England that has no application in Wales, and in any event, has not been adopted as guidance for use in England. Even so, NRW does not disagree with the conclusion in the report's Executive Summary, which notes that a wide range of factors are considered when determining the significance of small-scale effects, specifically:

*"The cases reviewed show that in practice, authoritative decision-makers invariably consider a wide range of factors when determining the significance of small scale effects, including:*

- *the characteristics of the qualifying feature (for example, rarity, location, distribution, vulnerability to potential change);*
- *how the ecological structure and function of the site might be affected;*
- *what ecological function the affected area is performing, or could perform, in terms of the ecological requirements of the qualifying features;*
- *the location of the affected area both in terms of its geographic position in the designated site and in terms of its position relative to the project;*
- *where a qualifying species is affected, when the activities would occur, the rarity of individuals of the species, its conservation status and future prospects in the location in question."*

[480]

962. The Applicant has estimated that the possible loss of vegetated cliff habitat would sit within a range found in recent cases not to give rise to AEOSI as listed in the table at [156] above and dealt with in Mr Campbell's Proof of Evidence (Ref: MDZ/P3). However, NRW has effectively rebutted all of these points of reference. For the reasons given in NRW's closing submissions, it is not apparent that the circumstances of the sites referred to, and resulting judgements, are sufficiently similar to be comparable. [491-494]

963. The table within the Applicant's closing submissions, at [156] above, also makes reference to the resurfacing and associated widening of the beach access path down the cliff next to Henborth. The inquiry heard about the background to that decision, the history of the path itself and the survey to confirm the absence of SAC species on the route of the path. This example has not been shown to be fully supportive of the Applicant's case, although the evidence and exchanges have left some doubt as to the full extent of vegetation loss and disturbance that would be required to complete the work on the path. [158, 495]

964. On the face of it, the potential loss of SAC habitat due to the proposed works would appear minimal within the overall context of the Holy Island Coast SAC. However once lost, the habitat recovery would not be rapid due to the nature of this exposed cliff environment. [157, 485, 486]
965. Looking at the quality of the habitat that could be lost. The botanical survey confirmed the area of the cliff face that could have cable ducting attached to it to be Annex I habitat "*H1230: Vegetated sea cliffs of the Atlantic and Baltic coasts*". NRW's evidence notes it to be comprised of a fine mosaic of crevice and ledge vegetation maritime therophyte communities and maritime grassland that extends over much of the rockface, and exposed rock. [158, 485]<sup>1019</sup>
966. While four of the species referred to in the vision for the SAC have been found not to be present in the footprint of the works that could occur on the vegetated cliff, two other species that are important to the SSSI have been. It is also clear that the opportunities for these species to become established on the cliff face are limited by the physical and environmental conditions of the cliff. [158, 485]
967. Paragraph 11 of Planning Policy Wales (11th edition) confirms that Technical Advice Notes supplement it. Technical Advice Note 5: *Nature Conservation and Planning* ("TAN 5") was issued in September 2009 and it continues to be the relevant advice on this topic. Paragraph 19 of TAN 5 states that convincing and exceptional reasons should be given for not adopting the advice from "CCW" (now part of NRW). Reference is made to judgements in *Mynydd y Gwynt* in regard to the decision-makers ability to depart from NRW's advice. My findings are based on the cases made to this inquiry and do not simply follow the advice from NRW. [162, 476-478, 497]
968. Annex 3 of TAN 5, entitled "*Development proposals likely to affect an internationally designated nature conservation site*", provides advice on what constitutes a significant effect within the context of the *Waddenzee* judgement. My attention has been drawn to paragraphs 19 and 21 of TAN 5 Annex 3, which state:
- "...19. The integrity of a site is the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified or listed. In determining the effect on site integrity, the advice of CCW and the citation issued by them saying why the site was classified or listed will need to be carefully considered. Whilst it is the duty of the decision-taker to carry out the appropriate assessment and make a judgement as to the effect on site integrity, it would normally be expected to adopt the advice of CCW on the integrity test. If it does not, the decision-taker should have convincing and exceptional reasons for not adopting the advice, which it should be prepared to explain, and it should be able to show that these reasons are clearly supported by sound scientific evidence.."*
- 21. Compensatory measures (see below) should **not** be taken into account in assessing whether the proposal would adversely affect the integrity of European sites or European offshore marine sites."*
- [478, 479]

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<sup>1019</sup> Paragraph 5.1.2 of Ms Lewis's Proof of Evidence (PDF page 24/92 of Ref: POE021)

969. The proposed works, if they were to include one or more J-tubes carrying export cables up and over the cliff, would require anthropogenic activity that could alter the extent of features. This is identified as a performance indicator for the condition of the vegetated cliffs in the “Core Management Plan” for the SAC & SPA (PDF p.21/39 of Ref: MDZ/F2). [483]
970. NRW accepts that the proposed works would affect a small percentage of the SAC as a whole. The Applicant estimates this to be 0.046% and considers it to be a highly precautionary figure with the actual area of Annex I habitat affected being closer to 0.023%. However, I find NRW’s point regarding the significance of the loss as a proportion of the overall area of crevice and ledge and maritime therophyte vegetation to be convincing and that to be a more appropriate measure. This is due to the limited spatial distribution of the vegetation within the SAC and its fragility. I accept that in this environment, and the context of the habitat that could be affected by the works, it is likely that the effects of possible works on the vegetated cliff at Abraham’s Bosom would be more than “*de minimis*”. [154, 486, 487]
971. NRW has provided a summary of its case on this issue at [496], and for the reasons given above, I find it persuasive. Specifically: the restricted geographic distribution of a species found on the section of vegetated cliff concerned; that section of vegetated cliff has good coverage of crevice and ledge vegetation, but this makes up a small proportion of the overall vegetated cliff habitat in the SAC; the long-term recovery that would be expected for any loss of the crevice and ledge vegetation; the potential for the soil substrate to be lost during the works due to shading and associated vegetation loss; and, the resulting uncertainty prevents the decision-maker being convinced that the crevice and ledge vegetation would easily recover after the works have been removed.
972. Accordingly, I find that an adverse effect on the integrity of the Holy Island Coast SAC i.e. “AEOSI”, cannot be ruled out, and I recommend that NRW’s advice be accepted on this matter. [163, 484, 496, 497]
973. Therefore, regulation 64 of the Habitat Regulations is engaged. The relevant requirements are within regulation 64 (1), which are set out in paragraph [474] above. [164, 471-474, 497]
974. The AEOSI would result from a fall-back position to the proposed means of implementing the works. Reasons have been provided as to why there are no alternatives to that fall-back route for the export cables (if it is shown to be required). These focus on: the geographic location of the tidal energy resource; the need to harness that resource; the policy support for it in this location; the extent of the SAC along this coast; that the cliff route is a fall-back position that a proposed planning condition would ensure only would be undertaken if necessary; and, the micro-siting of the works. Additional information on the alternatives considered is provided within the relevant part of the ES. From the evidence provided, I am satisfied that there are no alternative solutions to the export cable fall-back cliff route. [166]
975. Turning to whether the works are supported by imperative reasons of overriding public interest (“IROPI”). The benefits of the scheme and the policy support for it are set out in the Applicant’s case above, and in the initial policy conclusion at the beginning of my conclusions. The proposed works would establish ways to utilise a regular, reliable alternative to carbon based fuels to combat climate change, in a location where the scale of the tidal energy resource has been shown to be

significant in Welsh and UK terms. The works would also help to develop the tidal stream energy sector and the industries that support it. As such, it would help to diversify the economy of Anglesey and make it more resilient, while also creating jobs on and off the island. These benefits would in turn be expected to deliver a range of associated socio-economic benefits that result from employment and the educational opportunities that an industry of this kind would be expected to have. I consider these matters, not least the need to tackle climate change with viable solutions that directly and indirectly benefit local communities, to demonstrate imperative reasons of overriding public interest in the clearest terms. [58-63, 165]

976. Regulation 68 requires that where AEOSI would occur, any necessary compensatory measures are secured to protect the overall coherence of the SAC. I agree with NRW that, given the works include a fall-back position that would cause AEOSI to occur, the current "Outline Habitat Enhancement Plan" (Ref: Inquiry Doc – 069) should be considered as providing compensation measures rather than mitigation or enhancement. Although not submitted to the inquiry for that purpose, the Applicant has confirmed that following a finding of AEOSI, the Outline Habitat Enhancement Plan is to be considered as necessary compensation for the purposes of regulation 68. And that is how I now consider it to be. [167, 475, 498]
977. Proposed planning condition 7), as appended to this report, would provide a scheme of landscaping that would include "biodiversity enhancement measures" on land above the cliff face at Abrahams Bosom. Proposed planning condition 11) would provide the overall scheme for habitat compensation. Planning conditions 7) and 11) would ensure that the habitat compensation necessary to protect the overall coherence of the Holy Island Coast SAC is provided. The submission of the scheme for its approval in writing would enable the integration between landscape and ecological issues sought by NRW to be addressed. [167, 498, 523]
978. The Habitats Directive integrates the precautionary principle and therefore these findings are in accordance with that principle. Moreover, the WNMP also integrates and refers to the precautionary principle in its policies. [114]

## **Other matters**

### **Highway Safety**

979. IoACC as highway authority has confirmed that the proposed use of the highway is acceptable. Proposed condition 15) would provide a Construction Traffic Management Plan to address the effects of the works on traffic, transport and travel. [461]

### **Noise & Vibration**

980. Proposed condition 3) would require a Code of Construction Practice (“CoCP”) prior to any phase of development that would address construction noise. Accordingly, no unacceptable levels of noise, disturbance and vibration would be expected to result the proposed works.

### **Ground conditions and potential contamination**

981. Land that could be subject to the proposed works could be found to be contaminated. Proposed condition 10) would address such circumstances. [379]

### **Water quality**

982. Appendix 8.1 in ES Volume III provides a Water Framework Directive “WFD”) Compliance Assessment. It notes the objectives of the assessment to be to: 1) identify water bodies that could potentially be affected by the project; 2) identify activities that could affect these WFD water bodies; 3) assess the potential for the proposed project activities to result in a deterioration in the status of WFD water bodies, or prevent status objectives being achieved in the future; and, 4) determine the compliance of the project with the requirements of the WFD. The WFD Compliance Assessment concludes that, while impacts are predicted on key indicators of WFD waterbody status for the Caernarfon Bay North waterbody, none of these impacts would be of sufficient magnitude to lead to a deterioration in status of any of the receptors that have been assessed by the ES. NRW has confirmed the application’s WFD Compliance Assessment to be adequate. Details of the materials within the cabling and the risk of accidental spills at sea would be matters for the marine licensing process to consider (paras. A.88 & A.95 of Ref: FEI – REP004).

### **Air Quality**

983. Matters in relation to air quality and possible effects on it have been resolved. For each phase of the works the CoCP required by proposed condition 3) (and any requirements of marine licensing in regard to offshore effects) would, where relevant, include controls that enable air quality to be maintained. [264]

### **Electromagnetic radiation**

984. Concerns have been raised regarding the possible proximity of export cables to residential land use if they were to reach the South Stack substation via the cliff crossing “fall-back” route. The Applicant has produced Ref: Inquiry Doc – 053 to address the expected levels of electromagnetic radiation if the cables were to be taken on that route (which is the subject of possible planning condition 5) in Appendix 1 to this report). No unacceptable impacts have been identified in relation to electromagnetic radiation. [425]

### **Funding and financial viability**

985. A representor requested a “full-cost-benefit analysis which includes environmental” matters. Project delivery and funding are the subject of Section 9 of Mr Billcliff’s Proof of Evidence, and below in regard to Compulsory Acquisition, these matters are dealt with in more detail. Rule 10(3)(a) of *The Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006* – Statutory Instrument 2006 No.1466 requires the application to be accompanied by the Applicant’s proposals for funding the works and the acquisition of land. These details have been supplied as Ref: MDZ/A6, along with the estimate of costs required by rule 10(3)(b)(ii) (Ref: MDZ/A7). The proposed scheme would demonstrate the suitability and, in part, the (financial) viability of tidal stream energy technology in these waters. [366, 732]

986. These requirements do not include “environmental matters”, but what has been requested is, in effect, provided through the Welsh Ministers’ consideration of this report and the evidence in this case. Those matters will include the costs of the scheme and their weighing with other matters in the case.

### **Alternatives**

987. The Applicant has also addressed alternatives in relation to regulation 64 of the Habitats Regulations, noting there to be no alternatives to the MDZ. This is due to the specificity of the location in regard to tidal stream resource in this area. [166]

988. Alternatives to the proposed works, the individual elements of them, and the scale of the project, are the subject of ES Chapter 3: *Site Selection and Consideration of Alternatives* (Ref: MDZ/A25.3). Cogent reasons are given for the Applicant’s choices.

### **Consultation and the adequacy of the ES**

989. At the outset of the inquiry the Applicant confirmed that that all legal requirements had been met in preparing the application, the ES and consulting on it. No evidence has shown that confirmation to be incorrect.

990. The ES was found to require Further Environmental Information, which was provided, and parties had an opportunity to comment on it. The inquiry provided an opportunity for parties to address the cases made regarding alleged deficiencies in the ES. Matters raised in relation to the adequacy of the ES were not borne out during the inquiry and are dealt with earlier in these conclusions. [2, 3, 76-87, 274, 578, 589, 598, 600, 733, 734]

991. The MDZ proposal is seeking to demonstrate tidal stream energy converter technology, advance the understanding of it and the challenges to its adoption in UK waters, the means of monitoring the impacts of the technology and the mitigations where they are found to be necessary.

### **Cumulative Impacts**

992. NRW raised concerns regarding the cumulative impact assessment and the timing of works for the Order Scheme and those for the Holyhead Port Expansion. This was in addition to the overarching concerns regarding the need for an updated impact matrix for all stages of the project that demonstrates the pathways and plans/projects considered for each receptor. [Ref: FEI\_REP004] However, NRW has agreed that its concerns on cumulative impact are secondary matters capable of agreement at a later date. [Footnote 244]

993. The inquiry enabled all other concerns in relation to potential cumulative impacts to be aired and these are dealt with under the issues above.

## **The Order**

994. While Trinity House had initial concerns regarding: site and device specific NRAs; safety zones and the possibility of its vessels committing an offence when exercising its functions; and, that its direction making powers (and indeed, the Welsh Minister's decision making) could become subject to arbitration. The draft Order was amended prior to the closing submissions to address these matters through Articles 21, 43 and 49, which are summarised in the SoCG, Ref: MDZ/L9). [585, 586, Refs: Inquiry Doc – 102 & Inquiry Doc - 103]
995. The Applicant notes there to be no remaining objections to the drafting of the Order, apart from those pertaining to CA/CPO, and that is my understanding. [419]

## **Planning obligations**

996. A draft planning obligation (Ref: Inquiry Doc – 079) has been submitted to the inquiry and is proposed by the IoACC to be the subject of planning condition 23) (within Ref: Inquiry Doc - 098). The proposed s.106 agreement sets out to meet IoACC's concerns regarding seascape and landscape impacts and a CIL compliance statement has been provided (Ref: Inquiry Doc – 144). In their submissions to the inquiry, parties have referred to the obligations that the s.106 agreement would provide. [122, 135, 276, 277, 291, 303, 420-424, 430, 448-459, 525, 619]
997. Regulation 122 of the Community Infrastructure Levy Regulations 2010 (Statutory Instrument 2010 No. 948) states that a planning obligation may only constitute a reason for granting planning permission if the obligation is: necessary to make the development acceptable in planning terms; directly related to the development; and fairly and reasonably related in scale and kind to the development.
998. However, the s.106 agreement is still a draft unexecuted deed as the Applicant is not yet in a position where it could bind an interest in the land (see the reason for proposed condition 23) in Ref: Inquiry Doc – 098). Therefore, there is no planning obligation to meet CIL regulation 122.
999. Even so, necessary compensation measures for seascape and landscape impacts have been agreed between the Applicant and IoACC and could be delivered through a provision that meets possible condition 23) within Appendix 1 to this report. Likewise, suitable habitat compensation could be provided through a scheme that meets possible condition 11) within Appendix 1.

## **Planning Conditions**

1000. I have considered the conditions suggested to be imposed on the deemed planning permission by IoACC in light of the tests in Welsh Government Circular (“WGC”) 016/2014 “*The Use of Planning Conditions for Development Management*”. A reason is provided in Appendix 1 for each of the proposed planning conditions and sets out concisely why the condition would be needed. These concise reasons are supported by the relevant topic sections of this report. Phrases such as “*substantially in accordance with*” do not meet the precision test. Also, the responsibility for discharging conditions lies with the Local Planning Authority (“LPA”). Conditions set out what applicants are required to do and it is not necessary to refer to the LPA consulting with other bodies before discharging conditions. [443-446]
1001. If it is considered not feasible to install cables by horizontal directional drilling, proposed condition 5) requires the submission of a report explaining why. I agree that such a report should be completed by a suitably qualified engineer but see no reason why the LPA needs to approve the appointment of a particular person.
1002. Proposed condition 11) requires the submission of ecological surveys “*designed to confirm that the ecological baseline has not materially changed since the surveys supporting the ES were undertaken*”. However, the application is supported by an EIA, which was supplemented by “Further Environmental Information” and these were thoroughly tested during the inquiry. In addition, proposed condition 11) would apply to works on land that would be carried out at the start of the implementation of the Order. Therefore, it has not been shown that the proposed condition would be necessary. Moreover, paragraph 4.27 of WGC 016/2014 is unambiguous that “*...Where relevant, such information is a material consideration in the determination of an application and so should not be left to be considered after planning permission has been granted...*”. Accordingly, if the Order were to be made proposed condition 11) should not be imposed.
1003. Planning conditions should not be used to secure the submission of a planning obligation. However, the need to secure landscape and habitat compensation has been demonstrated. The Applicant’s “Outline Habitat Enhancement Plan” provides the basis for such habitat compensation. A scheme for the provision of that enhancement could be the subject of a planning condition, and in the absence of an executed planning obligation, landscape compensation would also be the subject of such a condition. [135, 167, 276, 291, 303, 430, 448-454, 459, 498, 525]
1004. Appendix 1 to this report includes: an alternative condition 11) that addresses habitat compensation; and, an alternative to proposed condition 23) that addresses the provision of landscape compensation to address the natural beauty of the AONB and the adverse impacts on the character and appearance of the locality.
1005. NRW submits that draft condition 7(c) should be amended to read:
- “...(c) Details of biodiversity enhancement measures on land above the cliff face of Abraham’s Bosom, including measures for landscape conservation and enhancement...”.*
- However, the landscape works provided by condition 7) would not be the only means of addressing landscape and habitat. Proposed alternative conditions 11) and 23)

would expand the scope of landscape works to provide both landscape and habitat compensation by the most appropriate means, and in the most appropriate locations, to meet the needs for compensation. [523, 524]

1006. The Circular warns that reasons for conditions such as "*to secure the proper planning of the area*" are vague and suggest that a condition has no proper justification.

1007. For the avoidance of doubt, the "Training Task and Finish Group" referred to within proposed condition 20) is the subject of SoCG Reference 29 between the Applicant and IoACC (see Ref: MDZ/L7). Conditions 19) and 21) would be necessary to ensure the proposed benefits from a skills and training action plan and a supply chain action plan are realised.

## **The Planning Balance**

1008. The Welsh Ministers need to ‘weigh’ the competing merits of the proposal (i.e. the arguments for and against the works), to arrive at their decision, as I now do in readiness to make my recommendation on the application. Before making that recommendation, I shall address the Compulsory Acquisition sought through the Order, along with a number of other legislative requirements. However, firstly turning to my own weighing of the issues in this case.

### **Matters weighing against**

1009. There would be significant impacts on the character and appearance of the locality, the settings of a number of heritage assets would fail to be preserved, and the natural beauty of the AONB would be diminished.

1010. There may be some depletion of wildlife within and around the MDZ. However, if that depletion were to occur it has not been shown to be unacceptable, and in any event, must be balanced with the benefits of the scheme. [730, 731]

### **Matters weighing in favour of the scheme**

1011. The Applicant has provided a concise summary of the matters that it considers provide support for the proposed works, which were added to by other contributors to the inquiry. These matters include: combatting climate change by assisting the decarbonisation of energy supplies; helping to develop the tidal stream energy sector and the industries that support it; and in doing so, it would help to diversify the economy of Anglesey and make it more resilient, while also creating jobs on the island. [58-65, 438, 440, 753]

### **Conclusion and the balance**

1012. Many of the objections in this case have, at least in part, resulted from the inclusion of surface emergent devices in the scheme. The reasons why such devices may be important to the industry as it establishes itself have been explained. [32] However, this particular location is very sensitive in terms of landscape / seascape, heritage asset settings and established tourist attractions.

1013. The stated “project life” for the demonstration zone is 37 years, which is an extended period of time and one that would have a degree of permanence to those experiencing the impacts over such a timescale. However, opportunities for tidal energy capture are geographically specific in nature and are found in relatively few locations around the Welsh coast.

1014. Therefore, if the MDZ demonstrates the viability and suitability of tidal energy devices for UK waters, there would be a reasonable likelihood of tidal energy capture being sought as a longer-term activity in this location, but that is as yet unknown.

1015. NRW’s suggested amendments to the Order’s “restricted area plan” would reduce the possible impacts of the Order on landscape, seascape and the natural beauty of the AONB.

1016. Matters set out for IROPI are relevant to, and inform, this conclusion. There is a very clear and pressing need to source energy from alternatives to fossil fuels. Tidal energy is reliable, predictable and has the potential to make a significant

contribution to meeting existing and future demand for electricity in Wales and the other parts of the UK. It is so due to the physical circumstances of this coast and the tidal flows around it. In that regard, and unlike many of the other sources of renewable energy, the opportunities to harness the best tidal power resources are geographically limited. And this is one such location.

1017. The scalable nature of the works would enable the suitability of the location, the technology, along with the monitoring and mitigation of it, to be demonstrated and to make the most appropriate use of the tidal energy resource. [438-442]
1018. The evidence, and my conclusions, confirm that Morlais would be a sustainable form of development.
1019. My conclusions have taken into account the requirements of sections 3 and 5 of the Well Being of Future Generations (Wales) Act 2015. I consider that my recommendations will be in accordance with the Future Generations (Wales) Act's sustainable development principle through its contribution towards the Welsh Ministers' well-being goals of supporting safe, cohesive and resilient communities. This scheme would contribute toward the current well-being objectives of building a stronger, greener economy as progress is made towards decarbonisation, and embedding our response to the climate and nature emergency in everything we do.
1020. The Order, with the proposed mitigation within the scheme and that which would be delivered through planning (and marine licence) conditions, attracts significant policy support. This includes: WNMP Policies GEN\_01, ELC\_03; *Future Wales* policies 18, 24; the relevant parts of PPW; the Vision for the JLDP and the policies that seek to implement it. [118, 125, 775-789, 792]
1021. The proposed mitigation would ensure compliance with: WNMP Policies SCI\_01 SOC\_07 and ENV\_01; and, JLDP policies including PS 19, AMG 3 and AMG 4. [793]
1022. No matters have been found to outweigh the policy compliance that would result from the making of the Order with the amendments recommended in this report.
1023. In conclusion, all of the matters identified as providing support for the proposal were explored during the inquiry. When weighed against the possible impacts of the works, they provide a clear and convincing case for the making of the Order, with amendments regarding the possible locations of surface emergent devices and infrastructure.

### **Deemed Planning Permission**

1024. By the close of the inquiry the Applicant and IoACC had reached a high level of agreement in relation to the deemed planning permission. The remaining area of disagreement regarding a clause in proposed condition 17) that would require agreement on a list of consultees, which is addressed in the conditions section below. [420, 421]
1025. Application document Ref: MDZ/A19 is entitled "*Request for Direction under section 90(2A) of the Town and Country Planning Act 1990, conditions to be attached to the Direction and Statement of Reserved Matters*", and it addresses each of these stated matters. As the document's title clearly signals, paragraph 1 of Ref: MDZ/A19 seeks a direction to be made under section 90(2A) of the Town and Country Planning Act 1990.
1026. Paragraph 8 of Ref: MDZ/A19 sets out the elements of the proposal that are, or may be, development requiring planning permission under section 57(1) of the Act 1990. The list in paragraph 8 includes all of the authorised works in Schedule 1 of the Order. Section 57(1) of the 1990 Act requires planning permission for the carrying out of any development of land.
1027. Matters concerning the likely impacts of the proposed works are addressed elsewhere in this report. The proposed planning conditions in Appendix 1 have been found to be necessary for the reasons given and also to meet the other five tests of a condition as set out within WGC 016/2014. Possible planning conditions 11) and 23) would enable the suitable habitat and landscape compensation measures, the nature of which are understood and the subject of the unexecuted planning obligation, to be brought forward. With the possible planning conditions in Appendix 1 to this report, the proposal would comply with relevant policies in Future Wales and the JLDP.
1028. Therefore, it is recommended that the Welsh Ministers issue a direction under section 90(2A) of the Town and Country Planning Act 1990 that planning permission, so far as it is required, be deemed to be granted for the development sought to be authorised by the Order now being applied for within the various limits provided for in the draft Order and the accompanying deposited plans and sections; and for the deemed planning permission to be granted subject to the planning conditions within Appendix 1 to this report.

## **Compulsory Acquisition (“CA”)**

### **Legislation**

1029. Current Welsh Government guidance for Compulsory Purchase is contained within Circular 003/2019 - *Compulsory Purchase in Wales and ‘The Cricheol Down Rules (Wales Version, 2020)’*. Paragraph 24 of Circular 003/2019 notes that it applies to CPO under the 1990 Act and that the other CPO powers listed in paragraph 24, including those of for the TWA, have their own guidance. The Applicant has addressed this via Footnote 714 [366], and I agree with the approach set out in that Footnote.

1030. Specifically, the document entitled *A Guide to TWA Procedures* was published in 2006 by the Department of Transport and refers to Circular 06/2004 - *Compulsory Purchase and the Cricheol Down Rules*. Circular 06/2004 now has been superseded in England, and in Wales, Circular 003/2019 has been written within and reflects the current legislative environment in Wales. Consequently, regard should be had to Circular 003/2019. [366]

1031. Paragraph 10 of Circular 003/2019 confirms that compulsory purchase powers may be used to acquire land, and rights over land, where a compelling case in the public interest can be demonstrated which outweighs the loss of private interests.

### **The Order Lands**

1032. The lands sought by the Order are summarised by:

- (i) *Location and Key Plan* (Ref: Inquiry Doc – 097)
- (ii) *Map 1, Works and Land Plan* (Ref: MDZ/A17.1)
- (iii) *Map 2, Works and Land Plan* (Ref: MDZ/A17.2)
- (iv) *Map 3, Works and Land Plan* (Ref: MDZ/A17.3)
- (v) *Map 4, Works and Land Plan* (Ref: MDZ/A17.4)
- (vi) *Map 5, Works and Land Plan* (Ref: MDZ/A17.5)
- (vii) *Map 6, Works and Land Plan* (Ref: MDZ/A17.6)
- (viii) *Map 7, Works and Land Plan* (Ref: MDZ/A17.7)
- (ix) *Map 8, Works and Land Plan* - (Ref: Inquiry Doc – 066 [390, 392])<sup>1020</sup>
- (x) *Book of Reference* (Ref: Inquiry Doc – 065)

With associated negotiations and objections summarised within:

- (xi) *Land CPO Process Schedule* (Ref: Inquiry Doc – 099)

[367]

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<sup>1020</sup> With annotated changes regarding ownership boundaries of Plots 46 & 47, as described in Footnote 817, and the removal of part of an existing building in Ref: Inquiry Doc – 076.

### **Modifications sought to the Order Lands**

1033. Amendments proposed by Menter Môn are summarised within:

- a) A unilateral undertaking in relation to the access road within Plots 48 and 51, dated 09 February 2021 (Ref: Inquiry Doc – 108)
- b) *Morlais – Orthios Plan 1* (within Ref: Inquiry Doc – 108)

[377]

1034. Orthios also proposes amendments to the Order, which are dealt with in the relevant section below.

### **The Need for Compulsory Acquisition**

1035. CA would be needed to release the intended benefits of the scheme by enabling the export of power from the MDZ to the national grid and local network connections. The intended benefits were summarised at the beginning of this report. However, given their relevance to the consideration of CA, and to assist the reader, the intended benefits are repeated here and include:

- (i) promoting and supporting the use of alternatives to fossil fuels;
- (ii) reducing greenhouse gas emissions;
- (iii) providing an installed tidal stream energy generating capacity of up to 240MW;
- (iv) assisting the development of a tidal stream energy industry within the UK and internationally, and Anglesey as a centre of excellence for tidal energy;
- (v) creating employment opportunities for the local community and in the local supply chain; and,
- (vi) attracting significant investment into Anglesey with resulting revenues and associated socio-economic benefits.

[19]

1036. Further detail on these matters is provided in section 5 of Mr Billcliff's Proof of Evidence (Ref: MDZ/P8).

1037. The Applicant notes the efforts that have been made to minimise the land take required. However, Orthios disputes this in relation to its land. [367, 685]

### **Funding and delivery**

1038. Proposed funding arrangements have been addressed above in relation to an objection that questioned the viability of the scheme. Details have been supplied as Ref: MDZ/A6, with the estimate of costs required by rule 10(3)(b)(ii) (Ref: MDZ/A7), and in section 9 of Mr Billcliff's Proof of Evidence (Ref: MDZ/P8). [366, 985]

1039. Part funding has been in place for the project, and Mr Billcliff's evidence confirms that final funding decisions would be expected after any making of the Order. Timescales are tight, and if the Order were to be made, the project team would need to move quickly to deliver the scheme within the timescales sought. Grid and local network connection offers have been received and accepted. Agreements have been

made with 10 tidal turbine developers to provide generated power to the connections. [366] (Ref: section 9 of MDZ/P8)

1040. This proposal is potentially important to demonstrating of the suitability of tidal stream energy supply in these waters and as a result, the decarbonisation of our energy supplies. Therefore, it would appear very likely that funding would continue to be available for such a scheme, and that funding would be sufficient to deliver the project and the acquisition of land and rights sought through it.

### **The objections**

#### Conygar Investment Company plc / Horizon Nuclear Power Wylfa Limited

1041. An objection remains in relation to Plot 39. The plot is owned by Conygar and Horizon have an option on it. The Book of Reference (Ref: Inquiry Doc – 065) records the land as having other tenants / occupiers with an interest on it. While the objection is noted, the land would be needed for the proposed route of the cables to the grid connection substation. In addition, there is no evidence that the Applicant's proposed cable corridor through Plot 39 would prevent the remainder of the Conygar site being brought forward for development. [369]

#### Orthios

1042. Orthios owns the land which includes the two 132kV cables that provided power to the former Anglesey Aluminium plant. The inquiry heard that, at present, there is no substation on the site, as the previous equipment has been cleared from it to leave the two terminated 132kV cables. The Applicant and Orthios have been in negotiations for a number of years regarding a connection for Morlais to the 132kV cables and therefore, onto the National Grid. Orthios has confirmed that it has no objection in principle to Morlais. However, the detail of the discussions with the Applicant remain confidential. [13, 45, 47, 370, 371, 649, 650, 658]

1043. Orthios is a private group of companies. It is not a statutory undertaker providing a particular infrastructural function, whereas National Grid is such a company. However, due to the very unusual scale, nature and location of the power supply to the former aluminium plant, the National Grid assets at the proposed grid connection substation are wholly within Orthios' land. [375]

1044. Neither Orthios nor the Applicant have delivered schemes of the type and scale that they currently intend to. Even so, the Applicant's proposed works are a well-defined scheme. In contrast, there appeared to be considerably less certainty regarding what would come forward on the Orthios site combined with considerable fluidity in the nature of Orthios' ambitions for its site. [30, 373, 398-415, 652, 677]

1045. The Applicant's need for the grid connection substation and the reasons for its location have been the subject of negotiations with Orthios. Orthios' evidence to the inquiry sought to question the need for the area of land sought by Menter Môn and its approach. While Mr Jesson has worked with Orthios for a number of years, it is not apparent that he was involved in or advised the earlier discussions that resulted in the Order Lands now proposed to the north of the A55 at Penrhos. Orthios' proposal for a different (shallower) HDD strategy beneath the A55 and the parallel railway corridor appears to have been put to the inquiry without consultation with Network Rail, whereas the Applicant and Network Rail have reached agreement on a suitable drilling depth to remove Network Rail's objection. It is not apparent that Orthios has discussed with Network Rail the appropriateness of a drilling depth

shallower than that agreed between Network Rail and the Applicant. Nor has it been shown that the ground conditions beneath the railway would be likely to support a shallower drilling depth. Consequently, very little weight can be given to the suggestion that a shallower drilling depth beneath the railway infrastructure would be appropriate.<sup>1021</sup> [373, 653-657, 688, 709, 710]

1046. The Applicant has a National Grid connection offer for 180MW at Penrhos. It would be efficient for Orthios and Morlais to share a grid connection substation, and that is what the relevant regulatory model looks for. However, in the absence of an agreement, single user solutions would need to be found, and they would be necessary in this circumstance. The proposed CA would enable a single user grid connection solution to be provided, and the evidence confirms this could be done within the Order lands. [378, 379]

1047. Protective provisions within the Order, along with Orthios' existing agreements with National Grid, would ensure that Orthios would retain the ability to connect to the national grid. [379]

1048. Orthios proposes two alternative connection options to that which would be provided through the Order: Orthios' Option 1 would be for Morlais to connect to the grid through Orthios' busbar; and, Orthios' Option 2 would be a direct connection to National Grid through Orthios' switchyard. However:

- (i) the Options rely on land and infrastructure that would be in Orthios' ownership;
- (ii) the costs of these Options are not known;
- (iii) the timescales for their deliverability are unknown as the switchyard does not exist;
- (iv) neither Option has planning permission;
- (v) there is no agreement between Orthios and Menter Môn regarding important matters, including:
  - a) the technical details of how the connections would work
  - b) the commercial terms and costs, and
  - c) how Menter Môn's interests would be protected if Orthios were to default.

[374, 686]

1049. Further detail on the Applicant's concerns are provided. Agreement between the two parties has not been reached after 4 years of negotiation. Orthios are a commercial group of companies that will seek to realise the benefit from their assets, and its evidence to the inquiry provided potentially workable grid connection "Options". However, Orthios failed to provide confidence that the matters of concern to the Applicant, and that would affect the deliverability of Morlais, could be readily resolved within an appropriate timescale. The Applicant's view is that Orthios'

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<sup>1021</sup> As noted above, the Applicant's proposal has now been modified to reflect the latest Land Registry boundary records and to delete part of a building that had been included within Plot 49 (see Refs: Inquiry Doc – 065 & Inquiry Doc – 076).

proposed “Options” would introduce significant planning risk into the project. I also reach that conclusion and consider the significant risk would extend beyond planning matters. It is clear that the level of uncertainty described above could threaten the deliverability of the proposed works. Consequently, it is the CA proposed by the Applicant that should be considered in this case. [375, 678, 387-389, 679, 694-696, 709-711]

1050. The matters that have shaped the Applicant’s approach to the grid connection substation and the elements that it considers need to be accommodated at this stage have been explained. These include providing the necessary reassurance to its funders, while also addressing both the scrutiny that would be applied to the scheme and the full range of risks associated with the proposed grid connection site. Any further consents that are required to bring forward the proposed grid connection substation have not been shown to present a significant risk to the delivery of the Morlais works (and the Applicant has firmly rebutted the potential need for any further consents with National Grid – see para. 5.6 of Ref: REP011). [381-386, 712-714]
1051. National Grid will have its connection objectives and will seek to have an efficient substation design. However, the land ownership, location and the nature of National Grid infrastructure in this location is very unusual. If no agreement has been possible between Orthios and the Applicant, and CA is required to resolve the provision of the Morlais grid connection, that would be the circumstance that would frame National Grid’s decision-making. And in any event, the Applicant has a connection offer from National Grid that is not based on a multi-user solution. Orthios has highlighted: the potential technical and practical challenges of joining to aging 132kV cabling; and, the absence of evidence to confirm easements or wayleaves for National Grid to lawfully carry out work on its assets on Orthios’ land. However, that is the nature of the connection offer that the Applicant has. And while Orthios notes there to be no evidence that National Grid could lawfully work on the cables (although National Grid has its own CPO powers), the proposed CA would provide access to National Grid’s assets on Plot 49, including the 132kV cable terminals, [375, 379 (including Footnote 781), 697-702]
1052. There are clearly considerations and potential regulatory decisions that could affect the provision of a grid connection even with the CA proposed. However, nothing has been shown to be insurmountable, or an unacceptable risk, or likely to prevent delivery of the proposed works. [703-708]
1053. Turning to the size of the substation sought by the Applicant. This is noted to result from: a lack of agreement with Orthios; advice from consulting engineers; meeting the relevant electrical standards; and, working to a reasonable worst case scenario that ensures sufficient land would be available within the Order to enable the works to be built out. Orthios has questioned the footprint of the works that are now proposed for its land and refers to differing sized areas sought during negotiation. However, the background to these negotiations, the footprints discussed, and the current proposal has been provided. [373, 380, 680-685]
1054. The evidence demonstrates the considerations that have shaped the area of Orthios’ land that is being sought for the works. It includes an element of contingency, such as that for additional power conditioning. Orthios has carried out site clearance works and remediation. However, regulatory sign-off has yet to be obtained to confirm that Plot 49 is considered to be free of contamination. It therefore remains a significant risk factor for the proposed use of that land. In

addition, services are present that could limit certain works. These factors support the area of land proposed for CA, and that it would be necessary to ensure the works have sufficient land. None of the supporting factors have been shown to indicate the footprint would be greater than that required to provide an appropriate level of contingency, and therefore certainty, on the deliverability of the proposed works. [373, 380, 688-693]

#### *Battery storage*

1055. At the RT for the Order / Deemed Planning Permission, Orthios suggested that there should be a control on the amount of Morlais battery storage. It was not raised during cross-examination of the Applicant's witness (Mr Billcliff). The Applicant's response is provided in Ref: Inquiry Doc – 095, with reference to para. 1.18 of PPW (edition 10), and in Annex 2 to the Applicant's closing submissions.<sup>1022</sup> It deals with the possibility that this, in effect, could restrict competition in regard to battery storage. However, Orthios considers the concerns regarding competition to be irrelevant and instead refer to a lack of clarity regarding the battery storage element of the substation in relation to the justification for the proposed CA. [421, 723, 724]
1056. The land take for the grid connection substation would be within the parameters sought through Table 4-30 of the *Project Description* in Chapter 4 of the ES (Ref: MDZ/A25.4). The parameters do not seek to specify the individual components of the grid connection substation nor their size. Within a PDE, to seek to do so would place very unusual restrictions on a developer. And in this case, there is no doubt that the Applicant intends to have battery storage as part of the Morlais energy supply infrastructure feeding into the national grid and/or the local network. [380, 421, 656, 672, 723, 724]
1057. There has been some vagueness regarding the battery storage element of the Morlais proposal. However, it would be a design detail of the scheme that a potential supplier spoke to during the public speaking session. There is no evidence to suggest that battery storage would be anything other than a benefit to the provision of stable and reliable energy supply from Morlais. Consequently, the Applicant can be expected to utilise the parameters of the substation to provide battery storage that would ensure the effectiveness of the infrastructure proposed. [380, 723]
1058. Orthios wish to see the capacity of the battery storage limited to that stated within Mr Billcliff's Rebuttal Proof of Evidence. The Applicant notes that this matter was not pursued through cross-examination during the inquiry. If it had been properly pursued, matters in relation to it may have been clearer to all parties.
1059. The parameter that is requested would limit storage capacity, not area and volume by dimensions. A project parameter defines the overall "Project installed capacity" for power generation as 240MW and has been used for the purposes of the ES. In contrast, the battery capacity would store the generated power as part of the transmission and distribution system. Within the parameter dimensions for the grid connection substation, such storage can be reasonably expected to become more efficient and reduce in size over time, just as other elements of the proposed substation works would be expected to do. If Orthios' proposed parameter were to be imposed, it potentially would stifle innovation and future efficiencies within the supporting on-shore transmission and distribution works, and thus prevent it from being as sustainable as it would otherwise be.

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<sup>1022</sup> Which is now para. 1.19 in PPW (edition 11)

1060. In any event, the Applicant has responded to the matter fully through a letter, dated 9 February 2021 (Ref: Inquiry Doc – 095). The project is for the capture of tidal stream energy and its connection to the electricity network. The flexibility provided by the PDE ensures the most effective solution would be found for the transmission and distribution of the generated power. I agree that need has been demonstrated through the case made, which notes amongst other things, that onshore infrastructure works for the 33kV connection may need a commercial scale battery, which could also provide limited 132kV export capability, and would be located at the grid connection substation.<sup>1023</sup>

*Orthios' proposed amendments*

1061. These are summarised within two documents: a) *Schedule of Proposed changes to dTWAO by Orthios* (Ref: Inquiry Doc – 091); and, *Land Plan Showing Reduced Morlais Consent Order* (Ref: Inquiry Doc – 056).

1062. The Applicant has responded to the proposed amendments via Annex 1 of its closing submissions (Ref: Inquiry Doc – 155) and does not agree to the proposed amendments.

- (i) Plots 46 and 47 – Orthios' amendment would enable cables to be laid at a depth of at least 5m in Plot 46, shallower than the 9m depth agreed by the Applicant with Network Rail. It would not prevent cables being placed lower in the subsoil, but it appears that Network Rail have not been consulted on the technical appropriateness of the proposed change to Plot 46. [373]
- (ii) Plot 48 – The Applicant: considers Plot 48 to be integral to Plot 49 and not appropriate to separate out; has similar concerns regarding the depth in subsoil as given for Plots 46 and 47; and concerns regarding access over Orthios' proposed Plot 48B to the other plots that would have works within them.
- (iii) Plot 49 – Orthios wishes to have its proposed amendments made to the Order and Plot 49A to correspond with the area Menter Môn said that it needed and that would be required by a single user connection. The Applicant is unambiguous that there would be insufficient space within the reduced area of Plot 49 for the reasons given in Annex 1 of its closing submissions (Ref: Inquiry Doc – 155). If the Order were to be made without sufficient land, and negotiations were (to continue to be) unable to resolve the situation, further CA/CPO would be required. Also, the suggested reduction in the size of Plot 49 would separate the Applicant's proposed substation from the 132kV terminations, placing the project at greater risk by having to seek to join to the aging subterranean cables. (However, if the amendment were to be accepted, Chapter 2 of Part 2 of Schedule 1 would need to reflect the creation of "Plot 49A") [716-720]
- (iv) Plot 50 – As with Plot 48, the Applicant notes Plot 50 became a separate plot due to differing ownership, and the need for it is similar to that for Plot 49. Orthios considers that Plot 50 should be removed from the Order. [721]

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<sup>1023</sup> Para. 4.10.10 of Mr Billcliff's Proof of Evidence (Ref: MDZ/P8)

*Orthios' land and developments*

1063. Both parties have addressed the developments that Orthios is seeking to bring forward on its 213 acre site. The Applicant proposes to compulsorily acquire 3 acres of that site. Orthios notes various potential uses for Plot 49, but those possible uses would be set within a much larger site that appears to have considerable uncertainty regarding the details of its redevelopment. [396-415, 658-676, 715, 716]

*The need for the CA of the Orthios plots*

1064. Plots 46 and 47 – The Applicant notes that at least subsoil rights would be needed for these plots to make a connection to the grid substation. [390]

1065. Plot 51 - A new right of access would be needed across Plot 51 for construction and maintenance. The Applicant has agreed terms with AMG Alpocho UK, which uses Plot 51 to access its site. [391]

1066. Plots 48 and 51 include land in the access road. The unilateral undertaking (Ref: Inquiry Doc – 108) addresses the use and availability of the access road to the Orthios site during construction of the proposed grid connection substation and after construction, along with, amongst other things, security and compensation. Orthios has accepted the unilateral undertaking as providing the protective provisions that would otherwise have been sought through Ref: Inquiry Doc – 057. [377, 391, 711, 722]

1067. Plots 48, 49 and 50 - These plots, as with those above, would be needed for the reasons given above in this section of the report in regard to "*The Need for Compulsory Acquisition*". [392-395]

*Conclusion in relation to Orthios' objection*

1068. The Applicant believes the effect of Orthios' proposed approach would be to provide Orthios with a 'ransom' position. After hearing the evidence, that is how I viewed the potential outcome of Orthios' case. That the parties had failed to reach agreement after protracted engagement on the relevant matters confirms, if the Order were to be made, the likelihood of an outcome regarding the grid connection substation that might threaten the delivery of the proposed works and the power that they would otherwise provide. [371, 705]

Other objections

1069. The Applicant's CA/CPO schedule (Ref: Inquiry Doc – 099) confirms there to be no outstanding objection from IoACC. IoACC has confirmed its agreement with the Applicant in relation to the CA/CPO that would affect its lands and the rights over them. [436, 439]

1070. Other relevant objections to the Order, apart from those dealt with below, have been withdrawn. Other parties that would be subject to the proposed CA appear to have made no objection to the application. [737-750]

**Special Kinds of Land**

1071. The Order lands include an area of assumed public open space at Abraham's Bosom. An application was made to the Welsh Ministers in accordance with paragraph 6 of Schedule 3 to the Acquisition of Land Act 1981. A certificate has now been issued in relation to the lands, identified as Plots 1 and 3a (as shown on Ref:

MDZ/A17.1), authorising their acquisition (Refs: Inquiry Doc – 077 and Inquiry Doc – 078). [368]

1072. Mr & Mrs Llewellyn have noted that, unlike a number of other parties, they were not consulted on the matter prior to the issuing of the Minister's decision within Ref: Inquiry Doc – 078. However, given the reasons provided for the decision within Ref: Inquiry Doc – 078, the matters raised by Mr & Mrs Llewellyn in this inquiry would not cause me to conclude that the proposed works would be likely to result in the open space being less advantageous to those persons in whom it is vested and other persons, if any, entitled to rights of common or other rights, and to the public than it was before.

### **Conclusion**

1073. The Applicant has had considerable success in its negotiations with the parties that would be subject to CA and the negotiations continue. It has not been possible for Orthios and the Applicant to reach agreement. The Orthios plots potentially would be critical to the delivery of the works and the benefits that would result from them. While Orthios seeks to protect its own interests on the site, in the absence of the CA proposed, the "Options" that Orthios has proposed would expose the works to considerable risk, and that risk would appear to be much greater than the risk within the Applicant's proposal.

1074. It has been shown that the Order lands would be necessary for the works proposed and the land take would be what is expected for an infrastructural development of this type.

1075. Given the evidence in this case and the conclusions reached in this report, there is clearly a compelling case in the public interest for the CA within the Order. [367]

1076. My conclusion in regard to Human Rights and the Order follows my recommendations in the next section.

## **Inspector's Recommendations**

1077. I recommend:

- (i) That the Welsh Ministers find the proposed works would be a form of sustainable development and make the Order subject to the following matters.
- (ii) To provide a clear link between the Order, and the context of the application and its ES (in relation to visual prominence), it is recommended that the Legend text from the Figures in Ref: MDZ/A28.1 be included on the "*restricted area plan*".
- (iii) For the reasons given in this report, it is recommended that "*Restricted Area - Northern*" on the "*restricted area plan*" is modified to include:
  - a) the additional area (also referred to as "The Triangle") suggested by NRW; and,
  - b) that the Legend text from the Figures in Ref: MDZ/A28.1 is added to the "*restricted area plan*" except for that in relation to the "*Restricted Area – Northern*" which should be changed to be "*Submerged tidal devices*".
- (iv) That the CA sought is based on the Land Plans provided with the application except for the following revisions:
  - a) *Location and Key Plan* (Ref: Inquiry Doc – 097);
  - b) *Map8, Works and Land Plan -* (Ref: Inquiry Doc – 066);
  - c) *Book of Reference* (Ref: Inquiry Doc – 065); and,
  - d) In relation to the access road within Plots 48 and 51, the context provided by Menter Môn's Unilateral Undertaking, dated 9th February 2021, (Ref: Inquiry Doc – 108).

1078. Also, it is recommended that:

- (v) the Welsh Ministers issue a direction under section 90(2A) of the Town and Country Planning Act 1990 that planning permission, so far as it is required, be deemed to be granted for the development sought to be authorised by the Order now being applied for within the various limits provided for in the draft Order and the accompanying deposited plans and sections; and,
- (vi) for the deemed planning permission to be granted subject to the planning conditions within Appendix 1 to this report.

1079. The evidence, along with exchanges during the Inquiry and submissions to it, demonstrate that the Applicant has considered realistic alternative approaches that were discounted for various reasons and resulted in the Order Scheme. In regard to the European Convention on Human Rights and the Human Rights Act 1998, it is apparent that the benefits of the Order scheme, which would be gained through the purposes for which the compulsory acquisition within the Order would be made, would justify any interference in interests otherwise protected by Convention rights. [22, 166]

### **Overall Conclusion**

1080. After considering the application and of all the matters raised in evidence, including during the inquiry, I find there to be a compelling case for the making of the Morlais Demonstration Zone Order and recommend accordingly.

*Clive Sproule*

INSPECTOR

## APPENDIX 1 – PLANNING CONDITIONS

### General

- 1) The development hereby permitted shall begin before the expiration of 5 years from the date that the Order comes into force.

*Reason:* To comply with Section 91 of the Town and Country Planning Act 1990.

- 2) Amendments to details previously submitted to and approved in writing by the Local Planning Authority, may be approved only where it can be demonstrated to the Local Planning Authority that the approval sought does not give rise to any materially new or materially different significant environmental effects from those assessed in the Environmental Statement.

The development shall be carried out in accordance with the following approved plans, unless otherwise approved under condition 6:

Drawing No. 70061106-001 Rev P01 – *Transport and Works Act 1992 Morlais Demonstration Zone Order – Site Location Plan - Isle of Anglesey (Ynys Môn)*

Drawing No. 70061106-002 Rev P01 – *Transport and Works Act 1992 Morlais Demonstration Zone Order – Indicative Site Plan - Landfall Substation - Isle of Anglesey (Ynys Môn)*

Drawing No. 70061106-003 Rev P01 – *Indicative Site Plan – Transport and Works Act 1992 Morlais Demonstration Zone Order – Indicative Site Plan – Switchgear Building – Isle of Anglesey (Ynys Môn)*

Drawing No. 70061106-004 Rev P01 – *Transport and Works Act 1992 – Morlais Demonstration Zone Order – Indicative Site Plan – Grid Substation – Isle of Anglesey (Ynys Môn)*

Drawing No. 70061106-005 Rev P01 – *Transport and Works Act 1992 Morlais Demonstration Zone Order – Existing Site Plan – Landfall Substation – Isle of Anglesey (Ynys Môn)*

Drawing No. 70061106-006 Rev P01 – *Transport and Works Act 1992 Morlais Demonstration Zone Order – Existing Site Plan - Switchgear Building Isle of Anglesey (Ynys Môn)*

Drawing No. 70061106-007 Rev P01 – *Transport and Works Act 1992 Morlais Demonstration Zone Order – Existing Site Plan – Grid Substation – Isle of Anglesey (Ynys Môn)*

Drawing No. 70061106-008 Rev 01 – *Transport and Works Act 1992 Morlais Demonstration Zone Order – General Arrangement – Landfall Substation – Isle of Anglesey (Ynys Môn)*

Drawing No. 70061106-009 Rev 01 – *Transport and Works Act 1992 Morlais Demonstration Zone Order – General Arrangement – Switchgear Building – Isle of Anglesey (Ynys Môn)*

Drawing No. 70061106-010 Rev 02 – *Transport and Works Act 1992 Morlais Demonstration Zone Order – General Arrangement – Grid Substation – Isle of Anglesey (Ynys Môn)*

Drawing No. 70061106-011 Rev 01 – *Transport and Works Act 1992 Morlais Demonstration Zone Order – Elevations – Isle of Anglesey (Ynys Môn)*

Drawing No. 70061106-012 Rev 01 – *Transport and Works Act 1992 Morlais Demonstration Zone Order – Elevations – Isle of Anglesey (Ynys Môn)*

*Reason:* To ensure that the development is carried out in accordance with the approved documents, plans and drawings submitted with the Order.

### **Approval and Implementation of Construction Mitigation Plans**

- 3) Prior to the commencement of any phase of the development, a CoCP for that phase, shall be submitted to and approved in writing by the Local Planning Authority. Any CoCP shall include:
- a) The area and works relevant to the CoCP; and,
  - b) Construction Method Statements relating to the phase of the development.

If relevant to the phase of the development the following will be included within the CoCP for that phase:

- c) Surface water drainage Plan
- d) Construction Noise Management Plan
- e) Construction Air Quality Management Plan
- f) Site and Excavated Waste Management Plan
- g) Habitat Reinstatement Plan
- h) Onshore Invasive Species Management Plan
- i) Ecological Action Plan
- j) Street works details, including:
  - (i) the timing(s) of and anticipated date for completion of the works,
  - (ii) traffic management and signage proposals, and
  - (iii) details of reinstatement of the street including matters such as the width and extent of resurfacing and street-markings.

The construction of each phase of the development will be carried out in accordance with the relevant approved CoCP.

*Reason:* In order to comply with Policy ADN 3 of the Local Development Plan.

- 4) Prior to the commencement of development, a Pollution Prevention and Management Plan (“PPMP”), shall be submitted to and approved in writing by the Local Planning

Authority. The construction of the development will be carried out in accordance with the approved PPMP.

*Reason: In order to protect the natural environment and comply with Strategic Policies PS 19 and ADN 3 of the Local Development Plan.*

- 5) No works which comprise the installation or laying of cables externally up the cliff face at the proposed landfall shall be undertaken until:
- a) A written report, produced by a suitably qualified independent engineer has been submitted to and approved by the Local Planning Authority demonstrating why it is not feasible for such cables to be installed by horizontal directional drilling or other trenchless technique.
  - b) A CoCP related to the proposed external installation works in accordance with the requirements of condition 3) has been submitted to and approved in writing by the Local Planning Authority; and
  - c) An updated landscape management plan related to the proposed external installation works in accordance with the requirements of condition 7) has been submitted to and approved in writing by the Local Planning Authority.

The works shall be undertaken in accordance with the approved details.

*Reason: In order to protect the natural environment and comply with Strategic Policies PS 19 and ADN 3 of the Local Development Plan.*

### Detailed Design

- 6) Development of each structure shall not commence until, for that structure, details of the layout, scale and external appearance of the structure have been submitted to and approved in writing by the Local Planning Authority.

Prior to the construction of the landfall substation, switchgear building and the grid connection substation, their external appearance and building heights above ground level will be submitted to and approved in writing by the Local Planning Authority. These elements must be within the parameters specified in Table 1 and buildings 1, 2 and 3 at the landfall substation shall be collectively no greater than 1,739m<sup>2</sup> in area.:

Table 1 – Consented Onshore Building maximum dimensions

Building or Structure	Maximum Height (m)	Maximum Length (m)	Maximum width (m)
Landfall substation building 1	7	62	22.5
Landfall substation building 2	7	28	10
Landfall substation building 3	7	8	8

Switchgear Building	4	9.4	5
Grid Connection Substation	9	104	62

Construction of the buildings and structures will be undertaken in accordance with the approved design.

*Reason:* To ensure that the development hereby permitted does not have a detrimental impact on the character and appearance of the area.

- 7) Prior to the commencement of construction of the development details of both hard and soft landscape works shall be submitted to and approved in writing by the Local Planning Authority. This shall include:
- a) Hard landscape details including boundary details, means of enclosure and hard surfacing areas including materials;
  - b) Soft landscape details including planting plans, written specifications including soil depths, and cultivation associated with plant and grass establishment and schedules of plants noting species, planting sizes and proposed numbers and densities;
  - c) Details of biodiversity enhancement measures on land above the cliff face of Abraham's Bosom; and,
  - d) A final Landscape Management Plan.

The construction of the development shall be carried out in accordance with the approved landscape details.

*Reason:* To ensure that the development hereby permitted does not have a detrimental impact on the character and appearance of the area and comply with Policy AMG 3 of the AONB Plan and Policy PCYFF 4 of the Local Development Plan

### **Water resources, flood risk and contamination**

- 8) Prior to the commencement of construction a method statement to minimise the impacts of temporary watercourse crossings shall be submitted to and approved in writing by the Local Planning Authority. The construction of the development shall be carried out in accordance with the approved method statement.

*Reason:* In order to protect the natural environment and comply with Strategic Policies PS 19 and ADN 3 of the Local Development Plan.

- 9) Prior to the commencement of construction a hydrogeological risk assessment shall be submitted to and approved in writing by the Local Planning Authority. This hydrogeological risk assessment will include a detailed risk assessment of the effects of horizontal directional drilling. The construction of the development will be carried out in accordance with the approved risk assessment.

*Reason: In order to protect the natural environment and comply with Strategic Policies PS 5 and ADN 3 of the Local Development Plan.*

- 10) If, during development, contamination not previously identified is found to be present at the site, no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until a remediation strategy detailing how this unsuspected contamination will be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be carried out as approved.

*Reason: To ensure the risks associated with previously unsuspected contamination at the site are dealt with through a remediation strategy, to minimise the risk to both future users of the land and neighbouring land, and to ensure that the development can be carried out safely without unacceptable risks.*

## **Biodiversity**

- 11) No development shall take place until a scheme for the provision of habitat compensation has been submitted to and approved in writing by the local planning authority. The habitat compensation shall be provided in accordance with the approved scheme and the timescales within it.

*Reason: In order to protect the natural environment and comply with Strategic Policies PS 19 and ADN 3 of the Local Development Plan.*

- 12) (1) No stage of the works shall commence until final pre-construction survey work has been carried out to establish whether a European protected species is present on any of the land affected, or likely to be affected, by any part of the onshore works or in any of the trees to be lopped or felled as part of the onshore works.

(2) Where a European protected species is shown to be present, the stage of the works likely to affect the species must not commence until a scheme of protection and mitigation measures has been submitted to and approved in writing by the Local Planning Authority.

(3) The works must be carried out in accordance with the approved scheme.

(4) In this Requirement, "European protected species" has the meaning given in regulation 42 of the Conservation of Habitats and Species Regulations 2017.

*Reason: In order to protect the natural environment and comply with Strategic Policies PS 19 and ADN 3 of the Local Development Plan.*

- 13) No trenching of cables will be undertaken landward of mean low water springs without a detailed installation methodology being submitted to and approved in writing by the Local Planning Authority. All trenching works landward of mean low water springs will be undertaken in accordance with this approved installation methodology.

*Reason: In order to comply with the high level marine objectives within the Marine Policy Statement and to minimise the impacts upon Annex I habitats stated in the Habitats Directive.*

## **Archaeology**

- 14) Prior to the commencement of development (including site clearance, topsoil strip, ground investigations or other groundworks), a Written Scheme of Investigation (WSI) for archaeological work shall be submitted to and approved in writing by the Local Planning Authority. The WSI will include:
- a) The proposed field investigation and recording methodology;
  - b) the proposed post-investigation programme including;
    - (i) assessment,
    - (ii) analysis,
    - (iii) reporting,
    - (iv) publication,
    - (v) dissemination and,
    - (vi) archiving.
  - c) a dated timescale for the archaeological work proposed.

The development shall be carried out in accordance with the approved WSI.

*Reason: To secure an appropriate archaeological mitigation programme in accordance with Policy AT 4 of the Local Development Plan, Planning Policy Wales 10 (December 2018) and TAN24: The Historic Environment.*

## **Traffic and Transport**

- 15) Prior to the commencement of construction of the development a Construction Traffic Management Plan ("CTMP") shall be submitted to and approved in writing by the Local Planning Authority. This will include measures to safely manage construction vehicle movements to and from the construction areas and measures to maintain access to businesses and residences affected by temporary highway closure. The CTMP shall include:
- a) Proposed construction traffic management measures;
  - b) Details of how construction will be staged;
  - c) Details of proposed diversion routes and advanced signage;
  - d) Details of the measures to manage access arrangements for local residents and tourists;
  - e) Details of construction workers parking arrangements;
  - f) Details of measures to encourage sustainable travel; and
  - g) Details of measures to escort pedestrians and cyclists during the works.

The construction of the development will be carried out in accordance with the approved CTMP.

*Reason: In the interest of highway safety and residential amenity.*

### **Welsh Language**

16) The following Welsh Language Mitigation, Optimisation and Monitoring Strategies (“WLMOMS”) shall be submitted to and approved in writing by the Local Planning Authority:

- a) At least three months prior to construction, a WLMOMS for the construction phase of the development will be submitted to and approved in writing by the Local Planning Authority; and
- b) At least six months prior to the operation of the development, a WLMOMS for the operational phase of the development will be submitted to and approved in writing by the Local Planning Authority.

The development must be carried out and operated in accordance with the approved strategies.

*Reason: To accord with Objectives SO1 of the Local Development Plan.*

### **Tourism and Recreation**

17) At least six months prior to the commencement of construction of the development a Tourism and Recreation Monitoring Strategy, shall be submitted to and approved in writing by the Local Planning Authority. The development must be carried out in accordance with the approved strategy.

*Reason: To accord with Policy ADN 3 of the Local Development Plan.*

18) Prior to the commencement of construction of the development, proposals for a Promotion and Interpretation Strategy, will be submitted to and approved in writing by the Local Planning Authority. The development must be carried out in accordance with the approved strategy.

*Reason: To accord with Objective SO14 of the Local Development Plan.*

### **Socio-Economics**

19) At least six months prior to the commencement of construction of the development a Skills and Training Action Plan, shall be submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved plan.

*Reason: To accord with Objective SO11 of the Local Development Plan.*

20) At least six months prior to the commencement of construction of the development, proposals for the Training Task And Finish Group, shall be submitted to and approved in writing by the Local Planning Authority. The development must be carried out in accordance with the approved proposals.

*Reason: To accord with Objective SO11 of the Local Development Plan.*

- 21) At least six months prior to the commencement of construction of the development a Supply Chain Action Plan, shall be submitted to and approved in writing by the Local Planning Authority. The development must be carried out in accordance with the approved plan.

*Reason: To accord with Objective SO12 of the Local Development Plan.*

- 22) At least three months prior to the commencement of construction of the development a Strategy for the Housing of Non-Resident Workers will be submitted to and approved in writing by the Local Planning Authority. The development must be carried out in accordance with the approved strategy.

*Reason: To accord with Objective SO12 of the Local Plan.*

- 23) No development shall take place until a scheme for the provision of landscape compensation has been submitted to and approved in writing by the local planning authority. The landscape compensation shall be provided in accordance with the approved scheme and the timescales within it.

*Reason: In order to protect the natural environment and comply with Strategic Policies PS 19 and ADN 3 of the Local Development Plan.*

## **Operations**

- 24) Prior to the operation of the development, an Operational Management Plan will be submitted to and approved in writing by the Local Planning Authority. This will detail the measures to safely manage above surface project infrastructure and maintenance operations on publicly accessible land. It shall include:
- a) Details of measures to prevent unsafe public access to above ground infrastructure
  - b) Details of the maintenance measures that are likely to be required and their approximate duration and timings
  - c) Details of measures to reduce as far as practical interference with public access and details of how public safety during the maintenance operations will be maintained
  - d) Details of how advance notice of the maintenance operations will be communicated to the Local Planning Authority
  - e) Details of how emergency maintenance measures will be managed.

*Reason: In the interests of public safety*

## **Decommissioning**

- 25) Within three months of the cessation of the commercial operations of the Morlais offshore tidal project, and at least six months prior to any onshore decommissioning works commencing, a written scheme of decommissioning must be submitted to and approved in writing by the Local Planning Authority. The written scheme of decommissioning is to include a Code of Construction Practice (CoCP) and the approved scheme must be implemented as approved in the carrying out of any decommissioning works or relevant part of it.

*Reason: In order to protect the natural environment and comply with Strategic Policies PS 5 and ADN 3 of the Local Development Plan.*

## APPENDIX 2 – DOCUMENTS

MDZ/A	Formal Application Documents	Date submitted
MDZ/A1	<a href="#">MMC057 Application to the Welsh Ministers</a>	16/09/2019
MDZ/A2	<a href="#">MMC002 MOR-EVS-DOC-0015 Welsh Statutory Instrument – Morlais TWAO</a>	18/09/2020
MDZ/A3	<a href="#">MMC004 MOR-EVS-DOC-0017 Explanatory Memorandum</a>	18/09/2020
MDZ/A5	<a href="#">MMC030 MOR-MM-DOC-0001 Statement of Aims</a>	16/09/2019
MDZ/A6	<a href="#">MMC031 MOR-MM-DOC-0002 Proposals for Funding under Rule 10(3)(a)</a>	16/09/2019
MDZ/A7	<a href="#">MMC032 MOR-MM-DOC-0003 Estimate of Costs required Rule 10(3)(b)(ii)</a>	16/09/2019
MDZ/A8	<a href="#">MMC060 MOR-RHDHV-DOC-0105 Morlais Tidal Array - Scoping Opinion</a>	16/09/2019
MDZ/A9	<a href="#">MMC012 MOR-ATEB-DOC-0066 Consultation Report</a>	16/09/2019
MDZ/A10	<a href="#">MMC175 MOR-RHDHV-DOC-0072 (03) Outline EMMP (Revised)*</a>	03/07/2020
MDZ/A11	<a href="#">MMC038 MOR-RHDHV-DOC-0073 Outline CEMP</a>	16/09/2019
MDZ/A12	<a href="#">MMC128 MOR-SLR-DOC-0002 Outline Landscape Management Plan</a>	27/03/2020
MDZ/A13	<a href="#">MMC039 MOR-RHDHV-DOC-0075 Outline ISMP</a>	16/09/2019
MDZ/A14	<a href="#">MMC040 MOR-RHDHV-DOC-0076 Outline CoCP</a>	16/09/2019
MDZ/A15	<a href="#">MMC041 MOR-RHDHV-DOC-0077 Outline PPMP</a>	16/09/2019
MDZ/A16	<a href="#">MMC019 MOR-BAY-DOC-0002 Book of Reference</a>	16/09/2019
MDZ/A16.2	<a href="#">MMC449 MOR-EVS-DOC-0015 (02) Welsh Statutory Instrument – Morlais TWAO</a>	02/11/2020

MDZ/A16.3	<a href="#">MMC450 MOR-EVS-DOC-0016 (02) Morlais Demonstration Zone - order changes tracker</a>	02/11/2020
MDZ/A16.4	<a href="#">MMC451 MOR-EVS-DOC-0017 (02) Explanatory Memorandum</a>	02/11/2020
MDZ/A16.5	<a href="#">MMC452 MOR-EVS-DOC-0018 (02) Explanatory Memorandum compareite</a>	02/11/2020
MDZ/A16.6	<a href="#">MMC453 MOR-EVS-DOC-0019 (02) Welsh Statutory Instruments - compareite</a>	02/11/2020
MDZ/A16.7	<a href="#">MMC446 MOR-WSP-DOC-0020 Morlais Mitigation Route Map</a>	02/11/2020
MDZ/A16.8	<a href="#">MMC447 MOR-RHDHV-DOC-0072 (04) Outline EMMP (Revised)</a>	02/11/2020
	<b>Works and Land Plans and Sections</b>	
MDZ/A17.1	<a href="#">MMC021 MOR-BAY-DRW-0002 TWAO Map1 Location Plan</a>	16/09/2019
MDZ/A17.2	<a href="#">MMC022 MOR-BAY-DRW-0003 TWAO Map2 Location Plan</a>	16/09/2019
MDZ/A17.3	<a href="#">MMC023 MOR-BAY-DRW-0004 TWAO Map3 Location Plan</a>	16/09/2019
MDZ/A17.4	<a href="#">MMC024 MOR-BAY-DRW-0005 TWAO Map4 Location Plan</a>	16/09/2019
MDZ/A17.5	<a href="#">MMC025 MOR-BAY-DRW-0006 TWAO Map5 Location Plan</a>	16/09/2019
MDZ/A17.6	<a href="#">MMC026 MOR-BAY-DRW-0007 TWAO Map6 Location Plan</a>	16/09/2019
MDZ/A17.7	<a href="#">MMC027 MOR-BAY-DRW-0008 TWAO Map7 Location Plan</a>	16/09/2019
MDZ/A17.8	<a href="#">MMC028 MOR-BAY-DRW-0009 TWAO Map8 Location Plan</a>	16/09/2019
MDZ/A17.9	<a href="#">MMC029 MOR-BAY-DRW-0010 TWAO Location &amp; Key Plan (Overview Plan)</a>	16/09/2019
	<b>Deemed Planning Application</b>	
MDZ/A19	<a href="#">MMC034 MOR-EVS-DOC-0009 Application for Deemed Planning Permission</a>	16/09/2019
MDZ/A20	<a href="#">MMC043 MOR-WSP-DOC-0015 Planning Statement</a>	16/09/2019
MDZ/A21.1	<a href="#">MMC045 MOR-WSP-DRW-0001 70061106-001 Site Location Plan</a>	16/09/2019

MDZ/A21.2	<a href="#">MMC046 MOR-WSP-DRW-0002 70061106-002 Indicative Site Plan - Landfall Substation</a>	16/09/2019
MDZ/A21.3	<a href="#">MMC047 MOR-WSP-DRW-0003 70061106-003 Indicative Site Plan - Switchgear Building</a>	16/09/2019
MDZ/A21.4	<a href="#">MMC048 MOR-WSP-DRW-0004 70061106-004 Indicative Site Plan – Grid Substation</a>	16/09/2019
MDZ/A21.5	<a href="#">MMC049 MOR-WSP-DRW-0005 70061106-005 Existing Site Plan – Landfall Substation</a>	16/09/2019
MDZ/A21.6	<a href="#">MMC050 MOR-WSP-DRW-0006 70061106-006 Existing Site Plan - Switchgear Building</a>	16/09/2019
MDZ/A21.7	<a href="#">MMC051 MOR-WSP-DRW-0007 70061106-007 Existing Site Plan – Grid Substation</a>	16/09/2019
MDZ/A21.8	<a href="#">MMC052 MOR-WSP-DRW-0008 70061106-008 GA - Landfall Substation</a>	16/09/2019
MDZ/A21.9	<a href="#">MMC053 MOR-WSP-DRW-0009 70061106-009 GA - Switchgear Building</a>	16/09/2019
MDZ/A21.10	<a href="#">MMC054 MOR-WSP-DRW-0010 70061106-010 GA - Grid Connection Building</a>	16/09/2019
MDZ/A21.11	<a href="#">MMC055 MOR-WSP-DRW-0011 70061106-011 - Elevations</a>	16/09/2019
MDZ/A21.12	<a href="#">MMC056 MOR-WSP-DRW-0012 70061106-012 - Elevations</a>	16/09/2019
MDZ/A22	<a href="#">MMC037 MOR-ITH-DOC-001 Welsh Language Impact Assessment FINAL</a>	16/09/2019
MDZ/A23	<a href="#">MMC059 MOR-RHDHV-DOC-0103 ES Non-Technical Summary (W)</a>	16/09/2019
MDZ/A24	<a href="#">MMC061 MOR-RHDHV-DOC-0068 Non-Technical Summary</a>	16/09/2019
MDZ/A24.2	<a href="#">MMC289 MOR-WSP-DOC-0018 Proposed Planning Conditions</a>	18/09/2020
	<b>Environmental Statement Volume 1 (Main Report)</b>	
MDZ/A25.1	<a href="#">MMC062 MOR-RHDHV-DOC-0001 Vol I Chapter 1: Introduction</a>	16/09/2019
MDZ/A25.2	<a href="#">MMC072 MOR-RHDHV-DOC-0003a Vol I Chapter 2: Policy and Legislation</a>	16/09/2019
MDZ/A25.3	<a href="#">MMC081 MOR-RHDHV-DOC-0003b Vol I Chapter 3: Site Selection and Consideration of Alternatives</a>	16/09/2019
MDZ/A25.4	<a href="#">MMC131 MOR-RHDHV-DOC-0004 ES Chapter 4 Project Description</a>	27/03/2020
MDZ/A25.5	<a href="#">MMC082 MOR-RHDHV-DOC-0007 Vol I Chapter 5: EIA Methodology</a>	16/09/2019

MDZ/A25.6	<a href="#">MMC083 MOR-RHDHV-DOC-0008 Vol I Chapter 6: Consultation</a>	16/09/2019
MDZ/A25.7	<a href="#">MMC084 MOR-RHDHV-DOC-0009 Vol I Chapter 7: Metocean Conditions and Coastal Processes</a>	16/09/2019
MDZ/A25.8	<a href="#">MMC085 MOR-RHDHV-DOC-0011 Vol I Chapter 8: Marine Water and Sediment Quality</a>	16/09/2019
MDZ/A25.9	<a href="#">MMC086 MOR-RHDHV-DOC-0013 Vol I Chapter 9: Benthic and Intertidal Ecology</a>	16/09/2019
MDZ/A25.10	<a href="#">MMC063 MOR-RHDHV-DOC-0015 Vol I Chapter 10: Fish and Shellfish Ecology</a>	16/09/2019
MDZ/A25.11	<a href="#">MMC064 MOR-RHDHV-DOC-0016 Vol I Chapter 11: Marine Ornithology</a>	16/09/2019
MDZ/A25.12	<a href="#">MMC065 MOR-RHDHV-DOC-0020 Vol I Chapter 12: Marine Mammals</a>	16/09/2019
MDZ/A25.13	<a href="#">MMC066 MOR-RHDHV-DOC-0025 Vol I Chapter 13: Offshore Archaeology and Cultural Heritage</a>	16/09/2019
MDZ/A25.14	<a href="#">MMC067 MOR-RHDHV-DOC-0027 Vol I Chapter 14: Commercial Fisheries</a>	16/09/2019
MDZ/A25.15	<a href="#">MMC194 MOR-MSP-DOC-002 Vol 1 Ch 15 Shipping and Navigation (Revised)</a>	18/09/2020
MDZ/A25.16	<a href="#">MMC068 MOR-RHDHV-DOC-0031 Vol I Chapter 16: Infrastructure and Other Users</a>	16/09/2019
MDZ/A25.17	<a href="#">MMC069 MOR-RHDHV-DOC-0032 Vol I Chapter 17: Water Resources and Flood Risk</a>	16/09/2019
MDZ/A25.18	<a href="#">MMC070 MOR-RHDHV-DOC-0034 Vol I Chapter 18: Ground Conditions and Contamination</a>	16/09/2019
MDZ/A25.19	<a href="#">MMC071 MOR-RHDHV-DOC-0037 Vol I Chapter 19: Onshore Ecology</a>	16/09/2019
MDZ/A25.20	<a href="#">MMC073 MOR-RHDHV-DOC-0041 Vol I Chapter 20: Onshore Archaeology and Cultural Heritage</a>	16/09/2019
MDZ/A25.21	<a href="#">MMC074 MOR-RHDHV-DOC-0044 Vol I Chapter 21: Noise and Vibration</a>	16/09/2019
MDZ/A25.22	<a href="#">MMC075 MOR-RHDHV-DOC-0049 Vol I Chapter 22: Air Quality</a>	16/09/2019
MDZ/A25.23	<a href="#">MMC076 MOR-RHDHV-DOC-0051 Vol I Chapter 23: Traffic and Transport</a>	16/09/2019
MDZ/A25.24	<a href="#">MMC077 MOR-RHDHV-DOC-0054 Vol I Chapter 24: Seascape, Landscape and Visual Impact Assessment</a>	16/09/2019

MDZ/A25.25	<a href="#">MMC078 MOR-RHDHV-DOC-0060 Vol I Chapter 25: Socio-Economics, Tourism and Recreation</a>	16/09/2019
MDZ/A25.26	<a href="#">MMC079 MOR-RHDHV-DOC-0063 Vol I Chapter 26: Cumulative and In-Combination</a>	16/09/2019
MDZ/A25.27	<a href="#">MMC080 MOR-RHDHV-DOC-0065 Vol I Chapter 27: Summary</a>	16/09/2019
	<b>Environmental Statement Volume 2 (Figures)</b>	
MDZ/A26.1	<a href="#">MMC089 MOR-RHDHV-DRW-0078 Vol II Chapter 1: Introduction</a>	16/09/2019
MDZ/A26.2	<a href="#">MMC087 MOR-RHDHV-DRW-0079 Vol II Chapter 3: Site Selection and Consideration of Alternatives</a>	16/09/2019
MDZ/A26.3	<a href="#">MMC104 MOR-RHDHV-DRW-0081 Vol II Chapter 7: Metocean Conditions and Coastal Processes</a>	16/09/2019
MDZ/A26.4	<a href="#">MMC106 MOR-RHDHV-DRW-0083 Vol II Chapter 9: Benthic and Intertidal Ecology</a>	16/09/2019
MDZ/A26.5	<a href="#">MMC090 MOR-RHDHV-DRW-0084 Vol II Chapter 10: Fish and Shellfish Ecology</a>	16/09/2019
MDZ/A26.6	<a href="#">MMC091 MOR-RHDHV-DRW-0085 Vol II Chapter 11: Marine Ornithology</a>	16/09/2019
MDZ/A26.7	<a href="#">MMC092 MOR-RHDHV-DRW-0086 Vol II Chapter 12: Marine Mammals</a>	16/09/2019
MDZ/A26.8	<a href="#">MMC098 MOR-RHDHV-DRW-0093 Vol II Chapter 19: Onshore Ecology</a>	16/09/2019
MDZ/A26.9	<a href="#">MMC102 MOR-RHDHV-DRW-0098 Vol II Chapter 24: Seascape, Landscape and Visual Impact Assessment</a>	16/09/2019
MDZ/A26.10	<a href="#">MMC103 MOR-RHDHV-DRW-0099 Vol II Chapter 26: Cumulative, Transboundary and In-Combination Impact Assessment</a>	16/09/2019
	<b>Environmental Statement Volume 3 (Appendices)</b>	
MDZ/A27.1	<a href="#">MMC121 MOR-RHDHV-APP-0005-0006 Vol III Chapter 4: Project Description</a>	16/09/2019
MDZ/A27.2	<a href="#">MMC122 MOR-RHDHV-APP-0010 Vol III Chapter 7: Metocean Conditions and Coastal Processes</a>	16/09/2019

MDZ/A27.3	<a href="#">MMC123 MOR-RHDHV-APP-0012 Vol III Chapter 8: Marine Water and Sediment Quality</a>	16/09/2019
MDZ/A27.4	<a href="#">MMC124 MOR-RHDHV-APP-0014 Vol III Chapter 9: Benthic and Intertidal Ecology</a>	16/09/2019
MDZ/A27.5	<a href="#">MMC107 MOR-RHDHV-APP-0017-0019 Vol III Chapter 11: Marine Ornithology</a>	16/09/2019
MDZ/A27.6	<a href="#">MMC108 MOR-RHDHV-APP-0021-0024 Vol III Chapter 12: Marine Mammals</a>	16/09/2019
MDZ/A27.7	<a href="#">MMC113 MOR-RHDHV-APP-0038-0040 Vol III Chapter 19: Onshore Ecology Non confidential</a>	16/09/2019
MDZ/A27.8	<a href="#">MMC118 MOR-RHDHV-APP-0055-0059 Vol III Chapter 24: Seascape, Landscape and Visual Impact Assessment</a>	16/09/2019
MDZ/A27.9	<a href="#">MMC119 MOR-RHDHV-APP-0061-0062 Vol III Chapter 25: Socio-Economics, Tourism and Recreation</a>	16/09/2019
MDZ/A27.10	<a href="#">MMC120 MOR-RHDHV-APP-0064 Vol III Chapter 26: Cumulative, Transboundary and In-Combination Impact Assessment</a>	16/09/2019
MDZ/A27.11	<a href="#">MMC033 MOR-RHDHV-DOC-0067 HRA Information to Support Habitats Regulations Assessment</a>	16/09/2019
	<b>Further Environmental Information</b>	
MDZ/A28.1	<a href="#">MMC186 MOR-RHDHV-DOC-0147 ES Volume II Chapter 4 Figures</a>	27/03/2020
MDZ/A28.2	<a href="#">MMC308 MOR-RHDHV-DOC-0128 Welsh National Marine Plan Comparison Note</a>	27/03/2020
MDZ/A28.3	<a href="#">MMC137 MOR-RHDHV-DOC-0112 Metocean and Physical Processes Numerical Modelling Supplementary Note</a>	27/03/2020
MDZ/A28.4	<a href="#">MMC136 MOR-RHDHV-DOC-0111 Metocean and Physical Processes ES Supplementary Note</a>	27/03/2020
MDZ/A28.5	<a href="#">MMC138 MOR-RHDHV-DOC-0113 Benthic and Intertidal Ecology Issues Responses to NRW comments</a>	27/03/2020
MDZ/A28.6	<a href="#">MMC176 MOR-RHDHV-DOC-0114 Fish Ecology Issues Responses to NRW comments</a>	27/03/2020
MDZ/A28.7	<a href="#">MMC361 MOR-RHDHV-DOC-0115 (04) Marine Ornithology Collision Risk Modelling</a>	27/03/2020

MDZ/A28.8	<a href="#">MMC175 MOR-RHDHV-DOC-0072 (03) Outline Environmental Mitigation and Monitoring Plan</a>	27/03/2020
MDZ/A28.9	<a href="#">MMC152 MOR-RHDHV-DOC-0120 (02) Onshore Ornithology Response to Comments on Chough</a>	27/03/2020
MDZ/A28.10	<a href="#">MMC139 MOR-RHDHV-DOC-0116 Underwater Noise Modelling Report</a>	27/03/2020
MDZ/A28.11	<a href="#">MMC140 MOR-RHDHV-DOC-0117 Marine Mammals Underwater Noise Modelling Note</a>	27/03/2020
MDZ/A28.12	<a href="#">MMC364 MOR-RHDHV-DOC-0118 (02) Marine Mammals Additional Collision Risk Modelling</a>	27/03/2020
MDZ/A28.13	<a href="#">MMC142 MOR-RHDHV-DOC-0119 Marine Mammals Monitoring and Mitigation Options</a>	27/03/2020
MDZ/A28.14	<a href="#">MMC144 MOR-RHDHV-DOC-0124 Navigation and Shipping Responses</a>	27/03/2020
MDZ/A28.15	<a href="#">MMC196 MOR-MCO-DOC-001 Navigation Risk Assessment Addendum - September 2020</a>	27/03/2020
MDZ/A28.16	<a href="#">MMC125 MOR-MM-DOC-0008 Outline Skills and Training Action Plan</a>	27/03/2020
MDZ/A28.17	<a href="#">MMC126 MOR-MM-DOC-0009 Outline Tourism and Recreation Monitoring Strategy</a>	27/03/2020
MDZ/A28.18	<a href="#">MMC353 MOR-RHDHV-DOC-0110 (04) Terrestrial Ecology Assessment Update</a>	27/03/2020
MDZ/A28.19	<a href="#">MMC146 MOR-SLR-DOC-0001 Seascape Landscape and Visual Impact Assessment response</a>	27/03/2020
MDZ/A28.20	<a href="#">MMC128 MOR-SLR-DOC-0002 Outline Landscape Management Plan</a>	27/03/2020
MDZ/A28.21	<a href="#">MMC150 MOR-MM-DOC-0011 Response and signposting to ORML1938 Request for Further Information 160420.xlsx<sup>v</sup>*</a>	21/05/2020
MDZ/A28.22	<a href="#">MMC153 MOR-RHDHV-DOC-0126 Signposting for responses to ORML1938_RSPB.xlsx*</a>	21/05/2020
MDZ/A28.23	<a href="#">MMC154 MOR-RHDHV-DOC-0127 Signposting for responses to ORML1938_ABPmer.xlsx*</a>	21/05/2020
MDZ/A28.24	<a href="#">MMC155 MOR-RHDHV-DOC-0127a Fish Ecology Response to ABPmer comments*</a>	21/05/2020
MDZ/A28.25	<a href="#">MMC156 MOR-RHDHV-DOC-0127b PDE Matrix Spreadsheet (Including Phase 1 parameters).xlsx*</a>	21/05/2020
MDZ/A28.26	<a href="#">MMC157 MOR-RHDHV-DOC-0129 Response and signposting to ORML1938 NRW Advisory .xlsx*</a>	21/05/2020

MDZ/A28.27	<a href="#">MMC158 MOR-RHDHV-DOC-0130 Signposting for responses to ORML1938 Trinity House.xlsx*</a>	21/05/2020
MDZ/A28.28	<a href="#">MMC159 MOR-RHDHV-DOC-0131 Signposting for responses to ORML1938_RYA.xlsx*</a>	21/05/2020
MDZ/A28.29	<a href="#">MMC160 MOR-RHDHV-DOC-0132 Signposting for responses to ORML1938 Chamber of Shipping.xlsx*</a>	21/05/2020
MDZ/A28.30	<a href="#">MMC161 MOR-RHDHV-DOC-0133 Signposting for responses to ORML1938 MCA.xlsx*</a>	21/05/2020
MDZ/A28.31	<a href="#">MMC162 MOR-RHDHV-DOC-0134 Signposting for responses to ORML1938 GAPS.xlsx*</a>	21/05/2020
MDZ/A28.32	<a href="#">MMC163 MOR-RHDHV-DOC-0135 Signposting for responses to ORML1938 all public representations 210120*</a>	21/05/2020
MDZ/A28.33	<a href="#">MMC164 MOR-RHDHV-DOC-0137 Partrac hydrographic and geophysical report Vol 1 Operation Report*</a>	21/05/2020
MDZ/A28.34	<a href="#">MMC165 MOR-RHDHV-DOC-0138 Signposting for responses to ORML1938 DAERA.xlsx*</a>	21/05/2020
MDZ/A28.35	<a href="#">MMC166 MOR-RHDHV-DOC-0139 Partrac hydrographic and geophysical Vol2 Survey Report*</a>	21/05/2020
MDZ/A28.36	<a href="#">MMC167 MOR-RHDHV-DOC-0140 P18030_004 ISOPACHYTE R1 (R0)*</a>	21/05/2020
MDZ/A28.37	<a href="#">MMC168 MOR-RHDHV-DOC-0141 P18030_001 BATHYMETRY (R0)*</a>	21/05/2020
MDZ/A28.38	<a href="#">MMC169 MOR-RHDHV-DOC-0142 P18030_003 SSS MOSAIC (R0)*</a>	21/05/2020
MDZ/A28.39	<a href="#">MMC170 MOR-RHDHV-DOC-0143 Wave model worst case clarification note*</a>	21/05/2020
MDZ/A28.40	<a href="#">MMC171 MOR-RHDHV-DOC-0144 Figure 15-14 GIS kayaking routes and illustrating operational exclusion zones*</a>	21/05/2020
MDZ/A28.41	<a href="#">MMC172 MOR-RHDHV-DOC-0145 Signposting for responses to ORML1938 WG Fisheries.xlsx*</a>	21/05/2020
MDZ/A28.42	<a href="#">MMC173 MOR-WSP-DOC-0019 Signposting for responses to ORML1938_IACC.xlsx*</a>	21/05/2020
MDZ/A28.43	<a href="#">MMC176 MOR-RHDHV-DOC-0114 (02) Fish Ecology Issues Responses to NRW comments (Revised)*</a>	03/07/2020

MDZ/A28.44	<a href="#">MMC177 MOR-RHDHV-DOC-0125 (03) Cumulative Impact Assessment Matrix (Revised).xlsx*</a>	03/07/2020
MDZ/A28.45	<a href="#">MMC178 MOR-RHDHV-DOC-0130a Signposting Response to Letter 050620.xlsx*</a>	03/07/2020
MDZ/A28.46	<a href="#">MMC179 MOR-RHDHV-DOC-0131a Non-Technical Summary and ES Chapter 27 Summary Addendum*</a>	03/07/2020
MDZ/A28.47	<a href="#">MMC180 MOR-RHDHV-DOC-0132a Additional Fish Ecology Responses to NRW comments*</a>	03/07/2020
MDZ/A28.48	<a href="#">MMC181 MOR-RHDHV-DOC-0133a Addendum to the CIA Chapter*</a>	03/07/2020
MDZ/A28.49	<a href="#">MMC182 MOR-RHDHV-DOC-0134a CIA Signposting Document.xlsx*</a>	03/07/2020
MDZ/A28.50	<a href="#">MMC183 MOR-RHDHV-DOC-0135a Cliff Habitat Design Refinement Note*</a>	03/07/2020
MDZ/A28.51	<a href="#">MMC184 20UK1619 RN MM VTS02-02 Interactive Boundary Assessment*</a>	08/07/2020
MDZ/A28.52	<a href="#">MMC185 MOR-RHDHV-DOC-0146 Signposting Responses to TWAO</a>	18/09/2020
MDZ/A28.53	<a href="#">MMC186 MOR-RHDHV-DOC-0147 ES Volume II Chapter 4 Figures</a>	18/09/2020
MDZ/A28.54	<a href="#">MMC187 MOR-RHDHV-APP-00126a Appendix 8.1 WFD Compliance Assessment</a>	18/09/2020
MDZ/A28.55	<a href="#">MMC188 MOR-RHDHV-DOC-0148 Morlais Project - Air Quality Response</a>	18/09/2020
MDZ/A28.56	<a href="#">MMC191 MOR-RHDHV-DOC-0150 Tagging of Guillemots and Razorbills</a>	18/09/2020
MDZ/A28.57	<a href="#">MMC192 MOR-RHDHV-DOC-0128 (03) WNMP Comparison Note</a>	18/09/2020
MDZ/A28.58	<a href="#">MMC193 MOR-BAU-DOC-0003 Supplementary Kayaking And Sailing Activities Assessment</a>	18/09/2020
MDZ/A28.59	<a href="#">MMC194 MOR-MSP-DOC-002 Vol 1 Ch 15 Shipping and Navigation (Revised)</a>	18/09/2020
MDZ/A28.60	<a href="#">MMC197 MOR-RHDHV-DOC-0107 Morlais Project Additional Environmental Information.pdf</a>	18/09/2020
MDZ/A28.61	<a href="#">Onshore Archaeology Settings Assessment for Offshore Infrastructure</a>	18/09/2020
MDZ/A29	<a href="#">Special Category Land Application</a>	20/10/2020
MDZ/A30	<a href="#">TWAo Change Tracker</a>	18/09/2020
MDZ/A31.1	<a href="#">MMC350 MOR-HRW-DOC-0002 Further information on predicted changes to currents</a>	19/10/2020

MDZ/A31.2	<a href="#">MMC351 MOR-MSP-DOC-003 Additional Information to Support Morlais Habitats Regulations Assessment (migratory fish)</a>	19/10/2020
MDZ/A31.3	<a href="#">MMC352 MOR-MSP-DOC-004 Further Environmental Information Benthic Annex 1 habitats</a>	19/10/2020
MDZ/A31.4	<a href="#">MMC353 MOR-RHDHV-DOC-0110 (4) Terrestrial Ecology Assessment Update</a>	19/10/2020
MDZ/A31.9	<a href="#">MMC360 MOR-RHDHV-DOC-0153 Marine Ornithology Revised Collision Risk Modelling Signposting document</a>	22/10/2020
MDZ/A31.10	<a href="#">MMC361 MOR-RHDHV-DOC-0115 (03) Marine Ornithology Collision Risk Modelling Note</a>	22/10/2020
MDZ/A31.11	<a href="#">MMC362 MOR-RHDHV-DOC-0016 (04) Vol I Chapter 11: Marine Ornithology</a>	22/10/2020
MDZ/A31.12	<a href="#">MMC363 MOR-RHDHV-APP-0019 (04) Vol III Chapter 11.3: Marine Ornithology</a>	22/10/2020
MDZ/A31.13	<a href="#">MMC364 MOR-RHDHV-DOC-0118 (02) Marine Mammals Additional Collision Risk Modelling</a>	22/10/2020
MDZ/A31.14	<a href="#">MMC365 MOR-RHDHV-DOC-0020 (02) Vol I Chapter 12: Marine Mammals</a>	22/10/2020
MDZ/A31.15	<a href="#">MMC366 MOR-RHDHV-APP-0022 (02) Vol III Chapter 12.2: Marine Mammals</a>	22/10/2020
MDZ/A31.16	<a href="#">MMC367 MOR-RHDHV-DOC-0067 (02) Information to Support HRA</a>	22/10/2020
MDZ/A31.17	<a href="#">MMC368 MOR-RHDHV-DOC-0154 Marine Mammals Revised Collision Risk Modelling Signposting document</a>	22/10/2020

MDZ/B	Legal Documents	Date Published
MDZ/B1	<a href="#">MMC285 MOR-MSP-DOC-0023 Transport and Works Act 1992</a>	1992
MDZ/B2	<a href="#">Section 90(2A), Town and Country Planning Act 1990</a>	1990
MDZ/B3	<a href="#">MMC286 MOR-MSP-DOC-0024 Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006</a>	2006

MDZ/B4	<a href="#">MMC283 MOR-MSP-DOC-0021 Transport and Works (Inquiries Procedure) Rules 2004</a>	2004
MDZ/B5	<a href="#">Habitats Directive</a>	1992
MDZ/B6	<a href="#">Habitats Regulations 2017</a>	2017
MDZ/B7	<a href="#">Habitats Regulations Offshore 2017</a>	2017
MDZ/B8	<a href="#">Birds Directive</a>	2009
MDZ/B9	<a href="#">The Environment (Wales) Act 2016 – (relevant extracts only)</a>	2016
MDZ/B10	<a href="#">The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019</a>	2019
MDZ/B11	<a href="#">Renewable Energy Directive 2009/28/EC</a>	2009
MDZ/B13	<a href="#">MMC425 The Scarweather Sands Offshore Wind Farm TWAo 2004</a>	2004
MDZ/B14	<a href="#">MMC426 The Swansea Bay Tidal Generating Station Order 2015</a>	2015
MDZ/B15	<a href="#">MMC242 MOR-POL-DOC-045 Well-being of Future Generations Act 2015 (Wales)</a>	2015
MDZ/B16	<a href="#">MMC245 MOR-POL-DOC-048 Wales Act 2017</a>	2017

MDZ/C	Economic Documents	Date Submitted
MDZ/C1	<a href="#">MMC205 MOR-EXT-DOC-008 Project appraisal for WEFO (Catapult report)</a>	18/09/2020

MDZ/D	Policy Documents	Date Published
MDZ/D1	<a href="#">MMC254 MOR-POL-DOC-057 WG Planning Policy Wales 10th Edition</a>	Dec-18
MDZ/D2	<a href="#">MMC257 MOR-POL-DOC-060 National Policy Statement EN-1 Overarching Energy</a>	Jul-11
MDZ/D3	<a href="#">MMC258 MOR-POL-DOC-061 National Policy Statement EN-3 Renewable Energy</a>	Jul-11
MDZ/D4	<a href="#">MMC271 MOR-POL-DOC-074 UK Marine Policy Statement</a>	Mar-11
MDZ/D5	<a href="#">MMC272 MOR-POL-DOC-075 Welsh National Marine Plan 2019</a>	Nov-19
MDZ/D6	<a href="#">MMC273 MOR-POL-DOC-076 Draft National Development Framework</a>	2019
MDZ/D7	<a href="#">MMC222 MOR-EXT-DOC-025 Anglesey AONB Management Plan Review 2015-2020</a>	2015
MDZ/D8	<a href="#">MMC281 MOR-POL-DOC-084 Committee on Climate Change-Reducing UK Emissions</a>	Jun-20
MDZ/D9	<a href="#">MMC294 MOR-EXT-DOC-037 PINS Inspectors Report-Developments of Nat Significance</a>	11/10/2018
MDZ/D10	<a href="#">MMC295 MOR-EXT-DOC-038 WG Decision Letter-Developments of Nat Significance</a>	08/11/2018
MDZ/D11	<a href="#">MMC299 MOR-POL-DOC-086 WG Press Release Climate Emergency Declaration 2019</a>	29/04/2019
MDZ/D12	<a href="#">MMC300 MOR-POL-DOC-087 Welsh Government CABINET STATEMENT on Net Zero</a>	11/06/2019
MDZ/D13	<a href="#">MMC336 UK Wave and Tidal Demonstration Zones Workshop Report</a>	Sep-15
MDZ/D14	<a href="#">MMC337 Advice Note Nine: Rochdale Envelope, The Planning Inspectorate</a>	Jul-18
MDZ/D15	<a href="#">MMC369 The National Marine Plan Implementation Guidance (2020)</a>	Jun-20
MDZ/D16	<a href="#">MMC370 Methodology for Assessing the Marine Navigational Safety &amp; Emergency Response Risks of Offshore Renewable Energy Installations (2013)</a>	2013
MDZ/D41	<a href="#">MMC395 Schedule of Changes to draft National Development Framework</a>	21/09/2020
MDZ/D42	<a href="#">MMC396 Llyn Bran – Inspectors Report on Wind Farm Appeal</a>	27/07/2017
MDZ/D43	<a href="#">MMC397 Welsh Government decision letter, Llyn Bran Wind Farm</a>	11/01/2018

MDZ/D44	<a href="#">MMC398 Welsh Government decision letter regarding a Wind Farm proposed in near Llandrindod Wells Powys</a>	25/10/2018
MDZ/D45	<a href="#">MMC399 Welsh Government Circular 'The Use of Planning Conditions for Development Management'</a>	Oct-14
MDZ/D47	<a href="#">MMC401 Welsh Government, Energy Wales: A low carbon Transition</a>	Mar-12
MDZ/D48	<a href="#">MMC402 Secretary of State BEIS email RE Good Law Project</a>	25/09/2020
MDZ/D49	<a href="#">MMC403 Vince &amp; Good Law Project v SoS for BEIS – Statement of Fact and Grounds, High Court</a>	14/05/2020
MDZ/D50	MMC429 The Government Response to the Committee on Climate Change's 2020 Progress Report to Parliament	2020
MDZ/D51	<a href="#">MMC430 Anglesey AONB Management Plan 2015 – 2020 Appendix 1</a>	2015
MDZ/D52	<a href="#">MMC259 MOR-POL-DOC-062 Anglesey and Gwynedd Joint Local Development Plan</a>	31/7/2017
MDZ/D53	<a href="#">MDZ_D53 The Queen on the application of ClientEarth v Sec of State for Business Energy and Industrial Strategy v Drax Power</a>	22/05/2020
MDZ/D54	<a href="#">Local ownership of energy generation in Wales-Benefitting Wales today and for future generations</a>	2020

MDZ/E	TWA / Inquiry Documents	Document Date
MDZ/E2.1	<a href="#">Notice of Further Environmental Information</a>	01/04/2020
MDZ/E2.2	<a href="#">Notice of Further Environmental Information</a>	19/10/2020
MDZ/E2.3	<a href="#">Notice of Clarifications to Environmental Information</a>	24/10/2020
MDZ/E3	<a href="#">List of Applicant's Witnesses</a>	02/11/2020
MDZ/E4	<a href="#">Affidavit Under Rule 10(8) of Compliance with the Provisions of Rules 14(6)(7)(9) and 15</a>	30/10/2019

MDZ/E5	<a href="#">Inquiry Procedural Note 1</a>	06/07/2020
MDZ/E6	<a href="#">Inquiry Procedural Note 2</a>	07/08/2020
MDZ/E7	<a href="#">Inquiry Procedural Note 3</a>	13/10/2020
MDZ/E8	<a href="#">Letter fixing date of Inquiry</a>	28/09/2020
MDZ/E9	<a href="#">Letter requesting PIM</a>	09/10/2020
MDZ/E10	<a href="#">MMC424 PINS Assessment of Environmental Statement</a>	04/12/2019
MDZ/E11	<a href="#">MMC433 PINS 2<sup>nd</sup> Assessment of Environmental Statement</a>	26/08/2020

MDZ/F	Biodiversity Matters	Document Date
	<b>Onshore Ecology</b>	
MDZ/F1	<a href="#">MMC338 Joint Nature Conservancy Council (JNCC) (2015) Natura 2000 - Standard Data Form: Glannau Ynys Gybi/ Holy Island Coast SAC. Site reference: UK0013046</a>	2015
MDZ/F2	<a href="#">MMC339 Countryside Council for Wales (CCW) (2011) Core Management Plan Including Conservation Objectives For Glannau Ynys Gybi SAC &amp; Glannau Ynys Gybi SPA</a>	2011
MDZ/F3	<a href="#">MMC340 First Onshore Ecology Technical Working Group (December 2019)</a>	Dec-19
MDZ/F4	<a href="#">MMC341 Provision of 'Updated assessments for terrestrial ecology (excluding chough) in response to comments made on the ES by NRW and RSPB' Technical Note (the EcIA Update) by MM to NRW (February 2019)</a>	Feb-19
MDZ/F5	<a href="#">MMC342 Second Onshore Ecology Technical Working Group (February 2019), followed by comments from NRW on the EcIA Update (March 2020)</a>	Mar-20
MDZ/F6	<a href="#">MMC343 Provision of revised EcIA Update (version 02) to NRW (March 2020)</a>	Mar-20

MDZ/F7	<a href="#">MMC344 Circulation of Pre-construction Botanical (NVC) Survey Report and Cliff Micrositing Note to NRW for comment (July 2020)</a>	Jul-20
FDZ/F8	<a href="#">MMC345 Provision of comments on Pre-construction Botanical (NVC) Survey Report and Cliff Micrositing Note by NRW (September 2020)</a>	Sep-20
MDZ/F9	<a href="#">MMC189 MOR-RHDHV-DOC-0110 Terrestrial Ecology Assessment Update</a>	18/09/2020
MDZ/F10	<a href="#">MMC174 MOR-BSG-DOC-0001 (02) Cliff Habitat Survey Report</a>	18/09/2020
	<b>Marine Mammals</b>	
MDZ/F13	<a href="#">MMC206 MOR-EXT-DOC-009 Advice to Morlais on Marine Mammal Collision &amp; Adaptive Management</a>	18/09/2020
MDZ/F14	<a href="#">MMC207 MOR-EXT-DOC-010 Morlais Demonstration Zone: Additional information provided by NRW Advisory on marine mammals</a>	18/09/2020
MDZ/F15	<a href="#">MMC346 Defining Project Envelopes for Marine Energy Projects: Review and Tidal Energy Test Facility and Marine Mammals Case Study (Sparling and Smith, 2019, unpublished)</a>	2019
MDZ/F15.2	<a href="#">MMC348 ABPmer, (2020). Review of potential collision between tidal stream devices and marine animals, NRW Evidence Report No. 444</a>	Jun-20
MDZ/F15.3	<a href="#">MMC445 Advice on adaptive management of the risk of collision impacts on protected marine mammal species in Welsh waters from the Morlais Project</a>	15/10/2020
	<b>Ornithology</b>	
MDZ/F16	<a href="#">MMC190 MOR-RHDHV-DOC-0115 (02) Marine Ornithology Collision Risk</a>	18/09/2020
MDZ/F17	<a href="#">MMC152 Onshore Ornithology: Response to Comments on Chough (Document MOR/RHDHV/DOC/0120)</a>	21/05/2020
MDZ/F18	<a href="#">MMC153 MOR-RHDHV-DOC-0126 Signposting for responses to ORML1938_RSPB.xlsx*</a>	21/05/2020

MDZ/F19	<a href="#">MMC347 Scottish Natural Heritage (SNH) (2016) Assessing collision risk between underwater turbines and marine wildlife. SNH Guidance Note (version 1 May 2016)</a>	01/05/2016
MDZ/F21	<a href="#">MMC404 Scoping opinion consultation response to NRW Marine Licensing (10/07/2015)</a>	10/07/2015
MDZ/F22	<a href="#">MMC405 Scoping opinion consultation response to Ynys Môn County Council (08/06/2015)</a>	08/06/2015
MDZ/F23	<a href="#">MMC406 Boundary variation consultation response made to Menter Môn (28/08/2015)</a>	28/08/2015
MDZ/F24	<a href="#">MMC407 Scoping opinion consultation response to NRW Marine Licensing (05/06/2018)</a>	05/06/2018
MDZ/F25	<a href="#">MMC408 Developments of National Significance (DNS) application response/objection made to Planning Inspectorate Wales (31/10/2019)</a>	31/10/2019
MDZ/F26	<a href="#">MMC409 Marine Licence application response/objection made to NRW Marine Licensing (10/01/2020)</a>	10/01/2020
MDZ/F27	<a href="#">MMC410 Developments of National Significance (DNS) additional environmental information response/objection made to Planning Inspectorate Wales (26/05/2020)</a>	26/05/2020
MDZ/F28	<a href="#">MMC411 Bowgen, K. &amp; Cook, A. 2018. Bird Collision Avoidance: Empirical evidence and impact assessments. JNCC Report No. 614, JNCC, Peterborough, ISSN 0963-8091.</a>	2018
MDZ/F29	<a href="#">MMC412 Chamberlain, D. E., Rehfish, M. R., Fox, A. D., Desholm, M., &amp; Anthony, S. J. (2006). The effect of avoidance rates on bird mortality predictions made by wind turbine collision risk models. Ibis, 148, 198-202.</a>	2006
MDZ/F30	<a href="#">MMC413 Chimienti, M., Cornulier, T., Owen, E., Bolton, M., Davies, I. M., Travis, J. M., &amp; Scott, B. E. (2016). The use of an unsupervised learning approach for characterizing latent behaviors in accelerometer data. Ecology and evolution, 6(3), 727-741.</a>	2016
MDZ/F31	<a href="#">MMC414 Cook, A. S. C. P., Johnston, A., Wright, L. J., &amp; Burton, N. H. (2012). Strategic Ornithological Support Services Project SOSS-02: A Review of Flight Heights and Avoidance Rates of Birds in Relation to Offshore Wind Farms. British Trust for Ornithology.</a>	2012
MDZ/F32	<a href="#">MMC415 Johnstone I, Whitehead S and Lamacraft D 2002. The importance of grazed habitat for foraging chough <i>Pyrrhocorax</i>, and its implications for agri-environment schemes. Aspects of Applied Biology. Birds and agriculture 67, 1-8</a>	2002
MDZ/F33	<a href="#">MMC416 Masden, E. (2015). Developing an avian collision risk model to incorporate variability and uncertainty. Marine Scotland Science.</a>	2015

MDZ/F34	<a href="#">MMC417 Ross-Smith, V.H., Thaxter, C.B., Masden, E.A., Shamoun-Baranes, J., Burton, N.H., Wright, L.J., Rehfisch, M.M. and Johnston, A., 2016. Modelling flight heights of lesser black-backed gulls and great skuas from GPS: a Bayesian approach. <i>Journal of applied ecology</i>, 53(6), pp.1676-1685.</a>	2016
MDZ/F36	<a href="#">MMC419 Shoji, A., Dean, B., Kirk, H., Freeman, R., Perrins, C. M., &amp; Guilford, T. (2016). The diving behaviour of the Manx Shearwater <i>Puffinus puffinus</i>. <i>Ibis</i>, 158(3), 598-606.</a>	2016
MDZ/F37	<a href="#">MMC420 Skov, H., Heinänen, S., Norman, T., Ward, R. M., Mendez-Roldan, S., &amp; Ellis, I. (2018). ORJIP Bird Collision and Avoidance Study. Final report–April 2018. <i>The Carbon Trust, United Kingdom</i>.</a>	2018
MDZ/F38	<a href="#">MMC421 Thaxter, C.B., Daunt, F., Hamer, K.C., Watanuki, Y., Harris, M.P., Grémillet, D., Peters, G. and Wanless, S., 2009. Sex-specific food provisioning in a monomorphic seabird, the common guillemot <i>Uria aalge</i>: nest defence, foraging efficiency or parental effort? <i>Journal of Avian Biology</i>, 40(1), pp.75-84.</a>	2009
MDZ/F39	<a href="#">MMC422 Whitehead S, Johnstone I and Wilson J (2005). Choughs <i>Pyrrhocorax pyrrhocorax</i> breeding in Wales select foraging habitat at different spatial scales. <i>Bird Study</i> 52. 193-203</a>	2005
MDZ/F40	<a href="#">MMC371 Marine Licence application additional environmental information response/objection made to NRW Marine Licensing (09/09/2020)</a>	09/09/2020
MDZ/F41	<a href="#">MMC372 SSSI: Operations Requiring Consultation with the Countryside Council for Wales (CCW) Glannau Ynys Gybi/Holy Island Coast (2000)</a>	2000
MDZ/F42	<a href="#">MMC373 Glannau ynys Gybi SSSI - Your Special Site and its Future</a>	2000
MDZ/F43	<a href="#">MMC374 Countryside for Council for Wales (CCW) SSSI Citation: Glannau Ynys Gybi/Holy Island Coast (2000)</a>	2000
MDZ/F44	<a href="#">MMC375 Glannau Ynys Gybi / Holy Island Coast SSSI Map 1</a>	Jul-01
MDZ/F45	<a href="#">MMC376 Glannau Ynys Gybi / Holy Island Coast SSSI Map 2</a>	Jul-01
MDZ/F46	<a href="#">MMC377 Glannau Ynys Gybi / Holy Island Coast SSSI Map 3</a>	Jul-01
MDZ/F47	<a href="#">MMC378 Glannau Ynys Gybi / Holy Island Coast SSSI Map 4</a>	Jul-01
MDZ/F48	<a href="#">MMC379 Glannau Ynys Gybi / Holy Island Coast SSSI Map 5</a>	Jul-01

MDZ/F49	<a href="#">MMC380 Glannau Ynys Gybi / Holy Island Coast SSSI Map 6</a>	Jul-01
MDZ/F51	<a href="#">MMC381 Glannau Ynys Gybi / Holy Island Coast SPA Map</a>	Nov-02
MDZ/F52	<a href="#">MMC382 EC Directive 79/409 on the Conservation of Wild Birds: Proposed extension to Special Protection Area (SPA) Glannau Ynys Gybi/Holy Island Coast</a>	Nov-01
MDZ/F53	<a href="#">MMC383 Glannau Ynys Gybi / Holy Island Coast SAC Map</a>	Feb-05
MDZ/F54	<a href="#">MMC384 Entry in the Register of European Sites for Wales-Glannau Ynys Gybi / Holy Island Coast SAC</a>	Dec-04
MDZ/F55	<a href="#">MMC385 Countryside Council for Wales (CCW) (2008) Core Management Plan Including Conservation Objectives For Glannau Aberdaron and Ynys Enlli /Aberdaron Coast and Bardsey Island SPA</a>	Mar-08
MDZ/F56	<a href="#">MMC386 Glannau Aberdaron ac Ynys Enlli / Aberdaron Coast and Bardsey Island Map</a>	Sep-14
MDZ/F57	<a href="#">MMC387 Entry in the Register of European Sites for Wales-Glannau Aberdaron ac Ynys Enlli / Aberdaron Coast and Bardsey Island SPA</a>	Oct-14
MDZ/F58	<a href="#">MMC388 Countryside Council for Wales (CCW) (2008) Core Management Plan Including Conservation Objectives For Skomer and Skokholm SPA</a>	Apr-08
MDZ/F59	<a href="#">MMC389 Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA Map 1</a>	Jun-17
MDZ/F60	<a href="#">MMC390 Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA Map 2</a>	Jun-17
MDZ/F61	<a href="#">MMC391 Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA Map 3</a>	Jun-17
MDZ/F62	<a href="#">MMC392 Entry in the Register of European Sites for Wales-Skomer, Skokholm and the seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro SPA</a>	Jan-17
MDZ/F63	<a href="#">MMC393 Cardigan Bay/ Bae Ceredigion Special Area of Conservation Advice provided by Natural Resources Wales in fulfilment of Regulation 37 of the Conservation of Habitats and Species Regulations 2017</a>	Mar-18

MDZ/G	Character and/or Appearance of Locality	Document Date
MDZ/G1	<a href="#">MMC252 MOR-POL-DOC-055 Guidelines for Landscape and Visual Impact Assessment (GLVIA 3)</a>	17/04/2013
MDZ/G2	<a href="#">MMC253 MOR-POL-DOC-056 Scottish Natural Heritage Visual Representation of Wind Farms</a>	Feb-17
MDZ/G3	<a href="#">MMC255 MOR-POL-DOC-058 Welsh Government Technical Advice Note 8 Planning for Renewable Energy</a>	Jul-05
MDZ/G4	<a href="#">MMC256 MOR-POL-DOC-059 Welsh Government Technical Advice Note 12 Design</a>	Mar-16
MDZ/G6	<a href="#">MMC260 MOR-POL-DOC-063 Review of Special Landscape Areas in Gwynedd and Anglesey</a>	2012
MDZ/G7	<a href="#">MMC262 MOR-POL-DOC-065 Anglesey-Landscape-Strategy-Update-2011</a>	2011
MDZ/G8	<a href="#">MMC263 MOR-POL-DOC-066 Anglesey Seascape Character Assessment</a>	Jan-13
MDZ/G9	<a href="#">MMC264 MOR-POL-DOC-067 NRW National Landscape Character Areas</a>	31/03/2014
MDZ/G10	<a href="#">MMC265 MOR-POL-DOC-068 NRW (undated) LANDMAP Information</a>	n/a
MDZ/G11	<a href="#">MMC235A MOR-POL-DOC-038A IALA Marking of Manmade Offshore Structures</a>	Dec-13
MDZ/G12	<a href="#">MMC267 MOR-POL-DOC-070 IALA Recommendation on Surface Colours used as Visual Signals on Aids to Nav</a>	Dec-17
MDZ/G13	<a href="#">MMC007 MOR-MSP-DOC-0020 Restricted Area Plan</a>	07/09/2020

MDZ/H	Socio-economic Matters	Date submitted / Date
MDZ/H1	<a href="#">MMC132 MOR-BAU-DOC-0001 Supplementary Tourism and Recreation Assessment*</a>	27/03/2020

MDZ/H2	<a href="#">MMC215 MOR-EXT-DOC-018 Economic evaluation of the recreational value of the coastal environment</a>	18/09/2020
MDZ/H3	<a href="#">MMC223 MOR-EXT-DOC-026 Destination-Anglesey-Management-Plan-2016-2020</a>	2016
MDZ/H4	<a href="#">MMC133 MOR-BAU-DOC-0002 Supplementary Socio-economic Assessment*</a>	27/03/2020

MDZ/I	Navigational Issues and other Marine Matters	Date submitted / Date
MDZ/I1	<a href="#">MMC196 MOR-MCO-DOC-001 Navigation Risk Assessment Addendum - September 2020</a>	18/09/2020
MDZ/I2	<a href="#">MMC231 MOR-EXT-DOC-034 MGN 543 Guidance on UK Navigational Practice, Safety and Emergency Response Issues</a>	Jan-16
MDZ/I3	<a href="#">MMC134 MOR-HRW-DOC-0001 HR Wallingford Coastal Processes Modelling.pdf</a>	27/03/2020
MDZ/I4	<a href="#">MMC011 MOR-ESI-DOC-0001 Draft Marine Licence Conditions v0.8</a>	18/09/2020
MDZ/I5	<a href="#">MMC427 Final Report on Consultation to Proposed Variation to Boundary West Anglesey Demonstration Zone 30th September 2015</a>	30/09/2015
MDZ/I6	Updated Marine Licence Conditions	TBC

MDZ/J	CPO Matters	Date submitted / Date
MDZ/J1	<a href="#">MMC241 MOR-POL-DOC-044 Marine energy plan for wales (T&amp;FG report)</a>	2016
MDZ/J3	<a href="#">MMC243 MOR-POL-DOC-046 Plan Prosperity for All-A low Carbon Wales 2019</a>	Mar-19
MDZ/J4	<a href="#">MMC244 MOR-POL-DOC-047 Cymraeg 2050 Welsh language strategy.</a>	Jul-17

MDZ/J6	<a href="#">MMC247 MOR-POL-DOC-050 Welsh Government Low Carbon Delivery Plan</a>	Mar-19
MDZ/J7	<a href="#">MMC432 Land CPO Process Schedule</a>	02/11/2020

MDZ/K	EMMP Matters	Document Date
MDZ/K1	<a href="#">MMC250 MOR-POL-DOC-053 NRW Guidance for Marine Developers- Using adaptive management for marine developments</a>	n/a
	<a href="https://naturalresourceswales.gov.uk/guidanceand-advice/business-sectors/marine/usingadaptive-management-for-marinedevelopments/?lang=en">https://naturalresourceswales.gov.uk/guidanceand-advice/business-sectors/marine/usingadaptive-management-for-marinedevelopments/?lang=en</a>	
MDZ/K2	<a href="#">MMC251 MOR-POL-DOC-054 Guidelines on the implementation of the Birds and Habitats Directives</a>	Jan-11

MDZ/L	Statements of Common Ground	Date submitted
MDZ/L1	<a href="#">Marine Mammals</a>	30/11/2020
MDZ/L2	<a href="#">Ornithology - NRW</a>	01/12/2020
MDZ/L3	Ornithology - RSPB	TBC
MDZ/L4	SLVIA – IoACC	TBC
MDZ/L5	<a href="#">SLVIA - NRW</a>	30/11/2020
MDZ/L6	<a href="#">Other topics - NRW</a>	30/11/2020
MDZ/L7	<a href="#">IoACC</a>	26/11/2020

MDZ/L8	<a href="#">MMC483 MOR-RHDHV-DOC-0156 Statement of Common Ground MCA Shipping and Navigation[1]</a>	TBC
MDZ/L9	<a href="#">MMC448 MOR-RHDHV-DOC-0155 Statement of Common Ground Trinity House Shipping and Navigation</a>	02/11/2020
MDZ/L10	RYA	TBC

MDZ/M	Developer Letters of Support	Date submitted
MDZ/M1	<a href="#">MMC198 MOR-EXT-DOC-001 Aquantis Letter to support scale of Morlais</a>	18/09/2020
MDZ/M2	<a href="#">MMC199 MOR-EXT-DOC-002 Instream Letter to support scale of Morlais</a>	18/09/2020
MDZ/M3	<a href="#">MMC200 MOR-EXT-DOC-003 Sabella Letter to support scale of Morlais</a>	18/09/2020
MDZ/M4	<a href="#">MMC201 MOR-EXT-DOC-004 Orbital Marine Power Letter to support scale of Morlais</a>	18/09/2020
MDZ/M5	<a href="#">MMC202 MOR-EXT-DOC-005 Verdant Power Letter to support scale of Morlais</a>	18/09/2020
MDZ/M6	<a href="#">MMC203 MOR-EXT-DOC-006 Magallanes Letter to support scale of Morlais</a>	18/09/2020

MDZ/N	Statements of Cases & Replies	Date submitted
MDZ/N1	<a href="#">MMC001 Statement of Case (Applicant)</a>	18/09/2020
MDZ/N2	<a href="#">Statement of Case Royal Yachting Association</a>	18/09/2020
MDZ/N3	<a href="#">Statement of Case Cyngor Sir Ynys Mon - Isle of Anglesey County Council</a>	18/09/2020
MDZ/N4	<a href="#">Statement of Case Dwr Cymru</a>	18/09/2020

MDZ/N5	<a href="#">Statement of Case RSPB</a>	18/09/2020
MDZ/N6	<a href="#">Statement of Case Marine and Coastguard Agency</a>	18/09/2020
MDZ/N7	<a href="#">Statement of Case Network Rail Infrastructure Ltd</a>	18/09/2020
MDZ/N8	<a href="#">Statement of Case M Llewellyn</a>	18/09/2020
MDZ/N9	<a href="#">Statement of Case Natural Resources Wales</a>	18/09/2020
MDZ/N10	<a href="#">Statement of Case Roberts TS</a>	18/09/2020
MDZ/N11	<a href="#">Statement of Case North Wales Wildlife Trust (NWWT)</a>	18/09/2020
MDZ/N12	<a href="#">Statement of Case Snowdonia Canoe Club</a>	18/09/2020
MDZ/N13	<a href="#">Statement of Case Trinity House</a>	18/09/2020
MDZ/N14	<a href="#">Statement of Case ORTHIOS ECO PARKS</a>	18/09/2020
MDZ/N15	<a href="#">MMC355 MOR-RHDHV-DOC-0151 Response to North Wales Wildlife Trust Statement of Case</a>	19/10/2020
MDZ/N16	<a href="#">MMC356 MOR-MM-DOC-0013 Response to Statement of Case Snowdonia Canoe Club</a>	19/10/2020
MDZ/N17	<a href="#">MMC357 MOR-MSP-DOC-006 Response to Royal Yachting Association Statement of Case</a>	19/10/2020
MDZ/N18	<a href="#">MMC358 MOR-EVS-DOC-0020 Response to Orthios Statement of Case</a>	19/10/2020
MDZ/N19	<a href="#">Response to Statements of Case - SOC - RSP001 - Maritime and Coast Guard Agency</a>	19/10/2020
MDZ/N20	<a href="#">Response to Statements of Case - SOC - RSP002 - Trinity House</a>	19/10/2020
MDZ/N21	<a href="#">Response to Statements of Case - SOC - RSP003 - Snowdonia Canoe Club</a>	19/10/2020
MDZ/N22	<a href="#">Response to Statements of Case - SOC - RSP004 - Royal Yachting Association</a>	19/10/2020
MDZ/N23	<a href="#">Response to Statements of Case - SOC - RSP005 - RSPB</a>	19/10/2020

<b>MDZ/P</b>	<b>Proofs of Evidence</b>	<b>Date Submitted</b>
MDZ/P1	<a href="#">MMC435 Dr Murray Grant Ornithology</a>	02/11/2020
MDZ/P2	<a href="#">MMC436 Dr Jennifer A. Learmonth Marine Mammals</a>	02/11/2020
MDZ/P3	<a href="#">MMC437 Gordon Campbell Onshore Ecology</a>	02/11/2020
MDZ/P4	<a href="#">MMC438 Frank Fortune Environmental Monitoring and Mitigation Plan</a>	02/11/2020
MDZ/P5	<a href="#">MMC439 Simon Myers Seascape, Landscape and Visual impact</a>	02/11/2020
MDZ/P6	<a href="#">MMC440 Dr Edward Thomas Jones Socioeconomics</a>	02/11/2020
MDZ/P7	<a href="#">MMC441 Commander Paul Brown Marine and Navigational Issues</a>	02/11/2020
MDZ/P8	<a href="#">MMC442 Andrew Billcliff Project and Compulsory Acquisition</a>	02/11/2020
MDZ/P9	<a href="#">MMC443 David Bell Planning and Policy</a>	02/11/2020
MDZ/P10	<a href="#">MMC444 Dr James Orme Project Witness</a>	02/11/2020

<b>Reference Code</b>	<b>Third party documents</b>	<b>Document Date</b>
<a href="#">OBJ001</a>	Maritime & Coastguard Agency	26/09/2019
<a href="#">OBJ003</a>	Network Rail	27/09/2019
<a href="#">OBJ020</a>	Hugh o Donnell on behalf of Kathleen Davies	30/10/2019
<a href="#">OBJ025</a>	Welsh Water	30/10/2019
<a href="#">OBJ026</a>	Trinity House	30/10/2019
<a href="#">OBJ034</a>	Welsh Water Dŵr Cymru	31/10/2019

<a href="#">OBJ036</a>	DR R Davies & Mrs C Lynes	31/10/2019
<a href="#">OBJ038</a>	Alpoco	31/10/2019
<a href="#">OBJ040</a>	Orthios	31/10/2019
<a href="#">OBJ058</a>	Tom & Stacy Roberts	01/11/2019
<a href="#">OBJ063</a>	M Llewellyn	01/11/2019
<a href="#">OBJ068</a>	Horizon	01/11/2019
<a href="#">OBJ072</a>	Kudelska	01/11/2019
<a href="#">OBJ073</a>	North Wales Wildlife Trust	31/10/2019
<a href="#">OBJ076</a>	Trinity House	01/11/2019
<a href="#">OBJ079</a>	CADW	05/11/2019
<a href="#">OBJ080</a>	Snowdonia Canoe Club	05/11/2019
<a href="#">OBJ081</a>	Land & Lakes	05/11/2019
<a href="#">OBJ082</a>	National Grid	05/11/2019
OBJ083	Canoe Wales	30/10/2019
<a href="#">OBJ086</a>	RSPB Cymru	05/11/2019
<a href="#">OBJ087</a>	Sam Measom	05/11/2019
OBJ088	Whale and Dolphin Conservation	31/10/2019
<a href="#">REPO01</a> & <a href="#">REPO01 (1)</a>	Martin Nelson	10/10/2019
<a href="#">REPO03</a>	Wales & West Utilities	31/10/2019
<a href="#">REPO04</a>	SP Energy Networks	06/11/2019
<a href="#">REPO05</a>	Natural Resources Wales	05/11/2019
<a href="#">REPO07</a>	Isle of Anglesey County Council	01/10/2019

<a href="#">SUP005</a>	Menai Science Park	05/11/2019
<a href="#">FEI- OBJ013</a>	Royal Yachting Association	18/05/2020
<a href="#">FEI- OBJ014</a>	RSPB	03/06/2020
<a href="#">FEI- OBJ015</a>	North Wales Wildlife Trust	03/06/2020
<a href="#">FEI_REP00</a>	Isle of Anglesey County Council	18/05/2020
<a href="#">FEI_REP001</a>	CADW	18/05/2020
<a href="#">FEI_REP003</a>	Orthios	18/05/2020
<a href="#">FEI_REP004</a>	Natural Resources Wales	18/05/2020
<a href="#">ML012</a>	ORML1938 Consultation Response RSPB	10/01/2020
<a href="#">ML001</a>	ORML1938 Consultation Response Natural Resources Wales	10/01/2020
ML001 (FEI)	ORML1938 Response Natural Resources Wales	18/09/2020
<a href="#">ML013</a>	ORML1938 Consultation Response RYA	08/01/2020

Reference Code	Third party Proofs of Evidence	Date Submitted
<a href="#">POE001</a>	Network Rail Letter	02/11/2020
<a href="#">POE002</a>	Snowdonia Canoe Club Proofs of Evidence	02/11/2020
<a href="#">POE003</a>	Isle of Anglesey County Council Proofs of Evidence	02/11/2020
<a href="#">POE004</a>	Prawf Tystiolaeth Cyngor Sir Ynys Môn	02/11/2020
<a href="#">POE005</a>	Orthios Eco Parks (Anglesey) Ltd & Orthios Power (Anglesey) Ltd Proofs of Evidence - Lewis Levasseur	02/11/2020

<a href="#">POE006</a>	Orthios Eco Parks (Anglesey) Ltd & Orthios Power (Anglesey) Ltd Proofs of Evidence - Tim Jesson	02/11/2020
<a href="#">POE007</a>	RSPB Proofs of Evidence	02/11/2020
<a href="#">POE007.1</a>	RSPB Supplemental Proof of Evidence	23/11/2020
<a href="#">POE008</a>	<b>Royal Yachting Association (RYA) Proofs of Evidence</b>	02/11/2020
<a href="#">POE009</a>	RYA POE – References - 3 Location of Tidal Devices in MDZ	02/11/2020
<a href="#">POE010</a>	RYA POE – References - 20UK1647_Survey_Weather_Data	02/11/2020
<a href="#">POE011</a>	RYA POE – References - 1938-overarching-nps-for-energy-en1 (1)	02/11/2020
<a href="#">POE012</a>	RYA POE – References - 1940-nps-renewable-energy-en3	02/11/2020
<a href="#">POE013</a>	RYA POE – References - ABPmer-soc-econ-SUDG-1	02/11/2020
<a href="#">POE014</a>	RYA POE – References - IALA 2015	02/11/2020
<a href="#">POE015</a>	RYA POE – References - OESEA3_Environmental_Report_Final	02/11/2020
<a href="#">POE016</a>	RYA POE – References - ORJIP-Ocean-Energy-Forward-Look-1	02/11/2020
<a href="#">POE017</a>	RYA POE – References - pb3654-marine-policy-statement-110316	02/11/2020
<a href="#">POE018</a>	RYA POE – References - RYA UK Coastal Atlas of Recreational Boating 2.1 User Guide	02/11/2020
<a href="#">POE019</a>	RYA POE – References - UK Wave and Tidal Demonstration Zones Workshop Report (003)	02/11/2020
<a href="#">POE020</a>	RYA POE – References - Wave and Tidal Enabling Actions Report 2014	02/11/2020
<a href="#">POE021</a>	<b>Natural Resources Wales Proofs of Evidence</b>	02/11/2020
<a href="#">POE022</a>	NRW POE – APP – A - Evans and Arvela 2011	02/11/2020
<a href="#">POE023</a>	NRW POE – APP – A - JNCC 2019 H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts	02/11/2020

<a href="#">POE024</a>	NRW POE – APP – A - Rees et al 2019	02/11/2020
<a href="#">POE025</a>	NRW POE – APP – B - Band 2000 SNH Guidance Note	02/11/2020
<a href="#">POE026</a>	NRW POE – APP – B - Band 2012	02/11/2020
<a href="#">POE027</a>	NRW POE – APP – B - Band et al 2007	02/11/2020
<a href="#">POE028</a>	NRW POE – APP – B - Band et al 2016	02/11/2020
<a href="#">POE029</a>	NRW POE – APP – B - Brandt et al 2013	02/11/2020
<a href="#">POE030</a>	NRW POE – APP – B - Brandt MJ 2012	02/11/2020
<a href="#">POE031</a>	NRW POE – APP – B - Evans 2012	02/11/2020
<a href="#">POE032</a>	NRW POE – APP – B - G.Hastie provided marine mammal advice in reply to Ceri Morris (email dated 29.4.2020)	02/11/2020
<a href="#">POE033</a>	NRW POE – APP – B - Gillespie et al 2020	02/11/2020
<a href="#">POE034</a>	NRW POE – APP – B - Hastie (2012) tracking_marine_mammals_around_renewable_devices	02/11/2020
<a href="#">POE035</a>	NRW POE – APP – B - Hastie et al 2018	02/11/2020
<a href="#">POE036</a>	NRW POE – APP – B - Hastie et al 2019	02/11/2020
<a href="#">POE037</a>	NRW POE – APP – B - IAMMWG 2015	02/11/2020
<a href="#">POE038</a>	NRW POE – APP – B - JNCC (2019) North Anglesey Marine- Conservation Objectives and Advice on Operations	02/11/2020
<a href="#">POE039</a>	NRW POE – APP – B - Joy et al 2018	02/11/2020
<a href="#">POE030</a>	NRW POE – APP – B - Lohrengel et al 2018	02/11/2020
<a href="#">POE041</a>	NRW POE – APP – B - McGarry et al 2017	02/11/2020
<a href="#">POE042</a>	NRW POE – APP – B - McGarry et al 2020	02/11/2020
<a href="#">POE043</a>	NRW POE – APP – B - Morlais MDZ- Marine mammals - NRW additional information - 070120	02/11/2020

<a href="#">POE044</a>	NRW POE – APP – B - Morlais Project Marine Mammals Working Group Minutes FINAL 6.1.2020 V2.0	02/11/2020
<a href="#">POE045</a>	NRW POE – APP – B - NMFS 2018	02/11/2020
<a href="#">POE046</a>	NRW POE – APP – B - NRW 22.05.19 Letter to Menter Môn regarding marine mammal collision risk concerns CAS-84017-M9P0	02/11/2020
<a href="#">POE047</a>	NRW POE – APP – B - NRW Position statement marine mammal AEOSI v1.3 clean	02/11/2020
<a href="#">POE048</a>	NRW POE – APP – B - Smith and Simpson 2018	02/11/2020
<a href="#">POE049</a>	NRW POE – APP – B - Southall et al 2019	02/11/2020
<a href="#">POE050</a>	NRW POE – APP – B - Southall et al. 2007 pt1	02/11/2020
<a href="#">POE051</a>	NRW POE – APP – B - Southall et al. 2007 pt2	02/11/2020
<a href="#">POE052</a>	NRW POE – APP – B - Southall et al. 2007 pt3	02/11/2020
<a href="#">POE053</a>	NRW POE – APP – B - Southall et al. 2007	02/11/2020
<a href="#">POE054</a>	NRW POE – APP – B - Sparling et al 2015	02/11/2020
<a href="#">POE055</a>	NRW POE – APP – B - Wade 1998	02/11/2020
<a href="#">POE056</a>	NRW POE – APP – B - Wilson and Carter 2013	02/11/2020
<a href="#">POE057</a>	NRW POE – APP – B - Wilson et al 2007	02/11/2020
<a href="#">POE058</a>	NRW POE – APP – C - Gilbey et al 2016	02/11/2020
<a href="#">POE059</a>	NRW POE – APP – C - ICES 2020	02/11/2020
<a href="#">POE060</a>	NRW POE – APP – C - Malcolm et al 2010	02/11/2020
<a href="#">POE061</a>	NRW POE – APP – C - Malcolm et al 2013	02/11/2020
<a href="#">POE062</a>	NRW POE – APP – C - ORJIP Ocean Energy 2017	02/11/2020
<a href="#">POE063</a>	NRW POE – APP – C - Sturlaugsson et al 2009	02/11/2020
<a href="#">POE064</a>	NRW POE – APP – C - Thorstad et al 2012	02/11/2020

<a href="#">POE065</a>	NRW POE – APP – C - Welsh Marine Evidence Strategy 2019-2025	02/11/2020
<a href="#">POE066</a>	NRW POE – APP – D - DTI Guidance 2005 - Seascape and Visual Impact Report	02/11/2020
<a href="#">POE067</a>	NRW POE – APP – D - SNH Offshore renewables 2012	02/11/2020
<a href="#">POE068</a>	NRW POE – APP – E - CEC 1999 Interpretation Manual - EUR 15	02/11/2020
<a href="#">POE069</a>	NRW POE – APP – E - CEC 2013 Interpretation Manual - EUR 28	02/11/2020
<a href="#">POE070</a>	NRW POE – APP – E - Foster-Smith and White 2001	02/11/2020
<a href="#">POE071</a>	NRW POE – APP – E - George and Warwick 1985	02/11/2020
<a href="#">POE072</a>	NRW POE – APP – E - Holt et al 1998	02/11/2020
<a href="#">POE073</a>	NRW POE – APP – E - Jenkins et al 2018	02/11/2020
<a href="#">POE074</a>	NRW POE – APP – E - Limpenny et al 2010	02/11/2020
<a href="#">POE075</a>	NRW POE – APP – E - OSPAR 2013	02/11/2020
<a href="#">POE076</a>	NRW POE – APP – E - Pearce 2014	02/11/2020
<a href="#">POE077</a>	NRW POE – APP – E - Pearce et al 2007	02/11/2020
<a href="#">POE078</a>	NRW POE – APP – E - Pearce et al 2011a	02/11/2020
<a href="#">POE079</a>	NRW POE – APP – E - Pearce et al 2011b	02/11/2020
<a href="#">POE080</a>	NRW POE – APP – E - Pearce et al 2014	02/11/2020
<a href="#">POE081</a>	NRW POE – APP – E - Wilson (1971) Sabellaria-colonies-at-duckpool-nor	02/11/2020
<a href="#">POE082</a>	<b>Land and Lakes (Anglesey) Limited Proofs of Evidence - Richard Garner</b>	13/11/2020

Reference Code	Rebuttal Proofs of Evidence	Date submitted
<a href="#">RPE001</a>	Royal Yachting Association – Rebuttal Proofs of Evidence	23/11/2020
<a href="#">RPE002</a>	Snowdonia Canoe Club – Rebuttal Proofs of Evidence	23/11/2020
<a href="#">RPE003</a>	Menter Mon - Morlais cover letter	23/11/2020
<a href="#">RPE004</a>	MMC556 MOR-RHDHV-DOC-0165 Rebuttal Proof of Evidence - Marine Mammals	23/11/2020
<a href="#">RPE005</a>	MMC558 MOR-AEC-DOC-001 Rebuttal Proof of Evidence of RSPB and NRW regarding the outline EMMP	23/11/2020
<a href="#">RPE006</a>	MMC559 MOR-MCO-DOC-002 Rebuttal Proof of Evidence – Navigation	23/11/2020
<a href="#">RPE007</a>	MMC560 MOR-SLR-DOC-003 Rebuttal Proof of Evidence - SLVIA	23/11/2020
<a href="#">RPE008</a>	MMC563 MOR-EVS-DOC-0020 Note_on_Order_and_interrelationship_with_other_regimes_-_Morlais_Demonstration__Zone.docx	23/11/2020
<a href="#">RPE009</a>	MMC562 MOR-MM-DOC-0016 Rebuttal to Land & Lakes Proof of Evidence	01/12/2020
<a href="#">RPE010</a>	MMC557MOR-RHDHV-DOC-0166_Morlais-Ornithology Rebuttal	07/12/2020
<a href="#">RPE011</a>	MMC561 MOR-MM-DOC-0015 Rebuttal Final	07/12/2020
<a href="#">RPE012</a>	The RSPB Rebuttal to Grant & Fortune 4.12.20	07/12/2020
<a href="#">RPE013</a>	Lewis LeVasseur second proof evidence as submitted	14/12/2020
<a href="#">RPE014</a>	Tim Jesson second Proof Evidence as submitted	14/12/2020

Name	<b>Hearing Agendas Suggested by the Applicant</b>	Date submitted
<a href="#">Agenda 1</a>	Morlais_Socio-economic_Round Table Agenda v0.2 SL	27/11/2020
<a href="#">Agenda 2</a>	Morlais_SLVIA_Round Table Agenda_Final v0.2 SL	27/11/2020
<a href="#">Agenda 3</a>	Morlais_Navigation_Round Table Agenda - V4 SL	27/11/2020
<a href="#">Agenda 4</a>	Morlais_Benthic_Round Table Agenda	27/11/2020
<a href="#">Agenda 5</a>	Morlais_Onshore Ecology_Round Table Agenda v0.2 SL	27/11/2020
<a href="#">Agenda 6</a>	BIR_PROP2-#8419981-v2-Morlais_TDZ_Order_RT_Agenda	27/11/2020

Reference Code	<b>Further Environmental Information – Consultation 30/11/2020 Responses</b>	Date submitted
<a href="#">EIC001</a>	C & I Hemming	30/10/2020
<a href="#">EIC002</a>	C Bird	30/10/2020
<a href="#">EIC003</a>	D da Cunha	30/10/2020
<a href="#">EIC004</a>	GH Leeming	30/10/2020
<a href="#">EIC005</a>	H Jones Yatch Charter	30/10/2020
<a href="#">EIC006</a>	H Withinshaw	30/10/2020
<a href="#">EIC007</a>	JL Price	30/10/2020
<a href="#">EIC008</a>	M & J Grant	30/10/2020

<a href="#">EIC009</a>	M Davis	30/10/2020
<a href="#">EIC010</a>	V Bird	30/10/2020
<a href="#">EIC011</a>	J Foster	30/10/2020
<a href="#">EIC012</a>	Snowdonia Canoe Club	30/11/2020
<a href="#">EIC013</a>	Natural Resources Wales	27/11/2020

Reference Code	Marine Mammals and Ornithology Modelling Consultation 05/12/2020 Response	Date submitted
<a href="#">MOC001</a>	NRW response to updated modelling	27/11/2020

Name	Revised Draft Order Documentation	Date submitted
<a href="#">ROD001</a>	Welsh Statutory Instrument - Morlais Demonstration Zone Draft Order.doc	26/11/2020
<a href="#">ROD002</a>	Morlais Demonstration Zone - Compareite draft Order 25 November.docx	26/11/2020
<a href="#">ROD003</a>	Morlais Demonstration Zone - Explanatory Memorandum.docx	26/11/2020
<a href="#">ROD004</a>	Morlais Demonstration Zone - Order Changes Tracker.docx	26/11/2020
<a href="#">ROD005</a>	Morlais Demonstration Zone - compareite Explanatory Memorandum 25 November 2020.docx	26/11/2020

Name	Withdrawals	Date submitted
<a href="#">Withdrawal - 001</a>	Withdrawal - Isle of Anglesey County Council	27/11/2020
<a href="#">Withdrawal – 002</a>	Withdrawal of REP001+ REP001(2)	09/10/2020
<a href="#">Withdrawal – 003</a>	Withdrawal of OBJ081 - Land and Lakes	11/12/2020
<a href="#">Withdrawal – 004</a>	Withdrawal of OBJ079 - CADW	23/11/2020
<a href="#">Withdrawal – 005</a>	Withdrawal of OBJ036	01/10/2020
<a href="#">Withdrawal – 006</a>	Withdrawal of OBJ020	28/10/2020
<a href="#">Withdrawal – 007</a>	Withdrawal of FEI - OBJ009	14/10/2020
<a href="#">Withdrawal – 008</a>	Withdrawal - Wales and West Utilities.	27/11/2020
<a href="#">Withdrawal – 009</a>	Withdrawal - Network Rail Infrastructure Ltd	11/01/2021
<a href="#">Withdrawal – 010</a>	Withdrawal - AMG Alpoco UK Ltd	27/11/2020
<a href="#">Withdrawal – 011</a>	SPEnergy Networks - Withdrawal of Objection	19/08/2020
<a href="#">Withdrawal – 012</a>	Withdrawal - Trinity House	02/11/2020
<a href="#">Withdrawal – 013</a>	Withdrawal - Dwr Cymru	30/10/2020
<a href="#">Withdrawal – 014</a>	Withdrawal - National Grid	19/08/2020
<a href="#">Withdrawal – 015</a>	Withdrawal – Fibrespeed	11/12/2019

Name	Inquiry Documents	Date submitted
<a href="#">Inquiry Doc - 001</a>	Dr James Orme EIC presentation	01/12/2020
<a href="#">Inquiry Doc - 002</a>	Morlais_Marine Mammal_Round Table Agenda v3	02/12/2020
<a href="#">Inquiry Doc - 003</a>	Morlais_Marine Mammal_Round Table Agenda - Final	03/12/2020
<a href="#">Inquiry Doc - 004</a>	Mick Green – Public Speaking Event - Morlais oral evidence	03/12/2020
<a href="#">Inquiry Doc - 005</a>	Matthew JH Davis - Statement for Public Consultation into Morlais Application 2nd December 2020 (3)	03/12/2020
<a href="#">Inquiry Doc - 006</a>	Morlais Opening - Applicant	01/12/2020
<a href="#">Inquiry Doc - 007</a>	NRW - Morlais Opening	01/12/2020
<a href="#">Inquiry Doc - 008</a>	RSPB Opening Statement Morlais (FINAL) 1.12.20	01/12/2020
<a href="#">Inquiry Doc - 009</a>	RYA FIN Morlais Opening Statement	01/12/2020
<a href="#">Inquiry Doc - 010</a>	SCCW Opening Statement	01/12/2020
<a href="#">Inquiry Doc - 011</a>	D Soloman Opening Statement - Morlais Tidal Demonstration Zone - IACC	01/12/2020
<a href="#">Inquiry Doc - 012</a>	3234121 - Inquiry Timetable Rev011220	08/12/2020
<a href="#">Inquiry Doc - 013</a>	MMC571 MOR-MM-DOC-0018 Response to questions raised in the public speaking sessions	10/12/2020
<a href="#">Inquiry Doc - 014</a>	MMC572 MOR-MM-DOC-0019 Further updates to UK Government Energy Policy v2	10/12/2020
<a href="#">Inquiry Doc - 015</a>	Trinity House email confirming yellow banding approach	10/12/2020
<a href="#">Inquiry Doc - 016</a>	RNLI email to MCA 081020	10/12/2020
<a href="#">Inquiry Doc - 017</a>	Land Titles	10/12/2020
<a href="#">Inquiry Doc - 018</a>	SV request from SCC	10/12/2020
<a href="#">Inquiry Doc - 019</a>	Olwen Maidment professional background	10/12/2020

<a href="#">Inquiry Doc - 020</a>	Socioeconomic round table SCC presentation	10/12/2020
<a href="#">Inquiry Doc - 021</a>	2020_12_10 Socioeconomic round table Presentation Verdant Isles	11/12/2020
<a href="#">Inquiry Doc - 022</a>	SLVIA RT presentation	14/12/2020
<a href="#">Inquiry Doc - 023</a>	2020_11_25 Morlais Demonstration Zone Order_letter	16/12/2020
<a href="#">Inquiry Doc - 024</a>	MMC350(2) MOR-HRW-DOC-0002 (02) Further information on predicted changes to currents	16/12/2020
<a href="#">Inquiry Doc - 025</a>	MMC575 MOR-MM-DOC-0020 Response to SCC in EIC012	16/12/2020
<a href="#">Inquiry Doc - 026</a>	SCC - roundtable slides 18 Dec 2020	
<a href="#">Inquiry Doc - 027</a>	SCC - Presentation Nav 3-4	
	<b>Orthios Eco Parks (Anglesey) Ltd &amp; Orthios Power (Anglesey) Ltd – Documentation Regarding the Development Pursuant to a Section 36 Consent and Deemed Planning Permission, as Requested.</b>	
<a href="#">Inquiry Doc – 028</a>	The Application From	22/12/2020
<a href="#">Inquiry Doc – 029</a>	The Submission Report	22/12/2020
<a href="#">Inquiry Doc – 030</a>	Location Plan – ending 46	22/12/2020
<a href="#">Inquiry Doc – 031</a>	Site Plan – Overall A(200)01E	22/12/2020
<a href="#">Inquiry Doc – 032</a>	Site Plan – Part A(200)04 B	22/12/2020
<a href="#">Inquiry Doc – 033</a>	Site Plan – Part A(200)05 B	22/12/2020
<a href="#">Inquiry Doc – 034</a>	Site Plan – Part A(200)06 B	22/12/2020
<a href="#">Inquiry Doc – 035</a>	Site Plan – Part A(200)07 B	22/12/2020
<a href="#">Inquiry Doc – 036</a>	Site Plan – Part A(200)08 D	22/12/2020
<a href="#">Inquiry Doc – 037</a>	Site Plan – Part A(200)09 C	22/12/2020
<a href="#">Inquiry Doc – 038</a>	Site Phasing Plan A(200)14 B	22/12/2020

<a href="#">Inquiry Doc – 039</a>	Site Plan Drawing Key A(200)15	22/12/2020
<a href="#">Inquiry Doc – 040</a>	Design Statement	22/12/2020
<a href="#">Inquiry Doc – 041</a>	Notice of Discharge	22/12/2020
	<b>Applicant’s Responses to Queries Raised During the Inquiry</b>	
<a href="#">Inquiry Doc – 042</a>	Morlais Letter to PINS 08012021	08/01/2021
<a href="#">Inquiry Doc – 043</a>	MMC574b MOR-MM-DOC-0021 Figure 4 (revised) in response to RYA Further Information 161220	08/01/2021
<a href="#">Inquiry Doc – 044</a>	MMC576 MOR-RHDHV-DOC-0167 Responses to TWA0 FEI and Modelling Comments from NRW	08/01/2021
<a href="#">Inquiry Doc – 045</a>	MMC577 MOR-RHDHV-DOC-0168 Potential for Underwater Noise from Operational Turbines	08/01/2021
<a href="#">Inquiry Doc – 046</a>	MMC579 MOR-MM-DOC-0022 Further updates to UK & Welsh Government Energy Policy	08/01/2021
<a href="#">Inquiry Doc – 047</a>	MMC579 MOR-MM-DOC-0022a Sixth Carbon Budget - Climate Change Committee	08/01/2021
<a href="#">Inquiry Doc – 048</a>	MMC579 MOR-MM-DOC-0022b Energy White Paper - Powering our Net Zero Future	08/01/2021
<a href="#">Inquiry Doc – 049</a>	MMC579 MOR-MM-DOC-0022c1 The path to Net Zero and reducing emissions in Wales_Progress	08/01/2021
<a href="#">Inquiry Doc – 050</a>	MMC579 MOR-MM-DOC-0022c2 The path to Net Zero and reducing emissions in Wales_Executive	08/01/2021
<a href="#">Inquiry Doc – 051</a>	MMC579 MOR-MM-DOC-0022d UK Government signs North Wales Growth Deal	08/01/2021
<a href="#">Inquiry Doc – 052</a>	MMC580 MOR-MCO-DOC-002 Responses to TWA0 FEI on Navigation	08/01/2021
<a href="#">Inquiry Doc – 053</a>	MMC581 MOR-BAV-DOC-001 Note on EMF EMR	08/01/2021
<a href="#">Inquiry Doc – 054</a>	MMC582 MOR-EVS-DOC-0021 Note on how the socio-economic impact will be monitored	08/01/2021
<a href="#">Inquiry Doc – 055</a>	MMC583 MOR-EVS-DOC-022 Morlais letter to the RYA	08/01/2021

<a href="#">Inquiry Doc - 056</a>	Orthios' proposed amendment to the dTWAO - NUMBER_TBC Land Plan Showing Reduced Morlais Consent Order DRAFT(107511260.1)	08/01/2021
<a href="#">Inquiry Doc - 057</a>	Orthios' proposed amendment to the dTWAO - Morlais - Proposed revised Land Plan and Changes to dTWAO 08.01.21(107511232.1)	08/01/2021
<a href="#">Inquiry Doc - 058</a>	Horizon Nuclear Power - 2020_11_25 Morlais Demonstration Zone Order letter	11/01/2021
<a href="#">Inquiry Doc - 059</a>	3234121 - Inquiry Timetable - rev181220	18/12/2020
<a href="#">Inquiry Doc - 060</a>	Letter From Conygar	12/01/2021
<a href="#">Inquiry Doc – 061</a>	MAN_003-#4865480-v1-Morlais_-_letter_to_PINS_re_Conygar	14/01/2021
<a href="#">Inquiry Doc – 062</a>	MMC447 MOR-RHDHV-DOC-0072 (05) Outline EMMP 161220 clean	18/01/2021
<a href="#">Inquiry Doc – 063</a>	MMC447 MOR-RHDHV-DOC-0072 (05) Outline EMMP 161220 tracked	18/01/2021
	<b>Further Documents from Morlais</b>	
<a href="#">Inquiry Doc – 064</a>	NOT_L001-#6008460-v3-Letter_to_PINS_-_submissions_25_January_.docx	25/01/2021
<a href="#">Inquiry Doc – 065</a>	MMC019(2) MOR-BAY-DOC-0002 (02) Book of Reference	25/01/2021
<a href="#">Inquiry Doc – 066</a>	MMC028(2) MOR-BAY-DRW-0009 (02) TWAO Map8 Location Plan	25/01/2021
<a href="#">Inquiry Doc – 067</a>	MMC289(2) MOR-WSP-DOC-0018 (02) - Proposed Planning Conditions 25 January 2021	25/01/2021
<a href="#">Inquiry Doc – 068</a>	MMC432(2) MOR-MM-DOC-0014 (02) Morlais Land CPO process Schedule	25/01/2021
<a href="#">Inquiry Doc – 069</a>	MMC555 MOR-RHDHV-DOC-0164 Outline Biodiversity Enhancement Strategy_F1.3	25/01/2021
<a href="#">Inquiry Doc – 070</a>	MMC578 MOR-RHDHV-DOC-0169 Morlais Outline Habitat Enhancement Plan_D2.0	25/01/2021
<a href="#">Inquiry Doc – 071</a>	MMC584 MOR-EVS-DOC-0015 (04) - Draft Order 25 January 2021	25/01/2021
<a href="#">Inquiry Doc – 072</a>	MMC585 MOR-EVS-DOC-0016 (04)- Order changes tracker 25 January 2021	25/01/2021
<a href="#">Inquiry Doc – 073</a>	MMC588 MOR-EVS-DOC-0019 (04) - Compareite Order 25 January 2021	25/01/2021

<a href="#">Inquiry Doc – 074</a>	MMC589 MOR-BAY-DOC-0004 Book of Reference - tracked changes	25/01/2021
<a href="#">Inquiry Doc – 075</a>	MMC590 MOR-EVS-DOC-0023 Book of Reference - changes tracker note	25/01/2021
<a href="#">Inquiry Doc – 076</a>	MMC591 MOR-BAY-DRW-0011 TWA0 Map8 Location Plan - tracked changes	25/01/2021
<a href="#">Inquiry Doc – 077</a>	MMC592 MA-LG-4496-20 - Morlais Demonstration Zone - Doc 1 - Certificate	25/01/2021
<a href="#">Inquiry Doc – 078</a>	MMC593_MA-LG-4496-20 - Morlais Demonstration Zone - Doc 2 - Decision Letter to Applicant	25/01/2021
<a href="#">Inquiry Doc – 079</a>	MMC594 MOR-EVS-DOC-0024 - Revised draft s106 agreement	25/01/2021
<a href="#">Inquiry Doc – 080</a>	MMC595 MOR-EVS-DOC-0025 - Compareite draft s106 agreement	25/01/2021
<a href="#">Inquiry Doc – 081</a>	MMC596 MOR-EVS-DOC-0026 - Conditions Changes Tracker 25 January 2021	25/01/2021
<a href="#">Inquiry Doc – 082</a>	Horswill et al_2017_Density dependence in seabirds & precaution in WF assessments_JApplEcol	02/02/2021
<a href="#">Inquiry Doc – 083</a>	Pentland Firth Meygen Todal DL (1)	03/02/2021
<a href="#">Inquiry Doc – 084</a>	Agenda.EMMPRoundtable	01/02/2021
<a href="#">Inquiry Doc – 085</a>	Morlais Marine Mammal EMMP Summary issues NRW 1.2.21.vF	01/02/2021
<a href="#">Inquiry Doc – 086</a>	MMC576 MOR-RHDHV-DOC-0167 Responses to TWA0 FEI and Modelling Comments from NRW_NRW responses 01.02.21	01/02/2021
<a href="#">Inquiry Doc – 087</a>	Jitlal et al (2017) Testing and Validating Metrics of Change, PVA (SMFS Vol 8 no 23)	01/02/2021
<a href="#">Inquiry Doc – 088</a>	Green et al (2016) Lack of Sound Science in Assessing Wind Farm Impacts	01/02/2021
<a href="#">Inquiry Doc – 089</a>	Cook & Robinson (2015) Scientific Validity of Criticisms made by RSPB (BTO RR 665)	01/02/2021
<a href="#">Inquiry Doc – 090</a>	Morlais - Letter to NRW on marine mammals (003)	04/02/2021
<a href="#">Inquiry Doc – 091</a>	ORTHIOS - Morlais - Proposed revised Land Plan and Changes to dTWA0 04.02.21 CLEAN(108037358.1)	04/02/2021

<a href="#">Inquiry Doc – 092</a>	ORTHIOS - Morlais - Proposed revised Land Plan and Changes to dTWA0 04.02.21 TRACKED(108037352.1)	04/02/2021
<a href="#">Inquiry Doc – 093</a>	LON_LIB1-#24134871-v1-Draft_UU_in_favour_of_Orthios	04/02/2021
<a href="#">Inquiry Doc – 094</a>	SCC slides for 1 <sup>st</sup> Feb FINAL.pdf	03/02/2021
<a href="#">Inquiry Doc – 095</a>	MAN_003-#4901043-v1-Letter_to_Andrew_Batterton__DLA_re_Orthios	09/02/2021
	<b>Applicant's supplied documents – 09/02/21</b>	
<a href="#">Inquiry Doc – 096</a>	Cover Letter 09022021	09/02/2021
<a href="#">Inquiry Doc – 097</a>	MMC029(2) MOR-BAY-DRW-0010 (02) TWA0 Location & Key Plan (Overview Plan)	09/02/2021
<a href="#">Inquiry Doc – 098</a>	MMC289(3) MOR-WSP-DOC-0018 (03) Proposed Planning Conditions	09/02/2021
<a href="#">Inquiry Doc – 099</a>	MMC432(3) MOR-MM-DOC-0014 (03) Land CPO Process Schedule	09/02/2021
<a href="#">Inquiry Doc – 100</a>	MMC447(2) MOR-RHDHV-DOC-0072 (08) Outline EMMP 090221 clean	09/02/2021
<a href="#">Inquiry Doc – 101</a>	MMC447(2) MOR-RHDHV-DOC-0072 (08) Outline EMMP 090221 tracked	09/02/2021
<a href="#">Inquiry Doc – 102</a>	MMC584(2) MOR-EVS-DOC-0015 (05) Welsh Statutory Instrument – Morlais TWA0	09/02/2021
<a href="#">Inquiry Doc – 103</a>	MMC585(2) MOR-EVS-DOC-0016 (05) Morlais Demonstration Zone - order changes tracker	09/02/2021
<a href="#">Inquiry Doc – 104</a>	MMC586(2) MOR-EVS-DOC-0017 (05) Explanatory Memorandum	09/02/2021
<a href="#">Inquiry Doc – 105</a>	MMC587(2) MOR-EVS-DOC-0018 (05) Explanatory Memorandum compareite	09/02/2021
<a href="#">Inquiry Doc – 106</a>	MMC588(2) MOR-EVS-DOC-0019 (05) Welsh Statutory Instruments - compareite	09/02/2021
<a href="#">Inquiry Doc – 107</a>	MMC596(2) MOR-EVS-DOC-0026 (02) Proposed Planning Conditions - changes tracker	09/02/2021
<a href="#">Inquiry Doc – 108</a>	MMC597 MOR-MM-DOC-0015 Unilateral Undertaking	09/02/2021
	<b>Applicant's Authorities Bundle</b>	
<a href="#">Inquiry Doc – 109</a>	Morlais Authorities	09/02/2021

<a href="#">Inquiry Doc – 110</a>	1-Wildlife and COuntryside ACT 1981, s 28G	09/02/2021
<a href="#">Inquiry Doc – 111</a>	2-TCPA 1990 ss 73, 90	09/02/2021
<a href="#">Inquiry Doc – 112</a>	3-TWA 1992 (Extracts)	09/02/2021
<a href="#">Inquiry Doc – 113</a>	4-Transport and Works (Apps and Objections) Rules 2006_1466	09/02/2021
<a href="#">Inquiry Doc – 114</a>	5-MCAA 2009 (extracts)	09/02/2021
<a href="#">Inquiry Doc – 115</a>	6-MCAA 2009 Explanatory Note (extract)	09/02/2021
<a href="#">Inquiry Doc – 116</a>	7-TCPA EIA (Wales) Regs 2017_567	09/02/2021
<a href="#">Inquiry Doc – 118</a>	8-Conservation of Habitats and Species Regs 2017_2012	09/02/2021
<a href="#">Inquiry Doc – 119</a>	9-EU (Withdrawal) ACT 2018	09/02/2021
<a href="#">Inquiry Doc – 120</a>	10-Rochdale MBC v Milne (No 2) [2001] Env. L.R. 22	09/02/2021
<a href="#">Inquiry Doc – 121</a>	11-R Blewett v Derbyshire CC [2004] Env. L.R. 29	09/02/2021
<a href="#">Inquiry Doc – 122</a>	12-Smith v SST [2003] Env. L.R. 32	09/02/2021
<a href="#">Inquiry Doc – 123</a>	13-Jones v Mansfield DC [2004] Env. L.R. 21	09/02/2021
<a href="#">Inquiry Doc – 124</a>	14-Hereford Waste Watchers Ltd v Herefordshire CC[2005] Env. L.R. 29	09/02/2021
<a href="#">Inquiry Doc – 125</a>	15-Waddenzee [2005] 2 C.M.L.R. 31	09/02/2021
<a href="#">Inquiry Doc – 126</a>	16-Atkinson v SST [2007] Env. L.R. 5	09/02/2021
<a href="#">Inquiry Doc – 127</a>	17-Briels (C-521_12) [2014] P.T.S.R. 1120	09/02/2021
<a href="#">Inquiry Doc – 128</a>	18-An Taisce v SSE [2015] PTSR 189	09/02/2021
<a href="#">Inquiry Doc – 129</a>	19-Champion v North Norfolk DC[2015] 1 W.L.R. 3710	09/02/2021
<a href="#">Inquiry Doc – 130</a>	20-R. (on the application of Powell) v Marine Management Organisation [2017] EWHC 1491 (Admin)	09/02/2021
<a href="#">Inquiry Doc – 131</a>	21-Preston New Road ACtion Group v SSCLG[2018] Env. L.R. 18	09/02/2021

<a href="#">Inquiry Doc – 132</a>	22-Holohan and others v An Bord Pleanala [2019] PTSR 1054	09/02/2021
<a href="#">Inquiry Doc – 133</a>	23-Spurrier v SST [2020] P.T.S.R. 240	09/02/2021
<a href="#">Inquiry Doc – 134</a>	24-Compton Parish Council v Guildford BC [2019] EWHC 3242 (Admin)	09/02/2021
<a href="#">Inquiry Doc – 135</a>	25-Plan B earth v SST [2020] P.T.S.R. 1446	09/02/2021
<a href="#">Inquiry Doc – 136</a>	26-R. (on the application of Friends of the Earth Ltd) v Heathrow Airport Ltd [2020] UKSC 52	09/02/2021
<a href="#">Inquiry Doc – 137</a>	27-Circular 003_2019 CPO in Wales (Extracts)	09/02/2021
<a href="#">Inquiry Doc – 138</a>	28-Planning encyclopedia (extracts)	09/02/2021
<a href="#">Inquiry Doc - 139</a>	Thorpe Hall Leisure Ltd v Secretary of State for Housing, Communities and Local Government	12/02/2021
<a href="#">Inquiry Doc - 140</a>	Wealden DC v Secretary of State for Communities and Local Government	12/02/2021
	<b>RSPB's Authorities Bundle</b>	
<a href="#">Inquiry Doc – 141</a>	Sustainable Shetland v Scottish Ministers [2015] UKSC 4	11/02/2021
<a href="#">Inquiry Doc – 142</a>	R v Secretary of State for the Environment Ex p RSPB (C-44-95) [1997] Env LR 442	11/02/2021
<a href="#">Inquiry Doc – 143</a>	Atkinson v Secretary of State for Transport [2007] Env LR 5	11/02/2021
	<b>Cyngor Sir Ynys Môn / IoACC</b>	
<a href="#">Inquiry Doc – 144</a>	IoACC CIL Compliance Statement Morlais TWAO 09.02.21_Redacted	11/02/2021
<a href="#">Inquiry Doc – 145</a>	Datganiad Agoriadol Cyngor Sir Ynys Mon - Parth Arddangos Yni Llanw Morlais	22/02/2021
	<b>Inquiry Closings</b>	
<a href="#">Inquiry Doc – 146</a>	Closing Statement Morlais - Mr Llywellyn	11/02/2021
<a href="#">Inquiry Doc – 147</a>	Closing Statement Mr & Mrs T & S Roberts	11/02/2021

<a href="#">Inquiry Doc – 148</a>	MDZ RYA Closing Statement 10-02-21 B	11/02/2021
<a href="#">Inquiry Doc – 149</a>	Morlais Closing - NRW	11/02/2021
<a href="#">Inquiry Doc – 150</a>	Morlais Closing Statement - Maritime and Coastguard Agency	11/02/2021
<a href="#">Inquiry Doc – 151</a>	Morlais Demonstration Zone the RSPB Closing Submissions 11.2.21	11/02/2021
<a href="#">Inquiry Doc – 152</a>	Orthios Closing FINAL as submitted	11/02/2021
<a href="#">Inquiry Doc – 153</a>	SCC+CW Closing submission FINAL v2	11/02/2021
<a href="#">Inquiry Doc – 154</a>	WORK_39599712_1_Doc (Soloman) Closing Submissions	11/02/2021
<a href="#">Inquiry Doc – 155</a>	Mentor Mon Closings FINAL	12/02/2021
<a href="#">Inquiry Doc – 156</a>	Datganiad Cloi Cyngor Sir Ynys Mon - Parth Arddangos Yni Llanw Morlais	22/02/2021
	<b>NDF – ‘Future Wales’ consultation responses</b>	
<a href="#">Inquiry Doc - 157</a>	FWC001 - Mark Llewellyn	11/03/2021
<a href="#">Inquiry Doc - 158</a>	NOT_L001-#6039553-v2-Letter_to_PINS_-_NDF_Wales_-_Morlais_Demonstration_Zone.docx	16/03/2021
	<b>Procedural Documents</b>	
<a href="#">Inquiry Doc - 159</a>	TWA - MDZ - Inquiry Closure - 24.03.2021	24/03/2021
<a href="#">Inquiry Doc - 160</a>	Inspectors Statement of Matters	12/11/2020

## APPENDIX 3 – Summary of the Habitats Regulations Assessment

*Square brackets in this summary contain numbers which refer to paragraphs in the main report that contain material of relevance to this summary. A number of inquiry documents are also referred to. Information of relevance to this summary may also be found in other report paragraphs and inquiry documents.*

### Preliminary Matters

1. The purpose of this Appendix to the main report is to provide a summary of matters within the main report that combine to provide the habitats regulation assessment (“HRA”) for the proposed works; and confirm it to be prepared in accordance with the Conservation of Habitats and Species Regulations 2017 (S.I. 2017/1012), as amended (“the Habitats Regulations”). [79, 80, 471]

### Background

2. The main report, and this Appendix to it, is in relation to the application for the Morlais Demonstration Zone (“MDZ”) Order, which falls to be determined by the Welsh Ministers. As such, the main report (including this Appendix) addresses all parts of the proposal, which includes onshore and offshore works. [9-17]

#### European sites

3. The MDZ lies within the North Anglesey Marine/Gogledd Môn Forol Special Area of Conservation (“SAC”),<sup>1024</sup> which is designated for the harbour porpoise. It is in the vicinity of the Pen Llŷn, Cardigan Bay and Pembrokeshire Marine SACs, designated for bottlenose dolphin and grey seal. [44]
4. Nine subsea export cables would transfer generated electricity from the MDZ to the mainland with the cables making landfall at Abraham’s Bosom. A significant proportion of the Anglesey coastline (and all of the part near the MDZ) falls within the Glannau Ynys Gybi/Holy Island Coast Special Protection Area (“SPA”) and SAC; it is also a Site of Special Scientific Interest (“SSSI”).<sup>1025</sup> [45]
5. The Glannau Ynys Gybi/Holy Island Coast SPA was originally designated for its breeding pairs and overwintering individual chough, while the SAC was designated for its Annex 1 coastal and heathland habitats. The SSSI is noted for its biological, botanical and ornithological value, with chough being one of its notification features. [535]
6. The Applicant intends to route the cables from Abraham’s Bosom to the South Stack substation via horizontal directional drilling (“HDD”), which would create tunnels for the cables to emerge ~220m from the cliff face. This would bypass the cliff and its habitats of concern in the Glannau Ynys Gybi/Holy Island Coast SPA, SAC and SSSI. However if HDD is shown not to be possible in that location, the Applicant’s fallback position would be to route the export cables over the cliff in J-tubes attached to the cliff face.<sup>1026</sup> The footprint of the fall-back route is noted to have been substantially

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<sup>1024</sup> See Ref: MDZ/P2 Fig 1.

<sup>1025</sup> Ref: MDZ/P1 Fig 1; Ref: MDZ/P3 Fig 1.

<sup>1026</sup> A visualisation has been included in Ref: RPE007, Rebuttal Proof of Evidence of Mr Myers, p.6.

reduced and would cross one of the narrowest points of the Glannau Ynys Gybi/Holy Island Coast SAC/SSSI and SPA. [45, 150]

7. The Glannau Aberdaron and Ynys Enlli /Aberdaron Coast and Bardsey Island SPA and the Sgomer, Sgogwm a Moroedd Penfro / Skomer, Skokholm and the Seas off Pembrokeshire SPA are present in the wider area. Both have Manx shearwater breeding populations. [535]

#### A precautionary approach

8. During the inquiry the Applicant set out why it considers its assessments to have provided a highly precautionary approach, and much of the evidence supports that view. [52, 114, 121, 149, 152, Footnote 207, 154, 171, 173, 182, 184, 196, 198, 199, 201, 204, 217, 221, 238-240, 563-564, 926, 970]
9. Policy within the *Welsh National Marine Plan* (2019) (“WNMP”) seeks the application of the precautionary principle. In addition, the latest guidance from Welsh Government on HRA states that decisions must take a precautionary approach at each stage of the HRA.<sup>1027</sup> [780]
10. This HRA addresses the possible effects of the proposed works on the protected sites and does so with reference to all the evidence before the inquiry.
11. Application documents include *Information to Support Habitats Regulations Assessment* (Ref: MDZ/A27.11), which is the Applicant’s “shadow” HRA for the proposal. It provided detailed screening for likely significant effects from the proposed works either alone or in-combination, with a “shadow” appropriate assessment in Section 8 of the document. [44, 134]
12. All parties to the inquiry had the opportunity to comment on matters relevant to the Habitats Regulations and the possible effects of the proposed works on the designated sites within and around the MDZ.
13. The assessment of the possible effects of the works within the application and its Environmental Statement (“ES”) is based on the worst-case scenario. This is reflected in the outline Environmental Mitigation and Monitoring Plan (“oEMMP”) provided at this stage. As the proposed works sit within a Project Design Envelope (“PDE”), final details of certain elements of the works, and the Detailed Environmental Mitigation and Monitoring Plan (“DEMMP”), are yet to be provided. The possible effects of the elements of the works that are yet to be confirmed, for example the individual tidal stream devices, would be the subject of further regulatory consideration and controls. These possible effects would include those in relation to the environment and navigation. The associated decisions, where relevant within the context of adaptive management, would ensure the acceptability of these possible effects. [93, 149, 182, 185, 191, 196, 198-201, 206, 211, 213-222, 469, 612]

#### **Likelihood of a significant effect – the “screening” stage**

14. The first step in the HRA is to “screen” the proposal for whether it: would be directly connected with or necessary for the conservation management of a European site; or, risks having a significant effect on a European site on its own or in combination with another proposal(s). Morlais works would not be directly connected with or necessary for the conservation management of a European site. [80, 85, 156, 538]

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<sup>1027</sup> <https://gov.wales/habitats-regulations-assessments-protecting-european-site.html>

15. Parties to the inquiry had the opportunity to consider and comment on the application, its ES and the shadow HRA. Whilst NRW had concerns regarding whether the European sites had been adequately screened into the shadow HRA, no such concerns remained when NRW made its closing submissions. [465 and 466-526]
16. Other representations raised concerns about the possible effects of the works on the breeding populations of guillemot and razorbill in the South Stack and Penlas colonies. However, these birds are not designated “features” of a European site. Therefore, any impacts on them would not cause an adverse effect on the integrity of a European site to engage regulation 63 of the Habitats Regulations and require an appropriate assessment to be made. [86, 473, 538, 916, 928]
17. However, looking at the other possible effects, it is apparent from the evidence in this case that it is likely the proposed works could undermine a European site’s conservation objectives to have a significant effect on the site. [479, 481-482, 905, 906, 950-954]

### **Appropriate Assessment**

18. In such circumstances where an adverse effect on site integrity (“AEOSI”) cannot be ruled out, regulation 63 requires the competent authority to carry out an appropriate assessment. [472-474, 973]
19. Relevant case law confirms there to be no special procedure prescribed for an appropriate assessment, and while a high standard of investigation is required, the issue ultimately rests on the judgement of the (competent) authority. This inquiry, including the evidence and submissions to it, has provided the high standard of investigation sought. [81]
20. As noted above, the advisory arm of NRW is the Statutory Nature Conservation Body (“SNCB”) in Wales and participated fully in this inquiry. [465-526]

#### Whether there would be an Adverse Effect on Site Integrity (“AEOSI”)

##### *Offshore Works*

21. The MDZ would lie within the North Anglesey Marine/Gogledd Môn Forol Special Area of Conservation (“SAC”). As a result, the proposed works could have an impact on harbour porpoise (*phocoena phocoena*), which is listed in Annex II and Annex IV of the Habitats Directive, and other marine mammals. Conservation Objectives for this SAC designation focus on matters that could affect site integrity by: significantly damaging relevant habitats; significantly reducing the availability of prey; preventing the harbour porpoise using significant areas of the SAC; and, killing or injuring harbour porpoise (directly or indirectly).<sup>1028</sup> [905]
22. Neither noise nor collision risk were found to be likely to result in AEOSI in regard to the North Anglesey Marine/Gogledd Môn Forol Special Area of Conservation (“SAC”). [906-912]
23. In relation to the Glannau Aberdaron and Ynys Enlli /Aberdaron Coast and Bardsey Island SPA and the Sgomer, Sgogwm a Moroedd Penfro / Skomer, Skokholm and the

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<sup>1028</sup> Ref: POE038 entitled *Harbour Porpoise (Phocoena phocoena) Special Area of Conservation: North Anglesey Marine/ Gogledd Môn Forol Conservation Objectives and Advice on Operations*

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Seas off Pembrokeshire SPA, there would be no impact on populations of Manx shearwater. [86]

#### *Onshore Works*

24. In regard to the Glannau Ynys Gybi/Holy Island Coast SPA, no possible impact on chough has been shown to be significant. [86]
25. No direct effects would be expected on a protected site from the onshore works as proposed with HDD to bring the export cables ashore to the South Stack substation. However, the fall-back position that would route the export cables over the cliff face would have direct effects on the Glannau Ynys Gybi/Holy Island Coast SPA/SAC (and SSSI). [147, 950]
26. Conservation objectives for the Holy Island Coast SAC are provided within Ref: MDZ/F2. The relevant section of the NRW Proof of Evidence (PDF page 23/92 of Ref: POE021) notes the vision for the SAC to encapsulate and summarise its detailed conservation objectives into a simple statement that:

*"...The vegetated coastal cliffs should remain largely undisturbed and support the endemic South Stack fleawort, golden samphire, rock sea lavender, hay scented buckler fern, juniper, ciliate strap-lichen and golden hair lichen..."*

[951]

27. The fall-back position could result in the loss of protected habitat for a period of almost 40 years. Having considered factors such as: the potential "permanence" of such a timescale; relevant legislation and case law; the significance of the potential loss of protected habitat within the context of the SAC as a whole; possible mitigation measures, including those that would be the subject of planning conditions and other regulatory controls; habitat recovery; and, the species involved, I have found that an adverse effect on the integrity of the Holy Island Coast SAC i.e. "AEOSI", cannot be ruled out, and recommend that NRW's advice be accepted on this matter. [150, Footnote 203, 496, 944, 952-972, 1020]

#### **Derogation**

28. The main report does not use the term "derogation", rather it addresses the associated legal tests that must be applied where a proposal fails the integrity test, namely the consideration of: alternative solutions; imperative reasons of overriding public interest ("IROPI"); and, the securing of necessary compensatory measures. [474, 475, 973]
29. The AEOSI would result from a fall-back position to the proposed means of implementing the works. Reasons have been provided as to why there are no alternatives to that fall-back route for the export cables (if it were to be shown to be required). These focus on: the geographic location of the tidal energy resource; the need to harness that resource; the policy support for it in this location; the extent of the SAC along this coast; that the cliff route is a fall-back position that a proposed planning condition would ensure only would be undertaken if necessary; and, the micro-siting of the works. Additional information on the alternatives considered is provided within the relevant part of the ES. From the evidence provided, I am

satisfied that, if it were to be shown to be required, there are no alternative solutions to the export cable fall-back cliff route. [166, 974]

30. Turning to whether the works are supported by imperative reasons of overriding public interest (“IROPI”). The benefits of the scheme and the policy support for it are set out in the Applicant’s case, and in the initial policy conclusion at the beginning of my conclusions in the main report. The proposed works would establish ways to utilise a regular, reliable alternative to carbon based fuels to combat climate change, in a location where the scale of the tidal energy resource has been shown to be significant in Welsh and UK terms. The works would also help to develop the tidal stream energy sector and the industries that support it. As such, it would help to diversify the economy of Anglesey and make it more resilient, while also creating jobs on and off the island. These benefits would in turn be expected to deliver a range of associated socio-economic benefits that result from employment and the educational opportunities that an industry of this kind would be expected to have. I consider these matters, not least the need to tackle climate change with viable solutions that directly and indirectly benefit local communities, to demonstrate imperative reasons of overriding public interest in the clearest terms. [58-63, 165, 794, 975]
31. Regulation 68 requires that where AEOSI would occur, any necessary compensatory measures are secured to protect the overall coherence of the SAC. I agree with NRW that, given the works include a fall-back position that would cause AEOSI to occur, the current “Outline Habitat Enhancement Plan” (Ref: Inquiry Doc – 069) should be considered as providing compensation measures rather than mitigation or enhancement. Although not submitted to the inquiry for that purpose, the Applicant has confirmed that following a finding of AEOSI, the Outline Habitat Enhancement Plan is to be considered as necessary compensation for the purposes of regulation 68. And that is how I now consider it to be. Habitat compensation would be secured through the imposition of planning condition 11) as drafted within Appendix 1 to the main report. [167, 475, 498, 976, 977, 1003-1005]
32. The Habitats Directive integrates the precautionary principle and therefore these findings are in accordance with that principle. [978]

### **Recommendation**

33. For the reasons given above, and having had regard to all other matters raised, I recommend that this Appendix report be accepted as a summary Habitats Regulations Assessment, that complies with the requirements of regulations 63, 64 and 68 of the Conservation of Habitats and Species Regulations 2017, as amended.

*Clive Sproule*

INSPECTOR