

MORGAN AND MORECAMBE OFFSHORE WIND FARMS: TRANSMISSION ASSETS

Technical Engagement Plan Appendices Part 1 of 3



**September 2024
Rev: F01**

**MOR001-FLO-CON-ENV-PLN-0073
MRCNS-J3303-RPS-10164**

**PINS Reference: EN020028
APFP Regulations: 5(2)(q)
Document reference: E5.1**

Document status					
Version	Purpose of document	Approved by	Date	Approved by	Date
F01	For issue	AS	September 2024	IM	September 2024

Prepared by:

RPS

Prepared for:

**Morgan Offshore Wind Project Limited,
Morecambe Offshore Windfarm Ltd**

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Appendix A: Evidence Plan Steering Group

A.1 Steering group meeting 1

A.1.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project External
(Restricted)

Minutes of Meeting Number : Transmission Assets EP Steering Group 1

REV. No. : Rev2

Minutes of Meeting Subject : Transmission Assets Evidence Plan Steering Group Meeting 1

MINUTES OF MEETING

MEETING DATE : 10/01/2023

MEETING LOCATION : Microsoft Teams

RECORDED BY : [REDACTED] (RPS)

ISSUED BY : [REDACTED] (RPS)

Attendees:

- [REDACTED] – bp (AS)
- [REDACTED] – Flotation Energy (OG)
- [REDACTED] – Flotation Energy (LA)
- [REDACTED] – RPS (AR)
- [REDACTED] – RPS (KL)
- [REDACTED] – RPS (AW)
- [REDACTED] – Natural England (EW)
- [REDACTED] – Natural England (LB)
- [REDACTED] – MMO (AE)
- [REDACTED] – Historic England (CP)
- [REDACTED] – Environment Agency (LL)
- [REDACTED] – Fylde Borough Council (AnS)
- [REDACTED] – Blackpool Borough Council (SP)
- [REDACTED] – Preston City Council (NS)
- [REDACTED] – Planning Inspectorate (SN)
- [REDACTED] – Natural England (LoB)

Apologies:

- [REDACTED] – bp (VR)
- [REDACTED] – bp (WD)
- [REDACTED] – Flotation Energy (RW)
- [REDACTED] – RPS (KR)
- [REDACTED] – MMO (LT)
- [REDACTED] (MMO) (PS)
- [REDACTED] – Natural England (AB)
- [REDACTED] – South Ribble County Council (JN)
- [REDACTED] – Lancashire County Council (RS)

Agenda

1. Introductions
2. Introduction to the Transmission Assets
3. Programme and key milestones
4. Overview of the Pre-Application Process
5. Purpose of and overview of Evidence Plan Process
 - Roles and Responsibilities
6. Overview of Evidence Plan Steering group
7. Overview of identified Expert Working Groups
8. Discuss and agree ways of working
9. Next Steps and summary of actions
10. AOB

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
Notes	Meeting not recorded due to MMO internal policy.		
1.	<p>Introductions (presented by KL)</p> <p>KL noted that attendees will have received the Terms of Reference (ToR) document for the Evidence Plan (EP) process with the meeting invitation. Hopefully attendees will have had the chance to read through this. This meeting will primarily provide a summary and discussion of that ToR document.</p> <p>Would request that attendees provide comments on the ToR document (e.g., on the relevant remits, ways of working, timescale, attendees etc.) after this meeting (see Next Steps)</p>		
2.	<p>Introduction to the Transmission Assets (presented by AS)</p> <p>About the wind farms (presented by AS)</p> <p>Morgan Offshore Wind Limited (Morgan OWL), a joint venture between bp and Energie Baden-Württemberg AG (EnBW), is developing the Morgan Offshore Wind Project, located in the east Irish sea. The Morgan Offshore Wind Project is located approximately 22 km (12 nautical miles (nm)) from the Isle of Man and approximately 36 km (20 nm) from the northwest coast of England (when measured from Mean High Water Springs (MHWS)). The anticipated nominal capacity of the Morgan Offshore Wind Project is 1,500 Megawatts (MW).</p> <p>Morecambe Offshore Windfarm Limited (Morecambe OWL), a joint venture between Cobra Instalaciones y Servicios, S.A. (Cobra) and Flotation Energy Ltd. (Flotation), is developing the Morecambe Offshore Windfarm. The Morecambe Offshore Windfarm is also located in the east Irish Sea approximately 30 km (16 nm) from the northwest coast of England (when measured from MHWS). The anticipated nominal capacity of the Morecambe Offshore Windfarm is 480 MW.</p> <p>About the Transmission Assets (presented by AS)</p> <p>In July 2022, the UK Government published the Pathway to 2030 Holistic Network Design documents, which set out the approach to connecting 50 GW of offshore wind to the UK electricity network (National Grid ESO, 2022). The output of this process concluded that the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm would work collaboratively to develop their transmission assets for connecting the wind farms to the National Grid at Penwortham in Lancashire. Morgan OWL and Morecambe OWL (the Applicants) are therefore seeking development consent for transmission assets comprising shared offshore export cable corridors to landfall and shared onshore export cable corridors to onshore substation(s), and onward connection to the National Grid electricity transmission network at Penwortham, Lancashire. These are known as the Morgan and Morecambe Offshore Wind Farms: Transmission Assets (referred to as the Transmission Assets).</p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>Both the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm fall within the definition of a Nationally Significant Infrastructure Project (NSIP), as they exceed the threshold for an offshore generating station of 100 MW, set under the Planning Act 2008, as amended. They therefore require an application for development consent to be made to the Planning Inspectorate.</p> <p>In relation to the Transmission Assets, the Applicants sought a direction from the Secretary of State under section 35 of the Planning Act to confirm that they should be treated as development for which development consent is required under the Planning Act 2008, as amended. A direction was given on 4 October 2022 and the Applicants are now pursuing a single application for development consent for the transmission assets for both wind farms. It is anticipated that the Applicants will apply for a Development Consent Order (DCO) which authorises two coordinated but electrically separate sets of transmission works (for example, where each offshore wind farm would have its own transmission cables and substation infrastructure).</p>		
3.	<p>Programme and key milestones</p> <p>Key Dates (presented by AS) The Scoping Report was submitted in October 2022. A Scoping Opinion was received in December 2022.</p> <p>The Applicants undertook pre-scoping engagement in 2021 and early 2022. Throughout 2023 the Applicants will progress with consenting and both offshore and onshore surveys, noting that a number of terrestrial ecology surveys and offshore surveys have commenced, which have fed into the ongoing site selection work.</p> <p>The Applicants aim to publish the Preliminary Environmental Information Report (PEIR) towards autumn 2023, with formal consultation scheduled for later in 2023. The Transmission Assets application for development consent is currently planned to be submitted in Q3 2024.</p> <p>CP – Queried whether worst case scenarios would be different for Morgan and Morecambe.</p> <p>AS – Confirmed that capacities are different and that therefore parameters do vary.</p>		
4.	<p>Overview of the Evidence Plan Process (presented by KL)</p> <p>EPP</p> <p>KL provided an overview of the EP process. The proposed approach has been developed following the Planning Inspectorate and Defra guidance and recent guidelines produced by Natural England. The EP is a mechanism to agree upfront what information the Applicants need to supply to the Planning Inspectorate as the Examining Authority as part of an application.</p>		

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	<p>The EP process has historically been focused on the Habitats Regulations Assessment (HRA) however in line with recent best practice, the Applicants propose to extend this to include the EIA processes, including both ecology topics and non-ecology topics, as set out in the slides later in the presentation.</p> <p>This EP process for the Transmission Assets is separate to the process for the Morgan generation and Morecambe generation assets.</p> <p>We will look to set up some of the meetings for similar topics for the Morgan Offshore Wind project, Morecambe Offshore Windfarm and Transmission Assets on similar days, where possible and where it's useful to do so.</p>		
5.	<p>Roles and responsibilities (presented by KL)</p> <p>The EP process is led by the Applicants. The responsibility for updating the EP is with the Applicants, with feedback from the relevant consultees.</p> <p>KL will act as chair for the EP process as a whole and will chair the steering group meetings and EWGs, as relevant. KR will act as secretariat, with AW as a stand in for today. KL and KR are to be included on all correspondence.</p> <p>The Applicants have put together a broad plan for engagement with the steering group, noting that this is subject to progress based on how the project progress.</p>		
6.	<p>Overview of Evidence Plan Steering Group (presented by KL)</p> <p>The purpose of the Evidence Plan Steering Group is to monitor progress of the EP. Meetings will provide key project updates and will include an update on timescales to ensure stakeholder resourcing during these periods are managed appropriately and forward planned.</p> <p>The EP Steering Group will guide and inform the EP process. The group will meet at key milestones during the project program for Transmission Assets.</p> <p>The next EP Steering Group meeting will discuss the cable route selection study. All organisations in this group meeting will be sent a Microsoft form to collect availability for the second EP Steering Group.</p> <p>The third EP Steering Group meeting will be timed around the PEIR. The Applicants can propose dates; however, we are open to suggestions on timings.</p>		
7.	<p>Overview of identified Expert Working Groups (presented by KL)</p> <p>KL gave an outline of the EWGs. Slide deck sets out EWGs for onshore and offshore topics. There are certain topics which are not included here (e.g., shipping and navigation, commercial</p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>fisheries) as these will be part of a separate, dedicated consultation process.</p> <p>The aim of these EWGs is to discuss and agree (where possible) key elements of the EIA and HRA during the pre-application period. With the overall aim of having a lot of the ground work completed on the Statements of Common Ground (SoCG), so the Examination can focus on the key issues.</p> <p>The slides set out the broad approach to agreement in the EWGs and key areas we are looking to get agreement on. These are the broad headings around which discussions and consultations (e.g., S42 consultation) will be focussed and will form the basis of the SoCG.</p> <p>The slides show the EWGs and the key consultees to be involved in each EWG. Please can you provide key contacts for the EWGs for your organisation.</p> <p>We have been asked previously (e.g., by MMO, Natural England etc.) to liaise through the case officer, rather than technical specialists, but do let us know if this differs. Each organisation to identify who their point of contact for each EWG. First EWGs will be established in early 2023.</p> <p>AE – CEFAS can be removed from offshore and coastal ornithology.</p> <p>KL - Noted, will be removed.</p> <p>LL – Does the hydrology EWG cover crossing and flooding? Need to know who to send from which department. May need biodiversity input for river crossing.</p> <p>AS - Where there are interrelated impacts, we can pick these up in the specialist meetings, i.e., we will bring ecology impacts related to any watercourse crossing into Ecology EWG.</p> <p>LL – We will ask flood risk and maybe contaminated land representatives for the water EWG, and we will ask biodiversity to attend the ecology EWG.</p> <p>KL noted that some of the first EWGs are underway in organising, but others are likely to fall in to February/March. The purpose for the timescale is to allow forward planning for resources and availability. We will look to update timescales as far as is possible and as more meeting may be required.</p> <p>LB – Are documents and technical reports going to be issued 10 days prior to EWGs</p> <p>KL - Yes, this will be dealt with in the following slides. First meetings are only introductions through and so pre-reading will not be likely required. More for the subsequent meetings and this process will be followed.</p>	<p>All organisations to identify who their point of contact is for each EWG outlined in the EP.</p>	<p>24/01/2023</p>

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>Some of the topics will be combined into one meeting and discussion of the scoping opinion will be undertaken within EWG meetings in an effort for efficiency. We are looking to build on the approach and working for the generation assets in terms of methodologies etc.</p> <p>The ToR includes a broad approach to the EWG meetings. However, some topics are likely to involve more meetings and consultation than others. This will be topic dependent.</p>		
8.	<p>Progress to agreement (presented by KL)</p> <p>The EP process is iterative. The Applicants will agree as much as possible during pre-application phase. Meetings will be held at key stages for each topic e.g., where a key section of data has been analysed or preliminary modelling undertaken. The idea is for consultees to provide feedback as early as possible.</p> <p>Information that is considered key for any upcoming EWG will be shared no less than two weeks prior to the agreed meeting date.</p> <p>Broad approach to EWGs:</p> <ul style="list-style-type: none"> • Information circulated to EWG minimum two weeks ahead of meeting. • Meeting is held with attendees prepared to comment on materials provided. • Full meeting minutes will be taken agreement logs will be compiled where matters are agreed, and after each meeting the minutes and agreement log will be circulated two weeks after the meeting. • Then minutes will be agreed, with comments from stakeholders two weeks after issue of minutes. The agreement log will be updated and ultimately appended to the DCO application. <p>Materials for the EWGs will be issued out with the correct key contacts. If information is comprehensive, the timescale may be longer.</p> <p>AE – Update on MMO consultation. Turnaround is 3 weeks and MMO may require further week to finalise, depending on Cefas input. Recommendation for meeting minutes to be extended to four weeks when there is more complicated information. Can any need for comments be explained at the point of issue of information so as to focus and highlight input requirements and timescales.</p> <p>KL - Yes, timescales fine and we will clearly communicate where input required and if more time is needed.</p> <p>CP – 10 working days to process information unlikely to be met by Historic England. Also the concept of the agreement log would only reflect present stage of conversation and not an ‘agreement’. The log would only focus on point in time and that advice may change depending on the information received as it evolves.</p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	KL – Yes, all understood, and the Agreement Log would be used as such.		
9.	<p>Next steps (presented by KL)</p> <p>Could all members on this call please review and confirm content with ToR document (deadline for 24th January) and the key contact details.</p> <p>Meeting minutes to be shared in two weeks, could these be commented on, and responses returned in the following two weeks.</p> <p>Second SG meeting Feb / early March. Information to discuss the cable routing and the site selection behind the current state of play. EWGs to be established across the next month or so.</p>	All organisations to identify who their point of contact is for each EWG outlined in the EP. Could they also review and provide comments on the ToR.	24/01/2023
10.	<p>Any other Business and Close of meeting (presented by KL)</p> <p>Responses received for the Scoping will likely dictate the prioritisation of the upcoming EWGs.</p> <p>AE – How are documents going to be shared? Emails or Sharepoint?</p> <p>OG –Sharepoint same as for the generation process.</p> <p>LL – Charge for involvement at this stage of the process. This has been sent to VR and RW? Transmission Assets been asked to charge half and half between the two Morgan and Morecambe. Are we talking about single trench, single access road, single depot site etc? Is that the direction? Cables and substation separate they share a common location.</p> <p>AS – Shared cable corridor at the current time. As the process evolves compounds and substation location will be determined as the project’s developers but with an effort to consolidate wherever possible and where site specifics allow. Site selection progress will be shared.</p> <p>LL – To understand the split of costs and for the wider understanding of the relationship and the envisioned to pass onto the wider team.</p> <p>AS – Design envelope but with some element of flexibility and therefore there is a lot of scenario planning to afford flexibility where needed. This will dictate how the project will be developed down the line and where colocation is possible. Dependent on constraints. Aim for payment to be taken away from 50/50 split to ease for the stakeholders to avoid multiple codes etc. Ideally kept as simple as possible. Actions for AS.</p>	AS to determine invoice split for bp and Flotation Energy for the	24/01/23

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>AnS – Is the cable routing subject to further discussion? As set out in Fylde Borough Council’s Scoping Opinion, we have concerns with the proposed overland route through Fylde. Question about whether the route will be overland or underwater through the River Ribble.</p> <p>AS – This can be picked up at a later meeting date, planned for the second EPP Steering Group Meeting.</p> <p>LB – Suggest information on Dudgeon Extension Project (DEP) and Sheringham Extension Project (SEP) are reviewed. Please review NE written and relevant representations to those projects. Best place to start in terms of installations of two projects under one NSIP. There were some LVIA issues raised and the suggestion that ducts for both projects could be installed at the same time to reduce effects. See also Norfolk and East Anglia projects (as well as DEPP and SEPP). For all of these projects, NE suggests the first project to install ducts for the 2nd project so terrestrial disruption is once.</p> <p>AS – Queried which examination deadline we should look at? Similar approach taken on Hornsea Three.</p> <p>LB – Hornsea only taken forward as one phase. DEPP, SEPP and Norfolk / EA projects for the split of elements.</p> <p>AS – Will review thank you. Post meeting update: NE Written and Relevant Representation for DEP and SEP provided at the link below. https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010109/EN010109-000540-Natural%20England%20-%20Relevant%20Representation.pdf</p> <p>AR – Do stakeholders have a strong preference for meetings for Transmission Assets and Generation Assets to be aligned for ease?</p> <p>AE – LT (MMO) availability Tues AM, Weds, Thurs all day and Fri AM as they are part-time.</p> <p>KL – Would this approach be preferable to coordinate meetings?</p> <p>AE – No preference.</p> <p>Meeting closed out – please confirm intentions re EWGs and comments on ToR by 24th. Minutes of meeting will be circulated in the coming two weeks for comments and sign-off.</p>	Environment Agency	
Summary of Actions			
A1.	All organisations to identify who their point of contact is for each EWG outlined in the EP.	All	24/01/23
A2.	Please provide comments on the ToR document shared.	All	24/01/23
A3.	bp and Flotation Energy to confirm split of invoicing to the Environment Agency.	AS/VR/RW	24/01/23

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
A4.	Stakeholders to provide comments on the minutes of meeting.	All.	7/02/2023



A.1.1.1 Response from Historic England regarding the meeting minutes



Historic England

██████████
Principal EIA Consultant
RPS | Consulting UK & Ireland
20 Farringdon Street
London EC4A 4AB

24th January 2023

Dear ██████████,

**Morgan and Morecambe Offshore Wind Farms Transmission Assets
Evidence Plan Methodology and Terms of Reference**

Further to the Evidence Plan Steering Group meeting held on 10th January 2023, we offer these comments on the following document, as referenced:

*Morgan and Morecambe Offshore Wind Farms: Transmission Assets
Environmental Impact Assessment (EIA) - Evidence Plan Methodology and
Terms of Reference. EOR0823 Evidence Plan 01; 22 December 2022*

The role of Historic England

As you may be aware, Historic England is the Government's advisor on all aspects of the historic environment in England. Historic England's general powers under section 33 of the National Heritage Act 1983 were extended (via the National Heritage Act 2002) to modify our functions to include securing the preservation of monuments in, on, or under the seabed within the seaward limits of the UK Territorial Sea adjacent to England. We also provide our advice in recognition of the English marine plan areas (inshore and offshore), as defined by the Marine and Coastal Access Act 2009 and the objectives and policies of published Marine Plans.

We understand that the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm are scoped into the "Pathways to 2030" workstream under the Offshore Transmission Network Review (OTNR), published by BEIS. The output of this initiative is that the separate Morgan and Morecambe projects should work collaboratively to connect with the National Grid electricity substation at Penwortham (Lancashire).



Historic England, 4th Floor, Cannon Bridge House, 25 Dowgate Hill, London EC4R 2YA
Telephone 020 7973 3700 Facsimile 020 7973 3001
HistoricEngland.org.uk



Please note that Historic England operates an access to information policy.
Correspondence or information which you send us may therefore become publicly available.



A.1.1.2 Response from MMO regarding the meeting minutes



Morecambe Offshore Windfarm Ltd
12 Alva Street
Edinburgh
EH2 4QG

Our reference: DCO/2022/00010
Your reference: EOR0823

[By email only]

20 January 2023

Dear [REDACTED],

EOR0823 Morgan and Morecambe Offshore Wind Farms: Transmission Assets Environmental Impact Assessment (EIA) Evidence Plan Methodology and Terms of Reference

The Marine Management Organisation (MMO) received the above on 22 December 2022. After full review of the document the MMO has the following comments to make:

1. EPP Steering Group Expert Working Groups

- 1.1. The MMO and its scientific advisors can only provide agreements 'in principle' during meetings. To ensure the position is fully aligned across all topics, the MMO will provide confirmation of any 'in principle' agreements in writing upon review of the minutes.
- 1.2. The MMO is content that the aim is to agree as much as possible during the pre-application period. Only major concerns/issues should therefore remain at the start of the examination. The MMO will work with all parties to try and resolve issues.
- 1.3. The MMO notes that Cefas are listed as a participant within the Offshore and Coastal Ornithology Expert Working Group (Table 3). Cefas do not provide technical advice relating to ornithology. The MMO requests Cefas are removed as a participant.
- 1.4. The MMO requests that it is added as a stakeholder when consulting with interested parties on Seascape, Landscape and Visual topics (Table 4).

2. Evidence Plan Process Logistics

- 2.1. The MMO informs you that a standard consultation with our scientific advisors Centre for Environment, Fisheries and Aquaculture Science (Cefas) is three weeks, and then we would need one week to prepare and collate the responses.
- 2.2. The MMO requests that any meeting requests and documents to review are circulated at least four weeks prior to reflect this.



3. Meetings

3.1. The MMO informs you that we do not consent to meetings being recorded on any device.

4. Timescales for Feedback

4.1. The MMO believes two weeks to provide comments on minutes and agreement logs is too short of a time scale. A standard consultation with our scientific advisors Cefas is three weeks, and then we would need one week to prepare and collate the responses. Please be reminded of point 2.1 above.

4.2. The MMO requests that the deadline is updated to four weeks to reflect this.

4.3. The MMO will endeavour to provide comments earlier where possible and shorter timescales can be discussed and agreed on a case-by-case basis.

5. Roles and Responsibilities

5.1. MMO

5.1.1. The MMO wishes to emphasise points 2.1 and 4.1 above. We aim to provide comments on minutes and agreement logs within four weeks of receipt.

5.1.2. The MMO coastal office may like to be involved in early pre-application discussions. Please notify us if you require contact details.

5.2. Cefas

5.2.1. The MMO welcomes the commitment that there will be no direct contact or discussions with Cefas unless this has been agreed by the MMO Case Team. All correspondence or advice required by Cefas is to be provided to the MMO to ensure a full audit of discussions.

Other comments

5.3. The MMO prefers that documents are shared using SharePoint but that a courtesy email is sent to advise us that new documents have been uploaded. This email should also make it clear if MMO review and comments on these documents is required.

5.4. The MMO requests that our advisors at Cefas have access to SharePoint. The MMO informs you that multiple advisors may input throughout the pre-application process. It will therefore be a key administrative duty of the applicant to grant access to specific individuals on a frequent and urgent basis. The MMO stresses strict adherence to point 5.2.1 above.

5.5. The MMO wishes to clarify the definition of 'agreement log.' Please note point 1.1 above; the MMO and its scientific advisors can only provide agreements 'in principle' during meetings.

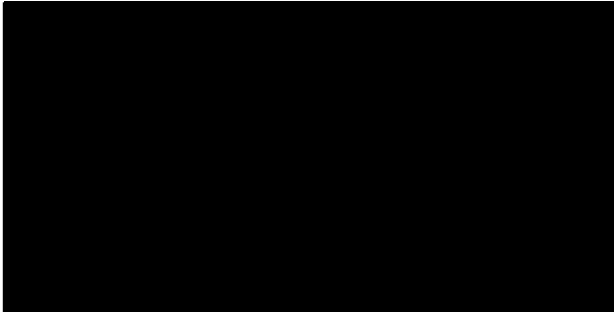


Your feedback

We are committed to providing excellent customer service and continually improving our standards and we would be delighted to know what you thought of the service you have received from us. Please help us by taking a few minutes to complete the following short survey [\[redacted\]](#).

If you require any further information, please do not hesitate to contact me using the details provided below.

Yours Sincerely,



Marine Licensing Case Officer



A.1.1.3 Response from Natural England regarding the meeting minutes

Date: 23 January 2023
Our ref: DAS/UDS A000566 412777
Your ref: Morgan and Morecambe Transmission Assets Evidence Plan and Terms of Reference



██████████
RPS/ Energy
20 Farringdon Street
London
EC4A 4AB

Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ
██████████

BY EMAIL ONLY

Dear ██████████

Discretionary Advice Service (Charged Advice): UDS A000566

Development proposal: Morgan and Morecambe Offshore Windfarms: Transmission Assets

Consultation: Morgan and Morecambe Transmission Assets Evidence Plan and Terms of Reference

This advice is being provided as part of Natural England's Discretionary Advice Service in accordance with the Quotation and Agreement dated 17th May 2021 to BP Alternative Energy Investments Limited.

The following advice forms Natural England's response to the Evidence Plan Methodology and Terms of Reference discussed during the Morgan and Morecambe Offshore Windfarms Transmission Assets EPP Steering Group on 10th January 2023.

Detailed comments

General

Natural England notes that the 'agreement log' should be considered as a log of the issues for which the agreements on evidence requirements may exist but are subject to change based on the criteria outlined on page 9 and in accordance with the final bullet point in Section A.1.1 of the Terms of Reference.

Evidence Plan Process Logistics

Table 5, p.16

- Post scoping EWGs and baseline EWGs have the potential to be scheduled very close together. Consideration should be given to the necessity for both meetings and the possibility of consolidating them (for each topic).

Appendix A: Terms of Reference

Table 7: Timescales for EPP Steering Group and EWG progress to agreement

- NE recommends that the 2 weeks allocated to "provide EWG with information ahead of meeting" be treated as a minimum. Where the information for review is particularly lengthy, dense or technical, a longer period would be beneficial. It may not be possible to review information provided at shorter notice.

A.3 Roles and responsibilities, A.3.6 Natural England

- Penultimate bullet point: In addition to advice on compensatory measures and MEEB, Natural England's advice should be sought in relation to the approach to mitigation and agreement of mitigation and monitoring measures

For clarification of any points in this letter, please contact me using the details provided below.

Yours sincerely,

[REDACTED]
Marine and Coastal Lead Adviser
Coast and Marine Team
Cheshire to Lancashire Area Team
[REDACTED]

The advice provided in this letter has been through Natural England's Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

[REDACTED]

Annex 1

European Protected Species

A licence is required in order to carry out any works that involve certain activities such as capturing the animals, disturbance, or damaging or destroying their resting or breeding places. Note that damage or destruction of a breeding site or resting place is an absolute offence and unless the offences can be avoided (e.g. by timing the works appropriately), it should be licensed. In the first instance it is for the developer to decide whether a species licence will be needed. The developer may need to engage specialist advice in making this decision. A licence may be needed to carry out mitigation work as well as for impacts directly connected with a development. Further information can be found in Natural England's ['How to get a licence'](#) publication.

If the application requires planning permission, it is for the local planning authority to consider whether the permission would offend against Article 12(1) of the Habitats Directive, and if so, whether the application would be likely to receive a licence. This should be based on the advice Natural England provides at formal consultation on the likely impacts on favourable conservation status and Natural England's [guidance](#) on how the three tests (no alternative solutions, imperative reasons of overriding public interest and maintenance of favourable conservation status) are applied when considering licence applications.

Natural England's pre-submission Screening Service can screen application drafts prior to formal submission, whether or not the relevant planning permission is already in place. Screening will help applicants by making an assessment of whether the draft application is likely to meet licensing requirements, and, if necessary, provide specific guidance on how to address any shortfalls. The advice should help developers and ecological consultants to better manage the risks or costs they may face in having to wait until the formal submission stage after planning permission is secured, or in responding to requests for further information following an initial formal application.

The service will be available for new applications, resubmissions or modifications – depending on customer requirements. More information can be found on [Natural England's website](#).

We understand that a direction has been obtained from the Secretary of State under section 35 of the Planning Act which confirms that this transmission assets project (two coordinated, but electrically separate sets of transmission works) can be treated as one development for which a Development Consent Order (DCO) is required under the Planning Act 2008 (as amended).

We understand the aims of the Evidence Plan process and we see it as an important means to consider impacts (either positive or negative) on the historic environment that it either known or presently unknown, as may occur in the Transmission Assets scoping boundary (as shown in Figure 1). Furthermore, we appreciate that a finalised Evidence Plan will be appended to the Consultation Report submitted as part of the overall DCO application.

Section 1.5 (Indicative Programme) and Table 1 sets out the envisaged milestones for this project during pre-application e.g. as set out in Table 5 including the Preliminary Environmental Information Report (PEIR) consultation starting in Q3 2023. We therefore take this opportunity to request that you see our paid-for services offered through our Enhanced Advisory Service (EAS), so that we can continue to provide advice to you during pre-application.

To access the information we have online about our EAS please see: <https://historicengland.org.uk/services-skills/our-planning-services/enhanced-advisory-services/> specifically our Extended Pre-Application Advice Service and Major Project Service.

Subject to EAS agreement, we will participate through the Evidence Plan process, such as attendance at Steering Group meetings and through Expert Working Groups (EWGs) as relevant to offshore and onshore archaeology, as illustrated in Figure 4 and set out in Table 3.

Appendix A: Terms of Reference – regarding the intention to seek agreement (A.1.3), in reference to the matters identified (other than focussed towards Habitats Regulations requirements), it is important that ‘agreement’ is in reference to the status of the project and the information made available to us for review, comment and advice. It is understood that the project timetable can change which may affect the flow of information and whether it can be included at key stages, such as at PEIR. It is the case that such matters can have a bearing on decisions and agreements as may be sort through the Evidence Plan process. Table 7 sets out timeframes in which responses are requested from participants and we request that there is flexibility when interpreting ‘2 weeks’ which should be considered as a minimum of 10 working days with acceptance that fully informed responses may take 15 working days. Section A.2.1 refers to ‘additional evidence’ and such a matter is relevant to how you expect Historic England to participate, as set out in A.3.9, whereby the advice we produce will be relevant and applicable to each and every development project as may occur within English inshore or offshore marine planning areas.

Yours sincerely,



Head of Marine Planning



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Please note that Historic England operates an access to information policy.
Correspondence or information which you send us may therefore become publicly available.

A.2 Steering group meeting 2

A.2.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project External
(Restricted)

Minutes of Meeting Number : Transmission Assets EP Steering Group 2

REV. No. : F01

Minutes of Meeting Subject : Transmission Assets Evidence Plan Steering Group Meeting 2

MINUTES OF MEETING

MEETING DATE : 11/05/2023

MEETING LOCATION : Microsoft Teams

RECORDED BY : [REDACTED] (RPS)

ISSUED BY : [REDACTED] (RPS)

Attendees:

- [REDACTED] – Flotation Energy (TS)
- [REDACTED] – Flotation Energy (LA)
- [REDACTED] – Flotation Energy (HR)
- [REDACTED] – bp (AS)
- [REDACTED] – bp (GV)
- [REDACTED] – bp (SR)
- [REDACTED] – bp (MP)
- [REDACTED] – bp (WD)
- [REDACTED] – bp (HK)
- [REDACTED] – RPS (AR)
- [REDACTED] – RPS (KL)
- [REDACTED] – RPS – (KR)
- [REDACTED] – Planning Inspectorate (SN)
- [REDACTED] – MMO (AE)
- [REDACTED] – MMO (AF)
- [REDACTED] – Historic England (CP)
- [REDACTED] – South Ribble Council (DR)
- [REDACTED] – South Ribble Council (LH)
- [REDACTED] – Natural England (LB)
- [REDACTED] – Natural England (KB)
- [REDACTED] – Natural England (EW)
- [REDACTED] – Natural England (LoB)

Apologies:

- [REDACTED] – Preston City Council (NS)
- [REDACTED] – Preston City Council (CH)
- [REDACTED] – Lancashire Council (RS)
- [REDACTED] – Blackpool Borough Council (SP)
- [REDACTED] – Fylde Borough Council (AnS)
- [REDACTED] – Natural England (MK)
- [REDACTED] – Historic England (PO)
- [REDACTED] – Environment Agency (LL)

Agenda

1. Timeline of activities
2. Offshore Site Selection process
3. Key constraints
4. Offshore cable route selection: Landfall
5. Offshore cable route selection: Offshore cable route
6. Final offshore cable corridor for PEIR
7. Interaction with key designated sites
8. Mitigation options and The Crown Estate Export Cable Route Assessment (ECRA)
9. Questions & feedback
10. Onshore Site Selection process
11. Next Steps

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
Notes	Meeting not recorded due to MMO internal policy.		
1.	<p><u>Agenda (slide #2 presented by KL)</u></p> <p>The purpose of this meeting is to explain the process by which the project has been undertaking site selection for the offshore cable route, now that we are in a position where we can engage with stakeholders on this and in line with the requirements set out in the Agreement for Lease (Afl) for the project and The Crown Estate’s plan level HRA.</p> <p>GV will run through a summary of the information which will be contained in the PEIR site selection document, which will come to you later this year, so you will get a lot more detail in the PEIR site selection chapter. However, in line with the principles for engagement via the Evidence Plan Process, we want to give the Steering Group early sight of this information, so you know what to expect (with regards to our methodology and the results in the PEIR) and there are no surprises once we get to PEIR later in the year.</p> <p>The agenda set out here (slide #2), as circulated previously to the Steering Group.</p>	-	-
2.	<p><u>Offshore Site Selection – overview timeline (slide #3 presented by GV)</u></p> <p>We thought it would be useful to give an overview of activities relating to the Morgan and Morecambe Transmission Assets since award of Morgan Offshore Wind Project and Morecambe Offshore Windfarm since the projects were awarded preferred bidder status. The slide shows a timeline running from left to right and the numbers are the sequencing of events.</p> <ol style="list-style-type: none"> 1. Both Morgan and Morecambe projects were selected as preferred bidders in February 2021. 2. Shortly after, two key activities commence – The Crown Estate commenced their plan level HRA and requested Round 4 developers not to engage with stakeholders on the export cable corridor site selection process until the plan level HRA had concluded. At the same time, BEIS commenced the Offshore Transmission Network Review (OTNR) and Holistic Network Design Review (HNDR) which prohibited the National Grid (NG) from providing grid connection offers for onshore Point of Interconnection (POI) to Morgan and Morecambe until the reviews were concluded. 3. To mitigate impacts to programme and meet Government targets for 2030, both projects commenced separate site selection process for transmission assets assuming POI at a number of potential locations in northwest England. 4. OTNR/HNDR and plan level HRA were all delayed into 2022 5. NG indicated a strong likelihood for POI at Penwortham (April 2022) and likelihood of coordinated connection between Morgan and Morecambe projects (decision finalised July 2022 with completion of OTNR). 6. Morgan and Morecambe had begun discussions between the projects and combined the site selection process efforts to agree a final offshore cable corridor route for both projects. 7. The Transmission Assets project applied for and secured a marine licence for geophysical surveys, some limited geotechnical surveys and benthic sampling. 	-	-

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>8. These surveys for the Transmission Assets offshore cable corridor took place through Q2/Q3 of 2022.</p> <p>9. In October 2022 the Transmission Assets Scoping report was published and we received a Scoping Opinion from the Secretary of State 6 weeks later.</p> <p>10. Toward the end of November 2022, the plan level HRA was completed which enabled developers to engage with stakeholders on the Transmission Assets site selection process</p> <p>11. In January 2023, we entered into AfL with The Crown Estate.</p> <p>Following finalisation of the plan-level HRA process at the end of November 2022, we had planned to speak to the Steering Group as soon as possible regarding the offshore site selection process, but this was delayed due to utilisation of resources on finalising the PEIRs for Morgan Generation Assets and Morecambe Generation Assets. Apologies that this steering group meeting hasn't happened sooner.</p>		
3.	<p><u>Offshore site selection process – (slide #4 presented by GV)</u> <u>Phased approach to cable route identification</u> We followed a phased approach to offshore cable route identification. This started with an early identification of a Study Area and likely 'show-stopper' constraints, identification of route options and a process of stress-testing and refinement of route options using GIS analysis, BRAG (Black, Red, Amber, Green) analysis, internal workshops with engineering teams, specialist support contractors and internal consents teams, and landfall site appraisals.</p> <p><u>Key technical site selection drivers offshore</u> Key drivers for site selection from a technical perspective are ensuring that we had sufficient corridor width for up to 6 export cables (4 from the Morgan Generation Assets to the Morecambe Generation Assets, and the addition of 2 cables from the Morecambe Generation Assets to the landfall, totalling 6 cables for the project as a whole). We needed to ensure sufficient separation distance to avoid the risk of damage to neighbouring cables during installation & maintenance / repair through the life cycle of the project.</p> <p>We needed to minimise cable / pipeline crossings and proximity to 3rd party assets, and minimise total route length (particularly important for Morgan) and select technically feasible landfall location and onshore route options</p> <p>For the purpose of Morgan Offshore Wind Project, we had to be mindful of including an offshore booster station (due to overall length of export cable) to ensure electricity reached the landfall. We had to look to avoid, where possible, shallow rock substrate and nearshore sandbanks, and had to consider the ability to use most common installation techniques (plough and trenching).</p> <p>Key guidance documents consulted during the site selection process and other requirements are listed on slide #4. Natural Resource Wales advice is also included because a lot of the work for the site selection process was carried out alongside the Mona Offshore Wind Project site selection process too (which is in Welsh waters).</p>	-	-
4.	<p><u>Offshore key constraints – (slide #5 and 6 presented by GV)</u></p>	-	-

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	<p>In terms of the key constraints, this is a highly constrained area of the Irish Sea.</p> <p>Environmental constraints include SPAs (e.g. Liverpool Bay), SACs (e.g. Shell Flats & Lune Deep and Morecambe Bay), MCZs (e.g. West of Walney, Fylde), WFD (e.g. Outer Ribble Estuary designated shellfish waters) and numerous coastal designations (SSSI, NNR & LNR).</p> <p>In terms of the human constraints, the area is equally busy and key constraints include the existing offshore wind farms & export cables (Walney 1 - 4 and West of Duddon Sands), significant Oil & Gas infrastructure (Millom, North Morecambe and South Morecambe gas fields with associated infrastructure and gas pipelines), cables (interconnectors & telecommunications) and shipping and navigation (traffic associated with ferry routes and port traffic).</p>		
5.	<p><u>Landfall site selection – (slide #7 presented by GV)</u></p> <p>The landfall site selection is integral to establishing the offshore cable route. Prior to the grid connection offer at Penwortham, the Search Area initially considered multiple landfall locations between Middleton in the north, to Formby in the south, against anticipated connection points at either Middleton, Penwortham or Kirby.</p> <p>Following indication of grid connection offer at Penwortham in April 2022, landfalls associated with Kirby and Middleton were discontinued and the focus went onto Penwortham landfall sites.</p> <p>Banks and Southport subsequently discounted as technically unfeasible due to significant challenges associated with shallow waters - 10m depth contour extends to approx. 14km offshore and implication on length of HDD was a significant issue, in addition to a large intertidal zone with multiple designations also noted for Banks.</p> <p>Ainsdale and South Formby subsequently discounted due to a combination of:</p> <ul style="list-style-type: none"> • Significant technical challenges associated with shallow waters - 10m depth contour extends to approx. 10km offshore and implication on length of HDD • Overall long cable length (approx. 128km with 33km onshore) • Existing cables and pipelines and additional significant technical challenges with shallow water crossings • More significant onshore environmental and human constraints. <p>Lytham St. Anne was retained as only viable landfall.</p>	-	-
6.	<p><u>Offshore cable route section – (slide #8 presented by GV)</u></p> <p>In terms of the offshore cable route selection, four routes were identified (see slide #8 for figure).</p> <p>GV described the four routes, as per slide #8 of the slide pack.</p> <p>Route 4 was discounted due to technical challenge of 3rd party cables/pipelines to south of Morecambe Generation Assets Array Area. Route 4 discounted prior to commencing the ‘coordination agreement’ approach with the Morecambe Offshore Wind Farm and therefore, no Morecambe cable route was developed for Route 4.</p> <p>Route options 1, 2 & 3 retained to with optionality required to mitigate technical / installation challenges and existing Oil and Gas infrastructure. The late identification of the POI meant that we were late in starting surveys for the offshore cable corridor route (relative to the pre-application development process) and we have only recently received the</p>	-	-

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	data for analysis. This optionality is required in the absence of geophysical and geotechnical data analysis and completion of route engineering studies (anticipated summer 2023).		
7.	<p><u>Final offshore cable corridor for PEIR – (slide #9 presented by GV)</u></p> <p>GV presented the final offshore cable corridor for the Transmission Assets PEIR (slide #9).</p> <p>GV highlighted that it includes both of the Morgan Generation Assets and Morecambe Generation Assets Array Areas because the OSPs within the Generation Assets Array Areas are included within the Transmission Assets PEIR.</p> <p>Landfall is at Lytham St Anne and avoids interaction with the West of Copeland & West of Walney MCZs, the Shell Flats and Lune Deep SAC, the Outer Ribble Estuary designated shellfish waters, the Sefton Coast SSSI and other wind farms and associated export cables.</p> <p>The cable corridor minimises interaction with the Ribble Estuary SSSI, Ribble and Alt Estuaries SPA and Ramsar (passes through SSSI, SPA & Ramsar at their northern limit), cables and pipelines, and key vessel traffic routes and approaches to major ports.</p> <p>The cable corridor interacts with the Fylde MCZ and Liverpool Bay SPA.</p>	-	-
8.	<p><u>Interaction with designated sites – (slide #10 presented by GV)</u></p> <p>Options for routes to avoid the Fylde MCZ were considered but discounted technically due to shallow nearshore waters (10m depth contour extends to greater than 6km offshore) and significant installation challenges for routing adjacent to the coast. Applying mitigation hierarchy set out in the 2019 Natural England and JNCC advice, we routed the cable route through the MCZ at its narrowest point to reduce interaction with the MCZ.</p> <p>Cable route passes through the Ribble Estuary SSSI / Ribble & Alt Estuaries SPA and Ramsar but is only overlapping the designations at their most northern extent.</p> <p>Passing through the Liverpool Bay SPA is unavoidable in connecting at Penwortham given the extent of the SPA.</p>	-	-
9.	<p><u>Mitigation options and The Crown Estate Export Cable Region Assessment (ECRA) – (slide #11 presented by GV)</u></p> <p>Mitigation requirements will be dictated by EIA and HRA and engagement with key stakeholders, and the mitigation hierarchy (NE & JNCC, 2019) approach will be applied.</p> <p>Current mitigation options to minimize / avoid impacts within MPAs being considered include:</p> <ul style="list-style-type: none"> • Minimise sandwave clearance • Minimise use of cable protection • Aim to install cables using sub-sea plough or using trenching methodologies as appropriate to maximise cable protection associated with cable burial and reduce need for additional cable protection such as gravel, rock, mattresses etc. on the surface • Use of micro siting approach within cable corridor 	-	-

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<ul style="list-style-type: none"> Timing of cable installation activities (with respect to the Liverpool Bay SPA) <p>We reviewed the Crown Estate ECRA requirements in the AfL, for relevant SPA features. There are several ‘Amber’ (low – medium) and ‘Red’ (high) risks identified by TCE (as shown in table on slide #11). There are no ‘Black’ (High) risks identified (for which ‘spatial avoidance’ is mandatory). These will be given due regard in the HRA.</p> <p>We are currently working through the geophysical and geotechnical data analysis from the 2022 surveys currently, to understand whether there will be any need for sandwave clearance, cable protection, whether we can bury the cable deep enough to avoid the need for surface cable protection etc. We understand what will be expected of us, and we are keen for feedback through the pre-Application process.</p> <p>Any questions from the Steering Group?</p> <p>CP – thank you for the summary. There was a reference to 4 cables from Morgan and 6 from Morecambe? Is there a merging of the cables so that there are only 6 which run on in a defined spatial area?</p> <p>GV – yes that’s right, there are 4 cables for Morgan and 2 cables for Morecambe combining to make 6 cables (slide #8). The combination of the cables for the two projects occurs to the east / landward of the Morecambe Generation Assets array area.</p> <p>KL – There are 4 from Morgan Generation Assets down to the northern boundary of Morecambe Generation Assets, and then once you add in the 2 from Morecambe to become 6 onto the landfall</p> <p>CP – so is it always the case that they run separately?</p> <p>GV – yes, the Morecambe cables are shown in orange leaving the eastern boundary of the Morecambe Generation Assets Array Area and travel due east to join up with the cable corridor. Then there are 6 cables which run along the same cable corridor into Lytham St Anne.</p> <p>CP – ok, thank you – you made reference to a booster station depending on the route – from what you have described, is it likely that this will be required?</p> <p>GV – yes, we’re not in a position to drop it now. For the purpose of assessment it is assumed that the dimensions of the offshore booster station will be the same as a 1500 MW OSP, and will be located at the approx. mid point for the offshore cables for the Morgan Generation Assets.</p> <p>CP – ok, thank you.</p> <p>LB – The booster station is the element that we know the least about currently. When you say mid-point, do you mean the overall midpoint or the midpoint before they are combined with the Morecambe cables?</p> <p>GV – Key parameters for the booster station are included in the Scoping report. In terms of location. There are two options for booster station areas, one to the north of the Morecambe Generation Array Area, and the second further to the east of the Morecambe site.</p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>KL – It’s midpoint between the Morgan Generation Assets and landfall. A booster substation won’t be required for the cables coming from Morecambe Generation Assets. Morgan Generation export cable is very long, so the booster station is needed.</p> <p>LB – the location option for the booster station within the Liverpool Bay SPA would be a concern for the SPA, just as it would be for the turbines within the SPA, so this should be a concern when considering the siting of the booster station.</p> <p>GV –. We appreciate the feedback, that’s clear.</p> <p>No further comments or questions.</p>		
10.	<p><u>Onshore planning – (slide #13 presented by AS)</u></p> <p>AS introduced herself (Consents Manager on Morgan across the Generation and Transmission Assets).</p> <p>AS provided an overview of the ongoing site selection process for onshore. We are undertaking a non-statutory consultation on the Transmission Assets to align with the statutory consultation for the Generation Assets (Morgan and Morecambe). The focus is to obtain feedback on route planning since scoping.</p> <p>Ongoing site selection process for onshore is based on a range of constraints including, commercial, environmental and engineering constraints.</p> <p>Overarching principles which lead us are that we look for the most direct route, try to mitigate effects on landowners by avoiding small holdings and ensure crossings of utilities, roads and watercourses are as close to 90 degrees as possible.</p> <p>These constraints are mapped into a ‘BRAG’. Slide #13 lists out the ‘BRAG’ categories and shows the onshore Scoping Boundary. The landfall will not be refined from this figure for PEIR as the 1st stage of detailed design work is still to come on that area.</p>	-	-
11.	<p><u>Route Planning & Site Selection Process – (slide #14 presented by AS)</u></p> <p>For the PEIR we will submit a 120m temporary cable corridor that we will take into the ES Application, and within this a 70m permanent width for Application which will be micro-sited within the 120m corridor.</p> <p>We have identified temporary compound areas, and in some cases there are options, for example where we don’t have a preference but would like to take the options to consultation, or for feedback from the landowner, we’ve included options.</p> <p>We’ve included temporary access tracks and access points for the cable route we have identified so far.</p> <p>We’ve identified four substation zones, which are fairly large. These are in the public domain as we’re looking for feedback on these as part of the non-statutory consultation. ¹</p>	-	-

¹ Morgan and Morecambe Offshore Wind Farms: Transmission Assets. Consultation hub (2023). Available at: [Morecambe Offshore Windfarm Limited and Morgan Offshore Wind Limited \(morecambeandmorgan.com\)](https://www.morecambeandmorgan.com)

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
12.	<p><u>Route Planning & Site Selection Next steps (slide #15 and 16 presented by AS)</u></p> <p>For PEIR, we are looking to submit preferred substation sites within zones. We will look to co-locate the onshore substation locations where we can and would only separate them if we come up against hard constraints. We’re undertaking ongoing engagement with landowners, to obtain feedback on cable routes, access points, compound locations, and we will look to adapt them prior to PEIR and statutory consultation later on this year.</p> <p>We will incorporate any environmental information we obtain from ecology surveys, and through the next round of EWGs on how we might microsite the onshore cable route further.</p> <p>We will incorporate identification of operational access points to check joint bays etc. We are aware of the Net Gain requirement as of November, we will also need to identify operational access points for Net Gain land and any enhancement land that we identify.</p> <p>A draft Commitments Register will be incorporated at PEIR to record a range of commitments including public commitments and mitigation identified as a result of the impact assessments (i.e. primary, secondary and tertiary). They will each be given a commitment number in the chapters and when we get to Application stage we will demonstrate via the Commitments Register how each commitment will be secured via the DCO Application. This is a tool that we will be using moving forward.</p> <p><u>Questions</u></p> <p>LoB – you mentioned you will include zones for substations in the PEIR. Have you completed all of your ecology surveys of each of the areas that you might have a substation?</p> <p>AS – yes we have a lot of coverage, there are some patches where we haven’t been able to gain access yet. There is quite lot of functionally linked land, and the data collected over the last 18 months is helping us to refine substation sites.</p> <p>LoB – will all of the surveys and data be included in the PEIR?</p> <p>AS – not all of it will be included, we will not have complete bat survey data for example, we might not have 100% survey access, it’s around 70% at the moment, but we will have good coverage and we will incorporate as much data as we can into the PEIR.</p> <p>LoB – advice – (also given to other R4 projects) – some advice to ensure that you have the best Application and the smoothest Application that you can, and this is advice that myself and Martin have been giving to other Round 4 projects currently. If you don’t have a fully fledged PEIR you need to ensure that you have sufficient time prior to submission of your application to be able to address issues and concerns raised, including if there is any mitigation and/or compensation required. I would advise that given PEIR is due to be submitted in September and Application is beginning of 2024, there is a concern that there is insufficient time between PEIR and submission. The “shutters come down” to allow the Application to be finalised around 3 months prior to the Application being submitted. That gives very little time between PEIR in September, followed by a 6-8 week consultation, this leaves November</p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>and December to address all of the concerns which doesn't feel feasible at the moment.</p> <p>This has been fed back to multiple projects and there are new processes currently being put into place to reform the NSIP process to try to keep everything within a 12 months period between submission and decision. A lot of that is based around making sure the Application is 'front loaded'. Natural England are working with the Planning Inspectorate to look at how that is achieved and secured prior to the acceptance of any Application.</p> <p>I want to flag this to yourselves that there is likely to be a change and if you're wanting a smooth process and no delays during examination/determination, and avoiding what is currently happening with some Round 3 project as they're having extended examination and determination periods, I would request that you think about your timeframes.</p> <p>AS – That's helpful, thank you. Whilst the applications for the 'Generation Assets' are planned to be submitted in Q1 2024, the Transmission Assets Application is planned to be submitted at the end of Q2/start of Q3 2024. We acknowledge that this is still very tight and there isn't a huge time for turnaround. We agree with front loading the information and we don't want to take that risk into examination either.</p> <p>LoB – if the Generation Assets applications are submitted before the Transmission Assets application, then the only thing that's available to inform the Generation Assets applications will be the Transmission Assets PEIR, which raises the issue of how you will consider the generation and transmission assets holistically. To prevent 'stranded assets' and give assurances about the projects as a whole, I would advise ensuring you the strongest PEIR you can have for the Transmission Assets.</p> <p>AS – Yes, agreed. We will be looking to come to the Steering Group as part of the Evidence Plan Process to present how we will approach the cumulative assessment in the Application to address these points.</p> <p>GV - The approach to addressing cumulatives and the holistic 'one project' approach between the Generation Assets for Morgan and Morecambe and the Transmission Assets was presented to the 1st steering group meeting (post meeting note: GV was in error in referring to information presented at the 1st steering group meeting. The information was presented by the Transmission Assets consents team at an EPP steering group meeting for Morecambe Generation Assets).</p> <p>A key point for the Transmission Assets is that when submit the Application, the Generation Assets Applications will already have been submitted and the Transmission Assets application will benefit from the information contained with the Generation Assets Applications. The Generation Asset Applications will use information from the Transmission Assets PEIR.</p> <p>AS – Question to LoB – regarding your conversations with the Planning Inspectorate, are you talking about the Early Adopters programme?</p> <p>LoB – no, just more generally than the Early Adopters programme, but there are also the reforms that we're working through and discussions in parallel to that.</p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>GV – and the Defra environmental standards work that’s started now.</p> <p>AS – thank you, that’s helpful.</p>		
13.	<p><u>Next Steps – (presented by KL)</u></p> <p>Circulate meeting minutes 2 weeks after the meeting.</p> <p>We would request comments 2 weeks after this.</p> <p>In terms of the PDE parameters/mitigations which will be explored with regard to MPAs as well as the initial assessment outputs for the PEIR, these will be communicated via the EWGs:</p> <ul style="list-style-type: none"> • Fylde MCZ – Benthic ecology, physical processes and fish and shellfish ecology EWG. • Liverpool Bay SPA, Ribble Estuary SSSI and Ribble & Alt Estuaries SPA and Ramsar – Offshore Ornithology EWG. <p>In terms of onshore site selection, we are in the process of non-statutory consultation which runs until 4 June 2023 and will review feedback on this. Ongoing EWGs and site-specific surveys will feed into the site selection process.</p> <p>Any further questions?</p> <p>Meeting closed</p>	-	-
Summary of Actions			
A1.	No actions	-	-

A.2.1.1 Response from Natural England regarding the meeting minutes

Date: 08 June 2023
Our ref: DAS/UDS A009203 434568
Your ref: Morgan and Morecambe Transmission Assets EPP Steering Group 02



██████████
RPS/ Energy
Imagination House
Station Road
Chepstow
Monmouthshire
NP16 5PB

Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ
██████████

BY EMAIL ONLY

Dear ██████████

Discretionary Advice Service (Charged Advice): UDS A009203

Development proposal: Morgan and Morecambe Offshore Windfarms: Transmission Assets

Consultation: Morgan and Morecambe Transmission Assets EPP Steering Group 02

This advice is being provided as part of Natural England's Discretionary Advice Service (DAS). We advise that the previous Quotation and agreement dated 17th May 2021 (UDS A000566) expired on 31 May 2023 and a new quotation was sent to BP Alternative Energy Investments Limited on 23 May 2023 (ref: UDS A009203). We request the Quotation agreement is signed by the client imminently to instate the new DAS contract. All DAS work undertaken after the 31 May 2023 will be logged and charged to the new DAS contract, including the advice provided in this letter.

The following advice forms Natural England's response to the meeting minutes provided for the Morgan and Morecambe Transmission Assets EPP Steering Group 02 which was attended by Natural England on 11th May 2023.

Detailed comments

Consenting Timelines

- Natural England acknowledges that the PEIR is due to be submitted in September and Application is in Q2 of 2024. Natural England highlights there is a concern that there is insufficient time, between PEIR and submission of the application, to address issues and concerns raised, including if there is any mitigation and/ or compensation required.

This has been fed back to multiple round four projects and there are new processes currently being put into place to reform the NSIP process to try to keep everything within a 12 months period between submission and decision. A lot of that is based around making sure the Application is 'front loaded'. Natural England are working with the Planning Inspectorate to look at how that is achieved and secured prior to the acceptance of any Application.

- The other concern in relation to the Morgan Generation Assets application submission before the Transmission Assets application submission is that the Generation Assets will only have the Transmission Assets PEIR to inform its application. Therefore, Natural England advise that the developer produces the strongest and most informed PEIR they can

Annex 1

European Protected Species

A licence is required in order to carry out any works that involve certain activities such as capturing the animals, disturbance, or damaging or destroying their resting or breeding places. Note that damage or destruction of a breeding site or resting place is an absolute offence and unless the offences can be avoided (e.g. by timing the works appropriately), it should be licensed. In the first instance it is for the developer to decide whether a species licence will be needed. The developer may need to engage specialist advice in making this decision. A licence may be needed to carry out mitigation work as well as for impacts directly connected with a development. Further information can be found in Natural England's ['How to get a licence'](#) publication.

If the application requires planning permission, it is for the local planning authority to consider whether the permission would offend against Article 12(1) of the Habitats Directive, and if so, whether the application would be likely to receive a licence. This should be based on the advice Natural England provides at formal consultation on the likely impacts on favourable conservation status and Natural England's [guidance](#) on how the three tests (no alternative solutions, imperative reasons of overriding public interest and maintenance of favourable conservation status) are applied when considering licence applications.

Natural England's pre-submission Screening Service can screen application drafts prior to formal submission, whether or not the relevant planning permission is already in place. Screening will help applicants by making an assessment of whether the draft application is likely to meet licensing requirements, and, if necessary, provide specific guidance on how to address any shortfalls. The advice should help developers and ecological consultants to better manage the risks or costs they may face in having to wait until the formal submission stage after planning permission is secured, or in responding to requests for further information following an initial formal application.

The service will be available for new applications, resubmissions or modifications – depending on customer requirements. More information can be found on [Natural England's website](#).

A.3 Steering group meeting 3

A.3.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project External
(Restricted)

Minutes of Meeting Number : Transmission Assets EP Steering Group 3

REV. No. : F00

Minutes of Meeting Subject : Transmission Assets Evidence Plan Steering Group Meeting 3

MINUTES OF MEETING

MEETING DATE : 16/07/2023

MEETING LOCATION : Microsoft Teams

RECORDED BY : [REDACTED] (RPS)

ISSUED BY : [REDACTED] (bp/EnBW)

Attendees:

- [REDACTED] – Flotation Energy (IM)
- [REDACTED] – bp/EnBW (AS)
- [REDACTED] – bp/EnBW (WD)
- [REDACTED] – RPS (KL)
- [REDACTED] – RPS – (KH)
- [REDACTED] – RPS – (BM)
- [REDACTED] – Planning Inspectorate (SN)
- [REDACTED] – MMO (AxS)
- [REDACTED] – Historic England (CP)
- [REDACTED] – South Ribble Council (DR)
- [REDACTED] – South Ribble Council (LH)
- [REDACTED] – Natural England (KB)
- [REDACTED] – Natural England (EW)
- [REDACTED] – Natural England (LoB)
- [REDACTED] – Fylde Borough Council (AnS)
- [REDACTED] – Environment Agency (LL)

Apologies:

- [REDACTED] – Preston City Council (JE)
- [REDACTED] – Preston City Council (NS)
- [REDACTED] – Preston City Council (CH)
- [REDACTED] - Lancashire County Council (RS)
- [REDACTED] – Blackpool Borough Council (SP)
- [REDACTED] – Natural England (MK)
- [REDACTED] – Historic England (PO)
- [REDACTED] – MMO (AF)
- [REDACTED] – JNCC (JW)

Agenda

1. Introductions
2. Project update
3. Route planning and site selection refinements post PEIR
4. Survey Updates
5. Commitments Register
6. Evidence Plan Process
7. Next Steps

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
Notes			
1.	Introductions (KL) Introductions made to the third steering group meeting and the attendees.		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>Agenda, as shown on slide 2, was explained and it was noted that questions and feedback throughout was welcomed.</p>		
2.	<p>Project Update (IM)</p> <p>Slide 5 shows the project overview which IM talked through, explaining the following:</p> <ul style="list-style-type: none"> • that a development consent for the Project is required; • who the Applicants for the Project are; • what the Transmission Assets project will include; and • what the project seeks to facilitate and explanation for the estimated earliest construction date and construction duration timeline. <p>Slide 6 shows the programme overview for the Morecambe Generation Assets, Morgan Generation Assets and the Morgan and Morecambe Transmission Assets projects. The slide details a programme indicating the milestones for Scoping, Preliminary Environmental Information Report (PEIR) and the submission dates of the DCO Application to the Planning Inspectorate (PINS) for each project. It was also highlighted that the Transmission Assets DCO application will be submitted in Q3 to PINS.</p> <p>The Project is committed, over the next few months, to further engagement with stakeholders. A project update newsletter will be released around the end of August to provide the public with an understanding of the project changes between PEIR and DCO Application. As shown on Slide 7 further engagement includes roadshow meetings with Local Planning Authorities, briefings with Parish Councils, ongoing engagement with offshore third-party asset owners and ongoing monthly meetings with the MMO, Environment Agency, Historic England and Natural England. There will be a further round of Expert Working Groups (EWGs) at the pre-submission phase to provide the EWG members with the key information from DCO Application including the assessment outcomes in advance of submission.</p>		
3.	<p>Route planning & site selection refinements post-PEIR (AS)</p> <p>Slide 9 details the design refinements made since PEIR including the refinement of the:</p> <ul style="list-style-type: none"> • offshore export cable corridor; • landfall area; • onshore export cable corridor. • crossing techniques at landfall and the River Ribble; • locations for the use of HDD; and • mitigation and biodiversity benefit and enhancement areas. <p>The slide also highlights the:</p> <ul style="list-style-type: none"> • selection of a single Morecambe onshore substation site; • refinement of the siting and orientation of the Morgan onshore substation; and • selection of preferred technology for the onshore substation for the Morgan Offshore Wind Project: Transmission Assets. <p>Slide 10 focuses on the Offshore elements of the Transmission Assets Project and shows the map of the PEIR Boundary (in blue) and the Transmission Assets indicative Order Limits (outlined in red). The Project has removed the corner from the northern part of the Order Limits. This was included at PEIR for vessel manoeuvring during Operations and</p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>Maintenance. However, due to PEIR feedback regarding potential Shipping and Navigation impacts, this area has been removed from the indicative Order Limits. For Morecambe, as shown on the slide, a portion of the west side has been removed to align with the Morecambe Generation Assets project.</p> <p>Slide 11 shows a map of the landfall area for the Transmission Assets which shows the draft works areas and illustrates the changes made at the landfall since the PEIR including:</p> <ul style="list-style-type: none"> • the reduction in land in proximity to the sand dunes to the north of Lytham (19A19B on map); • the substantial reduction in beach area to the south, with retention of the foot access from North Beach car park; • the reduction in area adjacent to the care home; • removal of a significant part of the golf course, except for an on foot direct pipe monitoring access for emergencies; • substantial refinement of the indicative Order Limits through the Airport and playing field to the south, including the removal of the option to install onshore export cables within the public highway; and • flexibility is required and has been retained by the Project around Leech Lane and the playing fields. <p>The key Project Description changes are also mentioned on the slide, namely, the commitment to Direct Pipe at landfall to reduce the potential ornithological and ecological effects due to the significant reduction in time on the beach this affords.</p> <p>Slide 12 shows the section of the onshore export cable corridor surrounding Blackpool Airport and Queensway and lists two changes to the corridor from PEIR and some Project Description changes as well. The project has undertaken significant work to reduce the area within the Airport and removal of the option of installation of cables in the roads option as presented at PEIR. AS highlighted the roads option on the slide. The Project is still retaining the optionality of open cut at Leach Lane, where the Project may install cable circuits within the playing fields to the south of Blackpool Airport. The Project will take forward, into the DCO Application, flexibility around the playing fields and the Airport within 11A11B (on map on slide) and 15A15B but a maximum of 6 circuits in total as per the Project Description.</p> <p>Another key change is the reduction to 100 m of the temporary working width of the onshore export cable corridor from 120 m. Similarly, the onshore export cable corridor permanent easement would be up to 70 m.</p> <p>Slide 13 shows a map of the continuation of the onshore export cable corridor and further changes from the PEIR, including:</p> <ul style="list-style-type: none"> • At PEIR, 2 options were presented near Lytham Moss and Higher Ballam (shown in light blue on the map), and in response s42 feedback, the northern route has been selected; and • Based on further assessment and route refinement, there has been a large reduction in biodiversity benefit, mitigation and enhancement areas to focus on those areas that can best deliver the appropriate outcomes. 		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>Slide 14 shows the two cable options from PEIR, highlighting the northern option which has been carried forward to Application.</p> <p>Slide 15 discusses the onshore cable route adjacent to the golf course and the Airport with a map showing the changes made since PEIR, including the temporary working width changes and removal of secondary corridor option, as previously mentioned. The Project has made additions/refinements to the temporary and permanent access areas. The Project undertook targeted statutory consultation in March of this year 2024. This focused primarily upon where temporary and permanent accesses were outside of the cable corridor area shown at PEIR.</p> <p>Slide 16 shows the onshore substations. At PEIR, the Project consulted on the onshore substation consultation area (hatched in purple on the left-hand figure on the slide) and the two Morecambe substation options. The Project has engaged with landowners throughout the refinement of these areas. The right-hand figure on the slide shows the PEIR Red Line Boundary and the Transmission Assets Order Limits where the Project has chosen the South Morecambe onshore substation option which has been refined. The Morgan substation site has been moved slightly to the east along with a change in the arrangement of the temporary work area and access.</p> <p>Slide 17 lists the changes made to the Morgan and Morecambe onshore substations and has a map to show these updates. For Morgan these focus on:</p> <ul style="list-style-type: none"> • the movement of the site to the east in response to landowner feedback; • the refinement of accesses (both temporary and permanent); • addition of mitigation area to the west of the Morgan substation (40A41A on the figure); • the inclusion of area to underground low voltage line (39A on figure); • commitment to GIS only for the Morgan substation; and • the reduction of height from 20m down to 15m. <p>For Morecambe these include:</p> <ul style="list-style-type: none"> • the selection of a single site option to the south; • a refinement of the permanent area; • refinement of accesses; and • the reduction in the maximum height from 20m to 15m. <p>IM explained that the Morecambe substation has an access from the south, off Preston New Road which will act as the main construction access point but the main operational access will be off Lower Lane, for light goods vehicles. The Project will retain permanent access rights over the main construction access point from the south this will facilitate any significant works that are required such as a transformer having to be replaced in the future.</p> <p>AS - Slide 18 shows the 400Kv grid connection corridor on a map and discusses the changes made since PEIR including the:</p> <ul style="list-style-type: none"> • large reduction and micro-siting of the 400kV route now that we have firmed up substation locations – including compounds & temporary and permanent accesses; • refinement of biodiversity benefit, enhancement and mitigation areas; and • addition of some operation accesses (subject of targeted consultation). 		

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	<p>The blue area, shown in the figure, was the 400kv grid connection search area at PEIR. It was large due to the complexities in crossing the River Ribble and included biodiversity benefit, mitigation and enhancement areas which the Project was considering. Engagement and targeted consultation has been undertaken through this process and feedback taken onboard where practicable. Operational accesses for the 400kv grid connection corridor have also need designed and included with the order limits.</p> <p>Slide 19 explains the changes to the 400kv grid connection in further detail and the changes to the River Ribble crossing. These changes are highlighted on the figure on the slide. Some operational accesses are situated outside the PEIR boundary but were the areas that targeted statutory consultation was undertaken on.</p> <p>The Project has been able to more clearly define the 400kv area and micro-siting since the substation locations have been better defined. The Project has refined the biodiversity benefit, enhancement and mitigation areas and the temporary width and permanent widths defined at 76 m and 50 m respectively. The permanent width has increased slightly from PEIR from 46 m to 50 m for both the 400Kv grid connection and the River Ribble crossing.</p> <p>The Project is seeking 150 m temporary width and 50 m permanent width for the River Ribble Crossing. As part of the design refinement for the River Ribble crossing the Project has removed the construction technique conventional tunnel from Project design envelope. However, the Project has retained both direct pipe and micro-tunnel construction techniques as options to install the 400kv grid connection cables beneath the River Ribble. There has also been refinement made for the connection into the National Grid substation as well.</p> <p>Slide 20 details the trenchless techniques to be used at the landfall and River Ribble crossing in more detail.</p> <p>The Project has committed to direct pipe at the landfall to reduce the working time on the beach and intertidal area to reduce impacts to ornithology, terrestrial ecology and beach users. Due to its length and expected technical difficulty, two potential trenchless installation techniques are proposed for the River Ribble crossing, direct pipe and micro-tunneling.</p>		
3.	<p>Mitigation, biodiversity benefit and enhancement areas (WD)</p> <p>WD - Slide 21 outlines the mitigation measures the Project has identified in relation to terrestrial ecology and ornithology.</p> <p>WD described that the Project at PEIR had large areas of search for mitigation, biodiversity benefit and enhancement areas. The requirement for the mitigation areas have been reduced through the implementation of the mitigation hierarchy. These areas will be shown in the relevant works plan and descriptions and in the Outline Ecological Management Plan which will be submitted as part of the DCO Application. Where required some of the mitigation areas will be created prior to construction commencing and will be monitored as the example for onshore ornithology on the slide shows. The use of direct pipe as mentioned previously will also help to reduce time and impact on the relevant features and this commitment has been made as a result of S42 feedback.</p>		

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	<p>Slide 22 discusses biodiversity benefit and enhancement opportunities. Biodiversity benefit has been discussed through the topic specific EWGs. The statutory requirements for biodiversity net gain (BNG) comes into effect for NSIPs in November 2025 and while the Project is not an NSIP and has no statutory requirement to undertake BNG it will be undertaking committing to delivering biodiversity benefit. The Project is looking to provide 10% net gain in areas where the Project has permanent above ground infrastructure (e.g. substations and TJBs). To calculate the required units to deliver 10% gain, Natural England’s 4.0 metric has been used. This will be presented in the Outline Onshore Biodiversity Benefit Statement submitted with the DCO Application. Enhancement opportunities are being developed by the Project. This is being explored with stakeholders and will be described in the Outline Marine Biodiversity Benefit Statement and Outline Onshore and Intertidal Enhancement Plan being submitted with the Application.</p> <p>KL - Regarding offshore, a further Project change since PEIR that has been discussed in the EWGs is the removal of the offshore substation platforms (OSPs) and Morgan Booster Station. The OSPs are still included in the Morgan and Morecambe Generations Assets DCO Applications. However, at PEIR their inclusion in the Transmission Assets was causing a double counting in EIA terms of these structures across the Generation and Transmission Assets DCO applications, and so the decision was made following S42 to remove these from the Transmission Assets DCO Application to avoid this duplication and confusion.</p>		
4.	<p>Survey Updates - (IM)</p> <p>Slide 24 lists the surveys covered in this section of the Steering group meeting.</p> <p>Slide 25 shows the offshore surveys and lists the surveys underway for the Morgan Generation Assets and those underway for the Morecambe Generation Assets. For Morgan, the Geotechnical surveys are ongoing through October 2024 within the Array Area and for Morecambe Phase 3 UXO identification, Geophysical surveys and shallow and deep Geotechnical surveys started in April 2024 and are set last until the end of August 2024.</p> <p>LoB questioned if these Geotechnical surveys will be sufficient to inform how much cable protection will be needed and/or will it be able to inform a Cable Burial Risk Assessment (CBRA) and Cable Specification and Installation Plan (CSIP) for understanding where the need for cable protection is needed and how much of it?</p> <p>IM responded to LoB to clarify that both of those documents mentioned will be included in the Application as outline documents. For the Fylde MCZ, the Project has made commitments to reduce the use of cable protection within that area. There has been a significant amount of work done in terms of our approach to cable burial and installation with refinement made to the Project parameters, post-PEIR.</p> <p>LoB queried further if required, once the documents have been reviewed, will the use of cable protection in certain areas be able to be found from these studies and from these surveys?</p>		

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	<p>IM responded that the Project is following a conservative approach in relation to cable installation and use of cable protection and has made a commitment to limits its use within the MCZ. KL noted that there was already a lot of geophysical and geotechnical survey data and information collected within the MCZ which is being incorporated into the Outline CBRA and Outline CSIP to be included in the DCO Application later this year.</p> <p>Slide 26 summarises the Onshore Ecology survey area, noting that surveys have been ongoing since mid-2022 and were first undertaken using the EIA Scoping boundary which is significantly larger than the Application Order Limits. These surveys completed outside the Application boundary may still provide valuable ecological data and context for assessing the value of and impacts on Important Ecological Features.</p> <p>Slide 27 lists the Onshore Ecology survey update and is talked through by IM. Adding that the surveys completed in the summer of 2023 were not included at PEIR but will be included in the Environmental Statement. An intensive survey period was also started in April 2024 to collect as much species-specific data in relation to terrestrial ecology and the details of this are found on the slide. The survey status has increased significantly from PEIR to bring the standard for the Project up to the required level for Application.</p> <p>Slide 28 explains the update on the Archaeological surveys and geophysical, trial trenching and land use. IM explained that soil sampling has been undertaken in areas of peaty soils and where permanent above ground land infrastructure could be present. Phase 1 trial trenching has been completed and phase 2 is currently being agreed with stakeholders. The Project is seeking to do infiltration testing at the substations. Geophysical surveys have been completed within the Indicative Order Limits.</p> <p>CP – What is the extent for which you have consultation ongoing with county level archaeological advice services to inform that programme?</p> <p>IM – The county archaeologists have been involved in the development of archaeological trial trenching and approval of the Phase 1 trenching plan and similarly for the Phase 2 plan. This will continue as the Project undertakes further trenching work.</p>		
5.	<p>Commitments Register (WD)</p> <p>Slide 30 details the Commitment Register and is talked through by WD, who explained that a draft was published at PIER and updates had been made post-PEIR, with many in response to S42 feedback. Some commitments (CoT) that related to the OSPs and surface piercing infrastructure are no longer required, so have been removed. Further updates are listed on the slide. WD highlighted that each ES chapter will contain a table of the relevant measures to be adopted.</p> <p>Slide 31 shows a screenshot of the Commitments Register, that will be submitted with the application.</p> <p>Slide 32 shows the change log table which will be provided, in addition to the table shown in slide 31.</p>	-	-

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>Slide 33 shows a table with some of the new post-PEIR commitments that have been added, their description, CoT numbers and explanations are on the slide. These examples were talked through, and further information can be found on the slide.</p>		
6.	<p>Evidence Plan Process (EPP) (KL)</p> <p>Slide 35 – shows the evidence plan process as a whole and illustrates the steering group and onshore and offshore EWGs. Some topics such as Shipping and Navigation and Commercial Fisheries have their own engagement processes and are therefore not listed on the slide.</p> <p>Slide 36 shows the recap of the previous two Steering Groups and the discussion focus of those meetings. The Steering Group meeting today is to explain and present the project refinements since PEIR.</p> <p>Slide 37 provides a table detailing the EWG meetings. The slide lists the meetings/topics and whether they there had been meetings held since PEIR. Also, if another meeting will be held prior to submission of the DCO Application, this is shown on the slide. There are a few EWGs which will continue between now and Application. Some are booked in the diary and others are in the process of being organised. Shipping and Navigation will not be one which undertakes further consultation prior to Application as the Project believes enough consultation has been undertaken ready for submission. The Archaeological Heritage Engagement Forum will undertake a further meeting and there is a plan to undertake a further EWG for the Benthic ecology, fish and shellfish ecology and physical processes EWG (though it will only focus on the MCZ assessment). The further topics that are aiming to have another meeting ahead of submission are listed on the slide. These additional meetings are to provide an update on where the Project is at in terms of its refinements and the implications of these on the various topics.</p> <p>LoB – The EWGs that you are proposing in August, are they going to change the Application as submitted?</p> <p>KL – The purpose of many of the EWGs is to give stakeholders a heads up on what to expect in the Application rather than looking for feedback. The Project has engaged with stakeholders and have incorporated the feedback through the EPP process. These meetings are to present the stakeholders with what will be in the Application to show where the Project is sitting in regard to the commitments and conclusions.</p> <p>LoB outlined in terms of Natural England’s involvement in these meetings, Natural England is at a pinch point of 9 Applications so the ability to be involved may be limited. Natural England will review EWG minutes but if the meetings won’t change the Application, it may be that NE wouldn’t have the capacity to bring specialists into those meetings.</p> <p>AS clarified that should be fine, if we could get Natural England’s involvement for the MCZ and onshore and intertidal ecology/ornithology meetings, it would be useful as they are important topics and will feed back into the assessment. If those could be prioritised, that would be appreciated.</p> <p>LoB asked whether those meetings will feed back into the assessment?</p> <p>AS clarified that yes for those topics that will be the case. Aside from the MCZ assessment, the Project is not expecting significant discussion points</p>	-	-

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>but in terms of the onshore ecology and ornithology, continued dialogue with stakeholders would be useful.</p> <p>KL went on to explain that for the EWGs that we are looking to take place prior to submission, we have picked through and thought carefully on what the purpose for the engagement is. The Project is aware stakeholders are time constrained and so the Project only wants to undertake EWGs that are on important issues.</p> <p>LoB responded to say they are unsure of how much the Project has seen on the recent rule 6 letters and engagement on other projects but Natural England is not engaging in statements of common ground prior to examination. Should Applicants put in a statement of common ground on what they think the position is they can do so, however Natural England will not be engaging until the final deadline of examination. Natural England has made this clear to PINS that NEs relevant written representation will be a statement which includes principal areas of disagreement, a written issues log submitted at deadline one and ongoing updates through that process.</p> <p>AS queried to LoB what was the other part that was mentioned aside from the written issues log?</p> <p>LoB clarified for AS it was the principal areas of disagreement which is included in our relevant written representation letter.</p> <p>SN stated that PINS is aware of this approach by NE. On the schedule of EWG meetings, with the submission date in mind, SN queried will these dates allow enough time to incorporate feedback into the Application?</p> <p>AS outlined that it is mainly the onshore topics which the Project is looking for engagement on and have been working with stakeholders to develop it as the Project is ongoing. The Project feels it is possible to take the feedback into Application.</p> <p>SN queried whether the Project was expecting general approval on the points to be raised?</p> <p>AS explained that the Project has already made some positive changes, such those refinements at the landfall discussed earlier.</p> <p>AnS questioned that there has been reference to engagement with the public, local planning authorities and Parish Councils. Are those meetings in place, will people be available and will points raised have enough time to be considered?</p> <p>AS confirmed that the EWGs are more focussed on the development of the Project, commitments, and assessment. In terms of the wider engagement the Project have today's Steering Group, and are planning a local planning authority roadshow in the next few weeks to give updates to keep stakeholders informed. The Project also intends to send out a Project newsletter more widely.</p> <p>AnS asked for clarification around whether the Project is looking to take information from the EWGs to inform the development of the Project but not looking to take any feedback from the local planning authorities or Parish Councils but instead telling them what is happening rather than listen to what views they may have on the proposal and queried whether this is this an oversimplified view?</p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>AS discussed that the local planning authorities are part of the consultation process and members of the EWGs, and the Project is interested in hearing their feedback via that process. The separate element is to update the public on the key changes made by the Project since PEIR. That update, via the Project newsletter, is not a statutory consultation step, as that was the function of PEIR. It is an opportunity for the Project to update the wider public about key changes the Project has made since the statutory consultation on the PEIR. The Project is looking to brief local planning authorities on the content of the newsletter ahead of its publication.</p> <p>AnS outlined as part of Fylde Council’s representation, it was noted that the consultation was done too early as much of the evolution of the cable routing and substation locations weren’t defined as it has been explained today. They indicated they were wary on not having further consultation on the routeing and substation locations before it is submitted.</p> <p>AS understood the concerns with the refinements from PEIR where consultation was undertaken, and ongoing engagement has taken place, including landowners on those changes. The Project would encourage that feedback through the EWGs or individual meetings can be set up if required.</p> <p>KL also added or provide feedback through this Steering Group process.</p> <p>AnS stated they were happy to go along with the meeting that was discussed to be put in the diary and that they were looking to understand the information and feedback being sought from the public and local planning authorities and Parish Councils and confirmed that had been answered by the project team.</p>		
7.	<p>Next Steps (IM)</p> <p>Slide 39 explains the next steps for the project. The continuation of public and stakeholder engagement through the aforementioned meetings and other engagement strategies. Submission is currently scheduled for late-Q3.</p> <p>SN questioned is there would be a meeting with the PINS before submission?</p> <p>WD clarified that the Project is in the process of organising its next meeting with PINS ahead of submission, with dates supplied by PINS for middle to end August.</p>	-	-
8.	<p>Questions and feedback and next steps (KL)</p> <p>KL – Meeting minutes will be produced and circulated.</p> <p>KB – The commitments register looks clear and will be helpful when providing our relevant representations. Please note for the EWGs and feedback Natural England don’t have as much resourcing so if there is anyway of combing the EWGs to better confirm attendance, that would be helpful</p> <p>KL – Is that for ecology and onshore and intertidal ornithology?</p> <p>KB – Yes, it is. If slide packs could be sent around in plenty of time prior to the meetings would be helpful.</p>	-	-

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	KL - That's something we can do. Thank you to everyone for attending. Meeting closed		
Summary of Actions			
A1.	Action: Project to provide update on offshore ornithology post meeting.	Project	-

Appendix B: Evidence Plan Benthic Ecology, Fish and Shellfish And Physical Processes EWG

B.1 Benthic ecology, Fish and shellfish and Physical processes EWG meeting 1

B.1.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project
External (Restricted)

MOM Number : Transmission Assets PP, BE, FSF EWG01 **REV. No.** : 01
MOM Subject : Transmission Assets Physical Processes, Benthic Ecology and Fish and Shellfish Ecology Expert Working Group 1

MINUTES OF MEETING

MEETING DATE : 30 March 2023
MEETING LOCATION : Microsoft Teams
RECORDED BY : [REDACTED] (RPS)
ISSUED BY : [REDACTED] (RPS)

Attendees:

- [REDACTED] – bp (MP)
- [REDACTED] – bp (SR)
- [REDACTED] – Flotation Energy (NJ)
- [REDACTED] – Flotation Energy (TS)
- [REDACTED] – Flotation Energy (KC)
- [REDACTED] – RPS (KL)
- [REDACTED] – RPS (KR)
- [REDACTED] – RPS (AP)
- [REDACTED] – RPS (NS)
- [REDACTED] – RPS (LS)
- [REDACTED] – MMO (AE)
- [REDACTED] – MMO (AF)
- [REDACTED] – Cefas (RB)
- [REDACTED] – Cefas (PM)
- [REDACTED] – Cefas (CR)
- [REDACTED] – Environment Agency (JK)
- [REDACTED] – Natural England (EW)
- [REDACTED] – Natural England (LB)

Apologies

- [REDACTED] – Natural England (KB)
- Cefas Underwater Noise and Fish and Shellfish Advisors
- The Wildlife Trust
- IFCA

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
1.	<p><u>Project Overview (presented by MP)</u></p> <p>The Morgan Offshore Wind farm in the Irish Sea is being developed by bp and EnBW, and the Morecambe Offshore Wind farm is being developed by Cobra and Flotation. The Generation Assets for these projects will be developed and consented separately to their Transmission Assets. The National Grid Holistic Network Design Review concluded that both projects would have a coordinated grid connection location at Penwortham, which results in three DCO applications: Morgan Generation Assets, Morecambe Generation Assets and Morecambe and Morgan Joint Transmission Assets. This meeting is to discuss the Morecambe and Morgan Transmission Assets project.</p>		

	<p>In relation to the Transmission Assets, the Applicants sought a direction from the Secretary of State under section 35 of the Planning Act to confirm that they should be treated as development for which development consent is required under the Planning Act 2008, as amended. A direction was given on 4 October 2022 and the Applicants are now pursuing a single application for development consent for the Transmission Assets for both wind farms.</p>		
<p>2.</p>	<p><u>Key milestones (presented by MP)</u></p> <p>Mona, Morgan Generation and Morecambe Generation Offshore Windfarm PEIRs will be submitted April 2023. The DCO applications for these projects are planned to be submitted Q1 2024.</p> <p>The Transmission Assets PEIR is planned to be submitted Q3 2023 and the application for development consent is currently anticipated to be submitted Q3 2024.</p> <p>LB - Note of caution around the upcoming PEIRs which will have almost fully overlapping consultation periods. Natural England are aware that the Morgan Generation and Mona PEIRs will have an extended consultation which gives some leeway. Please be aware that this period will be a difficult time for consultation with anything other than the PEIRs.</p> <p>KL – Noted, we will bear this in mind for upcoming EWG engagement and Steering Groups.</p> <p>KC – The Morecambe Generation PEIR Chapters will be provided to stakeholders as soon as possible (ahead of 19th April consultation start date for Morecambe)</p> <p>LB – Noted. It would be useful to see them ahead of time.</p> <p>MP – Statutory consultation for the Morgan Generation and Mona PEIRs runs from 19th April to 4th June and has been extended from 42 to 47 days. The Morecambe Generation PEIR also follows these dates. We are also undertaking non-statutory consultation on the Transmission Assets at the same time to give more opportunity for comment on this project.</p>		
<p>3.</p>	<p><u>Evidence Plan Process (EPP) (presented by KL)</u></p> <p>KL provided an overview of the EPP. The proposed approach has been developed following the Planning Inspectorate and Defra guidance and recent guidelines produced by Natural England. The EP is a mechanism to agree upfront what information the Applicants need to supply to the Planning Inspectorate as the Examining Authority as part of an application.</p> <p>The EP process has historically been focused on the Habitats Regulations Assessment (HRA) however in line with recent best practice, the Applicants propose to extend this to include the EIA processes, including both ecology topics and non-ecology topics, as set out in the slides later in the presentation.</p>		

	<p>This EP process for the Transmission Assets is separate to the process for the Morgan Generation and Morecambe Generation Assets.</p>		
4.	<p><u>Roles and responsibilities (presented by KL)</u></p> <p>The EP process is led by the Applicants. The responsibility for updating the EP is with the Applicants, with feedback from the relevant consultees.</p> <p>KL will act as chair for the EP process and will chair the steering group meetings and EWGs, as relevant. KR will act as secretariat. KL and KR are to be included on all correspondence.</p> <p>Roles and responsibilities are set out in the slide pack.</p> <p>The Applicants have put together a broad plan for engagement with the steering group and EWGs, noting that this is subject to progress based on how the project progress.</p>		
5.	<p><u>Overview of Evidence Plan Steering Group and EWGs (presented by KL)</u></p> <p>KL presented the Steering Group participants and the EWG structure. The next Steering Group meeting will discuss cable routing. The aim of the EWGs is to discuss key elements of the EIA and HRA during the pre-application stages.</p> <p>KL presented the areas we are seeking agreement on, the broad timescale for the next EWGs and what the focus of these EWGs will be.</p> <p>KL presented the broad process and timescales for progressing to agreements, which aligns with how we have run the Morgan Generation and Mona EPP.</p> <p>AE – Some Cefas advisory teams aren't available for this meeting. Would it be possible to include a memo note for these topics?</p> <p>KL – The meeting minutes will cover anything additional to the slides so reviewing minutes alongside the slides will help.</p> <p>AE – Acknowledged, with thanks.</p> <p>KL noted that the red line boundary presented in this EWG reflects the red line boundary presented in the Transmission Assets Scoping Report. There are plans to discuss refinement of the boundary with the Steering Group. A more refined route is not presented in these slides but will be included in the Transmission Assets PEIR, which we will present at a later meeting.</p>		
6.	<p><u>Physical Processes (presented by NS)</u></p> <p>Physical processes encompass tidal elevations, waves, currents, bathymetry, seabed sediments, suspended sediments and sediment transport.</p> <p>The physical processes study area is defined by a spring tidal excursion around the Transmission Assets Scoping Boundary and</p>		

	<p>amended around the coastline to account for residual currents and sediment migration along the coastline.</p> <p><u>Baseline:</u> We have a good amount of information for tidal flows. These have been modelled under the context of Morgan Generation and a lot of data sits behind these models. There are predominantly east-west tidal flows across the domain and flood tides are stronger than ebb tides. We have a good amount of information for wave climates also, which varies greatly between inshore and offshore. The largest and most frequent waves come from the southwest.</p> <p>Regarding sediment transport, the figure on the left (slide 22) shows residual current over spring tide. The residual current will bring material into the area from the west and around the Isle of Man from the north, which creates a sediment sink in the area. Currents feed into sediment transport regime. There are coarse substrates where the currents are stronger and muddy areas where the currents are weaker. EMODnet gives a broad overview of sediment classification, but we have a great deal more detailed information from survey data which is available to inform our study. This is set out in the Scoping Report.</p> <p><u>Approach to Impact Assessment:</u> The following potential impacts to physical features will be assessed in the PEIR: Potential increases in suspended sediments due to construction, operation and maintenance and/or decommissioning related activities, potential impacts on the tidal regime due to presence of infrastructure, potential impacts on the wave regime due to presence of infrastructure and potential impacts on sediment transport and sediment transport pathways. Designated sites are shown for those sites which are related to physical processes.</p> <p>We will assess all potential activities and how they may impact the identified receptors, by using the numerical modelling previously undertaken for Morgan Generation and Mona projects, and also the Rhiannon offshore windfarm modelling for wider context (undertaken in 2014). We will also draw on existing EIAs in the area and additional literature (a sample of which is presented in the slide pack).</p> <p><u>Approach to Cumulative Effects Assessment (CEA):</u> The CEA study area is two spring tidal excursions and extended further to consider the stronger tidal currents to the west. We will draw up a long list of projects which fall within this area and screen this in or out for the CEA.</p> <p>NS noted as a general comment, we haven't screened many parameters out of the EIA, so this may make the assessment and review more straight forward at this point in time.</p>		
7.	<p><u>Benthic (presented by AP)</u></p> <p>AP presented the surveys undertaken to date and the preliminary results of these surveys. The full results will be in the Benthic Subtidal and Intertidal Ecology Technical Report for the Morgan and Morecambe Offshore Wind Farms Transmission Assets PEIR.</p>		

Baseline: Three survey campaigns have been undertaken to date; the 2021 benthic survey for Morgan Generation Array, the 2021 benthic survey for Morecambe Generation Array and the 2022 Zol for the Morgan Array and the offshore cable corridor for the Transmission Assets, and Phase 1 intertidal survey to characterise the landfall for the Transmission Assets. These benthic surveys comprised drop-down video and grab samples. The samples and video collected from these surveys has been used in benthic infaunal and epifaunal analysis, sediment characterisation, sediment chemistry analysis and eDNA analysis; all of which will be reported in the technical report.

The 2022 site-specific subtidal surveys campaign for the Transmission Assets included depth data collected by SSS and MBES, and grab sampling undertaken to characterise the sediment at 77 stations. Analysis shows coarser sediments further offshore with proportions of fine sand and mud increasing closer to shore. According to modified Folk Classification, stations ranged from muddy sandy gravel to sandy mud. Sand was generally the dominant fraction across stations, with sediments in the west showing gravelly sands, sands and gravelly muddy sand, and sediments in the east (near to shore) grading to sands and muddy sands.

AP presented the preliminary results for sediment chemistry. This showed that contamination levels are generally shown to be low, with a few exceptions. With the exception of arsenic and nickel, all metal concentrations were below the respective CEFAS Action Level 1 values. Increased arsenic levels were found mostly around Morgan Array, as identified in the Morgan Array survey, and mercury increased nearshore, as expected from the nearshore area being located near historically highly industrialised areas. Polychlorinated biphenyls (PCBs) were typically recorded below limit of detection (LOD) across the survey areas and concentrations which were above LOD did not exceed CEFAS Action Level 1 values. Levels of all contaminants were below AL2 and PEL at all stations.

AP presented the preliminary results for infaunal biotopes. There is a reasonably clear change of community towards shore, with communities becoming more dominated by organisms more associated with muddy sediments approaching the landfall. A full write up of this will be included in the Benthic Subtidal and Intertidal Ecology Technical Report of the PEIR. Generally, biotopes identified from the 2022 surveys of the Transmission Assets align with those biotopes recorded in the surveys within the Morgan and Morecambe array areas in 2021.

AP presented the preliminary results of the seabed overview. Preliminary analysis of the camera investigations has been undertaken to date. The visible seabed faunal community observed across the areas of mobile sandy sediment was typically sparse. There was an increase in observed taxa in areas of gravel and cobbles. Visible epifauna were dominated by various species of Echinodermata, with Mollusca and Annelida less common but still broadly present throughout the study area. *Ophiura* sp. was the most abundant epifaunal taxa and was associated with every sediment type. Across the survey area, the community

	<p>composition observed from the DDV footage was relatively similar between all identified sediment types, with a broad distribution of taxa including Serpulidae, <i>Alcyonium digitatum</i> and Pectinidae.</p> <p>Within the imagery there were isolated observations of the bivalve <i>Modiolus modiolous</i>, listed on the OSPAR (2008) list of threatened and/or declining habitats, as well as isolated observations of <i>Arctica islandica</i> shells and siphons, which is listed on the OSPAR (2008) list of threatened and/or declining species. Other than those habitats and species detailed, there was no further evidence from seabed imagery of any habitats of species of conservation importance within the Morgan and Morecambe survey areas. This is based on the preliminary results of the camera investigations, though full results are pending and will be presented in full in the Benthic Ecology Technical Report of the PEIR (noting we are not expecting anything significantly different from that presented here).</p> <p>AP presented the preliminary results for the intertidal survey biotopes. There were expansive sloping exposed sandflats, with a breaker zone on the lower shore, the mid-shore dominated by at least three distinct wide mobile sandbars composed of shell fragments and gravels, and the upper shore with relative distinct zonation of Talitrid amphipods and Polychaetes in fine sand. The lower shore was a mosaic of <i>Macoma balthica</i> and <i>Arenicola marina</i> in littoral muddy sand, <i>Echinocardium cordatum</i> and <i>Ensis</i> spp. in lower shore and shallow sublittoral slightly muddy fine sand, and <i>Lanice conchilega</i> in littoral sand. All biotopes included as having conservation importance as Annex I habitats, in the Water Framework Directive, and in the UK BAP, with four also being listed under the OSPAR agreement.</p> <p>The desktop data sources used to determine the baseline considers stakeholder feedback and lessons learned from other recent DCO applications, surveys for other Irish Sea OWFs, online mapping data sources and publicly available EIAs.</p> <p><u>Approach to Impact Assessment:</u> AP presented the impacts scoped into and out of the assessment. This mirrors the impacts which are being assessed for the Morgan Generation project, and the impacts scoped out in line with the Transmission Assets Scoping Report; there was agreement with this through the Scoping Opinion.</p> <p>AP presented the impact assessment methodology: To identify the Important Ecological Features (IEFs), define the magnitude of the impact (based on the maximum design scenario (MDS)) and to define the sensitivity of receptors (considering vulnerability, recoverability and value using best available scientific information). The conclusion of significance in EIA terms is determined based on the assessment matrix (provided in the slide pack). The MDS is bespoke to each receptor and impact and will be outlined in full in the chapter.</p>		
8.	<p><u>Fylde MCZ (presented by AP)</u></p> <p>The current cable route runs directly through the middle of the Fylde MCZ, but avoids Shell Flat and Lune Deep SAC to the north,</p>		

	<p>taking into account a range of other engineering considerations (to be discussed at the next Steering Group meeting).</p> <p>Grab sampling was undertaken within the MCZ to provide a robust characterisation for the purposes of the MCZ Assessment. To prevent excess damage to the designated site while giving the highest resolution characterisation of the area, five additional DDV only sites were included throughout the MCZ during the 2022 survey. The biotopes shown within the MCZ, align with the biotopes from the wider survey area.</p> <p>Features of the Fylde MCZ will be included as IEFs, and assessed accordingly, in the benthic chapter of the PEIR. A full standalone MCZ Assessment Report will be produced for the PEIR and will build on the MCZ Screening undertaken at Scoping stage.</p>		
9.	<p><u>Fish and Shellfish (presented by LS)</u></p> <p>LS presented the site-specific survey data. No surveys were undertaken specifically for fish and shellfish, but the benthic and geophysical surveys and physical processes modelling provide data in terms of habitat information for fish and shellfish. Information presented is preliminary but full analysis of survey data will be included in the PEIR. Additional results from Morgan and Morecambe 2021 Array surveys will be used.</p> <p><u>Baseline:</u> Sandeel habitat and Herring spawning habitat suitability derived from the 2022 benthic survey PSA data (as presented by AP above). Almost 50% of sampling locations were considered unsuitable for sandeel habitation, with low numbers of stations meeting the criteria for prime and sub-prime habitat. All stations, bar two, are considered unsuitable for herring spawning due to their sediment composition, with either too high a mud content, or too little gravel.</p> <p>Desktop data sources that will be used to inform the baseline are included in the slides; from Irish OWF surveys, Cefas data, ICES data, JNCC data, AFBI data, EUSeaMap data and academic papers. If the EWG members perceive any key data sources to be missing (e.g. from slides or the more detailed list in the Scoping report), please do flag these and we can include within the PEIR.</p> <p>LS presented summary of spawning and nursery grounds within the study area, impacts to be scoped into and out of the assessment and the impact assessment methodology (as per slide pack, slides 46-48).</p> <p>Underwater Sound assessment – Noise modelling will be undertaken by Seiche to look at construction impacts from monopile and pin pile noise. Injury ranges based on ASA criteria looking at SPLpk and SELcum. SPL peak ranges presented in slide pack are examples only; these are typically presented as first strikes and the maximum hammer energies (so worst possible injury ranges). These are expected to be of the same order as other offshore wind farms. For SELcum, we look at the ramp up procedure as part of this. We are assuming both fleeing and static fish receptors, as per the Scoping Opinion.</p>	EWG members to consider if any key data sources are missing from the slides, please notify SR and KL and we will include them in the PEIR.	03/05/2023

	<p>KL added – in terms of the ranges presented, the modelling is being undertaken by Seiche so these ranges are indicative. Site specific modelling for the Transmission Assets has not been undertaken yet, but are expected to be of a similar range.</p> <p>Underwater sound sensitivity is broken down into mortality and recoverable injury, TTS and behavioural impacts. We will bring together specific studies to bring context to the qualitative behavioural response ranges proposed by Popper et al. (2014). The focus of the behavioural impacts is on spawning habitats, and for potential barrier effects on diadromous fish during migration.</p> <p>KL asked if anyone had any comments or queries on the information presented.</p> <p>No questions</p>		
<p>10.</p>	<p><u>Discussion and next steps (presented by KL)</u></p> <p>Minutes and agreement log will be circulated 2 weeks following meeting. We will be seeking agreement with the approach to baseline characterisation, assessment and scoping of impacts for the three topics covered in this EWG.</p> <p>The next EWG will be in the summer, once impact assessment has been worked through and we have some initial outputs.</p> <p>LB – Part of the Transmission Assets route involves a crossing of the Ribble Estuary and there are some tidal brackish habitats in that area next to the Penwortham substation. Has that been scoped out because the intent is to go through HDD tunnels under the estuary, and therefore there shouldn't be any interaction with the channel at all? Is there any contingency around that where you might think further down the line that we should have considered these habitats in the impact assessment?</p> <p>KL – the intention is to cross the estuary with trenchless techniques, so we are intending to avoid impacts on the intertidal and subtidal habitats in the Ribble Estuary. We would not be looking to include any open cut trench approach or similar methods at this time that would result in direct impacts on the Ribble Estuary at the crossing point in the Project Design Envelope (PDE).</p> <p>LB – acknowledged, if that is all that is scoped into the PDE then that's all that the assessment would need to cover.</p> <p>KL – Work is ongoing to ensure the PDE is realistic, and we will assess what the project engineers confirm the project to include. If they are confident that trenching through the river will not be required and trenchless techniques only are required, then we would not assess it. We can put this question to the engineers to make sure they are fully comfortable with just having trenchless techniques as an option, and not having alternative installation techniques as an option.</p> <p>LB – Assurance that trenching can be 100% ruled out would be useful otherwise it would need to be scoped in.</p>	<p>EWG members to return meeting minutes and agreement logs 2 weeks following circulation.</p>	<p>03/05/2023</p>

	<p><u>MEETING CLOSE</u></p> <p>PM - Post meeting note - There is a monitoring report that was published this month for the West Of Walney MCZ http://nepubprod.appspot.com/publication/4814912615088128 and the raw data is on the OneBenthic portal.</p>		
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B.1.1.1 Response from the MMO regarding the meeting minutes



[REDACTED]
Morecambe Offshore Windfarm Ltd
12 Alva Street
Edinburgh
EH24 4QG

Our reference: DCO/2022/00010

By email only

22 May 2023

Dear [REDACTED],

Minutes of Morecambe Offshore Windfarm: Physical Processes, Benthic Ecology, Fish and Shellfish Ecology EWG Meeting

The Marine Management Organisation (MMO) received the above meeting minutes for review on 20 April 2023. The MMO has reviewed the report alongside our Northwest MMO Coastal Colleagues and scientific advisors Cefas (Centre for Environment, Fisheries and Aquaculture Science). The MMO has the following comments to make.

1. Fish and Fisheries

- 1.1. There was not a discussion in the meeting of the timing on the spawning seasons for the marine fish species identified within the transmission assets area, and this is something which should be discussed in the PEIR.
- 1.2. Temporary habitat loss/disturbance and long-term habitat loss have been scoped in as potential impacts of the project works. Given the lifespan of the project (expected to be 30+ years), and that it cannot be guaranteed that alterations made to the habitat will be reversed following the removal project infrastructure, we consider that alterations to the habitat should be considered permanent rather than temporary.
- 1.3. For the purpose of modelling behavioural responses in herring at their spawning ground, the MMO recommend the inclusion of a 135 decibel (dB) threshold based on startle responses observed in sprat by *Hawkins et al.* (2014), and it would be useful if the 135 dB noise contour was presented in mapped form (i.e., as an additional contour to the 186dB, 203dB and 207dB, as per *Popper et al.*, 2014).
- 1.4. The meeting minutes state that both fleeing and static fish receptors are being assumed for the underwater noise assessment. Fish receptors should be modelled as stationary rather than fleeing receptors for the following reasons:
 - a) Fish will respond to loud noise and vibration, through observed reactions including schooling more closely; moving to the bottom of the water column; swimming away, and burying in substrate (*Popper et al.*, 2014). This is not the same as fleeing, which would require a fish to flee directly away from the source



over the distance shown in the modelling. The MMO are not aware of scientific or empirical evidence to support the assumption that fish will flee in this manner. Therefore, it is most appropriate to assume a stationary receptor.

- b) The assumption that a fish will flee from the source of noise is overly simplistic as it overlooks factors such as fish size and mobility, biological drivers, as well as foraging, reproductive or migratory behaviours which may cause an animal to remain/return to the area of impact. This is of particular relevance to herring, as they are benthic spawners which spawn in specific locations with specific substrate composition.
- c) Eggs and larvae have little to no mobility, which makes them vulnerable to trauma from exposure to noise and developmental effects. Accordingly, they should also be assessed and modelled as a stationary receptor, as per the *Popper et al.*, (2014) guidelines.

2. Underwater Noise

- 2.1. The slide pack and minutes refer to appropriate noise exposure criteria for fish, as per *Popper et al.* (2014). The MMO would expect to see mortality and recoverable injury, Temporary Threshold Shift and behavioural impacts considered (which have all been identified).
- 2.2. The *Popper et al.* (2014) criteria do not provide quantitative thresholds for behavioural responses to noise. Therefore, further discussions would be required on the approach to the behavioural assessment, especially if spawning herring are a concern.

Conclusion

The MMO agrees that the contents of the Physical Processes, Benthic Ecology, Fish and Shellfish Ecology EWG Meeting 1 Minutes are an accurate reflection of the meeting. However, please see above comments on the content that was discussed during the EWG.

Your feedback

We are committed to providing excellent customer service and continually improving our standards and we would be delighted to know what you thought of the service you have received from us. Please help us by taking a few minutes to complete the following short survey (<https://www.surveymonkey.com/r/MMOMLcustomer>).

If you require any further information please do not hesitate to contact me using the details provided below.

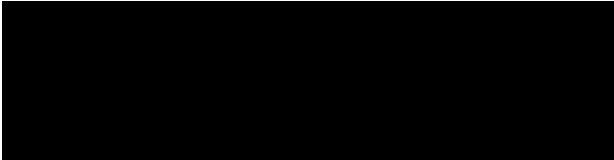


Yours Sincerely,



Marine Licensing Case Officer

D
E



References

Hawkins, A.D. and Popper, A.N., 2014. Assessing the impacts of underwater sounds on fishes and other forms of marine life. *Acoustics Today*, 10(2), pp.30-41.

Popper, A.N., Hawkins, A.D., Fay, R.R., Mann, D.A., Bartol, S., Carlson, T.J., Coombs, S., Ellison, W.T., Gentry, R.L., Halvorsen, M.B. and Løkkeborg, S., 2014. *Sound exposure guidelines* (pp. 33-51). Springer International Publishing.



B.1.1.2 Response from the Natural England regarding the meeting minutes

Date: 03 May 2023
Our ref: DAS/UDS A000566 430012
Your ref: Morgan and Morecambe Transmission Assets BE, FSF and PP
EWG01



██████████
RPS/ Energy
Imagination House
Station Road,
Chepstow,
Monmouthshire
NP16 5PB

Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ
██████████

BY EMAIL ONLY

Dear ██████████

Discretionary Advice Service (Charged Advice): UDS A000566

Development proposal: Morgan and Morecambe Offshore Windfarms: Transmission Assets

Consultation: Morgan and Morecambe Transmission Assets BE, FSF and PP EWG01

This advice is being provided as part of Natural England's Discretionary Advice Service in accordance with the Quotation and Agreement dated 17th May 2021 to BP Alternative Energy Investments Limited.

The following advice forms Natural England's response to the minutes for the Benthic Ecology, Fish and Shellfish, and Physical Processes EWG01 which was attended on 30th March 2023.

Natural England were asked to provide comments on the following:

- 1) Agreement on approach to baseline characterisation
- 2) Agreement on approach to assessment – physical processes
- 3) Agreement on approach to assessment – benthic ecology
- 4) Agreement on approach to assessment – fish and shellfish ecology (particularly underwater noise)
- 5) Agreement on scoping of impacts

Detailed comments

1) Agreement on approach to baseline characterisation

Natural England have set up a SharePoint Online (SPOL) site to share Natural England's advice on the environmental considerations and use of data and evidence to support offshore wind and cable projects in English waters. These should be considered when developing the baseline characterisation and designing future surveys. Advice provided on this site includes Natural England and Joint Nature Conservation Committee (JNCC)'s shared advice on 'Nature conservation considerations and environmental best practice for subsea cables in English inshore and UK offshore waters.'

The outputs of Natural England's project 'Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards' are also provided. This project, produced in collaboration with DEFRA, the following reports are currently available;

- Phase I: Expectations for pre-application baseline data for designated nature conservation

- and landscape receptors to support offshore wind applications.
- Phase II: Expectations for pre-application engagement and best practice guidance for the evidence plan process.
- Phase III: Expectations for data analysis and presentation at examination for offshore wind applications.

You can access the SPOL site from the following link:

[Environmental considerations for offshore wind and cable projects - Home \(sharepoint.com\)](#)

Due to how SharePoint Online works, people outside of Defra will need to request access to the site before being able to view the advice documents, so there could be a slight delay for external stakeholders to access the site.

In addition lessons learnt from previous offshore windfarm constructions and advice provided in the Morgan and Mona Generation EWGs should be taken into account where applicable. For example the Natural England report (2018) Natural England Offshore wind cabling: ten years' experience and recommendations available from: EN010080-001240-Natural England - Offshore Cabling paper July 2018.pdf (planninginspectorate.gov.uk). Also, the Natural England and JNCC report (2019) on key sensitivities of habitats and Marine Protected Areas in English Waters to offshore windfarm cabling within Proposed Round 4 leasing areas, available from:

<https://hub.jncc.gov.uk/assets/3c9f030c-5fa0-4ee4-9868-1debedb4b47f> Please note that this publication is about to be revised, Natural England will forward the updated version when available.

Natural England broadly agrees to the approach to baseline characterisation as presented at the EWG meeting on 30th March 2023.

2) Agreement on approach to assessment – physical processes

Natural England broadly agrees to the approach to assessment for physical processes as presented at the EWG meeting on 30th March 2023.

3) Agreement on approach to assessment – benthic ecology

Natural England broadly agrees to the approach to assessment for benthic ecology as presented at the EWG meeting on 30th March 2023..

4) Agreement on approach to assessment – fish and shellfish ecology (particularly underwater noise)

Natural England broadly agrees to the approach to assessment for fish and shellfish ecology as presented at the EWG meeting on 30th March 2023.

5) Agreement on scoping of impacts

Natural England broadly agrees to the scoping of impacts as presented at the EWG meeting on 30th March 2023.

For clarification of any points in this letter, please contact me using the details provided below.

Yours sincerely,

██████████
Marine and Coastal Lead Adviser
Coast and Marine Team
Cheshire to Lancashire Area Team
██████████



B.2 Benthic ecology, Fish and shellfish and Physical processes EWG meeting 2

B.2.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project
External (Restricted)

MOM Number : Transmission Assets PP, BE, FSF EWG02 **REV. No.** : 01 Draft
MOM Subject : Transmission Assets Physical Processes, Benthic Ecology and Fish and Shellfish Ecology Expert Working Group 2

MINUTES OF MEETING

MEETING DATE : 27 July 2023
MEETING LOCATION : Microsoft Teams
RECORDED BY : ██████████ (RPS)
ISSUED BY : ██████████ (RPS)

Attendees:

- ██████████ – bp (HK)
- ██████████ – bp (GV)
- ██████████ – Flotation Energy (NJ)
- ██████████ – Flotation Energy (TS)
- ██████████ – Flotation Energy (KC)
- ██████████ – Flotation Energy (IM)
- ██████████ – Flotation Energy (HR)
- ██████████ – RPS (KR)
- ██████████ – RPS (AP)
- ██████████ – RPS (LS)
- ██████████ – RPS (NS)
- ██████████ – RPS – (BM)
- ██████████ – MMO (AE)
- ██████████ – MMO (AF)
- ██████████ – Cefas (RB)
- ██████████ – Cefas (RF)
- ██████████ – Cefas (SB)
- ██████████ – Cefas (GE)
- ██████████ – Cefas (CH)
- ██████████ – Cefas (PW)
- ██████████ – Cefas (PM)
- ██████████ – Cefas (CR)
- ██████████ – Environment Agency (JK)
- ██████████ – Environment Agency (ET)
- ██████████ – Natural England (EW)
- ██████████ – Natural England (KB)
- ██████████ – Natural England (KC)
- ██████████ – Cumbria Wildlife Trust (BC)

Apologies

- ██████████ – RPS (KL)
- ██████████ – bp (MP)
- ██████████ – bp (SR)
- ██████████ – Natural England (LB)
- The Wildlife Trust
- IFCA

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
1.	<u>Introductions</u> Introductions and Agenda presented by KR (slides 1-2)		
2.	<u>Project Update (presented by HK)</u>		

	<p>HK – Slide 3 and 4 - Key project updates were presented, and it was explained that the dates for the specific Preliminary Environmental Information Report (PEIR) submission dates would be provided shortly but the project is still aiming for Q3 2023 and the Development Consent Order (DCO) a year later scheduled for Q3 2024.</p>		
3.	<p><u>Approach to Cumulative Effects Assessment (CEA) (presented by KR)</u></p> <p>KR – Explained the combined approach to the CEA. Noted that the Transmission Assets PEIR will include the export cable infrastructure and the offshore substation platforms within the Morgan and Morecambe array areas. Therefore, there will be some ‘double counting’ between the Generation and Transmission DCOs but that the over-precautionary approach will be made note of when considering the combined Generation and Transmission Assessments.</p> <p>Slide 5-6 - explained the approach to the CEA across the Morecambe and Morgan Generation Assets and the Transmission Assets. It was explained that the Transmission Assets PEIR is drafted based on the published PEIRs of the relevant projects. The Transmission Assets assessment will be undertaken for the project alone followed by the cumulative assessment which will include the Transmission Assets with both Generation Assets and no other projects. Subsequently, relevant other projects will be included in the next step of the CEA following the Tier process.</p> <p>This approach will be used conversely for the Generation Assets ES's. KR explained it is important to note only information in the public domain can be used as a basis for the CEA. The Tiered approach has been created to help with ensuring CEAs take into account different levels of information for projects as they are progressing at different stages in the consenting regime. The approach set out takes account of the tiered approach to CEA while also aligning with stakeholder feedback on presenting a combined project assessment for the Generation and Transmission Assets.</p>		
4.	<p><u>Fish and Shellfish Ecology (presented by LS)</u></p> <p>Slide 8- The summary of the site specific surveys and the desk top data sources were described. It was explained that while the project is taking into account the site specific baseline characterisation surveys from Morgan and Morecambe array areas, carried out in 2021, these are to be considered and treated as desktop data rather than site specific information.</p> <p>Slide 9 - Summary of baseline slide for sandeel habitat suitability. LS explained the area of preferred, marginal and unsuitable habitat with further information on the figure on the slide.</p> <p>Slide 10 - Summary of baseline for herring. LS explained the area of preferred, marginal and unsuitable habitat with further information on the figure on the slide.</p>		

	<p>Slides 11 through 13 showed a table of the IEFs and their description as part of the summary of the baseline. The species are shown on these slides with the notable species of specific interest noted.</p> <p>Slide 14 – The slide showed a figure and table depicting the summary of baseline designated sites for fish and shellfish ecology. These are sites and their qualifying features that could be affected by impacts from the phases of the Transmission Assets. The project will not consider sites that are outside the zone of influence, including the Marine Nature Reserves (MNR) around the Isle of Man (IOM) so these have not been considered further in the chapter.</p> <p>Slide 15 depicted the Impacts which have been scoped into the assessment based on responses to the scoping report. These are explained using the table on the slide.</p> <p>Slide 16 details the impact which has been scoped out of the assessment. The project will scope out accidental pollution because the risk of such an event is mitigated by the post consent plans such as the Marine Pollution Contingency Plan (MPCP) among others which makes the likelihood of a spill very low and the magnitude of these if they did would be minimised through such plans and measures.</p> <p>Slide 17 explained the approach to the impact assessment. LS explained the use of CIEEM guidance (2022), the 4 stages of the approach are explained and the table on the slide shows the matrix used to determine significance from the magnitude and sensitivity.</p> <p>Slide 18 and 19 – The initial assessment outputs for underwater sound during construction for monopiles and pin piles and their Maximum Design Scenario (MDS) are explained across these slides. The MDS was explained and the different scenarios such as concurrent or sequential piling and the maximum piling times for the different approaches are explained.</p> <p>Slide 20 – The table on the slide shows the Important Ecological Features (IEFs) considered their magnitude, sensitivity and overall significance determined from these for underwater sound during the construction phase. These are based on the MDS for piling scenarios. The ongoing discussions regarding herring are noted during the explanation of the results of the assessment matrix.</p> <p>Slide 21 – The initial assessment outputs for the impact of EMFs on three IEFs are discussed while LS explained the MDS of the interconnector and HVAC export cables (information on the slides). The area affected was explained and the significance for the IEFs that are considered is in the table on the slide.</p> <p>Slide 22 – The initial assessment outputs for the temporary habitat loss/disturbance during the construction is considered in this slide. LS explained where these impacts may result from and the MDS for habitat loss/disturbance. The table regarding the magnitude,</p>		
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	<p>sensitivity and significance for the considered IEFs is explained for all IEFs and on the slide for future reference.</p> <p>Slide 23 – The initial assessment outputs for the long term habitat loss during the operations and maintenance phase was considered on this slide. Where these impacts may result from and the MDS and spatial and temporal extent of these impacts was explained. The table of the magnitude, sensitivity and significance for the IEFs considered is explained and on the slide for future reference.</p> <p>Slide 24 – LS explained the CEA and that it takes into account other projects and plans within the CEA study area (up to a 50 km buffer around the Transmission Assets) which is increased to a 100km buffer for underwater sound. Examples of the types of projects considered are listed on the slide and the categories of projects used are explained and listed on the slide. Where impacts are localised or temporally restrictive these have been considered for the Transmission Assets but not cumulatively. Impacts such as disturbance, remobilisation of sediment bound pollutants or EMF.</p> <p>GE – In regard to herring, we expect them to be considered as high sensitivity in respect of noise. Cefas does understand where the project is coming from with benthic environment not being suitable for spawning and as such putting herring as low sensitivity for habitat disturbance. For noise, given their reliance on particular habitats we would prefer a high sensitivity. We are sure that the PSA data will be presented in the report. If the spawning habitat is not suitable, we are happy with the decision of low sensitivity but with the IOM and the suitable habitats near the IOM for these areas we would expect high sensitivity.</p> <p>LS – In determining the sensitivity of any species, including herring, the project uses the vulnerability (as well as recoverability) of a particular species in its determination of its sensitivity. The use of the vulnerability to a particular impact as a factor in determining sensitivity is why it has been considered to be of lower sensitivity than GE was suggesting.</p> <p>LS – Worth mentioning during section 42 consultation for the Morgan Generation and Mona PEIRs a couple of points were flagged. Where we haven’t incorporated those points into the Transmission Assets PEIR the project has identified what will be incorporated at Application, allowing stakeholders to get a good picture of what will be included later, if not included in the PEIR.</p> <p>KB – In one of the slides regarding the diadromous species scoped in, I couldn’t see Smelt included.</p> <p>LS – They have been included in the table as Smelt or Sparling (see slide 13).</p> <p>KB – On the following slide (slide 14) you correctly identified the two Marine Conservation Zones (MCZs) (Ribble and Wyre Lune) which they’re qualifying features of, thank you.</p>		
5.	<u>Physical Processes (presented by NS)</u>		

	<p>Slide 26 – Explained that the Transmission Assets study area for physical processes has been refined since the first EWG, based on the refined PEIR Red Line Boundary. The project has used the same definition of one spring tidal excursion, but the Morgan Generation Assets model has been used to create the new study area due to the variety of orientations and current speeds. Explained the two groups of effects related to physical processes shown on the table in slide 26 (Increases/changes in Suspended Sediment Concentrations (SSC) and changes to tidal currents, wave climates and sediment transport mechanisms). Explained that the presence of infrastructure includes the cable protection as well as the Morgan offshore booster station and offshore structures. Discussed the differences in activities across the project phases i.e. the construction processes focuses more on SSC whereas the O&M phase focuses more to do with intermittent work and structures placed within the study area.</p> <p>Slide 27 – NS explained the baseline information from EWG01 and introduces the modelling surveys and studies introduced since the last EWG. The Morgan and Morecambe Generation Assets PEIR documents are now able to be included and contain wide ranging modelling some of which can be related directly to the Transmission Assets. Specifically, for example, the Morgan offshore substation platforms were modelled and assessed within the Morgan Generation Assets PEIR. The documents also provide additional baseline and sediment data to back up the evidence base of this topic.</p> <p>Slide 28 – NS presented the initial assessment outputs for the various receptors within the physical processes study area alongside their descriptions and sensitivities to the project. These initial outputs are described and explained in the table in the slide. NS explained that other ecology topics may have different sensitivities to various actions, for example a change in a few millimetres of sediment may have significant impacts for benthic assessments but not impact things at the tidal, wave or sediment transport scale.</p> <p>Slide 29 – Initial assessment outputs are grouped as SSC and deposition, and changes to waves, tides and sediment transport. Levels of SSC are very close to background levels in far west areas of the Transmission Assets Red Line Boundary so the impact will be negligible. Other assessment outputs are explained for SSC and deposition. The impacts are quite concentrated, and the sedimentation will occur where the operations are taking place. NS explained how cable protection is introduced and how it will likely bring localised changes, noting the project aims to bury the cable so the amount of protection required is negligible.</p> <p>Slide 30 – Explained that as the study area has changed the cumulative assessment area has been reassessed. Another study has been undertaken for dispersion to ensure that the tidal flows and orientations are accurate. RPS have undertaken a screening to include projects that could introduce a cumulative effect. Example of a potential cumulative effect for SSC is provided and shows the assessment of all the project types and explained that the project is assessing Morgan Generation Assets and Morecambe</p>		
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	<p>Generation Assets as combined project assessments before moving onto other tiered projects. We will assess the interactions between the Transmission Assets and the activities undertaken for each project.</p> <p>Slide 31 – NS presented wave, tides and sediment transport from a cumulative perspective. A lot of these are maintenance activities such as cable protection/changes or updates and most cases seem to be very localised in their impacts.</p>		
6.	<p><u>Benthic Ecology (presented by AP)</u></p> <p>Slide 34 detailed the baseline characterisation explaining the site specific surveys and desktop data used and undertaken as part of the Transmission Assets benthic ecology studies. The details of these are listed on the slides and AP explained that the Morgan and Morecambe Generation Assets surveys were used for the Transmission Assets PEIR, but have been considered as desktop data, being careful to ensure all relevant information is considered in the Transmission Assets PEIR.</p> <p>35 - AP explained the individual biotopes, their locations (as shown on the figure) and IEFs which are grouped, explaining all the biotopes and where they overlap with the Transmission Assets. Individual species and biotopes are laid out in the slides, and the table and figure and were explained by AP. The project has identified and grouped 4 IEFs which are being considered but the full details of the multivariate analysis will be in the chapter and annexes.</p> <p>36 – The intertidal characterisation and walkover survey identified 6 biotopes. These are explained in the table and figure on the slide. The biotopes are grouped into three IEFs which are taken forward into the benthic subtidal and intertidal ecology chapter of the Transmission Assets PEIR, for consideration.</p> <p>37 – AP explained and showed in the slide table the designated sites and their qualifying features which are considered in the baseline. All designated sites within the benthic ecology study area were initially identified, following a two-step process. Firstly those that which overlap and then any others that are potentially within the Zone of Influence (ZOI) from impacts associated with the project were identified. The ZOI was determined using the outputs of the physical processes assessment. The table lists the designated sites that are being considered. All other designated sites, including the MNRs around the Isle of Man and the Morecambe Bay Special Area of Conservation (SAC) are outside the ZOI and so will not be affected by the Transmission Assets. These sites, therefore, are not considered further in the chapter.</p> <p>38 – In terms of the IEFs that have been identified and the associated designated sites, these have been taken into the benthic subtidal and intertidal ecology chapter of the Transmission Assets PEIR. Designated sites and features taken forward are outlined on the slide. AP explained that the PEIR considers IEFs within the Fylde MCZ, West of Copeland MCZ and the West of Walney MCZ, the relevant sites and their distribution. AP clarified that in terms of distribution, the only designated site which has a</p>		

	<p>physical overlap with the Transmission Assets Red Line Boundary is with the Fylde MCZ. All other designated sites mentioned are considered for indirect impacts.</p> <p>39 – The impacts to be scoped in, and the project phases under which they are considered are presented on the slide. These impacts are listed in the table have been scoped in based on responses to the Transmission Assets Scoping Opinion. AP clarified that for physical processes the project is assessing the impact for changes in physical processes across the project lifetime not just the operations and maintenance phase.</p> <p>40 – As with fish and shellfish the only impact to be scoped out is accidental pollution, due the manageability of the impact and risk through post consent plans such as the Environmental Monitoring Plan and the Marine Pollution Contingency Plan (MPCP).</p> <p>41 – the impact assessment methodology was presented on this slide. The process follows the CIEEM 2022 guidance and, as with all ecology topics, is based on the 4-step approach listed and described on the slide.</p> <p>42 – The next 4 slides looked at the preliminary impact assessment outputs for the key impacts for benthic ecology. The slide described the impact of temporary habitat disturbance in the subtidal and explains the MDS, likely magnitude, spatial and temporal extent of the impacts and the sensitivity of the impacted IEFs. This is then summarised in the table at the bottom of the slide which describes the impact of temporary habitat disturbance for three IEFs and provides the magnitude, sensitivity and overall significance. The other IEF previously mentioned is not included in this table due to it being located outside of the Transmission Assets Red Line Boundary. AP explained that this is a conservative approach and will be refined working with engineers and values will be considered again at ES. It is currently a precautionary approach to assessment.</p> <p>43 – AP presented the temporary habitat disturbance for the intertidal. As per the previous slide, this slide shows the effect, MDS, magnitude, sensitivity and spatial and temporal scale of these impacts. AP explained that this will occur over all phases of the project but will be at its highest during the construction phase. The table states the results of the assessment for three IEFs in terms of magnitude, sensitivity and overall significance.</p> <p>44 – Long term habitat loss (subtidal) was considered here. The likely impact, MDS, magnitude, spatial and temporal scales and sensitivity of the IEFs are explained on the slide as a result of the presence of OSP foundations, the Morgan offshore booster station and scour protection. The table states the results of the assessment for three IEFs in terms of magnitude, sensitivity and overall significance. AP explained that the final IEF is not included in the significance table because it is outside of the Transmission Assets Red Line Boundary. Colonisation of these following construction is also considered as a separate pathway in the chapter.</p>		
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<p>45 - Increased SSC and associated deposition was considered in this slide. The likely impact, MDS, magnitude, spatial and temporal scales and sensitivity of the IEFs are explained on the slide as a result from the presence of OSP foundations, Morgan offshore booster station and scour protection. The table states the results of the assessment for three IEFs in terms of magnitude, sensitivity and overall significance. All four IEFs are considered here but full assessments of the overall sensitivity will be dependent on the full expected magnitude. This will be updated following the completion of the physical processes chapter following the next round of reviews.</p> <p>46 – The cumulative effects assessment was described on this slide. The approach was explained on the slide alongside the size of the CEA study area. AP explained that each project has been considered individually for screening in or out of the CEA based upon data confidence, effect-receptor pathways and the spatial/temporal scales involved. Types of projects included are described in the slide alongside the explanation of the tiered categorisation explanations written in the bullet points on the side. AP explained that the study area for the CEA is designed to catch all projects that could have synergistic impacts or cumulative impacts. Colonisations and introduction of invasive non-native species from any fully constructed and operational structures such as other windfarm/oil and gas platforms have not been included in the CEA as this is considered part of the baseline. Localised impacts will be included in the project alone assessment such as EMF or heat and will be justified in the chapter.</p> <p>KB –There is a license area, number 457, Westminster gravels have submitted a Scoping EIA Report and are planning on submitting the ES during Q2/Q3 of 2024. It falls within the buffer zone as it is about 25km offshore of the Ribble estuary. The Scoping Report is on the public register of the MMO.</p> <p>AP – I believe it is in the benthic figure, but the project will double check across other topics.</p> <p>KR – This will be checked across other topics.</p> <p>SB – Very clear presentation, results look all good and sensible, noted APs comment of the potential inclusion/presence of the sea pen megafauna community and associated habitat, Cefas queried this for Morgan Generation Assets baseline [under the S42 responses]. It’s nice to see it included.</p> <p>AP – We have investigated that but sediments are quite different to the Morgan Generation Assets array area [compared with the cable corridor].</p> <p>KC – Regarding the impact assessment methodology - when the project is picking between the two possible categories is it possible to choose the more conservative approach and therefore choosing the more impactful result? This is something we will pick up when reviewing.</p>	<p>RPS to check the inclusion of the Westminster project across other topics.</p>	<p>31.08.2023</p>
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	<p>AP – We have had [stakeholder] feedback on this across the board for all topics. This is part of the EIA methodology chapter so applies to the whole project, but this can be taken away and considered. Currently it is down to the professional judgement, based on the best available empirical evidence to determine the impact category for the relevant impact/receptor.</p> <p>KC – For long term habitat loss had a query on the designations of significance, sensitivity and magnitude.</p> <p>KC – The magnitude is low, the sensitivity is high but the significance is minor adverse, could you explain that more as it would seem to be more appropriate to be moderate.</p> <p>AP – That comes down to the methodology. AP showed slide 41 again and referred to the matrix. AP explained that on the basis of the way the long term habitat loss will be distributed across the Transmission Assets Red Line Boundary, it won't be localised but distributed across the Transmission Assets Red Line Boundary. We consider the extent of coverage will be low in context of the wider distribution of the habitats, and therefore the conclusion is minor adverse effect.</p> <p>KC – thank you just wanted further clarity on that everything else seems reasonable. I don't see any element of cable protection; I assume that will be in the EIA?</p> <p>AP – That cable protection is considered under the long term habitat loss, is that what you mean?</p> <p>KC - yes, if there were specifics on cable protection but assume this will be provided in the PEIR.</p> <p>AP – Yes, the full MDS will be shown in the PEIR and include the assumptions behind the length of cables and length of cables that could have scour protection. This will be included in full in the chapter.</p>		
7.	<p><u>MCZ Assessment (presented by AP)</u></p> <p>48 - discussed the MCZ screening. AP explained how RPS conducted the screening process that was undertaken to determine which MCZs should be taken forward for a full stage 1 assessment. The features considered when making this decision are listed on the slide.</p> <p>49 – Results of the MCZ screening were shown in slide 49. For each of the features the slide explains whether direct impacts were anticipated or not and whether they would be considered for indirect impacts. The MCZs that were chosen to be taken forward or not are also described on this slide. Based upon these screening results only one MCZ, Fylde MCZ was taken forward for a stage 1 assessment.</p> <p>50 – The assessment baseline for the MCZ assessment was described in slide 50. Fylde was designated in 2016 for Subtidal Sand and Subtidal Mud features. The table and figure provided in the slide show spatial extent of the protected features within the</p>		



B.2.1.1 Response from the MMO regarding the meeting minutes

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: EOR0823 Morgan & Morecambe Transmission Assets PP BE FSF EWG02
Date: 23 August 2023 10:43:26
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)

CAUTION: This email originated from outside of RPS.

Good morning

Thank you for providing the meeting minutes.

Please note, Paul McIlwaine has been listed as an attendee, however he has indicated that he was not present.

Other than the above, the MMO can confirm that the meeting minutes are an accurate representation of the meeting.

Our Fisheries advisors had the following comments to make:

1. The discussions in the meeting minutes suggest that the sensitivity of the receptor changes, depending on the location.
2. The 'significance of effect' should be determined by referencing the sensitivity and risk on Table 6.8 from Chapter 6 EIA Methodology.
3. For example, if considering 'herring' as the receptor and 'disturbance to habitat' as the impact, herrings as a receptor have a high sensitivity and if there is no suitable herring spawning habitat within the zone of impact, then there is 'negligible' risk. When referencing these against Table 6.8 from Chapter 6 EIA Methodology, it would conclude that the significant of effect is minor.
4. The MMO also recommends the use of species-specific tables for determining receptor sensitivity and magnitude of risk. This would increase accuracy and minimise subjectivity.

If you have any questions, please do not hesitate to contact me.

Thank you,

[REDACTED]

[REDACTED] | Marine Licensing Case Officer | Marine
Management Organisation

Nobel House | 17 Smith Square | London | SW1P 3HX



Our MMO Values: Together we are **Accountable**, **Innovative**, **Engaging** and **Inclusive**
[Website](#) [Blog](#) [Twitter](#) [Facebook](#) [LinkedIn](#) [YouTube](#)



B.2.1.2 Response from the Natural England regarding the meeting minutes

Date: 24 August 2023
Our ref: DAS/UDS A009203 445664
Your ref: Morgan and Morecambe Transmission Assets BE, PP, FSF EWG02



[REDACTED]
RPS/ Energy
Imagination House
Station Road
Chepstow
Monmouthshire
NP16 5PB

Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

cc [REDACTED]
RPS

BY EMAIL ONLY

Dear [REDACTED]

Discretionary Advice Service (Charged Advice): UDS A009203

Development proposal: Morgan and Morecambe Offshore Windfarms: Transmission Assets

Consultation: Morgan and Morecambe Transmission Assets Benthic Ecology, Fish and Shellfish and Physical Processes EWG02

This advice is being provided as part of Natural England's Discretionary Advice Service (DAS) in accordance with the Quotation and Agreement dated 23rd May 2023 to Morgan Offshore Wind Limited & Mona Offshore Wind Limited.

The following advice forms Natural England's response to the meeting minutes provided for the Morgan and Morecambe Transmission Assets Benthic Ecology, Fish and Shellfish and Physical Processes EWG02 attended by Natural England on 27th July 2023.

Natural England were asked to provide feedback on the following points:

- Agreement on baseline characterisation and key receptors to be considered in impact assessment.
- Agreement on approach to CEA

Detailed comments

Baseline characterisation and key receptors

Natural England is in broad agreement with the baseline characterisation and key receptors.

Approach to CEA

Natural England understands the approach being taken for the CEA for Morgan and Morecambe Transmission Assets. However, we retain concerns associated with stranded assets during the consenting process (ref: 435658/436243).

For clarification of any points in this letter, please contact me using the details provided below.

Yours sincerely,

[REDACTED]
Marine and Coastal Lead Adviser
Coast and Marine Team
Cheshire to Lancashire Area Team
[REDACTED]

The advice provided in this letter has been through Natural England's Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

[REDACTED]

	<p>Fylde MCZ and the general management approach of the MCZ. This habitat is notable as a feeding ground for a variety of fish and shellfish including flatfish, rays, gurnard, swimming crabs and hermit crabs which feed on the bivalves which inhabit the Subtidal Sand and Subtidal Mud of the Fylde MCZ.</p> <p>51 – The site specific surveys for the Fylde MCZ are explained including the use of grab and DDV sampling. Sample numbers and locations are shown and the spread of these samples and the locations of their collection are explained on the slide. The MDS for cable length is 15.8 km within the MCZ and as such the sampling was undertaken at intervals along this at about 1 sample every 1 km. Sediment chemistry analysis was also undertaken.</p> <p>52 – The results from these surveys identified 4 biotopes within the area that overlaps the Transmission Assets Red Line Boundary and Fylde MCZ, these are listed on the slide. These lined up well with biotopes identified in literature for the Fylde MCZ but missed <i>Glycera lapidum</i> in impoverished infralittoral mobile gravel and sand (SS.SCS.ICS.Glap) and <i>Moerella</i> spp. with venerid bivalves in infralittoral gravelly sand (SS.SCS.ICS.MoeVen) for the subtidal sand feature.</p> <p>53 – The assumptions as part of the MCZ assessment are explained and show on the slide, including the total overlap with the Transmission Assets Red Line Boundary, and the distribution of this overlap across two feature types. The MDS for construction, operation and maintenance and decommissioning phases, for features of the MCZ has been apportioned based on the mapped distribution of subtidal sand and mud features as determined by the Transmission Assets site-specific surveys. Based on the biotopes identified 64% of the overlap is attributed to the subtidal sand biotope and 36% of the overlap is attributed to the subtidal mud biotope.</p> <p>Regarding the portion of the Transmission Assets infrastructure which lies within the Fylde MCZ, the maximum length of cable which could fit within the area of overlap is 15.8 km. This translates to 63.2km of cable for the 4 morgan export cables and 31.6 km of cable for the 2 Morecambe export cables. In total this accounts for 94.8 km of cable within the Fylde MCZ or 15.54% of the total export cable length.</p> <p>Slide 54 – The initial MCZ assessment outputs are listed on the slide for temporary habitat disturbance for subtidal sand. These include the MDS and the proportion of the MCZ that may be impacted, and what the make-up (in terms of effect) of the disturbance is between sandwave and boulder clearance and deposition of material. The overarching conclusions for this impact are listed at the bottom of the slide. Important to note that, as discussed before, the values presented here are conservative and engineers are looking at site specific information to reduce these parameters. However, the conclusions are still valid, based on the predicted recovery of the sediments and associated component communities.</p>		
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	<p>55 - The initial MCZ assessment outputs are listed on the slide for temporary habitat disturbance for subtidal mud. The overarching conclusions are stated on the slide and explained. The proportion of this habitat, likely effects/impacts and presence/distribution of biological communities are discussed with the same caveat that these are precautionary outputs and further discussions with engineers will occur, looking to reduce these parameters.</p> <p>56 – The initial assessment outputs for the cumulative temporary habitat disturbance are explained. There will be a cumulative disturbance as a result of the temporal overlap between the Transmission Assets and the Isle of Man interconnector cable within the Fylde MCZ. The cumulative disturbance is expected to be 8,200m² and the conclusions of the Transmission Assets alone assessment remain applicable. The project does not consider a significant risk of hindering the achievement of the conservation objectives for any features of the Fylde MCZ.</p> <p>57 – The initial MCZ assessment outputs are listed on the slide for long term habitat loss for subtidal sand. These include the MDS and the proportion of the MCZ the MDS covers. The overarching conclusions are listed in the slide and explain that the expected area of impact is up to 0.16 km and will not lead to a significant risk of hindering the achievement of the overall conservation objectives.</p> <p>58 – The initial MCZ assessment outputs are listed on the slide for long term habitat loss (early findings) for subtidal mud. The overarching conclusions are that long term habitat loss created by the project will not lead to a significant risk of hindering the achievement of the overall conservation objectives. AP explained that the effects are localised and discrete and the project is not expecting any broad changes to sediment types. Further detail for slides 54-59 is available in the MCZ Assessment document [which will be submitted with the Transmission Assets PEIR].</p> <p>59 – The initial assessment outputs for the cumulative long term habitat loss (early findings) are due to the temporal overlap with the Isle of Man interconnector cable within the Fylde MCZ. The project states there is no significant risk of hindering the achievement of the conservation objectives based on the cumulative assessment of long term habitat loss, for any of the features of the Fylde MCZ.</p> <p>60 – the conclusions from the MCZ initial assessment outputs are that there is no significant risk of the Transmission Assets hindering the achievement of the conservation objectives for the Fylde MCZ. Furthermore there is no significant risk of the Transmission Assets and the relevant cumulative projects hindering the achievement of the conservation objectives for the Fylde MCZ. These results are preliminary on the basis of the assessments undertaken to date, noting that these do not currently include any assessments for physical processes.</p>		
8.	<u>Discussions and Next steps (presented by KR)</u>		

	<p>KR explained that meeting minutes will be circulated within two weeks alongside the updated agreement logs. The project is seeking agreement on baseline characterisation and key receptors to be considered in impact assessment and agreement on the approach to the CEA.</p> <p>The next EWG is planned around the section 42 consultation – date TBC.</p> <p>There were no final comments or questions from stakeholders.</p>		
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B.3 Benthic ecology, Fish and shellfish and Physical processes EWG meeting 3

B.3.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project External
(Restricted)

Minutes of Meeting Number : Transmission Assets PP, BE, FSF EWG Meeting 03 **REV. No.** : F01

Minutes of Meeting Subject : Transmission Assets Physical Processes, Benthic Ecology and Fish and Shellfish Ecology EWG Meeting 03

MINUTES OF MEETING

MEETING DATE : 07/02/2024

Az-MEETING LOCATION : Microsoft Teams

RECORDED BY : [REDACTED] (RPS)

ISSUED BY : [REDACTED] (RPS)

Attendees:

- [REDACTED] – bp (HK)
- [REDACTED] – Flotation Energy (HR)
- [REDACTED] – RPS (KL)
- [REDACTED] – RPS (KH)
- [REDACTED] – RPS (AP)
- [REDACTED] – RPS (LS)
- [REDACTED] – RPS (NS)
- [REDACTED] – RPS – (BM)
- [REDACTED] – MMO (ALF)
- [REDACTED] – Cefas (RB)
- [REDACTED] – Cefas (GE)
- [REDACTED] – Cefas (CH)
- [REDACTED] – Environment Agency (LL)
- [REDACTED] – MMO (AS)
- [REDACTED] – Environment Agency (RH)
- [REDACTED] – Cefas (RS)
- [REDACTED] – Cefas (PM)

Apologies:

- The Wildlife Trust
- IFCA

Agenda

1. Introduction
2. Project Update
3. Project Parameter refinements post-PEIR
4. Physical Processes
5. S42 feedback and responses
6. Benthic subtidal and intertidal ecology
7. S42 feedback and responses
8. MCZ
9. Fish and shellfish ecology and
10. S42 feedback and responses
11. Discussion and Next Steps

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
Notes			
1.	<p>Introductions and Agenda (presented by KL)</p> <p>Introductions made and KL explained the agenda of the EWG to the attendees as detailed above.</p>		
2.	<p>Project Update (presented by HK)</p> <p>Statutory consultation for the Preliminary Environmental Information Report (PEIR) closed at the end of November. The Project is still on track for Application submission in Q3 2024. The Transmission Assets DCO Application is slightly behind the associated Morgan Generation Assets and Morecambe Generation Assets DCO Applications, which are aiming for submission in Q2 2024. Construction of the Transmission Assets is anticipated to start in 2026/2027 running through to 2030, subject to the grid connection timings.</p>		
3.	<p>Project Parameter Refinements post-PEIR (presented by HK)</p> <p>Key offshore refinements that have been made to the Project since the PEIR are discussed here. The double counting from the Offshore Substation Platforms (OSPs) was flagged in consultation as these were considered in both the Transmission Assets and Generation Assets Applications. The OSPs and interconnector cables will now be assessed wholly within the respective Generation Assets Applications and have been removed from the Transmission Assets Application.</p> <p>The Morgan offshore booster station has been removed as it is no longer required. This means the Transmission Assets will have no surface piercing infrastructure, and the DCO application will cover the offshore export cables, landfall and onshore infrastructure. With that, the Project have reduced the number of vessel and helicopter movements for construction and operation and maintenance.</p> <p>KL – With the removal of the surface piercing infrastructure, this has implications for topics such as marine mammals and fish and shellfish as many of the comments the Project received were regarding piling assessments and cumulative and in-combination assessments around piling. All piling will be covered in the Generation Assets Applications. It makes the combined Generation Assets and Transmission Assets assessment easier, as the double counting that was evident at Preliminary Environmental Information Report (PEIR) stage will not be within the Transmission Assets Environmental Statement (ES).</p> <p>HK – These next comments are regarding the site preparation and impacts in the Marine Conservation Zone (MCZ) assessment. The Project has reduced the sand wave clearance</p>		

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	<p>volumes across the offshore export cable corridor. For the ES it will be 9% total across cable corridor (down from 60% at PEIR) and 5% of that will be within the MCZ.</p> <p>The Project has also looked at reducing the cable protection parameters, these were 20% and 15% for Morgan and Morecambe respectively at the PEIR. Excluding cable crossings, the Project is now looking at 3% within the MCZ and total 10% across the offshore export cable. The Project has a commitment that burial is the preferred method for cable protection, excluding crossings and as such cable protection is a contingency with the use of cable protection within the MCZ would be a last resort.</p> <p>The figure on slide 7 shows a significant amount of existing infrastructure within the Irish Sea. Just after where the Morgan and Morgan cables come together, there is a need to cross two telecom cables. The Vodafone cable is the more northerly one with the Aquacomms cable just below and parallel to that with the need to cross these to make landfall at Lytham St Annes. The Virgin Media telecoms cable runs along the southern red line boundary with no requirement for crossing. The cable running from north west to south east is Hibernia Atlantic with also no requirement for crossings. Those are the existing telecoms that sit within and along the edge of the MCZ in the vicinity of the Transmission Assets. The cable alignment is still being refined by the engineers who are trying to push the Morgan cable further to the west to minimise cable crossing in the MCZ. However, they do not think they will be able to avoid a cable crossing within the MCZ. Due to the space needed to make the necessary turns in the cable, and minimum spacing and best practice crossing requirements for telecoms cables, it is likely the Project will have a crossing on that far edge of the MCZ.</p> <p>KL – Key thing from the assessment point of view within the DCO is that engineers have refined the Project parameters as much as possible. Most of the cable protection is contingency in case burial beneath the surface sediments is not possible. Within the final application the Project will have to assume that one of those telecoms cables will have to be crossed.</p>		
4.	<p>Physical Processes (presented by NS)</p> <p>Thank you for the feedback at consultation stage; there was a wide range of very useful and productive feedback. The aim during the presentation is to group the salient responses together of all the points raised. Three main themes arise when looking at the responses: the scope of the Physical Processes assessment, the Project description and parameters, and finally the Cumulative Effects Assessment (CEA).</p>		

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	<p><u>Outlined the need to ensure a robust Environmental Assessment is undertaken</u></p> <p>The first point is the need to have a robust environmental assessment and that the assessment is undertaken in-line with the national policy statements. These have been updated so any new information in the adopted measures will be taken on board. Throughout the Project, the mitigation hierarchy will be applied to avoid, reduce and mitigate. This approach has been applied throughout the design and this process has informed the Project refinement at the Project commitments. The commitments made at PEIR have been put into action to minimise and reduce sandwave clearance volumes and cable protection. The removal of the surface piercing infrastructure means the offshore aspects of the Project now focuses on the installation and management of the offshore export cables. The Project is proposing to, in the ES, assess waves, tides and offshore sediment transport collectively as one overarching seabed morphology assessment, rather than individually as was undertaken at PEIR. Nothing is being scoped out but due to only looking at cable installation and those requirements this method is the more streamlined.</p> <p><u>Provision of modelling studies and request for additional modelled scenarios</u></p> <p>The second point is regarding the use of the evidence based conceptual approach to undertake the assessments as was agreed at Scoping stage. Those studies that were used, particularly the Morgan and Mona studies, that had modelling studies undertaken have now been updated in relation to their Application status. These studies can now be supplied as appendices within the physical processes documents rather than referring the reader to online resources. There were some requests for additional modelling scenarios but with the reduction in infrastructure, for most of these queries, providing this information within the context of the chapter, will now be superseded.</p> <p><u>Inclusion of secondary scour within the Environmental Assessment</u></p> <p>The approach to secondary scour has changed slightly and will be updated in the assessment. This then allows the Project to state that although it was scoped out at PEIR it is covered in the context of the construction methodology and Offshore Cable Specification and Installation Plan (CSIP) and now also will be scoped into the assessment to be discussed.</p> <p><u>Further justification of scoping out impacts for jack-up vessels required</u></p> <p>The final point is about providing more information on the jack-up vessels. They will remain scoped out of the physical</p>	<p>RPS - Collective assessment of waves, tides and sediment transport to be added to agreement log</p>	

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	<p>processes assessment but are covered in other topics where they are more relevant.</p> <p>The next section discusses the PD and parameters.</p> <p><u>Concerns relating to the Fylde MCZ – sandwave clearance</u></p> <p>Concerns relating to the Fylde MCZ and some of the commitments have reduced with project refinement. One worry was sandwave clearance volumes and these have now been reduced from 60% at PEIR to 5% within the MCZ.</p> <p><u>Offshore Substation Platforms</u></p> <p>The OSPs and the booster station have been removed from the assessment due to the removal of the infrastructure from the Transmission DCO. In the case of OSPs these will be assessed as part of the CEA for generation assets. The booster station is no longer required, this has a positive impact on physical processes as it is infrastructure that could be closer to the shoreline which isn't going to be included anymore.</p> <p><u>Cable Crossings and HDD</u></p> <p>Cables crossings and protection changes have been discussed by HK already. The Horizontal Directional Drilling (HDD) or other trenchless techniques are currently being refined by the Project.</p> <p><u>Cable protection</u></p> <p>The final point regarding the PD and parameters is cable protection, particularly in shallow water, in terms of physical processes. There is a refinement to the amount of cable protection that will be used from 20% (Morgan) and 15% (Morecambe) Morecambe at PEIR to 3% within the MCZ and 10% total across the offshore export cable (excluding cable crossings). There are inter-related project commitments with navigation and under these commitments the Maritime and Coastguard Agency (MCA) guidance will be followed. These will have an impact in limiting impacts on the interruption of any sediment transport processes.</p> <p>KL - In terms of MCA guidelines it is for ensuring that there is no more than 5% reduction in depth without prior approval. This is mainly for shipping and navigation but will have benefits for physical processes. There was concern in the PEIR Project Design Envelope (PDE) that maximum scenarios for the height of cable protection could be a problem. In nearshore areas cable protection won't be several metres in height because of those navigational concerns which will have benefits for the sediment transport.</p> <p>NS – Only the maximum was provided at PEIR without caveats. The methods to achieve these lower cable protection heights</p>		

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	<p>in shallow waters allow sediment transport to continue almost as was and these methods have been designed into the project mitigation which will be discussed in further detail in the ES chapter.</p> <p><u>CEA screening and methodology</u></p> <p>To clarify, it is recognised that between the preparation and submission of the PEIR there were reviews ongoing highlighting that things had changed within other projects. To account for these and subsequent developments the CEA long list is currently being updated for the drafting of the ES chapters and will be reviewed again to ensure there is a full and complete list for Application.</p> <p>The next point is to clarify that for the CEA, the Project doesn't assess projects individually for significance and then add those significances together. The Project looks at the different magnitude of the projects and the sensitivity of the receptors before forming the cumulative conclusions.</p> <p><u>How transboundary effects are considered</u></p> <p>The final point was regarding transboundary effects. In terms of the Isle of Man it is a crown dependency so it wouldn't be considered transboundary. It is an integral part of the assessment, so it is considered within the chapter but not as transboundary.</p> <p>KL – The minutes will be circulated and if there are any questions, please put it in writing. The Project welcome any feedback.</p> <p>NS – the only small change the Project are undertaking is to roll the impacts together i.e. waves, tides and offshore sediment transport would be assessed collectively as one overarching seabed morphology impact, but it is not to remove them just to make it more concise and appropriate for the assessment.</p> <p>KL – That is to make it more appropriate for the Project as it is now, with the refinements made, and is therefore dealing with Physical Processes impacts holistically.</p> <p>NS – It is the approach the Project would use for an interconnector cable project that was without structures so makes sense to apply the approach here.</p>		
5.	<p>Benthic Ecology (presented by AP)</p> <p>Thank for the S42 comments, they are taken on board and will help refine the assessments.</p> <p>Comments on benthic ecology generally related to the same overarching issues, often centring around Project Description</p>		

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	<p>queries/concerns. Key comments have been identified on the slides by themes.</p> <p>KL – There was an administrative error on our side and the Cefas/MMO responses were not brought in in time to be included in this slide pack. These responses have been looked at by our authors and although Cefas and the MMO are not mentioned their feedback has been taken and will be discussed in this EWG. Please raise anything you want in this meeting and the Project apologise for administrative error causing those comments to not have been taken through in time to populate the slides.</p> <p>AP – While those points are not on the slides the key ones will be discussed in this section.</p> <p><u>Concerns regarding parameters for seabed preparation</u></p> <p>Firstly the concern regarding seabed preparation parameters particularly sand wave clearance and that the parameters assessed at PEIR were largely in relation to the resulting area affected by habitat disturbance. Project engineers have refined the parameters which will reduce the MDS for temporary habitat disturbance across the Project and within the Fylde MCZ. The MDS for temporary habitat disturbance across the Project has been reduced from 60% to 9% for the Morgan export cables and from 30% to 9% for the Morecambe export cables and to 5% within the Fylde MCZ.</p> <p><u>Request for further detail on boulder clearance methodologies and consideration of micrositing around boulders</u></p> <p>There was a request for further detail on boulder clearance methodologies and request for micro-siting around boulders. Further detail is to be added to the Project Description chapter to clarify the methods and assessment to be updated to clarify that boulders will not be removed, rather sidecast, which will not significantly alter the composition of the seabed. The Project is unable to commit to micro-siting around boulders but clarification of the methodology should help to allay concerns regarding the nature of this impact.</p> <p><u>Request for confirmation on the number and location of cable crossings</u></p> <p>The third point is regarding the request for confirmation on the number and location of cable crossings. The Project engineers are in the process of refining the parameters including the number of cable crossings, and where possible, the locations of these will be specified. This will feed into the calculations for long term habitat loss.</p> <p><u>Future monitoring</u></p>		

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	<p>There were comments regarding future monitoring. Benthic monitoring will be considered in the outline In Principle Monitoring Plan (IPMP) and will consider whether existing asset integrity surveys can have scope added to cover benthic monitoring. For example the recovery of seabed topography after trenching/sandwave clearance. Monitoring will likely focus on the area of overlap with the MCZ.</p> <p><u>Conclusions on sensitivity</u></p> <p>Lastly on the benthic conclusions on sensitivity. There were some points about the methods used to define the final conclusions for sensitivity and to make sure the Project always adopts the most precautionary approach when combining pressures across one impact pathway. This is a similar comment to one received for the Morgan Generation PEIR so this will be looked at to ensure the Project are using the most precautionary sensitivity when combining pressures.</p> <p>This slide doesn't capture the Cefas/MMO comments but there are a couple of key ones to mention.</p> <p><u>Scoping out of Pollution</u></p> <p>Firstly, there was general agreement in the Project scoping out pollution but a request that there is consideration of the potential for bentonite release at landfall during HDD. This will be considered in the benthic chapter.</p> <p><u>Desktop review – information included</u></p> <p>There were some comments around the information included in the desktop review section, relating to the Morgan Generation baseline. Some inconsistencies were picked up relating to how the Morgan Generation Assets PEIR had reported sediment chemistry which have been brought through to the desktop study of the Transmission Assets. These have been looked at and rectified for the Morgan Generation Assets Application and will be brought into the Transmission Assets at ES.</p> <p><u>PSA lab queries</u></p> <p>There were queries regarding the labs for PSA and the Project can confirm the labs used are MMO accredited, and this will be made clear in the benthic technical report.</p> <p><u>PCBs Annex</u></p> <p>Flagged that the annex containing the PCB results was missing. -The Project apologises for that and will make sure that is included for the final application.</p> <p><u>Sediment chemistry Sampling density</u></p>		

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	<p>Regarding the sampling density for sediment chemistry, samples were taken at half of all the stations sampled which the Project considered to be adequate coverage. This approach was agreed with the relevant consultees at the time.</p> <p><u>Disposal site for sandwave clearance</u></p> <p>There was a comment that due to the requirement for sandwave clearance, a disposal site will likely be required. This is noted and a Disposal Site Characterisation Report will be produced to accompany the Application.</p>		
6.	<p>MCZ Assessment (presented by AP)</p> <p>This slide focusses on a comment from Natural England which has cross over with some of The Wildlife Trust comments relating to cable protection within the MCZ and implications on long term habitat loss in the MCZ.</p> <p><u>Parameters for cable protection in the MCZ, request for consideration of mitigation hierarchy and number and location of crossings in the MCZ</u></p> <p>The primary concern was regarding parameters for cable protection in the MCZ and request for consideration of mitigation hierarchy.</p> <p>Mitigation hierarchy is central to the development of the Project and the assessments will be updated to make it clearer how it has been considered. For the ‘avoid’ step there are a number of offshore constraints, detailed in the Site Selection chapter, including designated sites and existing infrastructure that make an overlap with the Fylde MCZ unavoidable. The Project would next look to minimise effects. As part of that site selection process the route was initially chosen to cross the MCZ at the narrowest point and to reduce the number of cable crossings. Further steps to minimise effects come in the form of the PDE refinements from PEIR to the final Application to reduce requirements to significantly reduce long term habitat loss. Project engineers have refined the cable protection parameters which will reduce the MDS for cable protection in the MCZ from 20% to 3% contingency for the Morgan export cables and from 15% to 3% for the Morecambe export cables. Cable protection will only be required in the event that cable burial is unsuccessful, as a contingency measure.</p> <p>For an indication of the implications of this (heavily caveated as a work in progress), the long-term habitat loss in the MCZ at PEIR was up to 160,000 square metres which equates to approximately 0.065% of the total MCZ area. This will reduce to approximately 34,500 square metres including cable protection and cable crossings which equates to 0.013% of the MCZ which is more than a 75% decrease in habitat loss for the</p>		

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	<p>final Application. The cable crossings equate to about 6,000 square metres of this 34,500 square metres. These numbers will be confirmed for the final application.</p> <p>The next response focuses on cable crossings and their implications on long term habitat loss. There were queries regarding where, and how many, cable crossings could be required. Engineers are looking at this to try to minimise crossing requirements. There will be the potential for 4 crossings for Morgan cables (one for all four Morgan cables) in the MCZ and no cable crossing requirements for Morecambe cables. This will be reflected in the assessments and refined drawings showing locations of cable crossings will be included in the ES as well.</p> <p><u>Commitment for the removal of cable protection</u></p> <p>Request for removal of cable protection from MCZ at point of decommissioning. The Project will commit to ensuring that all external cable protection within the MCZ will be designed to be removable upon decommissioning. The removal is to be agreed with stakeholders and regulators at the time of decommissioning and under best practice at the time.</p> <p><u>Disagreement regarding conclusions that the conservation objectives will not be hindered</u></p> <p>Based on the parameters presented within the PEIR, Natural England and The Wildlife Trust couldn't agree with the conclusions that were presented in the MCZ assessment, that conservation objectives will not be hindered. They were advising that a full Stage 2 Assessment with MEEB would be required for Application.</p> <p>Since the reduction in the PDE parameters that have been outlined, the Applicants position remains that the conservation objectives will not be hindered and that a Stage 2 Assessment will not be required. This will be set out to Natural England next week (15th February) to hold some discussion and agreement on this.</p> <p>KL – There is query to be put to Cefas and the MMO, is the agreement on conclusions on MCZ stage 1 assessment something the MMO will take a position on or will that be deferred to Natural England? In terms of agreements and statements of common ground it would be good to know your position.</p> <p>ALF - It is most likely the MMO would take a position on this but in order to complete the agreement log there would need to be a separate consultation between the MMO and Cefas so it can be discussed in our monthly meetings.</p> <p>KL – The Project will send round agreement logs and it would be useful to make the most amount of progress as possible</p>		

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	<p>ahead of examination. The Project wants to make sure remit of that sits appropriately with that of the MMO. On topics such as marine mammals impact assessments and HRA the MMO have deferred to Natural England for SNCBs, therefore the Project wanted to check where are you sitting with regard to MCZ and applications on that.</p> <p>ALF – There are areas where the MMO would agree and defer to Natural England but there may be some where the MMO would have offer separate opinions.</p> <p><u>Concerns regarding the parameters for sandwave clearance in the MCZ</u></p> <p>AP – Regarding the concerns relating to the parameters for sandwave clearance within the MCZ and the implications of that on temporary habitat disturbance and request for consideration of mitigation hierarchy. Mitigation hierarchy is central to the development of the Project and the assessments will be updated to make this clearer.</p> <p>In terms of avoidance, there are a number of offshore constraints (detailed in the Site Selection chapter) including designated sites and existing infrastructure that makes an overlap with the Fylde MCZ unavoidable.</p> <p>In terms of minimising, the PDE refinements from PEIR to final application reduce requirements which will significantly reduce habitat disturbance. Project engineers have refined the sandwave clearance parameters which will reduce the MDS for sandwave clearance in the MCZ from 60% to 5% for the Morgan cables and from 30% to 5% for the Morecambe cables.</p> <p>On the basis of the reduction in the PDE parameters outlined above, the Applicant’s position remains that there will be no significant risks to the achievement of the Fylde MCZ conservation objectives and a Stage 2 assessment is not required.</p> <p><u>Confirmation of UXO clearance requirement in the MCZ</u></p> <p>There was a request for confirmation on the requirement for Unexploded Ordnance (UXO) clearance in the MCZ. The Project is investigating whether there will be a requirement for UXO clearance within the MCZ based on the data collected to date. If required, the assessments will be updated to include this impact.</p> <p><u>Morgan booster station location request</u></p> <p>A request that the Morgan offshore booster station should be located in the area with the least impact on the Fylde MCZ was made. Due to the PDE refinements since PEIR and the removal of all surface piercing infrastructure there is no longer a</p>	<p>MMO: To confirm if they will take a position on the MCZ assessment conclusions or if it will be deferred to Natural England</p>	

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	<p>requirement for the booster station. The assessments will be updated accordingly.</p> <p><u>Further HDD clarification</u></p> <p>Further clarification on HDD methods for screening out of smelt was requested. The Project intends to provide further detail in the Project Description chapter for other trenchless methods that could be used, should HDD fail.</p> <p><u>Publication of the Fylde MCZ condition assessment</u></p> <p>Notified the Project on the publication of the Fylde MCZ condition assessment. This has been noted and will be incorporated into the updated MCZ assessment.</p>		
7.	<p>Fish and Shellfish Ecology (presented by LS)</p> <p>To reiterate my colleagues' thanks for the Section 42 responses - these were very useful and will help us moving forward to the Application.</p> <p><u>Comment regarding parameters for seabed preparation</u></p> <p>The first comment is regarding parameters for seabed preparation. As described for Benthic Ecology, the MDS for sandwave clearance will reduce for temporary habitat disturbance across the Project (reduced to 10% overall, from 60% to 9% of Morgan export cables and from 30% to 9% for Morecambe export cables) and to 5% within the Fylde MCZ (as mentioned in previous slides).</p> <p><u>Comment key migratory periods for diadromous fish</u></p> <p>The next comment is regarding key migratory periods for diadromous fish. Natural England flagged that the submitted ES should include due consideration of seasonal timing or restrictions of works to mitigate for potential impacts on diadromous fish species with the aim of avoiding (as best as possible) key migratory periods. Whereas NRW stated that due to the extensive migration periods of various life stages of migratory fish and inshore foraging of sea trout and eel, determining key migration windows robustly is difficult. NRW therefore advise that diadromous fish are assumed to be present in the study area throughout the year. Key migratory windows drawn from literature are outlined within the fish and shellfish technical report, however, the precautionary approach suggested by NRW has been implemented for assessment purposes, assuming that diadromous fish may be present within the area year-round. Potential mitigation measures will be considered, where appropriate and based upon assessment outcomes with respect to diadromous fish.</p> <p><u>Static/moving fish receptors and soft start piling</u></p>		

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	<p>Regarding static/moving fish receptors and soft start piling, Natural England and NRW flagged that there is little evidence to support any assertion that fish flee consistently and coherently away from noise sources and therefore do not agree with soft start piling as mitigation for fish. Natural England advises that soft start piling is not considered as viable mitigation given the lack of evidence to support this. As described earlier in this presentation, piling activities for the Offshore Substation Platforms and the Offshore Booster Station are removed from the Project Design Envelope, therefore piling will not be considered in the Environmental Statement.</p> <p><u>Risk of significant impacts to herring and cod from underwater sound during spawning season</u></p> <p>Risk of significant impacts to herring from underwater sound during spawning season was raised in the section 42 responses. Natural England noted that a risk of significant impacts has been identified for spawning herring from piling for the Project alone and cumulatively, but as yet no mitigation measures have been proposed to address this impact. It is advised that mitigation measures are considered and presented in the ES to address the risk of impacts during the herring spawning season. NRW echoed this comment, and also highlighted potential significant impacts to cod spawning. Based upon the revised PDE which excludes all piling activities, no significant effects to fish are predicted as a result of underwater sound impacts. Piling will not be considered within the ES, but UXO clearance and High Resolution Geophysical surveys will be assessed, but are not predicted to result in significant impacts to fish and shellfish receptors.</p> <p>Key feedback from the MMO flagged queries relating to underwater sound, herring and sandeel substrate suitability assessment [as described below].</p> <p><u>Underwater sound and piling</u></p> <p>Much of the commentary regarding underwater sound is related to piling. Piling no longer forms part of the Project design envelope for the Transmission Assets, and the Underwater sound assessment will focus on UXO clearance and High Resolution Geophysical surveys, these two factors will be assessed for both the Project alone and cumulatively with other projects and plans. The Project note the feedback regarding continuous sound sources and will review and address this in the ES.</p> <p><u>Sandeel and herring substrate suitability assessment</u></p> <p>The Project proposes to update the sandeel and herring substrate suitability assessment in line with that undertaken for Morgan Generation Assets and will endeavour to explore</p>		

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	<p>the potential for generating heat maps for sandeel suitability, but will ensure incorporation of One Benthic PSA data to provide regional context. The substrate maps presented for herring and sandeel are intended to display the distribution of preferred/marginal substrates for these two species. A full broadscale substrate map can also be provided separately.</p> <p>KL – If the Project is only showing the broadscale sediment data the Project should be clear with a figure caption for better reader understanding.</p> <p>A lot of what was discussed above is aligned with the Morgan Generation Assets and Mona Offshore Wind Project Applications which have just been through review so that should help address some of the concerns.</p> <p>LS – There was a mention regarding the density inputs that were shown in the underwater sound assessment, regarding herring, that the Project will look at applying this in a similar way, but not for piling as it has been removed from the PDE.</p> <p>RS – Cefas can't provide immediate feedback in this meeting. Cefas did provide quite thorough feedback to the UWS modelling. While the piling has been removed there were other aspects aside from piling that were addressed, particularly other metrics used and the lack of detail for UWS modelling locations or how noise was modelled at certain sites. Once those updates have come through to Cefas there can be discussions and liaison with the MMO.</p> <p>KL – A lot of the Fish and Shellfish Ecology comments were focused on piling as that was the biggest risk for the topic. The Project has passed on all the comments to Seiche regarding UWS and they will take those onboard for modelling locations. This will likely only apply to UXO and will hopefully simplify things. The decision to remove piling should simplify the process and make the DCO easier to digest for readers. The Project will go through all responses to ensure clarity.</p> <p>RS – Agree on the fact that there was confusion between the DCOs.</p> <p>KL – There were two different modellers on the two Generation Asset PEIRs, in this application it will likely be less of an issue so that should be able to make it clearer.</p>		
8.	<p>Discussion and next steps (presented by KL)</p> <p>Meeting minutes will be circulated within two weeks alongside the agreement logs. Some of the content covered in the agreement logs will be revisiting what was covered in the previous EWG (pre-PEIR submission). Hopefully there can be progress on such things as agreement on the baseline</p>	<p>Review of meeting minutes and agreement logs two weeks following receipt</p>	

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	<p>characterisation remit. The Project would like to get some of those agreements tied down while thinking of heading towards Application on such topics as assessment conclusions and appropriate mitigation measures. This is with a view of front loading as much as possible before heading into examination at the end of the year.</p> <p>The Project only received agreement logs from Natural England from the last EWG. If the other stakeholders could provide feedback after the Project circulates the agreement logs that would be helpful.</p> <p>Any other comments or queries?</p> <p>RH – I will go away and speak to the biodiversity and ecology teams and share the slides. If my colleagues have any questions those will brought back to you.</p> <p>KL – For everyone’s reference the Project will send out the minutes and there will be time for discussions from stakeholders before coming back to us.</p> <p>Thank you and meeting brought to a close.</p>		
Summary of Actions		Status	Completion Date
A1.	RPS: Collective assessment of waves, tides and sediment transport to be added to agreement log		
A2.	MMO: To confirm if they will take a position on the MCZ assessment conclusions or if it will be deferred to Natural England		
A3.	Review of meeting minutes and agreement logs two weeks following receipt		
A4.			
Summary of Agreements			
Ag1.			
Ag2.			
Ag3.			

MINUTES OF MEETING



Security Classification: Project External
(Restricted)

Minutes of Meeting Number : Transmission Assets PP, BE, FSF EWG Meeting 03 **REV. No.** : F01

Minutes of Meeting Subject : Transmission Assets Physical Processes, Benthic Ecology and Fish and Shellfish Ecology EWG Meeting 03 (Natural England)

MINUTES OF MEETING

MEETING DATE : 15/02/2024

Az-MEETING LOCATION : Microsoft Teams

RECORDED BY : [REDACTED] (RPS)

ISSUED BY : [REDACTED] (RPS)

Attendees:

- [REDACTED] – bp (HK)
- [REDACTED] – Flotation Energy (HR)
- [REDACTED] – Flotation Energy (IM)
- [REDACTED] – RPS (KL)
- [REDACTED] – RPS (KH)
- [REDACTED] – RPS (AP)
- [REDACTED] – RPS (LS)
- [REDACTED] – RPS (NS)
- [REDACTED] – Natural England (KB)
- [REDACTED] – Natural England (EW)
- [REDACTED] – Natural England (LB)
- [REDACTED] – Natural England (KC)

Apologies:

- None

Agenda

1. Introduction
2. Project Update
3. Project Parameter refinements post-PEIR
4. Benthic subtidal and intertidal ecology
5. S42 feedback and responses
6. MCZ
7. Physical Processes
8. S42 feedback and responses
9. Fish and shellfish ecology and
10. S42 feedback and responses
11. Discussion and Next Steps

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1.	Introductions and Agenda (presented by KL) Introductions made and KL explained the agenda of the EWG to the attendees as detailed above. Focus of this meeting will be the responses to the PEIR, given by Natural England.		

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2.	<p>Project Update (presented by HK)</p> <p>Statutory consultation for the Preliminary Environmental Information Report (PEIR) closed at the end of November. The project is still on track for Application submission in Q3 2024. The Transmission Assets DCO Application is slightly behind the associated Morgan Generation Assets and Morecambe Generation Assets DCO Applications, which are aiming for submission in Q2 2024. Construction of the Transmission Assets is anticipated to start in 2026/2027 running through to 2030, subject to the grid connection timings.</p>		
3.	<p>Project Parameter Refinements post-PEIR (presented by HK)</p> <p>Key offshore refinements that have been made to the project since the PEIR are discussed here. The double counting from the Offshore Substation Platforms (OSPs) was flagged in consultation as these were considered in both the Transmission Assets and Generation Assets Applications. The OSPs and interconnector cables will now be assessed wholly within the respective Generation Assets Applications and have been removed from the Transmission Assets Application.</p> <p>The Morgan offshore booster station has been removed as it is no longer required. This means the Transmission Assets will have no surface piercing infrastructure, and there will be no piling within the Application. With that, the project have reduced the number of vessel and helicopter movements for construction and operation and maintenance. As such, the DCO application will cover the offshore export cables, landfall and onshore infrastructure</p> <p>These next comments are regarding the site preparation and impacts in the Marine Conservation Zone (MCZ) assessment. The project has reduced the sand wave clearance volumes across the offshore export cable corridor. For the ES it will be 9% total across cable corridor (down from 60% at PEIR) and 5% of that will be within the MCZ.</p> <p>The project has also looked at reducing the cable protection parameters, these were 20% and 15% for Morgan and Morecambe respectively at the PEIR. Excluding cable crossings, the project is now looking at 3% within the MCZ and total 10% across the offshore export cable. The project has a commitment that burial is the preferred method for cable protection, excluding crossings and as such cable protection is a contingency method with the use of cable protection within the MCZ would be a last resort.</p> <p>The figure on slide 7 shows a significant amount of existing infrastructure within the Irish Sea. Just after where the Morgan and Morgan cables come together, there is a need to</p>		

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	<p>cross two telecom cables. The Vodafone cable is the more northerly one with the Aquacomms cable just below and parallel to that with the need to cross these to make landfall at Lytham St Annes. The Virgin Media telecoms cable runs along the southern red line boundary with no requirement for crossing. The cable running from north west to south east is Hibernia Atlantic with also no requirement for crossings. Those are the existing telecoms that sit within and along the edge of the MCZ in the vicinity of the Transmission Assets. The cable I alignment is still being refined by the engineers who are trying to push the Morgan cable further to the west to minimise cable crossing in the MCZ. However, they do not think they will be able to avoid a cable crossing within the MCZ. Due to the space needed to make the necessary turns in the cable, and minimum spacing and best practice crossing requirements for telecoms cables, it is likely the Project will have a crossing on that far edge of the MCZ.</p> <p>KB – clarification for the 3% within the MCZ where you say it excludes the cable crossings – do you know what that figure is including the cable crossings?</p> <p>KL – Anna will run through the calculations later. We will assume that all 4 Morgan cables will cross the existing cable within the MCZ.</p> <p>LB – we really welcome what you’re doing in terms of efforts to reduce impacts within the site. Regarding the 3% within the MCZ, has there been any assessment of what features are most likely to be impacted? Is there a particular feature?</p> <p>AP – yes, we have done that, that’s the approach we took for the PEIR in terms of apportioning the impact for the two features. The overlap of the cable corridor looks like it’s predominantly within the subtidal sand, but on the basis of the site specific survey data we did assign some of the cable route as the subtidal mud feature. In the PEIR we took that approach that a % overlap would be mud, and a % would be sand.</p> <p>LB – not questioning that methodology, would like to know if the 3% cable protection is more likely to be in the mud or in the sand?</p> <p>AP – I don’t think we have that level of detail – we would be apportioning the impact</p> <p>LB – we don’t like that approach – that will make us more precautionary – we’re looking for the most likely impact</p> <p>LB – regarding the Cable Burial Risk Assessment (CBRA), which will be required to be submitted with the application, suggest</p>		

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	<p>to look at the tools you’re likely to use for the installation, what is the likelihood and differences with your engineers being able to install in mud or sand; having a CBRA that looks at the ability of tools used to install the cable in mud or sand, and the likelihood of success for optimal cable burial depth, finding if there is no difference with the ability of tools and then assigning a proportion of mud and sand to the area, in terms of cable protection, seems reasonable. Until we have that information, we’re not clear what the 3% relates to.</p> <p>HK – we don’t necessarily think we will need the 3%, it is contingency, we have a commitment to bury the cable wherever possible, the 3% is precautionary should we encounter seabed conditions where we cannot achieve the minimum burial depth of 0.5m</p> <p>LB – a realistic worst case scenario of 3% isn’t clear – we’ll need a clear explanation as to why 3% is chosen based on ground conditions there. This needs to be talked through in the Application so that the worst case scenario is clear. If fishing gear pulls up the cable this comes under O&M and a separate marine licence would be needed for any cable protection to be installed in the O&M phase as it’s within the protected site. We would also need a CBRA for within the MCZ which would need to include Geotechnical survey data.</p> <p>HK – Some initial geophysical and some geotechnical survey data has been collected with more, further detailed geotechnical surveys planned to be undertaken pre-construction.</p> <p>LB – suggest to look at the Sheringham and Dudgeon extension projects as an example (DEP and SEP) of what can be included. We would expect to see the same level of detail as DEP and SEP included in their application.</p> <p>KL – we can take that away and look at what DEP and SEP provided in terms of outline CBRA and talk to the engineers. In terms of the 3% we can talk to the engineers about this too, to clarify what this is informed by. The cable will be buried as a preference, but our assessments to need to account for the worst-case scenario of cable protection being required. We can try and refine locations of cable protection similarly to what was done for Hornsea 3, and assign higher probability vs lower probability of cable protection requirements in different areas, if possible.</p> <p>LB – we just need to see the workings out</p> <p>KL – in terms of the O&M activities, that would be a separate marine licence, in terms of the DCO we would want to include all the O&M remedial burial in the Application</p> <p>LB – remedial burial is fine to include in the DCO, cable protection required during the O&M phase is not – cable protection would still need a separate marine licence <u>because it’s in the protected site</u> – that’s in the advice notes for DEP and SEP too. This is new advice that Natural England is providing for all projects.</p>		

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	<p>KL – could you provide links to this advice? KL – to reassure, there has been a lot of work done on the cable installation with the engineers, and geophysical and geotechnical data collected and analysed – we can provide clarity on the 3% if that’s what is needed for the Application. The final CBRA is usually done once a contractor is in place. LB – Clarified that the expectation is an outline CBRA would be needed for Application. With an understanding that there would be a condition including consultation with the MMO prior to construction. LB – you’ve focused very much on the MCZ – you will need to cover off cable protection and impacts on supporting habitats for SPAs. KL – this is covered in the ISAA and the offshore ornithology ES chapter. No direct impacts on SACs. Ornithologists have covered this in their chapter and potential effects on SPA features was discussed with the offshore ornithology EWG last week. LB – cable protection affects supporting habitats and prey availability and therefore potentially the conservation objectives of the SPA and SACs. KL – we can certainly cover that in the Application.</p>	<p>Natural England to provide advice on cable protection licensing during the O&M phase.</p>	
4.	<p>Benthic Ecology (presented by AP)</p> <p>Thanks for the S42 comments, they are taken on board and will help refine the assessments.</p> <p>Comments on benthic ecology generally related to the same overarching issues, often centring around Project Description queries/concerns and parameters assumed. Key comments have been identified on the slide by themes.</p> <p><u>Concerns regarding parameters for seabed preparation</u></p> <p>Firstly the concern regarding seabed preparation parameters particularly sand wave clearance and that the parameters assessed at PEIR were largely in relation to the resulting area affected by habitat disturbance. Project engineers have refined the parameters which will reduce the MDS for temporary habitat disturbance across the Project and within the Fylde MCZ. The MDS for temporary habitat disturbance across the Project has been reduced from 60% to 9% for the Morgan export cables and from 30% to 9% for the Morecambe export cables and to 5% within the Fylde MCZ.</p> <p><u>Request for further detail on boulder clearance methodologies and consideration of micrositing around boulders</u></p> <p>There was a request for further detail on boulder clearance methodologies and request for micro-siting around boulders. Further detail is to be added to the Project Description chapter to clarify the methods and assessment to be updated to clarify that boulders will not be removed or picked up and relocated, rather sidecast, away from the installation tool, which will not</p>		

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	<p>significantly alter the composition of the seabed. The project is unable to commit to micro-siting around boulders as preference is for cables to be straight wherever possible as reduces the risk of them requiring reburial or remedial cable protection but clarification of the methodology should help to allay concerns regarding the nature of this impact.</p> <p><u>Request for confirmation on the number and location of cable crossings</u></p> <p>The third point is regarding the request for confirmation on the number and location of cable crossings. The project engineers are in the process of refining the parameters including the number of cable crossings, and where possible, the locations of these will be specified. This will feed into the calculations for long term habitat loss.</p> <p><u>Future monitoring</u></p> <p>There were comments regarding future monitoring. Benthic monitoring will be considered in the outlined In Principle Monitoring Plan (IPMP) and will consider whether existing asset integrity surveys can have scope added to cover benthic monitoring. For example the recovery of seabed topography after trenching/sandwave clearance. Monitoring will likely focus on the area of overlap with the MCZ.</p> <p><u>Conclusions on sensitivity</u></p> <p>Lastly on the benthic conclusions on sensitivity. There were some points about the methods used to define the final conclusions for sensitivity and to make sure the project always adopts the most precautionary approach when combining pressures across one impact pathway. This is a similar comment to one received for the Morgan Generation PEIR so this will be looked at to ensure the project are using the most precautionary sensitivity when combining pressures.</p>		
5.	<p>MCZ Assessment (presented by AP)</p> <p>This slide focusses on a comment from Natural England which has cross over with some of The Wildlife Trust comments relating to cable protection within the MCZ and implications on long term habitat loss in the MCZ.</p> <p><u>Parameters for cable protection in the MCZ, request for consideration of mitigation hierarchy and number and location of crossings in the MCZ</u></p> <p>The primary concern was regarding parameters for cable protection in the MCZ and request for consideration of mitigation hierarchy.</p>		

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	<p>Mitigation hierarchy is central to the development of the project and the assessments will be updated to make it clearer how it has been considered. For the 'avoid' step there are a number of offshore constraints, detailed in the Site Selection chapter, including designated sites and existing infrastructure that makes an overlap with the Fylde MCZ unavoidable. The project would next look to minimise effects. As part of that site selection process the route was initially chosen to cross the MCZ at the narrowest point and to reduce the number of cable crossings within the site. Further steps to minimise effects come in the form of the PDE refinements from PEIR to the final Application to reduce requirements to significantly reduce long term habitat loss. Project engineers have refined the cable protection parameters which will reduce the MDS for cable protection in the MCZ from 20% to 3% contingency for the Morgan export cables and from 15% to 3% for the Morecambe export cables. Cable protection will only be required in the event that cable burial is unsuccessful, as a contingency measure.</p> <p>For an indication of the implications of this (heavily caveated as a work in progress), the long-term habitat loss in the MCZ at PEIR was up to 160,000 square metres which equates to approximately 0.065% of the total MCZ area. This will reduce to approximately 34,500 square metres including cable protection and cable crossings which equates to 0.013% of the MCZ which is more than a 75% decrease in habitat loss for the final Application. Cable crossing equates to about 6,000 square metres of this 34,500 square metres. This numbers will be confirmed for the final application.</p> <p>The next response focuses on cable crossings and their implications on long term habitat loss. There were queries regarding where, and how many, cable crossings could be required and where they would be located. Engineers are looking at this to try to minimise crossing requirements. There will be the potential for 4 crossings for Morgan cables (one for all four Morgan cables) in the MCZ and no cable crossing requirements for Morecambe cables. This will be reflected in the assessments and refined drawings showing locations of cable crossings will be included in the ES as well.</p> <p><u>Commitment for the removal of cable protection</u></p> <p>Request for removal of cable protection from MCZ at point of decommissioning. The project will commit to ensuring that all external cable protection within the MCZ will be designed to be removable upon decommissioning. The removal is to be agreed with stakeholders and regulators at the time of decommissioning and under best practice at the time.</p> <p><u>Disagreement regarding conclusions that the conservation objectives will not be hindered</u></p>		

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	<p>Based on the parameters presented within the PEIR, Natural England and The Wildlife Trust couldn't agree with the conclusions that were presented in the MCZ assessment, that conservation objectives of the Fylde MCZ would not be hindered. They were advising that a full Stage 2 Assessment with MEEB would be required for Application.</p> <p>Since the reduction in the PDE parameters that have been outlined, the Applicants position remains that the conservation objectives will not be hindered and that a Stage 2 Assessment will not be required. We are interested to open some discussion as to whether this reduction now aligns our position in terms of our conclusion.</p> <p>LB – several points to discuss. Have you received the full list of benthic mitigation measures to consider as part of your application from Natural England? This is in our S42 response. What is talked about here is only part of that, not all of it as I would anticipate. In terms of mitigation measures, is there an option to bundle cables, for example.</p> <p>AP – yes we have this advice and are working through it as part of the updates to the DCO application.</p> <p>LB – In terms of MEEB and hindering conservation objectives for the site - based on what is presented, ~4 hectares approx. long term habitat loss, on that basis we would still be need to see a MEEB. Whilst Natural England welcome the reductions, I draw your attention back to DEP and SEP and the Secretary of State decision for Hornsea 3 in terms of 2.77 hectares in the Wash and North Norfolk Coast SAC. We would expect to see a without prejudice MEEB plan to be provided as part of your Application.</p> <p>AP – is there a number you have in mind as to below which MEEB would not be required?</p> <p>LB – no, for SEP and DEP Cromer Shoal [chalk beds] MCZ has only ~320m² of long term habitat loss and we are requiring MEEB because the site is in unfavourable condition. The % of the MCZ affected isn't going to change our advice – suggest reviewing the advice given for DEP and SEP.</p> <p>KL – understand projects which are implementing MEEB already, do you have suggestions as to what you would like MEEB to look like for this MCZ? Noting that the MCZs considered for DEP and SEP had different features to the Fylde MCZ.</p> <p>LB – we can only comment on what you put forward, we cannot steer your design. If you put something forward to us we can advise. Cromer Shoal [Chalk Beds] MCZ – DEP and SEP put forward oyster bed restoration due to the mixed sediment habitat in the location, and the possible need for cable</p>		

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	<p>protection specifically in that area. Oyster bed restoration was accepted as MEEB due to reefiness of the area, and oysters had been found within the site previously.</p> <p>LB- DEFRA is looking at potential for extensions to SACs as benthic compensation, but only for strategic compensation (not for projects alone). Subtidal sand would be provided by subtidal sandbank – you could use a more strategic route, rather than a project specific route. Mechanism for this not yet confirmed, but it is progressing. May be something that Natural England/Defra could be comfortable with and you could include on a MEEB long list.</p> <p>KL – can Natural England provide more information on this “Strategic” route for compensation as and when more information becomes available? We will make sure this is considered in long listing.</p> <p>KL – appreciate the compensation for the Habitat Regulations and MCZ are slightly different. A few papers released by Natural England in terms of ecological function – if we put forward measures that had a similar ecological function, would that be ok?</p> <p>LB – yes, you could look at removal of pressures, e.g. aggregate extraction. Removal of marine litter is not favoured for future projects.</p> <p>KL – we’ve been looking at nature inclusive design. With the cable protection in mind, is that the kind of thing that might help?</p> <p>LB – No, that is classed as enhancement. MEEB is about maintaining the feature within the site. However, would still be welcome.</p> <p>KL – what if nature inclusive design was built into the cable protection?</p> <p>LB – that is one of the mitigations included the advice note, but this could be tenuous. Removal of pressures would be considered MEEB and should be considered in the first instance.</p> <p><u>Concerns regarding the parameters for sandwave clearance in the MCZ</u></p> <p>AP – Regarding the concerns relating to the parameters for sandwave clearance within the MCZ and the implications of that on temporary habitat disturbance and request for consideration of mitigation hierarchy. Mitigation hierarchy is central to the development of the project and the assessments will be updated to make this clearer.</p>	<p>Natural England to provide more information on Strategic Compensation when it becomes available.</p>	

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	<p>In terms of avoidance, there are a number of offshore constraints (detailed in the Site Selection chapter) including designated sites and existing infrastructure that makes an overlap with the Fylde MCZ unavoidable.</p> <p>In terms of minimising, the PDE refinements from PEIR to final application to reduce requirements which will significantly reduce habitat disturbance. Project engineers have refined the sandwave clearance parameters which will reduce the MDS for sandwave clearance in the MCZ from 60% to 5% for the Morgan cables and from 30% to 5% for the Morecambe cables. Some approximate calculations – caveated as estimates may change – in terms of temporary habitat disturbance from cable installation and site prep (sandwave and boulder clearance for cable installation only i.e. doesn't include deposition of sandwave clearance material); the assessment at PEIR estimated just under 6million square metres in MCZ (2.3% of the area of the MCZ), reduced to just under 2million 0.074% of total area of MCZ for the Application.</p> <p>On the basis of the reduction in the PDE parameters outlined above, the Applicant's position remains that there will be no significant risks to the achievement of the Fylde MCZ conservation objectives and a Stage 2 assessment is not required.</p> <p>AP – do the concerns discussed already relate only to long terms habitat loss or do they include temporary habitat disturbance too?</p> <p>LB – if it's reef then yes there would be residual concerns. Sandwave levelling is classed as mitigation to reduce the need for cable protection – you would need sandwave levelling management plan in the Application for the MCZ – you don't need to do any MEEB for that but you need to demonstrate why and where the sandwave levelling takes place. Within designated sites you would need to dispose of sandwave material upstream within the site to ensure sediment is not lost to the system.</p> <p><u>Confirmation of UXO clearance requirement in the MCZ</u></p> <p>There was a request for confirmation on the requirement for Unexploded Ordnance (UXO) clearance in the MCZ. The project is investigating whether there will be a requirement for UXO clearance within the MCZ based on the data collected to date. If required, the assessments will be updated to include this impact.</p> <p>LB – you could take the UXO outside of the MCZ, or use lower ordnance detonation – detonation in muddy areas is not ideal.</p>		

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	<p>KL – the developer would rather avoid detonation and use low ordnance if required; but this is included in the assessment as a worst-case in case detonation is required. We can check on locations of UXO relative to the MCZ. There are no known UXO in the MCZ.</p> <p><u>Morgan booster station location request</u></p> <p>A request that the Morgan offshore booster station should be located in the area with the least impact on the Fylde MCZ was made. Due to the PDE refinements since PEIR and the removal of all surface piercing infrastructure there is no longer a requirement for the booster station. The assessments will be updated accordingly.</p> <p><u>Further HDD clarification</u></p> <p>Further clarification on HDD methods for screening out of smelt was requested. The project intends to provide further detail in the Project Description chapter for other trenchless methods that could be used, should HDD fail.</p> <p><u>Publication of the Fylde MCZ condition assessment</u></p> <p>Notified the project on the publication of the Fylde MCZ condition assessment. This has been noted and will be incorporated into the updated MCZ assessment.</p>		
6.	<p>Physical Processes (presented by NS)</p> <p>Thank you for the feedback at consultation stage; there was a wide range of very useful and productive feedback. The aim during the presentation is to group the salient responses together of all the points raised. Three main themes when looking at the responses are: the scope of the Physical Processes assessment, the project description and parameters, and the Cumulative Effects Assessment (CEA).</p> <p><u>Outlined the need to ensure a robust Environmental Assessment is undertaken</u></p> <p>The first point is the need to have a robust environmental assessment and that the assessment is undertaken in-line with the national policy statements. These have been updated so any new information in the adopted measures will be taken on board. Throughout the project the mitigation hierarchy will be applied to avoid, reduce and mitigate. This approach has been applied throughout the design and this process has informed the project refinement at the project commitments. The commitments made at PEIR have been put into action to reduce sandwave clearance volumes and cable protection.</p>		

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	<p><u>Provision of modelling studies and request for additional modelled scenarios</u></p> <p>The second point is regarding the use of the evidence based conceptual approach to undertake the assessments as was agreed at Scoping stage. Those studies that were used, particularly the Morgan and Mona studies, that had significant modelling studies undertaken have now been updated in relation to their Application status. These studies can now be supplied as appendices within the physical processes documents rather than referring the reader to online resources. There were some requests for additional modelling scenarios however providing this information within the context of the chapter and with the reduction in infrastructure most of these queries will now be superseded.</p> <p>The removal of the surface piercing infrastructure means the project now focuses on the installation and management of the offshore export cables. The project is proposing to, in the ES, assess waves, tides and offshore sediment transport collectively as one overarching seabed morphology assessment, rather than individually as was undertaken at PEIR. Nothing further is being scoped out and due to only looking at cable installation and those requirements this method is the more streamlined and proportionate.</p> <p><u>Inclusion of secondary scour within the Environmental Assessment</u></p> <p>The approach to secondary scour has changed slightly and will be updated and included within the assessment. This then allows the project to state that although it was scoped out at PEIR it is considered in the Construction Method Statement and will be scoped into the assessment to be discussed.</p> <p><u>Further justification of scoping out impacts for jack-up vessels required</u></p> <p>The final point is about providing more information on the jack-up vessels. They will remain scoped out of the physical processes assessment but are covered in other topics where they are more relevant.</p> <p>LB – use of jack up vessels within designated sites have caused some concerns in the North Sea, because the depressions have been quite consistent for quite some time, and affected that community. Can you consider alternatives to jack-up vessels within the MCZ – this is consistent with other projects – suggest to look also at DEP and SEP.</p> <p>The next section discusses the PD and parameters – some have already been discussed under the benthic ecology discussions.</p>	<p>RPS: Collective assessment of waves, tides and sediment transport to be added to agreement log</p>	

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p><u>Concerns relating to the Fylde MCZ – sandwave clearance</u></p> <p>Concerns relating to the Fylde MCZ and some of the commitments have reduced with project refinement. One worry was sandwave clearance volumes and these have now been reduced by a large amount.</p> <p><u>Number and location of Offshore Substation Platforms</u></p> <p>The number and location of OSPs and the booster station have been removed from the assessment due to the removal of the infrastructure from the project. This has a positive outcome for physical processes as it is infrastructure that could be located closer to the shoreline which isn't going to be included anymore reducing potential impacts.</p> <p><u>Cable Crossings and HDD</u></p> <p>Cables crossings and cable protection changes have been discussed by HK already. The Horizontal Directional Drilling (HDD) is currently being refined by the project and will be included in the Application.</p> <p><u>Cable protection</u></p> <p>The final point regarding the PD and parameters is cable protection, particularly in shallow water, in terms of physical processes. There is a refinement to the amount of cable protection that will be used but also there are inter-related project commitments with navigation and under these commitments the Maritime and Coastguard Agency (MCA) guidance will be followed – that there is no more than 5% reduction in depth without prior approval. These will have an impact in limiting impacts on the interruption of any sediment transport processes.</p> <p>LB – in relation to shallow waters, we need coastal processes chapter to assess implications of disruption to sediment transport and disruption to coastal designated sites in particular. We want the best cable protection that is least likely to disrupt – we'd need consideration of whether disruption can be reduced by use of different types of cable protection.</p> <p><u>CEA screening and methodology</u></p> <p>To clarify, it is recognised that between the preparation and submission of the PEIR there were reviews ongoing highlighting that things had changed/progressed within other projects. To account for this the long list is currently being updated for the drafting of the ES chapters and will be reviewed again to ensure there is a full and complete list for Application.</p>		

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	<p>The next point is to clarify that for the CEA the project doesn't assess projects individually for significance and then add those significances together. The cumulative assessment looks at the sum of the different magnitudes of impacts of the projects and the sensitivity of the receptors before forming the cumulative conclusions.</p> <p>KL – on the CEA screening, the Generation Assets will be considered based on their final Applications and ESs (that will be submitted in the next few months). This Application will have the cumulative assessment based on the Final DCO Applications for the Generation Assets DCOs and will not double count the OSPs.</p> <p><u>How transboundary effects are considered</u></p> <p>The final point was regarding transboundary effects. In terms of the Isle of Man it is a crown dependency so it wouldn't be considered transboundary. It is an integral part of the assessment, so it is considered but not as transboundary.</p>		
7.	<p>Fish and Shellfish Ecology (presented by LS)</p> <p>To reiterate my colleagues' thanks for the Section 42 responses - these were very useful and will help us moving forward to the Application.</p> <p><u>Concern regarding parameters for seabed preparation</u></p> <p>The first point of concern is regarding parameters for seabed preparation. As described for Benthic Ecology, the MDS for sandwave clearance will reduce for temporary habitat disturbance across the Project (reduced to 10% overall, from 60% to 9% of Morgan export cables and from 30% to 9% for Morecambe export cables) and to 5% within the Fylde MCZ (as mentioned in previous slides).</p> <p><u>Concerns regarding key migratory periods for diadromous fish</u></p> <p>The next concern is regarding key migratory periods for diadromous fish. Natural England flagged that the submitted ES should include due consideration of seasonal timing or restrictions of works to mitigate for potential impacts on diadromous fish species with the aim of avoiding (as best as possible) key migratory periods. Whereas NRW stated that due to the extensive migration periods of various life stages of migratory fish and inshore foraging of sea trout and eel, determining key migration windows robustly is difficult. NRW therefore advise that diadromous fish are assumed to be present in the study area throughout the year. Key migratory windows drawn from literature are outlined within the fish and shellfish technical report, however, the precautionary approach suggested by NRW has been implemented for assessment purposes, assuming that diadromous fish may be</p>		

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	<p>present within the area year-round. Potential mitigation measures will be considered, where appropriate and based upon assessment outcomes with respect to diadromous fish.</p> <p><u>Static/moving fish receptors and soft start piling</u></p> <p>Regarding static/moving fish receptors and soft start piling, Natural England and NRW flagged that there is little evidence to support any assertion that fish flee consistently and coherently away from noise sources and therefore do not agree with soft start piling as mitigation for fish. Natural England advises that soft start piling is not considered as viable mitigation given the lack of evidence to support this. As described earlier in this presentation, piling activities for the Offshore Substation Platforms and the Offshore Booster Station are removed from the Project Design Envelope, therefore piling will not be considered in the Environmental Statement.</p> <p><u>Risk of significant impacts to herring and cod from underwater sound during spawning season</u></p> <p>Risk of significant impacts to herring from underwater sound during spawning season was raised in the section 42 responses. Natural England noted that a risk of significant impacts has been identified for spawning herring from piling for the project alone and cumulatively, but as yet no mitigation measures have been proposed to address this impact. It is advised that mitigation measures are considered and presented in the ES to address the risk of impacts during the herring spawning season. NRW echoed this comment, and also highlighted potential significant impacts to cod spawning. Based upon the revised project design envelope which excludes all piling activities, no significant effects to fish are predicted as a result of underwater sound impacts. Piling will not be considered within the Transmission Assets ES, but UXO clearance and High Resolution Geophysical surveys will be assessed, but are not predicted to result in significant impacts to fish and shellfish receptors.</p> <p>Key feedback from the MMO flagged queries relating to underwater sound, herring and sandeel substrate suitability assessment.</p> <p><u>Underwater sound and piling</u></p> <p>Much of the commentary regarding underwater sound is related to piling. Piling no longer forms part of the project design envelope for the Transmission Assets, and the Underwater sound assessment will focus on UXO clearance and High Resolution Geophysical surveys, these two factors will be assessed for both the project alone and cumulatively with other projects and plans. The project note the feedback</p>		

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	<p>regarding continuous sound sources and will review and address this in the ES.</p> <p><u>Sandeel and herring substrate suitability assessment</u></p> <p>The project proposes to update the sandeel and herring substrate suitability assessment in line with that undertaken for Morgan Generation Assets Application and will endeavour to explore the potential for generating heat maps for sandeel suitability but will ensure incorporation of One Benthic PSA data to provide regional context. The substrate maps presented for herring and sandeel are intended to display the distribution of preferred/marginal substrates for these two species. A full broadscale substrate map can also be provided separately. Cefas highlighted that by not presenting the full biotope mapping against the separate figures for the preferred and marginal substrates, there could be potential for missing suitable/marginal habitats for those species. We'll add figures to show the full context for the area.</p>		
8.	<p>Discussion and next steps (presented by KL)</p> <p>Meeting minutes will be circulated within two weeks alongside the agreement logs. This will include the meeting minutes from the EWG on 7th February.</p> <p>Some of the content covered in the agreement logs will be revisiting what was covered in the previous EWG (pre-PEIR submission). Hopefully there can be progress on such things as agreement on the baseline characterisation remit. The project would like to get some of those agreements tied down while thinking of heading towards Application on such topics as assessment conclusions and appropriate mitigation measures. This is with a view of front loading as much as possible before heading into examination at the end of the year.</p> <p>Any other comments or queries?</p> <p>Thank you and meeting brought to a close.</p>		
Summary of Actions		Status	Completion Date
A1.	Natural England to provide more information on Strategic Compensation when it becomes available.		
A2.	Natural England to provide advice on cable protection licensing during the O&M phase.		
A3.	RPS: Collective assessment of waves, tides and sediment transport to be added to agreement log		
Summary of Agreements			
Ag1.			
Ag2.			

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
Ag3.			

B.3.1.1 Response from the Natural England regarding the meeting minutes

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Morgan and Morecambe Offshore Wind Farms: Transmission Assets - PP, BE, FSF EWG03
Date: 22 March 2024 10:41:33
Attachments: [image001.png](#)
[image002.jpg](#)
[image003.png](#)

Good Morning [REDACTED],

Thank you for providing the minutes and slides from the BE, PP and FSF EWG03.

In response to the agreement log at the end of the minutes, Natural England has the following comments:

- Agreement 1: Natural England to share this information when it becomes available
- Agreement 2: Cable protection licensing during the operation and maintenance phase: Remedial burial can be included in the DCO application. However, installation of cable protection within a protected site would still need a separate marine license due to the potential impacts to designated site features which may have changed over time.

Kind regards,

[REDACTED]

[REDACTED]

Pronouns: He/Him
Marine and Coastal Lead Adviser
Cheshire to Lancashire Area Team

Natural England

[REDACTED]

www.gov.uk/natural-england



[REDACTED]

B.4 Benthic ecology, Fish and shellfish and Physical processes EWG meeting 4

B.4.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project External
(Restricted)

Minutes of Meeting Number : Transmission Assets PP, BE, FSF EWG Meeting 04 **REV. No.** : 00

Minutes of Meeting Subject : Transmission Assets Physical Processes, Benthic Ecology and Fish and Shellfish Ecology EWG Meeting 04

MINUTES OF MEETING

MEETING DATE : 15/08/2024

Az-MEETING LOCATION : Microsoft Teams

RECORDED BY : [REDACTED] (RPS)

ISSUED BY : [REDACTED] (RPS)

Attendees:

- [REDACTED] – bp (HK)
- [REDACTED] – Flotation Energy (HR)
- [REDACTED] – RPS (KH)
- [REDACTED] – RPS (BM)
- [REDACTED] – RPS (AP)
- [REDACTED] – Natural England (KB)
- [REDACTED] – Natural England (LB)
- [REDACTED] – MMO (AS)
- [REDACTED] – Cefas (RB)
- [REDACTED] – Cefas (GE)
- [REDACTED] – Environment Agency (LL)
- [REDACTED] – Environment Agency (RH)
- [REDACTED] – Environment Agency (AJ)
- [REDACTED] - The Wildlife Trusts (GdJC)

Apologies:

- [REDACTED] – MMO (ALF)
- [REDACTED] – Cefas (CH)
- [REDACTED] – Cefas (RS)
- [REDACTED] – Cefas (PM)
- [REDACTED] – Natural England (EW)
- [REDACTED] – Natural England (KC)
- IFCA

Agenda

1. Introduction
2. MCZ Assessment
 - Updates post-S42 (commitments and impact assessments)
3. Outline Offshore Cable Specification and Installation Plan (CSIP) and Outline Cable Burial Risk Assessment (CBRA)
4. Discussion and Next Steps

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
1.	<p>Introductions and Agenda (presented by KH)</p> <p>Introductions were made before the agenda for the meeting was talked through as shown on slide 2.</p> <p>It was noted that Physical processes and Fish and shellfish ecology wouldn't be covered in this EWG</p>		

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2.	<p>MCZ Assessment (presented by AP)</p> <p>AP talked through Slide 4 which showed a table of all the commitments adopted as part of the Transmission Assets, relevant to the Marine Conservation Zone (MCZ), and how they have been updated since the Preliminary Environmental Information Report (PEIR) for the final application. All commitment numbers, PEIR wording (if applicable) and updated/additional measures introduced for the Environmental Statement (ES) were shown on the slide in full.</p> <p>The exact wording of these commitments will be finalised along with the MCZ Assessment for submission with the ES.</p> <p>In addition to the commitments on slide 4, consideration was given to the applicability of the mitigation measures utilised by other projects as indicated in Natural England’s Section 42 response.</p> <p>The tables on Slides 5 to 7 listed each mitigation measure proposed by Natural England and the consideration made by the Applicants on their suitability/relevance for the Transmission Assets. AP explained each proposal by Natural England and the consideration which was written in the table on the slide. AP noted that most were project and specific to different features of different MCZs and therefore were not appropriate to be implemented for the Transmission Assets.</p> <p>Slide 8 showed the confirmed updates for the project parameters for temporary habitat loss/disturbance during the construction phase since the PEIR. The table on the slide showed the project parameters for sandwave clearance (including subsequent burial), volume of sandwave clearance and jack ups for the Morgan export cables. AP talked through the PEIR MDS, the values presented at EWG03 and the reduced parameters that will be included in the final application for each parameter. This included a key reduction in the length of Morgan export cables in the MCZ that may require sandwave clearance from 60% at PEIR to 5% for the final application. AP noted that the final application will include quantification of up to four Jack ups for the Morgan export cables possibly located within the MCZ.</p> <p>Slide 9 presented the equivalent details for the Morecambe export cables. AP talked through the details and changes made since the PEIR and EWG03 for sandwave clearance, volume of sandwave clearance and Jack ups. This included a key reduction in the length of Morecambe export cables in the MCZ that may require sandwave clearance from 30% at PEIR to 5% for the final application. Similarly, as for the Morgan export cables, the number of Jack ups have now been quantified since EWG03 for Morecambe export cables, up to two Jack ups for Morecambe possibly located within the Fylde MCZ.</p> <p>Slide 10 showed the changes between PEIR and ES for the total temporary habitat loss/disturbance during the construction phase within the Fylde MCZ for the Morgan and Morecambe export cables combined. AP talked through the changes as shows in the table on slide 10 and highlighted the substantial reduction in temporary habitat disturbance during the construction phase from 8.53 km²</p>		

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	<p>(3.27% of the MCZ) at PEIR to 2.50 km² (0.96% of the MCZ) for the final application.</p> <p>Slide 11 showed the post-PEIR refinements to the MDS for operation and maintenance cable repair and reburial activities in the Fylde MCZ. AP discussed the changes to the length (in km) of each repair/reburial event as listed on the slide.</p> <p>Slide 12 showed the changes since PEIR in the total temporary habitat loss/disturbance during the operation and maintenance phase. AP talked through the table on slide 12 which shows the changes in area (km²) and the percentage affected area for the Fylde MCZ. AP highlighted the substantial reduction in temporary habitat disturbance during the operation and maintenance phase from 5.39 km² (2.07% of the MCZ) at PEIR to 0.83 km² (0.32% of the MCZ) for the final application.</p> <p>Slide 13 discussed the post-PEIR refinements of the Project design leading to long term habitat loss for the Morgan export cables, across the construction and operation and maintenance phases. AP highlighted the reductions in the parameters for cable protection for ground conditions which have reduced from 20% of Morgan export cables at PEIR to 3% for the final application. AP also presented the parameters for the cable crossing along the west edge of the Fylde MCZ required for the Morgan export cables.</p> <p>Slide 14 discussed the post-PEIR refinements of the project design leading to long term habitat loss for the Morecambe export cables, across construction and operation and maintenance phases. AP highlighted the reductions in the parameters for cable protection for ground conditions which have reduced from 15% of Morecambe export cables at PEIR to 3% for the final application. AP talked through the table showing these changes on the slide. The Morecambe cable will not have any cable crossing associated with the Morecambe cables within the MCZ.</p> <p>Slide 15 showed changes in the total long term habitat loss for the construction and operation and maintenance phases between PEIR and the final Application within the Fylde MCZ for the Morgan and Morecambe export cables combined. AP talked through the information in the table which can be found on the slide and highlighted the substantial reduction in long-term habitat loss from 0.16 km² (0.06% of the Fylde MCZ) to 0.003 km² (0.012% of the Fylde MCZ). This represents a ~80% reduction on the PEIR numbers.</p> <p>Slide 16 emphasised that the MDS includes cable protection within the Fylde MCZ as a contingency measure and it may only be required if cable burial and reburial is unsuccessful. The figure on the left shows the location of the one cable crossing of Vodafone Lanis 1 cable shown to the north of Havhingsten cable within the MCZ whilst the figure on the right shows the recommended separation distance for cables shown as buffers highlighting the constraints upon shifting the corridor and crossing within the Fylde MCZ further westward.</p> <p>Only one cable crossing has been identified within the Fylde MCZ, with all four of the Morgan export cables requiring cable crossing infrastructure (50 m long and 20 m wide).</p>		

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	<p>No cable crossings are required for the Morecambe export cables.</p> <p>Slide 17 explained the conclusions of the MCZ Stage 1 Assessment. Based on the reductions in the Project design parameters outlined in the previous slides, the Applicants’ position remains that there will be no significant risks to the achievement of the conservation objectives of the Fylde MCZ due to the Transmission Assets. On this basis, a Stage 2 assessment is not required.</p> <p>Any questions?</p> <p>LB – Comment: In relation to the sandwave levelling, the commitment to be deposited as close as possible to where it was removed, needs another point that it will be as close as possible and in the same sediment characteristic. This is because it is no good putting sand where mud is or mud where sand is. The commitment needs to include reference to the same sediment characteristic as well.</p> <p>LB – Comment: In relation to the In-Principal Monitoring plan, it is not clear where one and three years has come from. There needs to be further discussion around what is the most appropriate monitoring frequency, when we have seen a bit more of the data. If the Applicants are trying to demonstrate the conclusions of the ES, some of the impacts are likely to be two years, such as sandwave levelling, but impacts and understanding of rock placement and that element is slightly different. The Project may need to separate out monitoring in terms of impact pressure rather than looking at a blanket one and three years. Just a reflection it needs to be relevant to the hypothesis you are trying to answer. I think a generic year one and year three probably isn’t going to answer that. A request to go back and reconsider that in a little bit more detail would be good.</p> <p>LB – Comment: I really welcome the reductions and the work undertaken to reduce this; it is really well received. I recognise you are saying you will only put cable protection down where it is essential but unfortunately, we can only assess the worst case scenario that is put forward. While the commitment put forward is welcome, we have to assess and provide comment on that worst case scenario.</p> <p>LB – asked about the requirement for jack up barges in the MCZ?</p> <p>HK – Replied: I will be touching on that later on as part of the CSIP and CBRA discussion.</p> <p>LB – Continued: I will come back to that. Looking at whether MEEB is required, I think that is up in the air for us. Natural England cannot give an agreement on this at this time. It is not Natural England’s final comment on this but 2.6 hectares of cable installation is very similar to 2.77 hectares, where the conversation was required for the Wash and the Wash is a massive site. Looking at it against the whole the designated site and the feature, I am looking at it from a perspective where 2.6 hectares isn’t insignificant and is what I need to consider. I cannot provide further feedback on that today.</p> <p>HK – Replied: Each designation is quite site specific, with this being mud and sand, studies have shown it has quite a bit of recoverability which I hope is taken into consideration.</p>		

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	<p>LB – Noted: I haven’t got a fixed position but am reflecting a scenario where you have provided against the whole of the designated site and the futures of the site.</p> <p>HK and KH - Thank you.</p> <p>KH – Asked: Any other comments or questions before moving onto the CSIP and CBRA?</p> <p>RH – Asked: I can’t fully comment at the moment, but around the protection and areas you are looking to protect if more detail could be provided that would be useful as a geomorphologist. The area does recover quite quickly and there is a lot of mobile material, it’s a dynamic system with a large tidal range. With the impacts of climate change and increased storminess, a little more detail might be useful for us. We see a lot of change in this area and it’s very dynamic so it’s making sure the protection is complete and considered in the assessment.</p> <p>HK – Replied: That is noted, thank you.</p> <p>KB – Asked: I echo LB and appreciate the refinements in the parameters and the clear updates. One question I had was about a new commitment regarding the cable protection that was designed to be removable on decommissioning. Will that be in something like an outline decommissioning plan at the time of the Applications submission? Information on how that is going to look and the methodology for that would probably inform some of these parameters like the long term habitat loss/disturbance. Without that secured in an outline plan it is quite difficult to know if it will be possible for it to be removed at the time of decommissioning.</p> <p>HK – Replied: I don’t think we are submitting a decommissioning programme with the Application. It will be covered to some extent in the outline CSIP which will have a lot more of the specification for that. I would have to get more details from the engineers. I think we are currently looking at mattressing, rock bags and maybe articulated pipes. I can look to get more information on that.</p> <p>KB – Replied: Thank you, I think it is about expanding on that, I understand this is a broad update and overview.</p> <p>RH – Asked: I am assuming there will be ongoing monitoring of the situation with the protection during the construction and through the points to decommissioning.</p> <p>HK – Replied: We will be undertaking asset integrity surveys over the lifetime of the Project.</p> <p>KH – Asked: Any further questions?</p>	<p>Applicants to consider and provide further information on the decommissioning programme and methodology for removal of protection.</p>	<p>15/08/2024</p>

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3.	<p>Outline CSIP and CBRA (presented by HK)</p> <p>Slide 19 showed a table which highlights the mitigation hierarchy used in the site selection process and shows a figure of the cable route.</p> <p>The slide showed information pulled from the site selection chapter to highlight the work undertaken for the site selection across the designated sites, trying to minimise interaction with them. One of the key design elements was to take the shortest and most direct route because that allows for the least amount of interaction with the seabed and avoiding the constraints that have been talked about such as the crossings. The Project is quite constrained on the west edge of the MCZ with existing infrastructure and cables especially due to the south west to north east running Hibernian Atlantic cable that is just to the west of the proposed cable route. The Project looked to avoid a lot of the designations such as Shell Flat and Lune Deep SAC to the north and other MCZs further north. The Site Design has then gone on to look to reduce that impact by trying to cross at the shortest and narrowest point of the MCZ. That is how we have followed the mitigation hierarchy to avoid and reduce with further the commitments to help manage and mitigate any impacts.</p> <p>Slide 20: shows the initial results of the outline CBRA based on the six vibrocores/CPTs taken during geotechnical surveys in 2022, noting the sixth location is hidden under the 2A/2B label. The figure and table use the different kilometre points (KPs) along the route with 0 being the TJBs at Blackpool Airport so the first 2 km are between the airport and the beach with the MCZ approximately between KP5 and KP21.</p> <p>The first two kilometres will be onshore works. The Project will have 2000 m of cable that will have to be taken from the intertidal to Blackpool Airport. The near shore area has some small ridge and runnel features along the coast. KP4.0 is about 2km offshore and between KP4.0 and KP7.0 is where the Fylde MCZ begins. The majority of the Fylde MCZ is largely featureless with some pitted seabed (two hundredth of a metre). It is not until we get to the west edge of the MCZ that we start to see more variability in seabed features that require clearance. This is where small sporadic ripples start and become much more prevalent around KP17.0 to KP24.0. Based on the initial analysis of the six vibrocores, the Applicants do not anticipate a requirement for additional cable protection for ground conditions. The CBRA does identify some areas of slightly gravelly material which is not anticipated to be a constraint to cable burial; however, if denser gravel is encountered in further surveys, this may be a constraint to reaching the target burial depths. Hence, the contingency requirement for 3% cable protection for ground conditions with further survey work required to determine if and where this may be required.</p> <p>HK noted that the following would allude to LBs query on the Jack ups. The water depth is quite shallow in the near shore area and you don't get the 10 m water depth until about 6 km offshore (KP8.0). The Project is yet to procure the subsea cable provider and are quite constrained by the weight and length of the cable pull-in that is</p>		

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	<p>required which could see approximately 7,000 m of cable requiring pull in 7-8000 m. This is further constrained by the limited number and types of vessel that can operate in shallow water depths and accommodate the size and weight of the cable. The As such, the possibility is that one jack up could be required along the east edge of the MCZ though the Applicants are exploring other possible options and methodologies.</p> <p>The CBRA indicates that the greatest risk to cable exposure and impact is damage due to hooking, snagging, etc from fishing activities and anchoring. The most appropriate mitigation is to achieve suitable cable burial depths. The CBRA recommends burial depths of between 1.5-3.0 m. The Project is committed to trying to achieve that and cables will be buried where the substrate allows to target burial depths in accordance with the final CBRA with a minimum burial depth of 0.5 m or greater, where possible.</p> <p>Slide 21 highlights the pre-construction survey works that will be undertaken to help improve the likelihood of successful burial and installation. This is work that will be undertaken post consent and prior to the commencement of construction. The UXO surveys will be undertaken and feed into the final routeing and mitigation for any UXO clearance, if required. The Applicants have a commitment that if a detonation is required, low order techniques will be utilised where possible and further information will be submitted to the MMO when the Project knows more about any UXO in the area.</p> <p>Boulder clearance will be required to enable the cables to be buried and will be side cast if present. A Pre-lay grapnel run will be used to clear obstacles such as discarded fishing gear from the cable corridor. The most appropriate selection of a cable burial tool will be made based on the seabed conditions.</p> <p>Slide 22 described the CSIP sandwave clearance in the nearshore and Fylde MCZ. As the CBRA highlighted, a large portion of the Fylde MCZ is featureless until we get to the west edge where we see the sporadic ripples and mega ripples becoming prevalent. This is why the Project have been able to reduce the sandwave clearance parameters to 5% within the Fylde MCZ.</p> <p>Slide 23 included a table with a list and explanation of the possible cable burial tools for the export cables. From the outcomes of the CBRA and the Transmission Assets largely being characterised as sand/mud/clay, it appears there is only need for traditional tool methods because of the features and conditions present along the cable route. Further details of the cable burial tools were found in the table on slide 23.</p> <p>Slide 24 outlined the CSIP cable protection for ground conditions and cable crossings in the table on the slide. The results of the CBRA indicate the seabed is mostly sand and clay mud and the desired cable burial depths within the Fylde MCZ should be achievable without cable protections. However, this is based on six vibrocores which do indicate some slightly gravelly. If further investigations show that there are areas of dense gravelly seabed that is likely where the 3% contingency cable protection may be required if we cannot reach the minimum burial depth of 0.5m. As AP highlighted</p>		

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	<p>earlier the Projects main aim is to bury the cables. The cable protection will be designed to be removable and the final requirements for cable protection will be informed by the pre-construction surveys. This will all be detailed in the final CSIPs following pre-construction surveys and submitted prior to the commencement of construction.</p> <p>One area where cable protection will be required in the MCZ is for the cable crossing of the Lanis 1 (KP19.4) telecom cable with up to 4 of the Morgan cables crossing this asset in the MCZ, noting that the Morecambe cables (up to 2 cables) were pushed westward and would not cross in the MCZ. Based on the constraints as highlighted on slide 16, the Project have tried to push this as far westward as possible but due to the Hibernian Atlantic cable the Project cannot go any further west and maintain adequate separate distance between the cables and facilitate 90 degree crossings.</p> <p>Slide 25 again touched on the potential need for Jack up vessels. The table on slide 25 showed an overview of the information for the Landfall from the CSIP. As stated earlier there are very shallow water depths in the nearshore area. Conventional cable laying vessels are limited in their ability to approach the coast in shallow waters. Cable lay vessels will need to be able to accommodate the size/weight of cable and be able to manoeuvre in shallow waters which limits the types of vessels that can be used.</p> <p>The worst case scenario for the cable pull-in is about 7000 m and is in part due to the 2000 m between landfall and Blackpool Airport. There may be some seabed preparation required if the Project are able to utilise a Cable Lay Vessel that can sit grounded to some extent on the seabed with smaller anchors. It is ultimately down to what type of vessel can handle the weight of the cable and can potentially be used where the water depth drops to 3-4 m. There is a possibility that a Jack up vessel may be needed in the MCZ to facilitate the long length of the cable pull-in. If that is the case it would be very close to the east edge of the MCZ. The Project is currently investigating alternative and less impactful methods such as spud-pull vessels or shallow draft cable barges. These decisions will be made closer to construction when the parameters of the cable and availability of vessels are known.</p> <p>KH – Asked if there were any questions or comments?</p> <p>LB – Asked are the Project saying they might need a Jack up barge or are likely to need one at the exit pits for the Horizontal Directional Drilling (HDD)?</p> <p>HK – Replied: The Project has refined the way in which the cable pull-in is going to connect. Between the beach and Blackpool Airport a direct pipe methodology will be used. This is slightly smaller, less impactful and takes slightly less time than HDD. That is to go from Blackpool Airport under the SSSI, sand dunes, golf course and exit on the beach. The reason for selecting direct pipe is to try and minimise winter working at the beach where there are over-wintering and foraging birds. The cable comes in from an offshore vessel and is floated in, onto the beach and goes into the direct pipe. The Jack up is to stabilise the subsea vessel that is holding the cable to account</p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>for waves and tidal movements. Ultimately it is the length of the cable pull-in and weight and size of the cable which will determine the vessel type that accommodate that and shallow water depths. Smaller vessels can get closer to the nearshore but cannot hold the same weight and length of cable.</p> <p>LB – Asked: Effectively there is a Jack up barge to enable the landfall. My concern and question is, if the 10 m depth contour is beyond KP8, what vessel will you use to support your cable burial in the shallow water?</p> <p>HK – Replied: I would have to take that back to the engineers, but it is usually some sort of shallow draft barge vessel.</p> <p>LB – Commented: That is my expectation. I am concerned that they may have an expectation to use a shallow bottomed Jack up barge that ‘walks’. This would be a major concern for us, I would really like you to investigate it now because either there is a commitment that it won’t be a walking barge that is the supporting vessel out to KP8.0 or we might have a situation that hasn’t been assessed. Natural England are coming across this time and time again, especially with vessel availability, that post consent pre-construction the vessel used is a walking barge. Natural England don’t like that within the MCZ is where I am coming from, which is why I want the engineers to really think about this and ensure that if at all possible, they commit to not using a walking barge. I would say in relation to this, we are seeing Jack up barge led depressions lasting a lot longer than anyone anticipated. Nearly 6 years at Lynn and Inner Dowsing and currently two years at Triton Knoll. This is why we don’t really like jack up barge use within the MCZ. I understand the engineering justification because I think there are limited alternatives. I can understand it coming in once per cable and being stationary and in the hope it will recover but that it will be a medium term impact probably. What we would struggle with is if you were coming in multiple times with multiple legs meaning moving the barge around.</p> <p>HK – Replied: I will raise that with engineers and take it away.</p> <p>LL – Asked: For my understanding, the Projects intention is to remove the cable protection upon decommissioning, is the cable itself intended to be left in situ? Following on from RH on climate change and stormy conditions. What is the commitment for monitoring throughout the Project and after decommissioning if the cable is left in situ.</p> <p>AP – Replied: In terms of the assessment the MDS is that the cables would be removed as well as the cable protection and I believe that is what is in the Project Description.</p> <p>HK – Continued: That is correct, at worst case it would be removed. The preference from the engineering side is to leave the cables in place and just remove the cable protection. The worst case parameters would be the complete de-installation of the Transmission Assets.</p> <p>As far as monitoring goes during the operation and maintenance phase there are Asset integrity surveys which are undertaken more</p>	<p>Applicants to raise the details of vessel type and use of Jack up vessels with the engineers for more information on methodology in shallow water depths.</p>	<p>15/08/2024</p>

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>frequently in the first few years but become more spaced once an understanding of where the risk of cable exposure is likely to be. The regular Asset integrity surveys will often coincide after major storm events to ensure the Assets are adequately protected and not exposed.</p> <p>LL – Asked: Longer term, the worst case is to remove it all, what would trigger worst case scenario decision and if left in situ what monitoring would be undertaken post decommissioning?</p> <p>HK – Replied: I am not sure, best practice can change quite a bit over 35 years as what is required/desired on the seabed in terms of staying in situ or maybe recycling as that becomes more prevalent. The flexibility which exists throughout the EIA to assume what the worst case is for each receptor and impact assessment so that the eventuality at decommissioning will be covered. I am unsure on monitoring of cables on the seabed post decommissioning I can take that away and find out what the requirements are around that.</p> <p>LL - Thank you.</p> <p>AJ – Asked: is there a reason why a new cable cannot go underneath an existing cable thus removing the need for cable protection when approaching a cable crossing?</p> <p>HK – Replied: I will need to take that away and ask the engineers as well. Generally, the best practice is to have hard protection between the cables to prevent issues between the cables and integrity of the different assets.</p> <p>AJ – Asked: We know the water is shallow and the area is very dynamic. There was mention that burial depths could be as little as 0.5 m, that seems like the condition that could lead to exposure. I know contingency such as re-burial is considered in the Project but did you have any comment on being happy to accept 0.5 m [burial depth] and the risks associated with that.</p> <p>HK – Replied: We will look at the risk of burial depths. The recommended depths within the CBRA are due to the potential risk of snagging and anchorage pulling, as mentioned earlier. The Project is aware that, while telecom cables are smaller, some of the others in the area had smaller target burial depths and to our understanding have not had any issues. The Projects preference is to bury in line with the CBRA recommendations but as a means to facilitate cable burial in the MCZ and not use cable protection, there may be instances where 0.5 m burial depths would be suitable.</p> <p>RH asked for the slides from this presentation to be shared. KH reminded attendees that the slides are attached to the meeting invitation but notes the Project will share the slides alongside the minutes.</p> <p>RH – Thank you that will be useful so it can be shared with other members of my team.</p> <p>KH – Asked if there were any other questions?</p>	<p>Applicants to look into the monitoring requirements for cables left in situ post decommissioning</p> <p>Applicant to ask engineers on specifications on cable crossings and whether there is a reason a new cable cannot be buried under an existing cable?</p>	<p>15/08/2024</p> <p>15/08/2024</p>
4.	Discussion and next steps (presented by KH) – slides 26-27		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>The meeting minutes will be circulated two weeks following the EWG and will re-distribute the slides.</p> <p>The project are due to submit the DCO Application for the Transmission Assets in late September of this year.</p> <p>AS – Asked: Some Cefas teams weren’t brought into this as we weren’t sure if it would be applicable to them. We will need more than 2 weeks with the minutes to consult with those other Cefas teams.</p> <p>KH – Replied: The Project will get those over to you as soon as possible. If you could reply to state that, that would be helpful.</p> <p>AS – Thank you</p> <p>KH - Thank you for attending.</p> <p>Meeting closed.</p>		
5.	<p>Post Meeting Notes</p> <p>In response to LBs concerns over ‘walking’ Jack up vessels, it should be noted that the Applicants are drafting a new Commitment to not use walking jack-ups in MCZ during construction.</p> <p>In response to the question by LL regarding whether there would be monitoring post decommissioning if the cables were left in situ. The Applicants note that, following discussions with the engineers, the cables are generally not monitored post-decommissioning as they wouldn’t be active at this point.</p> <p>In response to the question from AJ regarding installing cables underneath existing cables, HK has discussed with engineers.</p> <p>The method of installing underneath existing cables is not undertaken as this could affect integrity of existing assets and a layer of protection is needed in between any new and existing assets to ensure that neither is compromised by the other.</p>		
Summary of Actions		Status	Completion Date
A1.	None		
Summary of Agreements			
Ag1.	See agreement log		

B.4.1.1 Response from the Natural England regarding the meeting minutes

Date: 11 September 2024
Our ref: DAS/UDS A012451 489596
Your ref: Morgan and Morecambe Transmission Assets BE PP FSF EWG04
MCZ Discussion



[REDACTED]
RPS/ Energy
Imagination House
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Monmouthshire
NP16 5PB

Hornbeam House
Crewe Business Park
Electra Way
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CW1 6GJ

cc [REDACTED]
RPS

BY EMAIL ONLY

Dear [REDACTED]

Discretionary Advice Service (Charged Advice): UDS A012451

Development proposal: Morgan and Morecambe Offshore Windfarms: Transmission Assets

Consultation: Morgan and Morecambe Transmission Assets BE PP FSF EWG04 MCZ Discussion

This advice is being provided as part of Natural England's Discretionary Advice Service (DAS) in accordance with the Quotation and Agreement dated 12th January 2024 to Morgan Offshore Wind Limited for the Morgan and Morecambe Transmission Assets.

The following advice forms Natural England's response to the meeting minutes provided for the Morgan and Morecambe Transmission Assets BE PP FSF EWG04 attended by Natural England on 15th August 2024.

Natural England were asked to provide feedback on the following points:

- MCZ Assessment Conclusion

Detailed comments

MCZ Assessment Conclusion

Based on the updated information presented within the EWG04 and the refinements to the project design to reduce effects on the Fylde MCZ, the Applicant position is that the project will not pose a risk to achievement of conservation objectives for the site.

Natural England welcome the work put into refining the project design in order to reduce effects on the Fylde MCZ. However, Natural England can only assess the worst case scenario that is put forward and therefore, Natural England cannot provide agreement at this stage. This will be reviewed when the full assessment is provided during the Examination period.

Other Comments Raised From EWG04:

Sandwave Clearance

We welcome the proposed new commitment in relation to sandwave clearance deposition: “*CSIP includes for **material arising sandwave clearance to be deposited in close proximity to the works and within the licensed disposal sites within the Order Limits.***” However, we advise that sandwave clearance deposition should also take place within the same sediment characteristic it was removed from. We request that the wording of the proposed commitment is updated to reflect this.

In-Principal Monitoring Plan

In relation to the In-Principal Monitoring plan, it is not clear where one and three years has come from. There needs to be further discussion around what is the most appropriate monitoring frequency, when we have seen a bit more of the data. If the Applicants are trying to demonstrate the conclusions of the ES, some of the impacts are likely to be two years, such as sandwave levelling, but impacts and understanding of rock placement and that element is slightly different. The Project may need to separate out monitoring in terms of impact pressure rather than looking at a blanket one and three years. It needs to be relevant to the hypothesis you are trying to answer and therefore we request that the applicant considers this in more detail.

Cable Protection & Removal

The applicant should consider providing information on how the outline decommissioning plan will be implemented, including methodology used in measuring certain parameters, particularly in relation to long-term habitat loss/disturbance.

Cable Burial & Landfall

Natural England queries what vessel will be used to support cable burial in shallow water if the 10 m depth contour is beyond KP8.

Use of a shallow-bottomed jack-up barge that ‘walks’ would be of major concern to Natural England, particularly in relation to use within Fylde MCZ. Natural England therefore advises that the applicant provides a commitment that a walking barge will not be used out to KP8.0. This is due to jack-up barge depressions lasting longer than previously anticipated, with depressions lasting nearly six years at Lynn and Inner Dowsing wind farm, and currently two years at Triton Knoll. Natural England notes that the post-meeting notes that the applicant has stated that they are drafting a new Commitment to not use walking jack-ups in the MCZ during construction.

For clarification of any points in this letter, please contact me using the details provided below.

Yours sincerely,

██████████
Marine and Coastal Lead Adviser
Coast and Marine Team
Cheshire to Lancashire Area Team
████████████████████

The advice provided in this letter has been through Natural England’s Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All

Appendix C: Evidence Plan Marine mammals EWG

C.1 Marine mammals EWG meeting 1

C.1.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project
External (Restricted)

MOM Number : Transmission Assets MM EWG01 **REV. No.** : 01

MOM Subject : Transmission Assets Marine Mammals Expert Working Group 1

MINUTES OF MEETING

MEETING DATE : 05 April 2023

MEETING LOCATION : Microsoft Teams

RECORDED BY : [REDACTED] (RPS)

ISSUED BY : [REDACTED] (RPS)

Attendees:

- [REDACTED] – Flotation (TS)
- [REDACTED] – Flotation (NJ)
- [REDACTED] – bp (MP)
- [REDACTED] – bp (SR)
- [REDACTED] – bp (DH)
- [REDACTED] – RPS (KL)
- [REDACTED] – RPS (KR)
- [REDACTED] – RPS (CL)
- [REDACTED] – RPS (LB)
- [REDACTED] – Seiche (SS)
- [REDACTED] – Seiche (CB)
- [REDACTED] – MMO (AE)
- [REDACTED] – MMO (KW)
- [REDACTED] – MMO (EW)
- [REDACTED] – Natural England (KB)
- [REDACTED] – Cefas (RF)

Apologies

- [REDACTED] – Natural England (LB)
- [REDACTED] – MMO (AF)
- The Wildlife Trust

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
1.	<p><u>Project Overview (presented by SR)</u></p> <p>The Morgan Offshore Wind farm in the Irish Sea is being developed by bp and EnBW, and the Morecambe Offshore Wind farm is being developed by Cobra and Flotation. The Generation Assets for these projects will be developed and consented separately to their Transmission Assets.</p> <p>The National Grid Holistic Network Design Review concluded that both projects would have a single coordinated grid connection location at Penwortham and would result in three DCO applications: Morgan Generation Assets, Morecambe Generation Assets and Morecambe and Morgan Joint Transmission Assets.</p> <p>In relation to the Transmission Assets, the Applicants sought a direction from the Secretary of State under section 35 of the Planning Act to confirm that they should be treated as development for which development consent is required under</p>		

	<p>the Planning Act 2008, as amended. A direction was given on 4 October 2022 and the Applicants are now pursuing a single application for development consent for the Transmission Assets for both wind farms.</p>		
2.	<p><u>Key milestones (presented by SR)</u></p> <p>Mona, Morgan Generation and Morecambe Generation PEIRs will be submitted April 2023. The DCO applications for these projects will be submitted during Q1 2024.</p> <p>The Morgan and Morecambe Joint Transmission Assets PEIR will be submitted Q3 2023 and the application for development consent is currently planned to be submitted Q3 2024.</p> <p>The Applicants have extended the consultation period for the Morgan Generation and Mona PEIRs to 47 days. This will run from 18 April to 04 June 2023. The Morecambe Generation PEIR also follows these dates.</p>		
3.	<p><u>Evidence Plan Process (EPP) (presented by KL)</u></p> <p>KL provided an overview of the EPP. The proposed approach has been developed following the Planning Inspectorate and Defra guidance and recent guidelines produced by Natural England. The EP is a mechanism to agree upfront what information the Applicants need to supply to the Planning Inspectorate as the Examining Authority as part of an application.</p> <p>The EP process has historically been focused on the Habitats Regulations Assessment (HRA) however in line with recent best practice, the Applicants propose to extend this to include the EIA processes, including both ecology topics and non-ecology topics, as set out in the slides later in the presentation.</p> <p>This EP process for the Transmission Assets is separate to the process for the Morgan generation and Morecambe generation assets. As a note, stage 3 and 4 appear compressed on the figure, but this is just a presentation issue for the slide pack. The timings are not compressed; we have assumed adequate time to incorporate stakeholder feedback on the PEIR ahead of the DCO application.</p>		
4.	<p><u>Roles and responsibilities (presented by KL)</u></p> <p>The EP process is led by the Applicants. The responsibility for updating the EP is with the Applicants, with feedback from the relevant consultees.</p> <p>KL will act as chair for the EP process as a whole and will chair the steering group meetings and EWGs, as relevant. KR will act as secretariat. KL and KR are to be included on all correspondence.</p> <p>Roles and responsibilities are set out in the slide pack.</p> <p>The Applicants have put together a broad plan for engagement with the steering group and EWGs, noting that this is subject to progress based on how the project progress.</p>		

<p>5.</p>	<p><u>Overview of Evidence Plan Steering Group and EWGs (presented by KL)</u></p> <p>KL presented the Steering Group participants and the EWG structure. The next Steering Group meeting will discuss cable routing. The aim of the EWGs is to discuss and agree with stakeholders, key elements of the EIA and HRA during the pre-application stages.</p> <p>KL presented the areas we are seeking agreement on, the broad timescale for the next EWGs and what the focus of each of them will be. This EWG will combine the introduction to the project, and the baseline for marine mammals.</p> <p>KL presented the broad process and timescales for progressing to agreements, and this aligns with how we have run the Morgan Generation and Mona EPP. The process is iterative, and meetings will be held at key stages or where new information becomes available. Where we require feedback during the meeting, materials will be provided ahead of time. Minutes and agreement logs will be provided two weeks following the meeting.</p> <p>We will follow up this meeting with a revised paper to confirm the densities to be used in the baseline for marine mammals.</p> <p>The offshore red line boundary presented here is the same as presented in the Scoping Report. The Applicants are in the process of refining this boundary and have plans to engage with the Steering Group in May. In this meeting we will explain the process for refinement of the route, which will be presented in the PEIR.</p>		
<p>6.</p>	<p><u>Marine Mammal Baseline (presented by LB)</u></p> <p>Aerial site surveys were undertaken for the Morgan Array Area, between April 2021 and March 2023, and 1 year of data will be available for inclusion in the PEIR, noting that 2 years of data will be presented in the Environmental Statement at Application submission. The Array Area plus a 10km buffer defines the survey area. The survey comprised of 18 survey transects with a 2km spacing. This equated to 12% of the survey surface area analysed, with a resolution of 1.5cm GSD.</p> <p>Aerial site surveys were undertaken for the Morecambe Array Areas, between March 2021 and February 2023, and 1 year of data will be available for inclusion in the PEIR. The Array Area plus a 4-10km buffer defines the survey area. The survey comprised of 31 strip transects with a 1km spacing. This equated to 25% of the survey surface area analysed, with a resolution of 2cm GSD.</p> <p>LB presented the data sources to be used for the baseline, as per the slide pack. Given the proximity to the Isle of Man, we have sourced data also from the Manx Wildlife Trust, Manx Whale and Dolphin Watch and the Sea Mammal Research Unit.</p> <p>Key species are identified are harbour seal, grey seal, harbour porpoise, bottlenose dolphin, short-beaked common dolphin, Risso’s dolphin and minke whale. White-beaked dolphin were included in the Morecambe Generation PEIR, but this species has</p>		

	<p>been scoped out of the Morgan and Morecambe Transmission Assets PEIR, as supported by the Scoping Opinion.</p> <p>The Morgan and Morecambe Transmission Assets Study Area is the red line boundary plus 10km. This will be updated in line with the refined red line boundary, as discussed earlier in this meeting.</p> <p>The Regional Marine Mammal Study Area provides a wider context. The desktop review considered the marine mammal ecology, distribution and density/abundance within the Irish Sea and wider Celtic Sea. Species specific populations were considered over a regional scale, within the context of their relevant species Management Units (MUs).</p>		
7.	<p><u>Species Specific Management Units (presented by LB)</u></p> <p>These have been considered at species appropriate scales, as per the slide pack, for harbour porpoise, bottlenose dolphin, common dolphin, Risso's dolphin and minke whale.</p> <p>For Seals, MUs have been detailed largely through the telemetry data, and connectivity from the Transmission Assets Study Area and haul-out site data. For harbour seal, this is the SCOS MU including NW England, Wales and Northern Ireland. For grey seal, this is the SCOS MU including SW Scotland, NW England, Wales and Northern Ireland. Reference population numbers for MUs will be based on Duck and Morris (2019), Howe (2018) and SCOS (2020). We are looking into different approaches to correction factors, to adapt sightings data to identify population numbers, and this will be presented at the next EWG.</p> <p>Grey seal – through the Morgan Generation Evidence Plan, we were asked to consider the use of OSPAR Region III as an alternative MU in the assessment so we will be seeking opinion on application of this for the Transmission Assets PEIR.</p> <p>KL – We have some feedback on OSPAR region III from the Morgan Generation Evidence Plan, and we used this for our PEIR assessment, so we will consider this advice as part of the note that we're developing. We will follow this up with a post-meeting action to set out our approach.</p> <p>LB – Within the post meeting note we'll set out estimated population numbers for the different MUs and that will include the population numbers for OSPAR Region III to seek advice on the use of the two (not mutually exclusive) approaches to reference populations for grey seal.</p> <p>KL – so it's not just about the densities, it's about the reference populations for the OSPAR Region III?</p> <p>LB – yes, that's correct.</p>	<p>RPS to circulate a note confirming densities to be used in the marine mammal assessment, and justification for the proposed densities.</p>	<p>28/04/2023</p>
		<p>Feedback on the above will be required 2 weeks after issue.</p>	<p>12/05/2023</p>
8.	<p><u>Approach to Assessment – Underwater Sound (presented by SS)</u></p> <p>SS presented the sound sources to be included in the assessment, as per the slide pack. This ranges from site preparation activities, including various UXO sizes and this will include use of low order techniques too so we'll undertake modelling for those. In terms of</p>		

	<p>piling, we have monopile and jacket foundations to be modelled, as well as the potential use of drilled piles. We are covering the geophysical surveys and various operational vessels as well as a range of construction vessels.</p> <p>In terms of the source levels that we are using as inputs to the propagation modelling, we will use a hybrid finite element and parabolic equation model approach. This takes into account pile geometries, water depth at the pile locations and surrounding bathymetry, sound velocity profiles in the soil at the pile locations, the specification of the type of impact hammer, the connecting devices between hammer and pile (like anvil, anvil ring, follower, etc) and the hammer type and energy, including velocity and force/time profiles to describe the excitation by the hammer impact acting at the pile head.</p> <p>In terms of hammer energy we have undertaken calculations based on maximum energies and will make some empirical corrections for things like soft start and ramp up at lower hammer energies.</p> <p>SS presented the piling scenarios to be calculated for the exposure, noting mitigation measures will also be incorporated into the modelling.</p> <p>For noise propagation modelling, the Weston Energy Flux model will be used and calibrated against other noise models.</p> <p>SS presented the steps for the modelling methodology to be used, as per the slide pack. For the moving animal model, we assume a constant swim speed approach but we're using a swim away speed rather than a scaled maximum swim speed. Swim speeds are set out in the slides and are based on previous stakeholder consultation.</p> <p>Summary of conservatism in the assessment – Southall et al. (2019) criteria will be used for PTS and TTS. Use of impulsive thresholds at larger ranges – at some distance the initially impulsive sound will elongate due to dispersion and multiple reflections to become non-impulsive. There is currently no quantitative method of determining this point at which sounds moves from being impulsive to non-impulsive. As a result we are using the impulsive thresholds no matter what the range is and therefore some conservatism is included in the assessment.</p> <p>Piling scenarios will be based on maximum PDE parameters, which are unlikely to be required for all piles. There are maximum pile sizes and hammer energy, maximum number of strikes and piling duration, worst case pile design and geoacoustic conditions, and assessment of maximum design scenario for consecutive piling. Robust pile source levels are based on detailed modelling: the source levels we are using are robust based on detailed finite element modelling.</p> <p>SR – Just to confirm that this modelling will be for the substation platforms for the Transmission Assets.</p>		
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	<p>KL – Yes, the Transmission Assets project includes not just the cables, but also for the OSPs within the Morgan and Morecambe Array Areas, plus a booster station for Morgan along the export cable corridor.</p> <p>SS – Modelling will be undertaken for the Morgan booster station in the two booster station search areas.</p> <p>KL – The main purpose of this is to enable the MDS to be considered under the marine mammal assessment, from the engineering perspective but also from the physical noise perspective and the ecology (e.g. proximity to sensitive locations).</p> <p>SR – This is a useful point to clarify.</p> <p>KL – As SS outlined, we have taken onboard feedback on the modelling approach from the Morgan Generation Assets Evidence Plan too, so we would hope that this approach takes into account comments that were raised previously.</p>		
<p>9.</p>	<p><u>Approach to Assessment – Marine mammals (presented by LB)</u></p> <p>Harbour porpoise – as the most common cetacean species they are widely distributed with hotspots off North Anglesey, the Llyn Peninsula, Cardigan Bay, west Pembrokeshire, and Swansea. The species are present all year round, with peak densities in summer months. LB presented density range currently under consideration in the assessment.</p> <p>Bottlenose dolphin – the species show a coastal distribution, with known hotspots in Cardigan Bay and Anglesey, and movement between Manx waters and Cardigan Bay. The species are present all year round, with peak densities in summer months. LB presented density range currently under consideration in the assessment.</p> <p>Risso’s dolphin – the species are regularly sighted in the southern Irish Sea and are observed all year round but show high seasonality in Max waters. LB presented density range currently under consideration in the assessment.</p> <p>Minke whale – the species are widely distributed and present year round, with peak numbers from July to September. LB presented density range currently under consideration in the assessment.</p> <p>We are aware of two other data sources which we are currently considering (the NRW Welsh Marine Mammal Atlas densities and density surface estimates from the SCANS III surveys), and this may change the densities for the species noted above. The densities to be taken forward will be circulated as a post meeting note (as per action under point 7 above).</p> <p>Common dolphin – the species are widespread in UK waters but less so in the Irish Sea and show strong seasonal shifts. LB presented density range currently under consideration in the assessment. This density will be taken forward in the assessment (note, no change to this density range is anticipated, as there may be for other species noted above).</p>		

	<p>Grey seal – present on Welsh and Irish coasts with haul out sites in the regional study area. LB presented density range currently under consideration in the assessment.</p> <p>Harbour seal – present year round, main haul out sites in SW Scotland MU and Northern Ireland. LB presented density range currently under consideration in the assessment.</p> <p>The harbour seal and grey seal densities will be reassessed with the update to the offshore redline boundary. The proposed densities to be used in the assessment will be circulated with the post meeting note mentioned above.</p>		
10.	<p><u>Approach to assessment – LSE Screening and Appropriate Assessment (presented by KL)</u></p> <p>KL presented the approach taken for the LSE Screening, which broadly follows the approach taken for the Morgan Generation Assets LSE Screening. We have incorporated feedback received through the Morgan Generation Assets EWG process.</p> <p>For Grey seal and Harbour seal, we refer to foraging ranges presented in Carter <i>et al.</i>, 2022, and telemetry data which will be presented in the Marine Mammal Technical Report. Based on these data sources, we have extended the number of SACs with which we will consider potential connectivity in the LSE Screening.</p> <p>The approach to the Appropriate Assessment will be to undertake a sequential assessment as suggested by NRW. If adverse effects on integrity (AEOI) of the sites can be ruled out for the closest site, we would then rule out AEOI for all other more distant sites. Feedback from Natural England during Morgan and Mona EWGs requested that individual assessments are undertaken for all English sites, so we would propose to do the same for the Transmission Assets, and for Welsh, Northern Irish and EU sites we will take the sequential approach as suggested by NRW. This is to try to manage the size of the Information to Support Appropriate Assessment.</p>		
11.	<p><u>Approach to Agreement (presented by KL)</u></p> <p>We will be seeking agreement with the approach to baseline characterisation, specifically on the MUs and densities, the approach to assessment and scoping of impacts for marine mammals. We will also be seeking agreement on the approach to the noise assessment and methods for LSE screening.</p>		
12.	<p><u>Discussion and next steps (presented by KL)</u></p> <p>Meeting minutes and agreement log will be circulated 2 weeks following meeting.</p> <p>We will aim to also circulate the post meeting note regarding densities along with the meeting minutes, if not shortly after.</p> <p>The next EWG will be in the summer, once impact assessment has been worked through and we have some initial outputs.</p>	<p>EWG members to return meeting minutes and agreement logs 2 weeks following circulation.</p>	04/05/2023

Transmission Assets Marine Mammals Expert Working Group 1

	SR – we recognise that stakeholders will be busy with PEIR reviews so we will look at dates outside of the consultation period, for the next EWG.		
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C.1.1.1 Response from the Natural England regarding the meeting minutes

Date: 04 May 2023
Our ref: DAS/UDS A000566 430718
Your ref: Morgan and Morecambe Transmission Assets Marine Mammal
EWG01



██████████
RPS/ Energy
Imagination House
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Chepstow,
Monmouthshire
NP16 5PB

Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ
██████████

BY EMAIL ONLY

Dear ██████████

Discretionary Advice Service (Charged Advice): UDS A000566

Development proposal: Morgan and Morecambe Offshore Windfarms: Transmission Assets

Consultation: Morgan and Morecambe Transmission Assets Marine Mammal EWG01

This advice is being provided as part of Natural England's Discretionary Advice Service in accordance with the Quotation and Agreement dated 17th May 2021 to BP Alternative Energy Investments Limited.

The following advice forms Natural England's response to the minutes for the Marine Mammal EWG01 which was attended on 5th April 2023.

Natural England were asked to provide comments on the following:

- 1) Agreement on approach to baseline characterisation
- 2) Agreement on approach to assessment – marine mammals
- 3) Agreement on scoping of impacts
- 4) Agreement on approach to noise assessment

Detailed comments

1) Agreement on approach to baseline characterisation

Natural England have set up a SharePoint Online (SPOL) site to share Natural England's advice on the environmental considerations and use of data and evidence to support offshore wind and cable projects in English waters. These should be considered when developing the baseline characterisation and designing future surveys. Advice provided on this site includes Natural England and Joint Nature Conservation Committee (JNCC)'s shared advice on 'Nature conservation considerations and environmental best practice for subsea cables in English inshore and UK offshore waters.'

The outputs of Natural England's project 'Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards' are also provided. This project, produced in collaboration with DEFRA, the following reports are currently available;

- Phase I: Expectations for pre-application baseline data for designated nature conservation and landscape receptors to support offshore wind applications.
- Phase II: Expectations for pre-application engagement and best practice guidance for the

evidence plan process.

- Phase III: Expectations for data analysis and presentation at examination for offshore wind applications.

You can access the SPOL site from the following link:

[Environmental considerations for offshore wind and cable projects - Home \(sharepoint.com\)](#)

Due to how SharePoint Online works, people outside of Defra will need to request access to the site before being able to view the advice documents, so there could be a slight delay for external stakeholders to access the site.

In addition lessons learnt from previous offshore windfarm constructions and advice provided in the Morgan and Mona Generation EWGs should be taken into account where applicable. For example the Natural England report (2018) Natural England Offshore wind cabling: ten years' experience and recommendations available from: EN010080-001240-Natural England - Offshore Cabling paper July 2018.pdf (planninginspectorate.gov.uk). Also, the Natural England and JNCC report (2019) on key sensitivities of habitats and Marine Protected Areas in English Waters to offshore windfarm cabling within Proposed Round 4 leasing areas, available from:

<https://hub.jncc.gov.uk/assets/3c9f030c-5fa0-4ee4-9868-1debedb4b47f> Please note that this publication is about to be revised, Natural England will forward the updated version when available.

Natural England broadly agrees to the approach to baseline characterisation as presented at the EWG meeting on 5th April 2023.

2) Agreement on approach to assessment – marine mammals

Natural England broadly agrees to the approach to assessment for marine mammals as presented at the EWG meeting on 5th April 2023.

3) Agreement on scoping of impacts

Natural England broadly agrees to the scoping of impacts as presented at the EWG meeting on 5th April 2023.

4) Agreement on approach to noise assessment

Natural England broadly agrees to the approach to noise assessment as presented at the EWG meeting on 5th April 2023.

For clarification of any points in this letter, please contact me using the details provided below.

Yours sincerely,

██████████
Marine and Coastal Lead Adviser
Coast and Marine Team
Cheshire to Lancashire Area Team
██████████

The advice provided in this letter has been through Natural England's Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is

C.2 Marine mammals EWG meeting 2

C.2.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project
External (Restricted)

MOM Number : Transmission Assets MM EWG02 **REV. No.** : F01

MOM Subject : Transmission Assets Marine Mammals Expert Working Group 2

MINUTES OF MEETING

MEETING DATE : 01 August 2023

MEETING LOCATION : Microsoft Teams

RECORDED BY : [REDACTED] (RPS)

ISSUED BY : [REDACTED] (RPS)

Attendees:

- [REDACTED] – Flotation Energy (HR)
- [REDACTED] – Flotation Energy (IM)
- [REDACTED] – bp (SR)
- [REDACTED] – bp (HK)
- [REDACTED] – bp (DH)
- [REDACTED] – RPS (KR)
- [REDACTED] – RPS (LB)
- [REDACTED] – Seiche (SS)
- [REDACTED] – Seiche (CB)
- [REDACTED] – MMO (EW)
- [REDACTED] – MMO (SC)
- [REDACTED] – MMO (AF)
- [REDACTED] – Natural England (EW)
- [REDACTED] – Cefas (RF)
- [REDACTED] – Wildlife Trust (GdL)

Apologies

- [REDACTED] – RPS (KL)
- [REDACTED] – MMO (AE)

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
1.	<p><u>Introductions (presented by KR)</u></p> <p>Slides 1-2 - Introductions among stakeholders and applicants and discussion of the agenda for the meeting.</p>		
2.	<p><u>Project Overview (presented by HK)</u></p> <p>Slides 3 and 4 - Currently on track to submit the PEIR in the quarters listed in the slide and previously agreed. The exact months will be clarified when this has been decided.</p> <p>KR – It is worth noting for the Transmission Assets PEIR that will come to stakeholders in the Autumn, this includes the export cable infrastructure and the offshore substation platforms (OSPs) that are within the Morgan and Morecambe Array Areas. There will therefore be some double counting between the Generation Assets and Transmission Assets DCOs. A note of this over-precautionary assumption will be included in the Transmission Assets PEIR when undertaking those assessments.</p>		

3.	<p><u>Approach to CEA (presented by KR)</u></p> <p>Slide 5 set out the approach to the Combined Transmission and Generation Assessments. For the Transmission Assets, the assessment will be undertaken for the project alone. Then the cumulative assessment will have a separate section where the Transmission Assets are considered alongside the two Generation Assets, but no other projects.</p> <p>The assessment will consider the other projects (Tier 1, 2 and 3) in the next step of the CEA. For instance, Mona and Awel Y Mor would be included in this stage, in the relevant Tier. The combined assessment with the Generation Assets can be considered the first step of the CEA.</p> <p>The approach for the Morgan and Morecambe ES's will be the same as the Transmission Assets PEIR approach. It is important to be aware that the CEA can only be based on information in the public domain. As Morgan Generation, Morecambe Generation and the Transmission Assets are separate consent applications, the CEA approach has been created to help align the projects following stakeholder feedback on presenting the Transmission Assets with the associated Generation Assets.</p> <p>Slide 6 outlined how the project is undertaking these assessments. The table in the slide showed that the process for the Morgan and Morecambe Generation Assets PEIR will be the same for both projects. The CEA for the PEIRs will be based on the scoping from Mona, Morgan and Morecambe Generation and the Transmission Assets. For the Morgan and Morecambe Generation Assets Applications, the Cumulative assessments will be based on the PEIRs as this will be the information in the public domain at the time. For Transmission Assets PEIR, the CEA will be based upon the PEIRS of Mona, Morgan Generation and Morecambe Generation. The Transmission Assets Application will be based upon the ES's of those same projects as these will be available by the submission of the Transmission Assets Application. The Transmission application will be the most refined in terms of the cumulative assessment as the last project.</p>		
4.	<p><u>Feedback and actions from EWG01 (presented by LB)</u></p> <p>Slides 7 and 8 – Explained that in the last EWG the project requested feedback on approach to baseline and specifically on the approach to baseline characterisation, approach to assessment, scoping of impacts, approach to the noise assessment and the approach to methods for LSE screening.</p> <p>Following the EWG the project received a response from Natural England who agreed to most of what was agreed in the EWG. The project has not had feedback from other stakeholders and would appreciate any feedback stakeholders could supply.</p>		
5.	<p><u>Initial Assessment Outputs - Marine Mammals (LB)</u></p> <p>Maximum Design Scenario (MDS)</p>		

	<p>Slide 10 – LB described the MDS for the OSPs for monopiles for Morgan and these are outlined in the slide in detail. The slide covered the monopiles, vessel spacing, maximum piling times and cumulative piling times for the Morgan and Morecambe OSPs.</p> <p>LB also explained the maximum spatial scenario and maximum temporal scenario for these projects with details available on the slide.</p> <p>Slide 11 - LB explained the MDS for pin piling. The MDS was explained in detail, including number of required pin piles and evident on the slides, including the maximum hammer energies, the vessel spacing, max piling times and the consecutive and cumulative piling times as well as the maximum spatial scenario and maximum temporal scenario. The maximum days of piling for each scenario are provided on the slide. The values provided on the slide are based on the two pin piles for the Morgan OSP, Morecambe OSP and Morgan offshore booster station.</p> <p>Slide 12 – LB explained the tables on slides 12 and 13, and described the modelled PTS ranges for the piling scenarios based on the cumulative SEL metric and peak sound pressure metric, in the absence of tertiary mitigation, for Morgan and Morecambe OSPs and the Morgan offshore booster station. Slide 12 described this for the very high frequency cetaceans (harbour porpoise) and high frequency cetaceans (bottlenose, Risso’s and common dolphin). Data and results are available in the table on the slide.</p> <p>Slide 13 – LB described the modelled PTS results for low frequency species (Minke whale) and Pinnipeds. LB explained that the modelling outputs were similar to that of high frequency species from the previous slide. For monopiles and pin piles the threshold for PTS was only exceeded for modelling at the Morecambe OSP with a range of 100 m for both monopiles and pin piles. For low frequency cetaceans LB described that the ranges of effect are of a similar magnitude across the locations for monopiles. The differences and details of pin piles and monopiles are shown in the table.</p> <p>Slide 14 – LB explained that slides 14 and 15 set out the modelling based on the SPLpk metric. The table on slide 14 shows the modelling results for the very high frequency cetaceans (harbour porpoise) and high frequency cetaceans (bottlenose, Risso’s and common dolphin). The range of effect, piling scenarios and thresholds are explained by LB and available in the table on the slide.</p> <p>Slide 15 - LB explained the results modelling based on the SPLpk metric for low frequency species (Minke whale) and Pinnipeds. LB explained the range of effect, piling scenarios and thresholds. These values are available in the table on the slide.</p> <p>RF – noted the SELpk should read SPLpk on slides 14 and 15. Explained where the error was to LB. There are a couple of other slides where LB was talking about the cumulative sound exposure level but I think the thresholds you have in those slides were the peak sound exposure levels. I think they need to be changed [for minke whale and grey seal].</p>	<p>RPS to edit the slide pack and send out updated slide pack with the draft meeting minutes.</p>	<p>15/08/2023</p>
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<p>LB – Agreed it was a mistake and would need editing.</p> <p>KR – We can make these edits and send out an updated slide pack with the minutes.</p> <p>Post-meeting note: Slides 12-13 have been updated to correct the Threshold units; slides 14-15 have been updated to amend the title from “Summary of PTS injury range of effect (m) (SELpk)” to “Summary of PTS injury range of effect (m) (SPLpk)”, to reflect this discussion.</p> <p>Slide 16 - Behavioural Effects – LB explained the maximum predicted behavioural effects are considered to occur as a result of concurrent piling. When comparing concurrent piling of the Morgan OSP and the Morecambe OSP the outputs are very similar to the concurrent piling outputs Morecambe OSP and Morgan offshore booster station. The figure on the slide represents modelled single strike sound exposure levels in 5 db increment contours, all concurrent piling at the Morecambe OSP in the south east of the figure and Morgan OSP in the north west of the Transmission Assets area. The threshold of disturbance at 140dB rms sits roughly equivalent to that shown in slide 16 of between 130-135dB. The 130dB sits south west of the Isle of Man and the northern edge sits north of the Isle of Man. Similarly for a threshold of strong disturbance at 160dB rms the equivalent single strike contours sit roughly at 150db within the yellow contours on the figure on the slide, within the vicinity of the Transmission Assets Red Line Boundary.</p> <p>Slide 17 – LB explained that these are similar to the previous slide but this time it is considering the concurrent piling (single strike) at the Morgan offshore booster station and Morecambe OSP. LB explained the equivalent thresholds are again for mild and strong disturbance at 140 and 160dB rms respectively. The equivalent contours for both scenarios are very similar to that of the previous slide. 130dB contour for mild and 150dB contour for strong disturbance.</p> <p>Slide 18 – LB explained that the next 4 slides set out the same modelling however overlaid on seal at sea usage density maps. The figure on the slide shows the modelled single strike sound increment 5dB contours for all concurrent piling at the Morecambe OSP and Morgan OSP. This is overlaid on the grey seal at sea usage densities, taken from Carter <i>et al.</i> (2022). Looking at the equivalent contours for mild and strong disturbance, strong disturbance contours sit just outside the higher densities for grey seal, just outside the vicinity of the Morgan OSP and Morecambe OSP. The contours for mild disturbance sit just south east and north of the Isle of Man.</p> <p>Slide 19 – The slide and figure show the same information for the scenario of concurrent piling at the Morgan offshore booster station and the Morecambe OSP for grey seal.</p> <p>Slide 20 – LB explained that similarly to the previous two slides the figure shows the 5dB contours with seal at-sea usage densities from Carter <i>et al.</i>, (2022) but this time for harbour seal and for the</p>		
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	<p>concurrent piling scenario at Morgan OSP and Morecambe OSP. The major difference for this slide is the lower densities of harbour seal comparatively to grey seal.</p> <p>Slide 21 – The incremental single strike 5 dB contours are overlaid with the seal at-sea usage densities for harbour seal for the concurrent piling scenario at Morecambe OSP and Morgan offshore booster station.</p> <p>Mitigation considerations</p> <p>Slide 22 – LB explained the mitigation considerations listed on the slide for piling, including Acoustic Deterrent Device (ADD) being included in the UWS assessment as part of tertiary mitigation, piling scenarios modelled with and without ADDs, assessment considers SPLpk and SELcum metrics and looks at injuries based on this, differences in approach between OWF applications and others listed and explained on the slide. LB noted the Applicant seeks agreement with respect to defining the mitigation zone for piling using the dual metric approach, would preferably like to seek this agreement through the working group.</p> <p>EW – (reading notes from Natural England) What factors/ criteria do you decide on the duration of the ADD activation for underwater sound modelling? Natural England’s point of view was that they don’t see why ADD should be included in the underwater sound modelling to predict impact ranges for the assessment. This is because it can, if included, obscure the true worst-case scenario that the assessment must be based on. It also to note that the ADD duration needs to be agreed with the statutory nature conservation bodies. The predicted impact ranges for PTS without the ADDs should be used to determine the appropriate duration of ADD with the purpose to deter marine mammals from the full extent of the PTS zone. It is outlined in our best practice that we support the dual metrics to assess the impact of piling. Those are the notes I have been passed on. Hopefully this gives you an idea of what we will put in our written response.</p> <p>LB – We would like to clarify the first point. It is understood that the use of ADDs shouldn’t be used as the only approach to modelling. The noise modelling report and assessment present injury ranges both with and without modelling of ADDs. That allows for the comparison to ensure the use of ADDs doesn’t obscure the ranges without that tertiary mitigation. Could we have a copy of those notes you have just made to ensure we take those into account?</p> <p>EW – Yes, I will get them included in our written response.</p> <p>RF – Agree with Natural England and support the use of the dual approach so recommend both metrics and use the largest threshold on which to base mitigation.</p> <p>LB – Thank you, it is good to address that in this meeting.</p> <p>Slide 23 – LB explained the MDS for UXO, including the number that could be cleared, the size ranges and details of the high and low order clearance that have been considered are listed with it</p>	<p>NE to include the notes mentioned here within their written response</p>	<p>15/08/23</p>
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	<p>noted that the MDS is based on high order clearance. The full list of the MDS for UXO is listed on the slide.</p> <p>Slides 24 and 25 show the potential PTS ranges in three tables for the low order and low yield UXO clearance, donor charges used in high order clearance and PTS ranges for high order UXO clearance activities. LB explained that the tables show the charge size against the PTS range in metres for thresholds of SPLpk and SEL in the absence of tertiary mitigation for very high frequency, high frequency, low frequency and Phocids (seals). For all the tables the threshold for PTS was exceeded for all activities. The details for these PTS ranges are shown in the tables on the slides. LB explained it was important to note that clearance of UXO where possible would be based on low order techniques as a primary clearance option.</p> <p>Slide 26 – Summary of the approach to cumulative effects. LB explained that projects and plans within the Transmission Assets regional marine mammal study area (Irish Sea and wider Celtic Sea) were screened into the CEA. The projects are allocated into tiers reflecting a projects current stage and the tiers are listed and explained on the slide. The figure on the side provides an overview of these projects scoped in for Marine Mammals.</p>		
6.	<p><u>Discussion and next steps</u></p> <p>KR - The minutes will be circulated within two weeks and amendments to those headers (as discussed) will be made. The agreement logs will also be circulated, the project is seeking agreement on the approach to the CEA and included projects and the mitigation zone and dual metric approach.</p> <p>We have noted that we only had a response previously from Natural England, so the project really encourages other stakeholders to contribute and respond with the points we are including. That would be really helpful.</p> <p>Next EWG will around the S42 consultation around January 2023, and the dates will be confirmed as soon as possible.</p> <p>No further comments or questions - End of Meeting</p>		

C.2.1.1 Response from the Natural England regarding the meeting minutes

Date: 01 September 2023
Our ref: DAS/UDS A009203 447852
Your ref: Morgan and Morecambe Transmission Assets Marine Mammals
EWG02



[REDACTED]
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Hornbeam House
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Crewe
Cheshire
CW1 6GJ

cc [REDACTED]
RPS

BY EMAIL ONLY

Dear [REDACTED]

Discretionary Advice Service (Charged Advice): UDS A009203

Development proposal: Morgan and Morecambe Offshore Windfarms: Transmission Assets

Consultation: Morgan and Morecambe Transmission Assets Marine Mammals

This advice is being provided as part of Natural England's Discretionary Advice Service (DAS) in accordance with the Quotation and Agreement dated 23rd May 2023 to Morgan Offshore Wind Limited & Mona Offshore Wind Limited.

The following advice forms Natural England's response to the meeting minutes provided for the Morgan and Morecambe Transmission Assets Marine Mammals EWG02 attended by Natural England on 1st August 2023.

Natural England were asked to provide feedback on the following points:

- Agreement on the approach to the CEA, including projects included
- Agreement with respect to defining the mitigation zone using the dual metric approach.

Detailed comments

Approach to CEA

Natural England understands the approach being taken for the CEA for Morgan and Morecambe Transmission Assets. However, we retain concerns associated with stranded assets during the consenting process (ref: 435658/436243).

ADD and use of the Dual Metric approach

Natural England does not see why ADD should be included in the underwater noise modelling to predict impact ranges for the assessment. The ADD duration has to be agreed with SNCBs, and its inclusion obscures the true worst-case scenario that the assessment must be based on.

The predicted impact ranges for PTS without ADDs should be used to determine the appropriate duration of ADD with the purpose to deter marine mammals from the full extent of the PTS zone.

As stated in our Best practice document, NE supports the use of dual metrics to assess the impact of piling. In general, mitigation zones should be based on the largest impact zone as per the precautionary principle.

For clarification of any points in this letter, please contact me using the details provided below.

Yours sincerely,

[REDACTED]
Marine and Coastal Lead Adviser
Coast and Marine Team
Cheshire to Lancashire Area Team
[REDACTED]

The advice provided in this letter has been through Natural England's Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

[REDACTED]



C.3 Marine mammals EWG meeting 3

C.3.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project External
(Restricted)

Minutes of Meeting Number : Transmission Assets Marine Mammals EWG Meeting 03 **REV. No.** : F01

Minutes of Meeting Subject : Transmission Assets Marine Mammals and LSE EWG Meeting 03

MINUTES OF MEETING

MEETING DATE : 08/02/2024

Az-MEETING LOCATION : Microsoft Teams

RECORDED BY : [REDACTED] (RPS)

ISSUED BY : (RPS)

Attendees:

- [REDACTED] – Flotation Energy (HR)
- [REDACTED] – Flotation Energy (NJ)
- [REDACTED] – bp (HK)
- [REDACTED] – bp (DH)
- [REDACTED] – RPS (KL)
- [REDACTED] – RPS (KH)
- [REDACTED] – RPS (BM)
- [REDACTED] – RPS (LB)
- [REDACTED] – Seiche (CB)
- [REDACTED] – MMO (AF)
- [REDACTED] – Wildlife Trust (GdL)
- [REDACTED] – Natural England (EW)
- [REDACTED] – Natural England (MNW)
- [REDACTED] – Cefas (RS)

Apologies:

Agenda

1. Project update
2. Project Parameter Refinements post-PEIR
3. Marine Mammals
 - S42 response
4. LSE Screening
5. Discussion and Next Steps

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
1.	<u>Introductions and Agenda (presented by KL)</u> Introductions by attendees and the agenda was set out as shown above.		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>KL - NRW have provided a section 42 response but aren't involved in the EWGs however will be kept informed with the discussions in these EWGs.</p> <p>KL – Within these slides there is an omission in terms of the section 42 responses from Cefas and MMO due to an administrative error. This error meant the Project didn't get those responses to our authors in time to include them in the slide pack. These will, however, still be discussed today and will be in the meeting minutes.</p>		
2.	<p>Project Update (presented by HK)</p> <p>Statutory consultation for the Preliminary Environmental Information Report (PEIR) closed at the end of November. The Project is still on track for Application submission in Q3 2024. The Transmission Assets DCO Application is slightly behind the associated Morgan Generation Assets and Morecambe Generation Assets DCO Applications, which are aiming for submission in Q2 2024. Construction of the Transmission Assets is anticipated to start in 2026/2027 running through to 2030, subject to the grid connection timings.</p>		
3.	<p>Project Parameter Refinements post-PEIR (presented by HK)</p> <p>Key offshore refinements that have been made to the Project since the PEIR are discussed here. The double counting from the Offshore Substation Platforms (OSPs) was flagged in consultation as these were considered in both the Transmission Assets and Generation Assets Applications. The OSPs and interconnector cables will now be assessed wholly within the respective Generation Assets Applications and have been removed from the Transmission Assets Application.</p> <p>The Morgan offshore booster station has been removed as it is no longer required. This means the Transmission Assets will have no surface piercing infrastructure, and the DCO application will cover the offshore export cables, landfall and onshore infrastructure. With that, we have reduced the number of vessel and helicopter movements for construction and operation and maintenance.</p> <p>KL – The Project has been refined down considerably, particularly with removal of the OSPs and booster station. The export cables are the focus of the Transmission Assets. This will hopefully make the cumulative assessment and combined Generation/Transmission assessments a lot more straightforward as there will be no double counting to consider.</p> <p>HK – These next comments are regarding the site preparation and impacts in the marine Conservation Zone (MCZ). The</p>		

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	<p>Project has reduced the sand wave clearance across the offshore export cable. For the ES it will be 9% total across cable corridor (down from 60% at PEIR) and 5% of that will be within the MCZ. Many of the larger sand waves identified are situated further to the west, so the Project has been able to reduce that.</p> <p>The Project has also looked at reducing the cable protection parameters, these were 20% and 15% for Morgan and Morecambe respectively at the PEIR. Excluding cable crossings, the Project is now looking at 3% within the MCZ and total 10% across the offshore export cable. The Project has a commitment that burial is the preferred method for cable protection, excluding crossings and as such protection is the contingency. The use of cable protection within the MCZ would be a last resort.</p> <p>The figure on slide 7 shows a significant amount of existing infrastructure within the Irish Sea. Just after where the Morgan and Morgan cables come together, there is a need to cross two telecom cables. The Vodafone cable is the more northerly one with the Aquacomms cable just below and parallel to that with the need to cross these to make landfall at Lytham St Annes. The Virgin Media telecoms cable runs along the southern red line boundary with no requirement for crossing. The cable running from north west to south east is Hibernian Atlantic with also no requirement for crossing. Those are the existing telecoms that sit within and along the edge of the MCZ in the vicinity of the Transmission Assets. The cable alignment is still being refined by the engineers who are trying to push the morgan cable further to the west to minimise cable crossings in the MCZ. However, they do not think they will be able to avoid a cable crossing within the MCZ. Due the space needed to make the turns needed and minimum spacing and best practice crossing requirements for telecoms cables, it is likely the Project will have a crossing on that far edge of the MCZ.</p> <p>KL – The removal of OSPs in the Transmission Assets application and only including those in Generation Assets does make transmission Assets application simpler due to the removal of double counting.</p>		
4.	<p>Marine Mammals (presented by LB)</p> <p>Some of the comments relate directly to piling but they have been included as they are also relevant elsewhere in the assessment.</p> <p><u>Assessment methodology, definitions and terminology</u></p>		

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	<p>First few responses relate to the assessment methodology. Natural England requested the methodology, including definitions, is more clearly outlined and applied more consistently, with particular reference to terminology used to define temporal and geographical scale where this informs conclusions of the assessment. The Project’s proposed action is to review the assessment methodology including those definitions of terms, and to revisit and refine to provide more clarity.</p> <p><u>Assessment matrix, significant effects justification and sensitivities and magnitudes</u></p> <p>Natural England highlighted that based on the dual effect approach to the assessment matrix, both non-significant and significant effects can result from the same combination of magnitude and sensitivity, without further justification when lower effect categories are chosen. Following on from this Natural England suggest changing the sensitivity of harbour porpoise to elevated underwater sound due to piling from ‘medium’ to ‘high’.</p> <p>Piling as an impact will be removed, based on the removal of the OSPs and booster station from this application. As a general response to this, the assessment matrix applied is aligned with the CIEEM guidelines and expert judgement is employed to assess the final level of significance, based on a combination of the receptor sensitivity and magnitude of impact. However, conclusions and context to these conclusions will be revisited to add further justification where needed to ensure that the route to conclusions of significance are clear and justified.</p> <p>Natural England highlight that there is “inconsistency in assigning magnitude and sensitivity scores and that the Methodology of the assessment is not always clear (for example how the number of animals disturbed have been derived using dose response curves). In some cases, conclusions on the assessment are made without robust evidence and justification.</p> <p>Similarly to the previous slide, conclusions and context to these conclusions will be revisited to add further justification where needed to ensure that the route to conclusions of magnitude and sensitivity are clear and justified.</p> <p><u>Revising the assessment matrix</u></p> <p>The next point suggests revising the assessment matrix in the submitted ES to reflect the precautionary principle unless there is strong evidence to indicate otherwise.</p>		

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	<p>Again, the assessment matrix is aligned with the CIEEM guidelines which allows expert judgement to be employed and to reflect the precautionary principle in assessing the final level of significance.</p> <p>Our proposed action is to review the assessment matrix, to ensure that there isn't a more suitable alternative, but the primary action will be to revisit assessment conclusions and provide more context to conclusions of magnitude, sensitivity, and significance throughout, ensuring the precautionary principle is applied. In doing so we aim to remove any potential for associated ambiguity.</p> <p><u>Defining appropriate thresholds for reference populations</u></p> <p>The third point here relates to defining appropriate thresholds for percentage of reference population (MU) predicted to be impacted by an activity to aid assessment of the appropriate level of magnitude.</p> <p>Given that there is a lack of understanding for the trigger point at which population effects occur, and equally a lack of understanding for the trigger point for population effects in terms of percentage of population, we consider that there is insufficient evidence to define what % of a reference population impacted, classes as significant.</p> <p>In line with Tougaard et al 2021, which stated "that it is not yet possible to use population models to accurately predict effects of acoustic disturbances and thereby provide guidance on the most central question: "when are animals disturbed enough to cause population level effects", any applied thresholds would need to align with guidance. To our knowledge there is no relevant guidance that could be applied for any of the marine mammal species considered, and therefore no percentage threshold has been defined. Finally, whilst this response is still relevant for the Project impacts, it is assumed that this largely relates to the impact of piling and population modelling and as previously mentioned piling as an impact has been removed.</p> <p>MNW – In many cases in the PEIR expert judgement was used to reach a conclusion of assessment. The terms used were short term, medium term, highly localised and small scale. These terms were not defined making it hard to agree. For clarity and sense and logic we left the comment regarding terminology use.</p> <p>Regarding the guidelines and the matrix there is, as far as MNW is aware no standard for the matrix. There is no preference for how the matrix looks as long as it is sound with a logical justification from the start. If the basics are not set up</p>		

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	<p>clearly it trickles down through the assessment making it harder to agree with the assessment conclusions.</p> <p>Regarding the magnitude and thresholds, Natural England have seen many examples of how this is undertaken. One comment was regarding part of the assessment which read '6.13% of Harbour porpoises were affected within the MU which was not considered significant'. The question Natural England would ask is what percentage would be significant which is a natural question to ask. Other developers have added numbers to explain the point at which a percentage impact would become significant. An example for context but this is not necessarily what Natural England are asking for from the Project is as follows. 'Temporary effects are considered to be of medium magnitude when they are greater than 5% of the reference population'. This is not a fixed method but, in that example, they used the literature and expert knowledge to put a number in to explain the thresholds.</p> <p>LB – Thank you, it is useful to get that additional explanation.</p> <p>MNW – Context that can be followed through from the start through to conclusions is useful and makes it clear to Natural England that it's a good sound conclusion.</p> <p>KL – that is something the Project can take away and consider. When the Project looks at magnitude, the percentage of baseline populations are very important. The other side to this is how temporary is temporary? As the application has changed the main source is UXO and that is very short comparatively to piling. The Project will take that away and consider it and will have to look at the magnitude along with the spatial and temporal. That is useful thank you.</p> <p><u>ES structure</u></p> <p>The next response from Natural England requests that the chapter is restructured to make it more reader friendly and to allow for easier comparison of assessments from Morgan Generation Assets and Morecambe Generation Assets.</p> <p>The ES structure will be revisited. Particularly with the removal of piling, the marine mammal chapter will be reduced in length, but also, with the removal of OSPs and booster station from the Project parameters the chapter will be simpler - this has also removed the requirement for assessing the OSPs and booster station, which will remove the associated complexity of these being assessed in more than one application, which was experienced at PEIR.</p>		

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	<p><u>Mitigation/Marine Mammal Mitigation Plan (MMMP)/Noise Abatement</u></p> <p>The next responses from Natural England and the North West Wildlife Trust relate to MMMPs and noise abatement. Natural England highlighted that all available mitigation methods should be considered in the MMMP and would welcome sight of the draft MMMP through future marine mammal EWGs. And the Northwest Wildlife Trust recommended the consideration of noise abatement. An Outline MMMP will be submitted with the application; and mitigation options (including noise abatement if considered relevant) to be included in the MMMP will be discussed with stakeholders in future EWGs.</p> <p>Again, it is important to note that the removal of piling activities from the application removes the need to consider noise abatement systems specifically for piling.</p> <p><u>Isle of Man Government monitoring</u></p> <p>Finally, The Isle of Man government have queried how the assumptions and predictions in the assessment can be validated without monitoring being undertaken. The requirement for monitoring will be carefully considered based on the outcomes of the assessment within the final ES, to be discussed with future EWGs, noting again that piling has been removed from the assessment.</p> <p><u>Acoustic deterrent devices (ADDs)</u></p> <p>The next group of responses from Natural England and NRW relate to Acoustic Deterrent Devices.</p> <p>NE and NRW highlight that the 30 minute ADD duration used in the assessment had not been agreed with the statutory nature conservation bodies(SNCBs) and as such the results of the noise modelling without ADD use should be presented and underpin the assessments. The submitted ES should base its assessment on the underwater noise modelling without ADDs and revise any assessments that are based on the predicted ranges with 30min ADD activation. Finally, the assessment in the submitted ES should also address the displacement effects arising from ADDs, including consideration of Elmegaard <i>et. al.</i>, (2023).</p> <p>So, in terms of proposed action, we will present modelling both with and without ADDs, and the assessment will be based on implementation of ADDs as standard industry measures, if needed. It is important to highlight that the mitigation hierarchy will of course be applied.</p> <p>In addition, we will ensure the latest peer-reviewed literature around ADD displacement effects is reviewed and</p>		

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	<p>incorporated into the assessment where it makes sense to do so. However, we welcome more detail on ideally what would be presented for this.</p> <p>MNW – Elmegaard et al., 2023 is the newest paper that covers in detail the effects of ADDs and should be in the literature review. It was a valid reference to include especially for assessments as they have their own effect. It was just for context for the newest reference to be included.</p> <p>KL – The Project was envisioning that for ADDs they will be considered as part of UXO clearance mitigation. Also that this could be considered qualitatively so it is acknowledged that they have an impact on marine mammals. Will that resolve the issues?</p> <p>NMW - That is a good start. Regarding ADDs as an industry standard measure, while they are standard for every project their use is very specific per project. Suggest the language is reviewed and that it be left open so it can be discussed and the implementation of the ADDs agreed later.</p> <p>The final point on this line is that NRW do not agree with injury being scoped out of the cumulative impact assessment.</p> <p>At PEIR the majority of impacts for the CEA considered both injury and disturbance. The impacts of piling and vessel use and other (non-piling) sound-producing activities focussed on disturbance alone. Given that piling has now been removed we will consider the inclusion of an assessment of injury for the CEA, but we will be seeking further information from NRW on this point, particularly with respect to which impact or impacts this relate to.</p> <p><u>Vessel Noise</u></p> <p>Finally on this slide, NRW requested that the vessel noise impact pathway be adequately assessed, particularly given that there will be an estimated 700 vessels associated with the development alone. Our proposed action is to revisit this assessment and provide additional information and context to the assessment, where possible. It is important to note that the number of vessels in the area will be greatly reduced with the removal of the OSPs and booster stations from the application.</p> <p>KL – Some of the comments NRW had on vessel noise align with some of Cefas’ comments. Particularly on the number of vessel movements.</p> <p>RS – It was something Cefas addressed in our advice feedback, it is good to see the assessment will be revisited. Understand</p>		

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	<p>that the number of vessels (700) is going to be reduced with removal of piling but it is good that it will be revisited.</p> <p>KL – if Cefas had queries regarding the ranges that were mentioned for vessel noise, CB has been looking at that for the other applications and is something the Project can look at.</p> <p>RS – Cefas had quite a detailed response to some of the underwater noise modelling and the metrics that had been used and on providing that additional information in the modelling report. It makes the advice feedback easier as there is clarity over what has been done.</p> <p>KL – The geophysical survey vessels was another point where Cefas had queries about how the predictions were derived. The Project can clarify that.</p> <p>CB – That can be done.</p> <p><u>Densities</u></p> <p>Natural England and NRW noted that harbour porpoise densities vary considerably across the Project area and requested that reasons for such variability are explored, and further detail behind the variability of harbour porpoise density be provided in the ES. We will incorporate clear context to variability in harbour porpoise densities and will ensure application of densities is clear throughout the ES.</p> <p><u>Effective deterrence ranges (EDRs)</u></p> <p>NRW noted that Effective deterrence ranges (EDRs) have been incorrectly applied in the PEIR. NRW noted that they are area-based thresholds defined as reflecting the overall loss of habitat that would occur if all animals vacated an area within the EDR, being equivalent to the mean loss of habitat per animal for use in HRA / Information to Support an Appropriate Assessment rather than estimating the number of animals disturbed.</p> <p>The marine mammal chapter at PEIR presented a representation of both Morgan Generation Assets PEIR and Morecambe Generation Assets PEIR. The chapter highlighted that EDRs were presented in the Morecambe PEIR for piling, but the assessment itself was not based on EDRs. The assessment will of course be updated for ES and will present relevant information from both the Morgan Generation Assets and Morecambe Generation Assets ES' but given that piling has been removed EDRs will certainly not be a part of the assessment for EIA. The ISAA will also be updated in line with the approach for the two ES' and will likely present both EDRs and the 143 dB sound level contour.</p>		

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	<p><u>Swimming Speeds</u></p> <p>Natural England also advised the use of consistent swimming speeds across the whole project area. Similarly with the removal of OSPs and booster station, the removal of project parameters for the Transmission Assets which overlap those of the Morgan Generation Assets and Morecambe Generation Assets ESs will simplify the approach to assessment. We will revisit swimming speeds and ensure justification for their application is clear.</p> <p><u>Cumulative effects assessment (CEA) approach</u></p> <p>Finally, Natural England and NRW suggested the inclusion of two specific projects for the CIA, which included Westminster Gravels aggregate extraction licence and Mersey Tidal Power Project. We will consider these projects for application but would also welcome information on any other projects that known of to consider.</p> <p>KL - Coming back to Cefas, is there anything regarding UXO that you want to address?</p> <p>RS – In general most comments weren’t major but were specific. We welcome the further information from the VMS and MMMP and for mitigation to be included dependent on factors. Projects are subject to change so would have to revisit our comments to work out how we piece together advise for continuity when we have the agreement logs and in transferring these agreements from one project to another.</p> <p>KL – The Project has put similar people across the Generation and Transmission Assets projects so lessons and consistency can be worked across the Projects. The Project is keen to ensure that any feedback on this project can be applied, where programmes allow, into the other projects.</p> <p>RS – With regard UXO the methodology, it followed what we expected the comments were regarding more detail, specifics, and clarity on some certain areas.</p> <p>KL – With the removal of the infrastructure, the Project appreciates appreciate it will have changed the assessment from the PEIR, but it won’t change the approach that the Generation Assets have been following. The main implication is that the double counting is removed and that will make it a more streamlined and straightforward assessment.</p> <p>RS - That was raised that it was confusing and hard to follow. With that the time taken over the responses was reflective of</p>		

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	<p>that and hopefully with the changes and the work in the responses will make a difference.</p> <p>KL – It is the first time two generation assets have attempted to combine and work on one transmission assets. There will certainly be lessons to learn as we go through. The Project knows there will be sperate applications for future on the consulting and stakeholder side.</p>		
5.	<p>LSE Screening (presented by KL)</p> <p>KL – Apologies, this wasn’t included in the original slide deck.</p> <p>Wanted to run though our proposed approach to LSE Screening now that piling is out of the PDE. The aim is to get agreement from stakeholders on the updated approach. Aware that agreement in this EWG isn’t possible but it will be useful to have some initial feedback.</p> <p>The Project took a very conservative approach, in general it followed Mona and Morgan Generation with the main concern being piling, and in particular cumulative/in-combination effects of piling. The Project took a broad approach and didn’t look in detail beyond receptor pathways and theoretical connectivity’s based on management units (MUs). This meant the Project screened in sites that are very far away, some well over 100km away. Within the LSE, we didn’t consider modelling outputs and nor did we look at the full consideration of the conservation objectives of the site. This led to a very long ISAA which contained a lot of repetition.</p> <p>KL presented some example Conservation Objectives – examples of these presented including further information can be found on slide 16. There is significant reference to ‘within the sites’ which will be relevant to impacts to be discussed later in this LSE screening section. Conservation objectives such as to ‘maintain in favourable condition’ are likely to apply beyond the SAC boundary.</p> <p>First thing to note is that all these impacts, other than piling will be considered fully in EIA. This is just for LSE Screening and the subsequent Information to Support Appropriate Assessment (ISAA).</p> <p>The Project hopes that for the majority of these suggestions should be uncontroversial and there should be the ability to reach agreement. The Project appreciates stakeholders will want to take them away. These slides will be circulated after the meeting so stakeholders can start thinking about them, but if confirmation could be received in the 2 weeks after the meeting minutes have been provided, that would be very helpful. With the large number of documents that are being worked on at the moment it would be useful to reach agreement on LSE screening if possible.</p>	<p>SNCBs to review proposed approach to LSE Screening and provide feedback on whether this is agreed.</p> <p>Agree approach to LSE Screening for the DCO Application.</p> <p>Review of meeting minutes and agreement logs two weeks following receipt</p>	

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	<p>Propose to use the same approach to identify sites (i.e. MU’s), but take a more proportionate approach to the screening of the individual impacts, giving more consideration to site specific modelling. This is in line with other offshore wind projects and site investigation marine licence applications that have been worked on recently.</p> <p>As there is now no piling associated with the Transmission Assets, there will not be LSE and piling will not be considered in the DCO application.</p> <p>For site investigations there is no overlap with SACs so it is suggested there is no LSE. This is in line with marine licence applications for site investigations. In terms of “significant” effects, the project is looking at very limited impacts, for example tens of metres for injury, which it should be noted will be mitigated, and mild disturbance to very small numbers of animals. As such, we don’t consider this will represent an LSE to marine mammal features of any SACs identified.</p> <p>Similarly for vessels there will be no overlap with SACs. Injury is deemed to be unlikely to occur and disturbance is likely to be mild, limited and not extend into any SACs. The reduction in vessel numbers from the PEIR due to the removal of surface piercing infrastructure will also reduce the likelihood and magnitude of any impacts. As such, we don’t consider this will represent an LSE to marine mammal features of any SACs identified.</p> <p>Regarding prey species, with the removal of piling from the PDE this means that effects on fish and shellfish is much reduced, such that there won’t be any significant impacts. This was reported in the PEIR but now piling is removed the likelihood of impacts has reduced further. The Project is not expecting any LSE for marine mammal sites at DCO Application.</p> <p>What are stakeholders’ initial thoughts?</p> <p>MNW – We cannot agree in the meeting but can’t see anything immediately that causes concern.</p> <p>KL – Within the PEIR, noting the changes that are being made to the PDE, the injury and disturbance ratings and information within that should provide context as we don’t expect those values to change up to the ES.</p>		

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6.	<p>LSE associated with UXO clearance</p> <p>UXO is an impact which we acknowledge we'll need to keep screened in.</p> <p>This will primarily be for injury effects but behaviour (using TTS as a proxy) is also considered. However, any behavioural effects are expected to be limited due to the very short duration of any UXOs.</p> <p>The ISAA at PEIR presented all the information regarding injury ranges (TTS and PTS) for all species. These ranges were all unmitigated, with mitigation the Project would expect no injury to occur. As part of the mitigation hierarchy, avoidance is best case scenario for all (e.g. bp and Flotation Energy would ideally like to be able to microsite around these). However, the MDS is for UXOs to be detonated because at LSE the Project cannot consider mitigation.</p> <p>The Project has the unmitigated scenario for harbour porpoise which presents PTS of tens to hundreds of individuals and over a thousand for TTS; although more it would be less than 400. Again, this is an unmitigated scenario.</p> <p>The Project is looking at effects that are likely and significant, with the conservation objectives in mind. The Project are proposing to scope in the following five SACs for harbour porpoise (the first three SACs were those given detailed consideration in the ISAA presented at PEIR):</p> <ul style="list-style-type: none"> • North Anglesey Marine/Gogledd Môn Forol SAC • North Channel SAC • Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC • West Wales Marine/Gorllewin Cymru Forol SAC • Rockabill to Dalkey Island SAC <p>Beyond these, all other SACs are over 300 km away. While there might be a possibility of a porpoise linked with SACs further away occurring in the vicinity of the Project, the likelihood is lower and it's unlikely this would be significant in terms of the conservation objectives of the site. Particularly given the scenario of high order UXO detonations ideally being avoided, through micro siting or low order methods, and the conservative modelling assumptions for UXO.</p> <p>The LSE approach taken here is still more precautionary than other OWFs and other marine developments where UXOs are concerned. The aim is to ensure the key sites are considered without ending up with a very large ISAA as we had at PEIR, particularly given the risk posed by the Project to marine mammals associated with very distant SACs.</p> <p>Similarly, for grey seal, the injury PTS and TTS ranges have been presented on slide 19. The numbers here are</p>	<p>Stakeholders to agree scoping of 5 SACs for harbour porpoise (as listed in agreements log)</p>	

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	<p>considerably smaller than for porpoise. The Project is proposing to screen in the following 5 SACs in the final LSE Screening:</p> <ul style="list-style-type: none"> • Pen Llŷn a'r Sarnau/Llŷn Peninsula and the Sarnau SAC • Lambay Island SAC • Cardigan Bay/Bae Ceredigion SAC • Pembrokeshire Marine/Sir Benfro Forol SAC • Saltee Islands SAC <p>Outside this, the Project looked at SMRU telemetry data and SACs further afield which didn't have connectivity.</p> <p>For Bottlenose dolphin and harbour seal, in the PEIR the numbers shown were much smaller, largely due to the very low abundances within the Project area. Therefore, the proportions of the relevant reference populations are again very small (even in a very precautionary and unmitigated scenario for UXO). The nearest SAC for harbour seal is 93km away and for bottlenose it is well over 100km away. The risk is therefore low enough to warrant screening all SACs for bottlenose dolphin and harbour porpoise at the LSE stage.</p> <p>The Project will outline this in writing (i.e. as set out in these meeting minutes above) so the EWG can confirm agreement of this approach. If there are specific sites which stakeholders would prefer to be screened in within the DCO Application, please can these be specified.</p> <p>We expect this can be agreed given the information presented in the PEIR, including underwater sound modelling and associated assessments, and a more refined and proportionate approach to LSE Screening can be taken for the DCO Application.</p> <p>Any other Questions?</p>	<p>Stakeholders to agree scoping of 5 SACs for grey seal (as listed in agreements log)</p> <p>Agree approach to LSE Screening for the DCO Application.</p>	
7.	<p>Discussion and Next Steps (presented by KL)</p> <p>Meeting minutes will be circulated within two weeks alongside the agreement logs. Some of the content covered in the agreement logs will be revisiting what was covered in the previous EWG (pre-PEIR submission discussions on baseline, methodology etc.). Hopefully there can be progress on such things as agreement on the baseline characterisation remit. We would also like to get some of those agreements tied down while thinking of heading towards Application on such topics as assessment conclusions and appropriate mitigation measures (based on the information in the PEIR). This is with a view of front loading as much as possible before heading into examination at the end of the year.</p> <p>The Project only received agreement logs from Natural England from the last EWG. If the other stakeholders could</p>	<p>Review of meeting minutes and agreement logs two weeks following receipt</p>	

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	provide feedback after the Project circulates the agreement logs that would be helpful. Meeting brought to a close.		
Summary of Actions		Status	Completion Date
A1.	SNCBs to review proposed approach to LSE Screening and provide feedback on whether this is agreed.		
A2.	Review of meeting minutes and agreement logs two weeks following receipt		
A3.			
A4.			
Summary of Agreements			
Ag1.	Agree approach to LSE Screening for the DCO Application.		
Ag2.	Stakeholders to agree scoping of 5 SACs for harbour porpoise (as listed in agreements log)		
Ag3.	Stakeholders to agree scoping of 5 SACs for grey seal (as listed in agreements log)		

C.3.1.1 Response from the Natural England regarding the meeting minutes

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Morgan and Morecambe Offshore Wind Farms: Transmission Assets - Marine Mammals EWG03
Date: 22 March 2024 10:23:40
Attachments: [image001.png](#)
[image002.jpg](#)
[image003.png](#)

Good Morning [REDACTED]

Thank you for providing the minutes and slides for the 3rd Transmission Marine Mammals EWG held on 8th February.

In response to the agreement log at the end of the minutes, Natural England has the following comments:

- Agreement 1: Natural England agrees with the proposed approach to LSE screening
- Agreement 2 and Agreement 3: Natural England agrees with the proposed approach for scoping of SACs for harbour porpoise and grey seals.

Many thanks,

[REDACTED]

[REDACTED]

Pronouns: He/Him
Marine and Coastal Lead Adviser
Cheshire to Lancashire Area Team

Natural England

[REDACTED]

www.gov.uk/natural-england



[REDACTED]

Appendix D: Evidence Plan Offshore Ornithology EWG

D.1 Offshore ornithology EWG meeting 1

D.1.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project
External (Restricted)

MOM Number : Transmission Assets OO EWG01 **REV. No.** : 01

MOM Subject : Transmission Assets Offshore Ornithology Expert Working Group 1

MINUTES OF MEETING

MEETING DATE: 01 June 2023

MEETING LOCATION: Microsoft Teams

RECORDED BY: [REDACTED] (RPS)

ISSUED BY: [REDACTED] (RPS)

Attendees:

- [REDACTED] – bp (SR)
- [REDACTED] – bp (MP)
- [REDACTED] - bp (HK)
- [REDACTED] – Flotation Energy (RH)
- [REDACTED] – Flotation Energy (NJ)
- [REDACTED] – RPS (KR)
- [REDACTED] – RPS (ST)
- [REDACTED] – RPS (BM)
- [REDACTED] - NIRAS (RW)
- [REDACTED] - NIRAS (WG)
- [REDACTED] - NIRAS (PW)
- [REDACTED] - RSPB (AM)
- [REDACTED] - RSPB (AD)
- [REDACTED] - MMO (AE)
- [REDACTED] – Natural England (LB)
- [REDACTED] – Natural England (MT)
- [REDACTED] – Natural England (EW)

Apologies

- [REDACTED] – MMO (AF)
- [REDACTED] – RPS (KL)

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
1.	<p><u>Project Overview (presented by SR)</u></p> <p>The Morgan Offshore Wind farm in the Irish Sea is being developed by bp and EnBW, and the Morecambe Offshore Wind farm is being developed by Cobra and Flotation Energy. The Generation Assets for this project will be developed and consented separately to their Transmission Assets.</p> <p>The National Grid Holistic Network Design Review concluded that both generation projects would have a single coordinated grid connection location at Penwortham and would result in three DCO applications: Morgan Generation Assets, Morecambe Generation Assets and Morecambe and Morgan Joint Transmission Assets.</p> <p>In relation to the Transmission Assets, the Applicants sought direction from the Secretary of State under section 35 of the</p>	-	-

	<p>Planning Act to confirm that they should be treated as development for which development consent is required under the Planning Act 2008, as amended. A direction was given on 4 October 2022 and the Applicants are now pursuing a single application for development consent for the Transmission Assets for both wind farms. This allows for integrated consideration of cumulative impacts for the Transmission Assets.</p> <p>The strategy is to avoid additional cable route assessments by combining into one joint Transmission Assets DCO.</p>		
<p>2.</p>	<p><u>Key milestones (presented by SR)</u></p> <p>SR presented the consenting milestones for the project. The statutory consultation for the Generation Assets PEIRs is running currently until 4 June. The Applicants would really appreciate any thoughts, discussions and comments from stakeholders. The Applicants are also holding the non-statutory consultation for the Transmission Assets alongside this.</p> <p>Mona, Morgan Generation and Morecambe Generation PEIRs have been submitted April 2023. The DCO application submission for these projects is anticipated Q1 2024.</p> <p>The Transmission Assets PEIR will be submitted Q3 2023 and the application for development consent is currently planned to be submitted Q3 2024.</p> <p>Are there any questions from stakeholders?</p> <p>No questions.</p>	<p>-</p>	<p>-</p>
<p>3.</p>	<p><u>Evidence Plan Process (EPP) (presented by KR)</u></p> <p>KR provided an overview of the EPP. The proposed approach has been developed following the Planning Inspectorate and Defra guidance and recent guidelines produced by Natural England. The Evidence Plan (EP) is a mechanism to agree upfront what information the Applicants need to supply to the Planning Inspectorate as the Examining Authority as part of a DCO application.</p> <p>The EP process has historically been focused on the Habitats Regulations Assessment (HRA) however in line with recent best practice, the Applicants propose to extend this to include the EIA processes, including both ecology topics and non-ecology topics, as set out in the slides later in the presentation.</p> <p>This EPP for the Transmission Assets is separate to the process for the Morgan Generation and Morecambe Generation Assets.</p> <p>The separate EPs for the Morgan Generation Assets, Morecambe Generation Assets, and Transmission Assets means the Applicants will try and schedule Generation and Transmission Assets meetings together. This may not always be possible due to different stages of each project.</p>	<p>-</p>	<p>-</p>

<p>4.</p>	<p><u>Roles and responsibilities (presented by KR)</u></p> <p>KR presented the roles and responsibilities (as per slide 10 of the presentation). The EPP is led by the Applicants. The responsibility for updating the EP is with the Applicants, with feedback from the relevant consultees. The Applicants’ responsibility is also to engage actively and responsibly with the stakeholders and to collect and analyse evidence as agreed with the stakeholders. To understand some of the evidence requirements might change throughout the process due to various circumstances.</p> <p>It is expected that stakeholders will seek pragmatic solutions, for example with any uncertainties or any changing solutions, to take a proportionate approach to the assessments and to only change the evidence requirements when new evidence leads to new areas of focus. Where new evidence might change the information required or where the project changes significantly. It is for stakeholders to engage clearly and proactively with the process, with a view to resolving issues pre-application which is the main aim of the evidence plan process.</p> <p>KR presented the structure of the Steering Group and Expert Working Groups (EWG) (as per slide 11 of the presentation) – KL will act as chair for the EP process as a whole and will chair the Steering group meetings and EWGs, as relevant. KR will act as secretariat. KL and KR are to be included on all correspondence.</p> <p>Roles and responsibilities and the aims of Steering groups and EWGs are set out in the slide pack.</p> <p>The Applicants have put together a broad plan for engagement with the Steering group and EWGs, noting that this is subject to progress based on how the project progress.</p>	<p>-</p>	<p>-</p>
<p>5.</p>	<p><u>Overview of Evidence Plan Steering Group and EWGs (presented by KR)</u></p> <p>KR presented the Steering Group participants and the EWG structure. The aim of the EWGs is to discuss and agree, with stakeholders, key elements of the EIA and HRA during the pre-application stages. Overall aim of having a lot of the groundwork completed on the statements of common ground so that examination only focuses on the key issues. Certain topics are not included, such as Shipping and Navigation and Commercial Fisheries, as these have their own separate consultation processes.</p> <p>KR presented the areas the project is seeking agreement on, the broad timescale for the next EWGs and what the focus of each of them will be. This EWG will combine the introduction to the project, and the baseline for offshore ornithology.</p> <p>KR presented main topics where the aims to agree are found. These included but are not limited to; (further information on slide 12) study areas, approach, screening, terminology,</p>	<p>-</p>	<p>-</p>

	<p>assessment conclusions, mitigation and monitoring requirements.</p> <p>KR presented the list of the participants of the offshore ornithology EWG (as per slide 13). Any changes to project teams stakeholders should let the applicants know so they can update their participant list.</p> <p>KR presented an overview of EWG meeting process and timings. This EWG is to introduce the Transmission Assets project and included baseline information and the EIA methodology for best use of time, noting for some topics or subjects there may be need for more or less consultation time, which may be amended. This should provide an idea of the level of engagement and a timescale for this.</p> <p>The Applicants are undertaking stakeholder engagement pre PEIR to provide initial assessments before PEIR. After section 42 responses are received there will be another EWG to discuss how the Applicants and the project will get to the DCO application stage.</p> <p>The slide (15) shows the further consultation, if needed for certain topics depending on section 42 response. This will be updated and adapted as the Applicants progress through the pre-application process. KL presented the broad process and timescales for progressing to agreements, and this aligns with how the project has decided to run the Transmission Assets EWG.</p> <p>KR presented slide setting out how the EWGs will work. The process is iterative, and meetings will be held at key stages or where new information becomes available. Where the project require feedback during the meeting, materials will be provided ahead of time. Minutes and agreement logs will be provided two weeks following the meeting.</p> <p>KR presented the approach to agreements, which aligns with Mona and Morgan Generation EP as well. If the stakeholders need to review evidence ahead of meeting, this would be would ideally be sent out to stakeholders two weeks ahead of time, with the expectation that attendees are prepared to discuss this in the EWG. Agreement logs and minutes will be circulated two weeks after and the Applicants would expect responses two weeks after that.</p> <p>SR – Is the structure of the EWG and content that has been laid out all clear and make sense?</p> <p>No concerns raised.</p>		
6.	<p><u>Offshore Ornithology Baseline and LSE Screening (presented by RW)</u></p> <p>RW presented an overview of the offshore ornithology baseline data, stating that scoping and HRA screening has been undertaken by the project to a very high level. A list on the slide (19) showed an overview of the baseline data and site-specific</p>		

	<p>survey data. Digital Aerial site surveys have been undertaken as per the slide. The map on slide 19 shows study areas and Transmission Assets red line boundary.</p> <p>RW presented a summary of the offshore ornithology baseline (as per slide 20). Other data sources are listed on the slide, most notably the [REDACTED] data set alongside other past data sets used.</p> <p>RW presented the preliminary baseline. Project site specific data shows the five most common species from the first 12 months of aerial surveys (as listed on slide 21). Other data sources are used for other species/designated sites which are listed in the slides.</p> <p>RW presented the approach to assessment. The impacts scoped into assessment (as per slide 22) are explained; Disturbance and displacement has been scoped in for all project phases; indirect species affecting prey species and temporary habitat loss and increased SSCs.</p> <p>Only indirect underwater noise has been scoped out for the operation and maintenance phased.</p> <p>Collision risk has been scoped out during the operation and maintenance phase as the chances of collisions are considered negligible as the offshore booster station and OSPs are stationary features. A barrier to movement has also been scoped out during operation and maintenance phase (as per slide 23). Accidental pollution has been scoped out of all phases (as per slide 23).</p> <p>AM - thinking about collision risk and the Offshore Substation Platforms (OSPs), is there any lighting on the OSPs?</p> <p>RW – there will be safety lighting as required, unable to comment further on the lighting on the OSPs.</p> <p>AM – One of the five species mentioned in the most common species observed from the site-specific data is Manx shearwater. This species has been shown to be attracted to light and can collide with lit features. Should there be a consideration of this? If it is decided to be scoped out [of the assessment] that decision should be explained.</p> <p>RW – yes, that makes sense to us.</p> <p>SR – thanks for raising that.</p> <p>RW presented the assessment methodology - CIEEM guidelines are being followed throughout the assessment process on all relevant topic areas including Offshore Ornithology for Transmission Assets, summarised on slide.</p> <p>The likely significant effects (LSE) screening has been undertaken by NIRAS. The screening has looked at breeding seasons and mean/max foraging ranges, plus 1 standard deviation. This is using a Biologically Defined Minimum Population Scales (BDMPS) for breeding seabirds in the non-breeding season and using the SPA boundary for non-breeding seabirds. For impacts, a zone of influence footprint plus 2km and 15km buffer has been used</p>		
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D.2 Offshore ornithology EWG meeting 2

D.2.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project
External (Restricted)

MOM Number : Transmission Assets OO EWG02 **REV. No.** : F01

MOM Subject : Transmission Assets Offshore Ornithology Expert Working Group 2

MINUTES OF MEETING

MEETING DATE: 02 August 2023

MEETING LOCATION: Microsoft Teams

RECORDED BY: [REDACTED] (RPS)

ISSUED BY: [REDACTED] (RPS)

Attendees:

- [REDACTED] – bp (SR)
- [REDACTED] - bp (HK)
- [REDACTED] – Flotation Energy (HR)
- [REDACTED] – Flotation Energy (NJ)
- [REDACTED] – Flotation Energy (IM)
- [REDACTED] – RPS (KR)
- [REDACTED] – RPS (ST)
- [REDACTED] – RPS (BM)
- [REDACTED] – NIRAS (MH)
- [REDACTED] - NIRAS (WG)
- [REDACTED] - NIRAS (PW)
- [REDACTED] - MMO (AE)
- [REDACTED] – MMO (ALF)
- [REDACTED] – Natural England (AR)
- [REDACTED] – Natural England (MT)
- [REDACTED] – Natural England (EW)
- [REDACTED] – The Wildlife Trust (GdJ)
- [REDACTED] – The Wildlife Trust (KB)

Apologies

- [REDACTED] – RPS
- [REDACTED] – RSPB

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
1.	<u>Introductions and agenda (presented by KR)</u> Slides 1 and 2	-	-
2.	<u>Key Project Updates (presented by HK)</u> Slides 3 and 4 - Currently on track to submit the PEIR for the Transmission Assets in Q3 2023 as shown on slide 3 as previously agreed. The Transmission Assets ES is scheduled to be submitted in Q3 of 2024.	-	-
3.	<u>Discussion and updates on the Cumulative Assessment (presented by KR).</u> Slide 4 – The Transmission Assets PEIR that will come to stakeholders in the Autumn includes the export cable	-	-

	<p>infrastructure and the offshore substation platforms (OSPs) that are within the Morgan and Morecambe Array Areas. There will therefore be some double counting between the Generation and Transmission Assets DCOs. This over-precautionary assumption will be noted and included in the PEIR and when undertaking the combined Generation Assets and Transmission Assets assessments.</p> <p>Slide 5 set out the approach to the Combined Transmission and Generation Assessments. For the Transmission Assets, the assessment will be undertaken for the project alone. Then the cumulative assessment will have a separate section where the Transmission Assets are considered alongside the two Generation Assets, but no other projects. The assessment will incorporate the other projects (Tier 1, 2 and 3) into the next step in the CEA. For instance, Mona and Awel Y Mor would be included in this stage, in the relevant Tier. The combined assessment with the Generation Assets can be considered the first step of the CEA.</p> <p>The approach for the Morgan and Morecambe ES's will be the same as the Transmission Assets PEIR approach. It is important to be aware that the CEA can only be based on information in the public domain. As Morgan Generation, Morecambe Generation and the Transmission Assets are separate consent applications, the CEA approach has been created to help align the projects following stakeholder feedback on presenting the Transmission Assets with the associated Generation Assets..</p> <p>Slide 6 outlined how the project is undertaking these assessments. The table in the slide showed that the process for the Morgan and Morecambe Generation Assets PEIR will be the same for both projects. The CEA for the PEIRs will be based on the scoping from Mona, Morgan and Morecambe Generation and the Transmission Assets. For the Morgan and Morecambe Generation Assets Applications, the Cumulative assessments will be based on the PEIRs as this will be the information in the public domain at the time. For Transmission Assets PEIR, the CEA will be based upon the PEIRS of Mona, Morgan Generation and Morecambe Generation. The Transmission Assets Application will be based upon the ES's of those same projects as these will be available by the submission of the Transmission Assets Application. The Transmission application will be the most refined in terms of the cumulative assessment as the last project.</p>		
4.	<p><u>Offshore Ornithology – ISAA (presented by MH)</u></p> <p>Slide 8 – MH described the Information to Support Appropriate Assessment (ISAA) and the impacts identified to be assessed in the ISAA and be consistent with those identified in the Transmission Assets Scoping Report, taking on board comments from the Planning Inspectorate and incorporating different project phases and the indirect impacts into the assessments. The impacts considered are: disturbance and displacement (considered through all project phases), indirect impacts from underwater sound (construction and decommissioning only), temporary habitat loss and increased suspended sediment</p>	-	-

	<p>concentrations (SSC) (again across all three project phases) and in-combination impacts. These are listed and explained on slide 8.</p> <p>Slide 9 – Following the HRA screening report there were 5 designated sites for which an LSE could not be ruled out and are listed in the table on the slide with the relevant ornithological features. MH remarked that the project hasn’t received any comments back on these as of yet.</p> <p>Slide 10 – The HRA screening assessment, was conducted using foraging ranges and zones of influence (ZOI). It was undertaken using the HRA screening tool that was developed for the Crown Estate as part of their Plan Level assessments. HRA screening was undertaken using the standard categories such as foraging ranges, breeding season and different spatial criteria. This produced a long list of SPAs and Ramsar sites that could not be screened out in stage 1 (identification of connectivity). The second stage was the determination of LSE where we brought in aspects like vulnerability to work out if a likely significant effect is possible.</p> <p>Slide 11 – ISAA methodology. Following the screening, the 5 designated sites for which an LSE could not be ruled out were taken through to the ISAA. The key features were explained to be red-throated diver and common scoter of the Liverpool Bay SPA. The approach to assessment is consistent to approaches taken previously on different projects. MH explained that the project has utilised the density services that accompany the Lawson <i>et al.</i> (2016) report on the distribution of these birds within the SPA. The densities along the cable route and other effected areas have been extracted and used to estimate how many birds would be subject to disturbance and displacement, using standard 100% displacement and varying mortality rates. Sensitivity to impacts was incorporated into the HRA screening report and included in the assessment.</p> <p>Slide 12 – The maximum design scenario (MDS) was explained and the details of this are on the slide. The information is split into phases and describes the scale, vessel movements (including helicopter flights) and construction activity across the phases of the project.</p> <p>Slide 13 – MH listed the potential factors that are considered when assessing the impacts of temporary habitat loss/disturbance and increased SSC. These factors that could increase SSC, affecting prey abundance or the habitat used by species screened into the ISAA, are listed on the slide for the construction and decommissioning phases of the project.</p> <p>Slide 14 – Initial Assessment outputs were described. The displacement and disturbance of red-throated diver and common scoter were looked at based on the previously mentioned densities with a displacement of 100% and mortality of 1%. The report includes mortalities of 10%, 5%, 2% and 1% but the assessment determined a 1% rate was appropriate for the type of impact we were looking at and the type characteristics of that</p>		
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	<p>impact. The increases were considered to be not significant for the project alone or in-combination with other plans or projects. For other qualifying features there was deemed to be a negligible potential for an adverse effect on the integrity of any European sites for the project alone or in-combination with other projects and plans. Morecambe Bay Ramsar site and Morecambe Bay and Duddon Bay SPAs were ruled out for any potential adverse effect on the integrity of any European sites due to the distance and lack of direct connectivity. Further details provided on the slide.</p> <p>Slide 15 – Indirect Impacts from underwater noise on prey species. MH explained that underwater noise may cause displacement of fish and other prey species. The ornithology assessment has relied on the conclusions from the benthic and fish and shellfish ecology assessments. Those assessments determined that the impacts would be minor and localised for potential prey species given the area the key species forage over. It was determined that due to the large foraging ranges of qualifying features the indirect impacts from underwater noise will be of negligible magnitude.</p> <p>Slide 16 – The final impact explained was regarding temporary habitat loss/ disturbance and increased SSC. Utilised the findings from the benthic and fish and shellfish assessments and the impacts on prey species would be minor and localised, so the same conclusion was drawn, that there would be no adverse effect on species associated with the SPAs.</p> <p>Slide 17 – The table on the slide summarises the previous assessment findings slides and states that for all European sites or ornithological features taken forward there was deemed to be no adverse effect on integrity for the project alone or in-combination with other plans and projects.</p>		
5.	<p><u>Offshore Ornithology – PEIR (presented by MH)</u></p> <p>Slide 18 – MH discussed the PEIR and the key impacts that are being considered. These were explained to be the same impacts to the ISAA and are listed on the slide based on the information from the Scoping Report and consultation through the Scoping Opinion.</p> <p>Slide 19 – the table on the slide was explained to show the key impacts that have been scoped out of the assessment and details the justifications of these decisions. The three issues are collision risk during the operations and maintenance phase, barrier to movement during the operations and maintenance phase and accidental pollution. Please see slide for details on the justifications.</p> <p>Slide 20 – The initial assessment outcomes and the receptors taken forward to assessment in the PEIR are listed on the slide. This was based on the review of available information which included the survey data from the Morgan and Morecambe Generation Assets PEIRs and wider regional data sets such as the MERT data sets. 23 waterbird species have been taken forward</p>		

	<p>to assessment. This includes the qualifying features of local SPAs but also other species such as kittiwake and guillemot which are quite abundant within UK waters.</p> <p>Slide 21 – The PEIR assessment methodology. MH explained that sensitivities to impacts and recoverability were established from existing sources. Sensitivities were established for each species with regards to actions within project phases. These sensitivities directly relate to sensitivity to disturbance from the activities and habitat loss. Noted that for red-throated diver and common scoter previous survey work was used to establish densities, disturbance and mortality impacts. The impacts are considered based on their spatial and temporal extent, regularity and reversibility to determine magnitude. This information is then used to establish whether there would be a significant effect.</p> <p>Slide 22 – MH summarised the PEIR findings in a table which showed the impact assessed, the receptor, and the significance of effect for the project alone and for in-combination assessment. The determination was the impacts were not significant for all phases, and for all impacts. All impacts considered are localised, infrequent and short term in nature and as such were all determined as having an either negligible or minor adverse significant effect. The conclusion of minor adverse significant effect were generally in relation to the key species such as red-throated diver and common scoter and negligible for the rest of the species.</p>		
<p>6.</p>	<p><u>Offshore Ornithology – CEA (presented by MH)</u></p> <p>Slide 23 – MH described the CEA and described the buffer and methodology for the assessment including the types of projects and plans included as well as explaining the tiered approach for considering other projects and plans. Greater detail can be found on the slide including a figure showing the CEA study area (up to a 50km buffer around the Transmission Assets Red Line Boundary) and some of the projects and other plans considered within the CEA. At times species specific buffers were used, an example of which is for red-throated diver where the Liverpool Bay search area was used due to the majority of that species population of concern occurring within that area. Any projects that interact with that search area would be included in the CEA.</p> <p>MT – Noticed you have used Lawson <i>et al.</i> (2016), I assume you are familiar with the more recent HiDef aerial surveying limited report that was published in June of this year? Natural England would encourage you to look at that as it is more up to date. It may not make a significant difference but it’s best practice to look at the most recent available data.</p> <p>MH – we have included discussion on that report in both documents (Offshore Ornithology chapter and Annex for PEIR). [Post-meeting note: the Annex has now been incorporated into the PEIR Chapter, so there will only be one document produced for Offshore Ornithology for the PEIR]. We have requested the data but it isn’t in a suitable format for us to undertake the</p>	<p>-</p>	<p>-</p>

D.2.1.1 Response from the MMO regarding the meeting minutes

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Morgan & Morecambe Transmission Assets Offshore Ornithology EWG02 - meeting minutes
Date: 18 August 2023 09:27:31
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)

CAUTION: This email originated from outside of RPS.

Good morning


I can confirm these minutes are an accurate representation of the meeting.

The MMO defer to Natural England for further comments.

Thank you

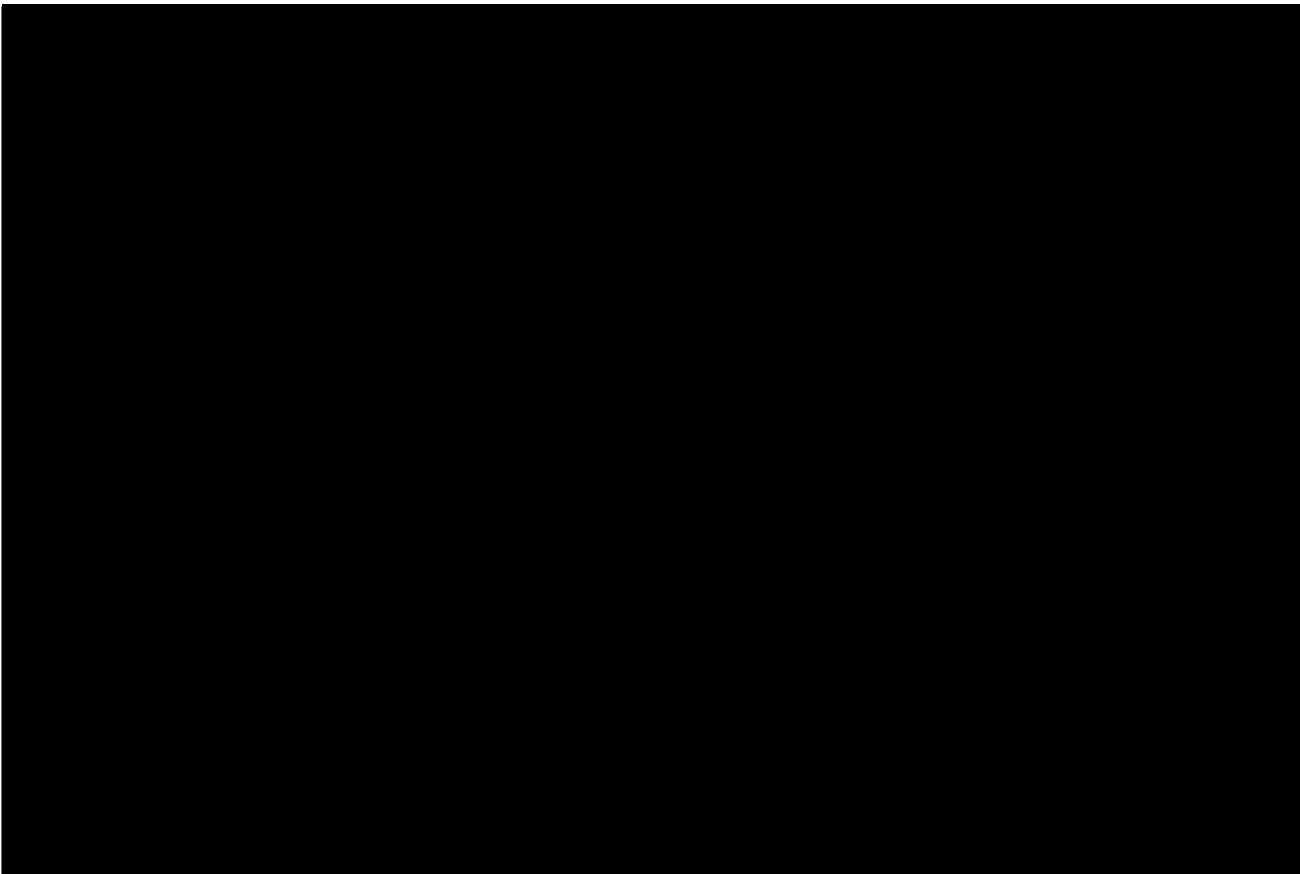
[REDACTED]

[REDACTED] (She/Her) | Marine Licensing Case Officer | Marine Management Organisation

 Nobel House | 17 Smith Square | London | SW1P 3HX

 [REDACTED]

Our MMO Values: Together we are **Accountable**, **Innovative**, **Engaging** and **Inclusive**
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D.3 Offshore ornithology EWG meeting 3

D.3.1 Meeting Minutes

MINUTES OF MEETING



Security Classification: Project External
(Restricted)

Minutes of Meeting Number : Transmission Assets Offshore Ornithology EWG Meeting 03 **REV. No.** : F01

Minutes of Meeting Subject : Transmission Assets Offshore Ornithology EWG Meeting 03

MINUTES OF MEETING

MEETING DATE : 06/02/2024

Az-MEETING LOCATION : Microsoft Teams

RECORDED BY : [REDACTED] (RPS)

ISSUED BY : [REDACTED] (RPS)

Attendees:

- [REDACTED] – HK (bp)
- [REDACTED] - HR (Flotation)
- [REDACTED] - KL (RPS)
- [REDACTED] - KH (RPS)
- [REDACTED] - BM (RPS)
- [REDACTED] - MH (Niras)
- [REDACTED] - PW (Niras)
- [REDACTED] - WG (Niras)
- [REDACTED] - ALF (MMO)
- [REDACTED] - AS (MMO)
- [REDACTED] - EW (Natural England)
- [REDACTED] - KB (Natural England)
- [REDACTED] - RB (Natural England)

Apologies:

- [REDACTED] (MMO)
- [REDACTED] (Natural England)
- [REDACTED] (Wildlife Trust)
- [REDACTED] (Wildlife Trust)
- [REDACTED] (RSPB)
- [REDACTED] (RSPB)
- [REDACTED] (Natural England)
- [REDACTED] (Natural England)
- [REDACTED] (Niras)

Agenda

1. Introductions and Agenda
2. Project update
3. Project Parameter Refinements post-PEIR
4. Offshore Ornithology
 - S42 responses
5. Discussion and Next Steps

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
1.	<p>Introductions and Agenda (presented by KL)</p> <p>Introductions made and KL explained the agenda of the EWG to the attendees as detailed above.</p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
2.	<p>Project Update (presented by HK)</p> <p>Statutory consultation for the Preliminary Environmental Information Report (PEIR) closed at the end of November. The project is still on track for Application submission in Q3 2024. The Transmission Assets DCO Application is slightly behind the associated Morgan Generation Assets and Morecambe Generation Assets DCO Applications, which are aiming for submission in Q2 2024. Construction of the Transmission Assets is anticipated to start in 2026/2027 running through to 2030, subject to the grid connection timings.</p>		
3.	<p>Project Parameter Refinements post-PEIR (presented by HK)</p> <p>Key offshore refinements that have been made to the project since the PEIR are discussed here. The double counting from the Offshore Substation Platforms (OSPs) was flagged in consultation responses as these were considered in both the Transmission Assets and Generation Assets Applications. The OSPs and interconnector cables will now be assessed wholly within the respective Generation Assets Applications and have been removed from the Transmission Assets Application.</p> <p>The Morgan offshore booster substation has been removed as it is no longer required following more detailed engineering studies undertaken since PEIR publication. This means the Transmission Assets will have no surface piercing infrastructure and focus on the offshore export cable, landfall, onshore export cable and onshore substations. With that the removal of surface piercing infrastructure, we have reduced the number of vessel and helicopter movements for construction and operation and maintenance.</p> <p>KL – The project has been refined down considerably, particularly with removal of the OSPs and booster station. The installation and operation of export cables are therefore the key focus of the Transmission Assets. This will hopefully make the cumulative assessment and combined Generation/Transmission assessments a lot more straightforward and easier for readers to follow as there will be no double counting to consider.</p>		
4.	<p>Offshore Ornithology (presented by MH)</p> <p>We have received and reviewed the S42 consultation responses and will take those considerations into the Application. We have picked out the key responses to discuss.</p> <p><u>Absence of cumulative assessment for red-throated diver and common scoter</u></p> <p>There were some cumulative assessments in the PEIR but perhaps not as many as consultees would have wanted to see for certain species. The assessment will change due to the</p>	<p>RB to provide HiDef Density Surface data for Liverpool Bay SPA (action completed)</p>	<p>Action completed</p>

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>removal of the surface piercing infrastructure, but we will look to include as much information as possible in the cumulative assessments. The level of information included in the assessment relates to the magnitude of the impact from the Transmission Assets. For some impacts, the project may be able to state there is no impact from the Transmission Assets and therefore there would be no need for the cumulative assessments. Will look to include as much information in the cumulative assessment as possible to cover these queries.</p> <p>KL – Regarding the cumulative assessment, ongoing projects have an impact during the operation and maintenance phase. Now the project has removed all the surface piercing infrastructure the export cables and its installation are now the key impact to be assessed. Does the temporary nature of the impact influence the undertaking of the assessment?</p> <p>MH – The impacts associated with installation of the cable, while they would come under disturbance/displacement, these impacts are now temporary. This will need to be carefully considered. Did Natural England have any thoughts on how this should be approached for cumulative assessments, regarding temporary and permanent impacts, and whether they should be combined or whether the project can split those out?</p> <p>RB – It depends on what you are thinking about. For example, for red throated diver and common scoter you can do a cumulative assessment of a mortality estimate. The temporary nature doesn't really matter where you are assessing mortality. There isn't an expectation of significant mortality so the problem Natural England is more concerned with will be habitat loss due to displacement. With this being a temporary impact the projects cumulative/in-combination assessment isn't going to consider a cable lay operation as impactful as the [presence of the] Array. This comes back to mitigation and the aim to reduce the temporal overlap of this activity with these features in this site; anything the project can do to this end is appreciated. Natural England wouldn't look to treat temporary cable laying impacts to be as impactful as more permanent structures.</p> <p>MH – We will consider the difference between permanent and temporary impacts. It won't necessarily be quantitative, rather a more qualitative discussion on those differences and the temporal and spatial scale.</p> <p>RB – We'd consider that this is a perfectly appropriate approach. It is possible to quantify the rough scale of habitat loss and the time of the impact if there is an overlap with feature presence. The project could put a 2 km buffer around the cable laying vessel and state the loss of how much of the</p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>SPA for however many days in the sensitive period. This could maybe be quantified.</p> <p><u>Use of Hedef (2023) instead of Lawson et al. (2016) to inform assessments for features of the Liverpool Bay SPA</u></p> <p>MH – We have used the Lawson <i>et al.</i> (2016) data to quantify the disturbance impact. We did request the Hi-def (2023) data but it wasn't provided in a form we could use [at PEIR stage] to calculate those impacts as it was raw count data. The Hi-def (2023) report does give density surfaces. Is that information available?</p> <p>RB – NE will be able to provide the Hi-def density surfaces. It is worth flagging the Liverpool Bay SPA conservation advice package was updated at the back end of 2022. In those conservation objectives, for red throated diver and common scoter, they do use the non-breeding populations from the Hi-def (2023) data. Natural England can supply density services and will send those across when possible.</p> <p>MH – If we have the population numbers from Hi-def (2023) then comparisons will be from the same source which will be helpful.</p> <p><u>Use of survival rates representing all age classes of birds that will be present</u></p> <p>Regarding the use of survival rates and the reduction of the adult survival rates, the SPA population includes all birds [of all age classes] so this will be updated accordingly.</p> <p><u>Best practice measures</u></p> <p>The project has already incorporated best practice measures, such as avoiding rafting birds and sticking to shipping routes. Those will be maintained in the Environmental Statement (ES) from the PEIR.</p> <p><u>Timing restrictions on construction activities</u></p> <p>The timing restrictions were raised by Natural Resources Wales (NRW). The project has the Vessel Management Plan (VMP) which is part of the best practice measures, but the project hasn't intended to add timing restrictions due to magnitude of impacts. The project will however take on board the comments from NE [comments made by RB above] and do further work on the magnitude of those impacts now we have the refined Project Design Envelope (PDE). Currently the project believes the best practice measures applied at PEIR are enough.</p> <p><u>Data from Morgan and Morecambe Generation Assets only represents 12 months</u></p>		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
	<p>The project has used data from both the Morecambe and Morgan Generation Assets PEIRs within the Transmission Assets PEIR. At ES stage, the project will have the full 24 months of data for use in the assessment and will follow through any implications for the identification of species noted within the 24 months of data.</p> <p>HK – Regarding the VMP, the project will have some outline documents submitted with the DCO Application that weren’t included at PEIR and an outline VMP will be one of those. It will outline in more detail the mitigation incorporated by the project for vessels to access the site.</p> <p>KL – With the removal of all the surface piercing infrastructure, vessel movements will be reduced also from the PEIR numbers, considerably, as it just the installation of the export cable and some operations and maintenance movements.</p>		
5.	<p>Discussion and next steps (presented by KL)</p> <p>Meeting minutes will be circulated within two weeks alongside the agreement logs. Some of the content covered in the agreement logs will be revisiting what was covered in the previous EWG (pre-PEIR submission). Hopefully there can be progress on such things as agreement on the baseline characterisation remit, noting the point earlier on about the Hi-def data. We would like to get some of those agreements tied down while thinking of heading towards Application on such topics as assessment conclusions and appropriate mitigation measures. This is with a view of front loading as much as possible before heading into examination at the end of the year.</p> <p>A note for the MMO, the project only received agreement logs from Natural England from the last EWG. If the MMO could provide feedback after the project circulates the agreement logs that would be helpful. If the MMO is deferring to Natural England on any some of the technical ornithology points that’s fine but would appreciate the MMO checking they are happy with those logs.</p> <p>ALF – The MMO will provide an update on that.</p> <p>KL – No other questions from attendees.</p> <p style="text-align: center;">Meeting brought to a close.</p>	Feedback on agreement logs	
Summary of Actions		Status	Completion Date
A1.	Natural England to provide the high-def data and density services to Niras for the ornithology team to use in the ES.	Complete	06/02/2024
A2.	MMO to provide response to the agreement logs to the project.		

ITEM NO:	DISCUSSION ITEM:	Responsible party	Date
Summary of Agreements			
Ag1.	-		
Ag2.	-		
Ag3.	-		

	<p>equivalent assessments that we would normally undertake with the Lawson data. So it can't be used in a quantitative fashion but we have discussed it qualitatively.</p> <p>SR – Was wondering if it was worth clarifying, is the data in a way that it will never be in a form to use quantitatively?</p> <p>MH – the data we were provided with was raw data whereas the Lawson paper is density services. It is currently not in a suitable format, I think the HiDef report does include density services but they won't provide it [to us] so we can't use it.</p> <p>SR – I understand.</p> <p>PW – We enquired [for the data] and unfortunately was all the information we were able to get.</p>		
<p>7.</p>	<p><u>Discussion and next steps (presented by KR)</u></p> <p>The meeting minutes will be circulated within 2 weeks of the EWG alongside the agreement logs. For this EWG the project is seeking agreement with respect to the initial assessment approach and outputs and agreement on the approach to the CEA. It was noted from the last EWG that we only received agreement logs back from Natural England, so if other stakeholders could take a look and return their comments on the agreement logs, that would be helpful.</p> <p>The next EWG is scheduled around the S42 consultation which is anticipated to be early January and we will try to get the meeting into everyone's diaries as soon as possible.</p> <p>SR – Any other final comments?</p> <p>PW - It was noted that in the previous EWG we were asked to consider the impact of lights on the OSPs in respect to collision risk for Manx shearwater.</p> <p>PW – noted that this was considered but due to the fact that lights [on infrastructure] affect Manx shearwater juveniles on their first flight from land offshore and with the large distances between the Transmission Assets and the nearest breeding colonies we were quite comfortable in removing this as a potential risk. We have taken this on board and covered it in our document, but it hasn't been taken any further.</p> <p>SR – That is great as I believe that was an RSPB point from the last EWG so good to clarify and explain.</p> <p>Any last comments from anyone?</p> <p>No further comments.</p> <p>KR - Thanks and calls meeting to a close.</p>	<p>Action on stakeholders to review the agreement logs and return comments.</p>	<p>31 August 2023</p>

	<p>during the LSE screening process. The modified version of the HRA screening tool developed by NIRAS for the Plan-level HRA's recently undertaken by The Crown Estate has been updated to incorporate the most recent developments in relation to certain parameters e.g. foraging ranges from the NatureScot guidance.</p> <p>SR – Any comments or questions?</p> <p>NJ – returning to the baseline for Morecambe Generation Assets, the red line boundary has been revised so it is now smaller. The project has been undertaking apportioned population estimates for the year 1 and 2 surveys. Where the revised site plus zero, 2km, 4km and a custom 10km buffer for red-throated diver has been used, updated population densities will be coming because of this. The Morecambe survey data is as follows:</p> <ul style="list-style-type: none"> • Year 2 (Mar 22 to Feb 23) – apportioned availability bias – site + custom 4 - 10km buffer • Year 1 and 2 (Mar 21 to Feb 23) - apportioned abundance estimates for revised site: <ul style="list-style-type: none"> ○ Revised site ○ Revised site +2km ○ Revised site +4km ○ Revised site + custom buffer 10km overlapping with SPA – Red-throated Diver only <p>Post meeting note: The above statement by NJ is related to Morecambe Generation Assets only and the assessments for the Transmission Assets PEIR will be including the previous full extent of the boundary, as per the Morecambe Generation Assets PEIR. Flotation Energy are taking the revised boundary through to the ES Application, post-PEIR, and are currently in the process of informing the Expert Topic Group Members of this change through meetings with them.</p> <p>SR – Any comments regarding the screening approach?</p> <p>RW presented a further slide on LSE screening. 61 European sites are identified to take forward to the determination of LSE. 24 species were assessed by LSE and qualifying features, the majority ruled out with no LSE. Potential LSE cannot be ruled out for construction, operation and maintenance and decommissioning phases. Further detail can be viewed on slide 26, including a table of species showing five designated sites and the species protected under each designation.</p> <p>KR - Any questions or queries?</p> <p>No concerns raised.</p>		
7.	<p><u>Discussion and next steps (presented by KR)</u></p> <p>KR presented the key items that the project wishes to seek agreement on following this EWG and the information provided by RW and the scoping report (as per slide 27).</p> <p>These are:</p> <ul style="list-style-type: none"> • Agreement on approach to baseline characterisations 		

	<ul style="list-style-type: none"> • Agreement on approach to assessment (EIA and LSE) • Agreement on scoping of impacts. <p>These will be added to an agreement log and will be issued with meeting minutes.</p> <p>RPS will circulate minutes and agreement logs in two weeks and are looking for a response two weeks after that.</p> <p>The next EWG to be held summer 2023, pre PEIR submission and the dates will be booked asap.</p> <p>Any other comments or questions?</p> <p>LB – The approach to cumulative assessments will be important i.e. across three project and in-combination across the piece – LSE screening alone looks okay. This isn't a project that will ever continue alone and as such cumulative is the one to really look at and most important for this project.</p> <p>SR – There is an EWG meeting where it is scheduled that this is discussed.</p> <p>KR – The next meeting would be the initial outputs of the assessment which will include cumulative assessment.</p> <p>LB – wanted to raise it because there will be things that will be removed at LSE but will be relevant at cumulative so wanted to raise it.</p> <p>KR - Any other questions or comments?</p> <p>No questions or comments raised.</p> <p>Calls meeting to a close.</p>		
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D.3.1.1 Response from the Natural England regarding the meeting minutes

Date: 02 April 2024
Our ref: DAS/UDS A012451 461093
Your ref: Morgan and Morecambe Transmission Assets Offshore Ornithology
EWG03



[REDACTED]
RPS/ Energy
Imagination House
Station Road
Chepstow
Monmouthshire
NP16 5PB

Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

cc [REDACTED]
RPS

BY EMAIL ONLY

Dear [REDACTED]

Discretionary Advice Service (Charged Advice): UDS A012451

Development proposal: Morgan and Morecambe Offshore Windfarms: Transmission Assets

Consultation: Morgan and Morecambe Transmission Assets Offshore Ornithology EWG03

This advice is being provided as part of Natural England's Discretionary Advice Service (DAS) in accordance with the Quotation and Agreement dated 12th January 2024 to Morgan Offshore Wind Limited for the Morgan and Morecambe Transmission Assets.

The following advice forms Natural England's response to the meeting minutes provided for the Morgan and Morecambe Transmission Assets Offshore Ornithology EWG03 attended by Natural England on 6th February 2024.

Natural England were asked to provide feedback on the following points:

- LSE Screening
- Baseline Characterisation
- CEA Approach
- Conclusions:
 - 1) No AEOI for SPAs designated for offshore ornithology features
 - 2) No significant effects in EIA terms on offshore ornithological receptors
 - 3) Measures (commitments) adopted as part of the project are appropriate

Detailed comments

LSE Screening

Natural England broadly agrees to the approach presented within the EWGs.

Baseline Characterisation

Now that Natural England has provided HiDef density surfaces, we assume that the baseline characterisation will be updated. Therefore, Natural England will provide comments on this after we have reviewed the updated baseline characterisation. Natural England agree that the same

characterisation methods should be used with the updated data.

Approach to CEA

Based on the EWG03 discussions, Natural England agrees to the approach where the project quantifies the rough scale of habitat loss and the time of the impact if there is an overlap with feature presences. The project should use a 2km buffer around the cable laying vessel to quantify how much of the SPA will be subject to temporary loss due to disturbance for however many days within the sensitive period that the vessel is active.

Conclusion 1 - AEOI

Natural England cannot agree that there will be no adverse effect on site integrity for offshore ornithological features without seeing the full assessment.

Conclusion 2 – Significance in EIA terms

Natural England cannot agree that there will be no significant effects in EIA terms on offshore ornithological receptors without seeing the full assessment.

Conclusion 3 – Appropriateness of Measures Adopted

Natural England welcomes the decision to provide an outline VMP with the DCO application which will provide detail on the mitigation incorporated by the project. However, we cannot agree on the appropriateness of these measures without seeing the full detail.

As mentioned in EWG03, the project should quantify the rough scale of habitat loss and the time of the impact if there is an overlap with feature presences. The project should use a 2km buffer around the cable laying vessel to quantify how much of the SPA will be subject to temporary loss due to disturbance for however many days within the sensitive period that the vessel is active.

For clarification of any points in this letter, please contact me using the details provided below.

Yours sincerely,

██████████
Marine and Coastal Lead Adviser
Coast and Marine Team
Cheshire to Lancashire Area Team
██

The advice provided in this letter has been through Natural England's Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

Appendix E: Maritime Navigation Engagement Forum (MNEF) EWG

E.1 MNEF EWG Meeting 1

E.1.1.1 Meeting Minutes

RECORD OF MEETINGS

Table 1: Consultation Meeting 24 May 2023

Attendees	Subject	Summary
Stena Line, Applicants, NASH Maritime	<ul style="list-style-type: none"> Introduction and Project Background 	It was communicated that the Transmission Assets will be a separate DCO Application from the associated Generation Assets in line with recommendation from the Offshore Transmission Network Review.
	<ul style="list-style-type: none"> Location of the Morgan Offshore Wind Project: Offshore Booster Station 	It was acknowledged that the Morgan Offshore Wind Project: Offshore Booster Station location was not yet finalised, and it was requested that the location is shared once known. It was also noted that worst-case positioning of the booster station could negate any benefit of the revised Morecambe array area boundary. Stena Line highlighted that there are some dredgers that pass in vicinity of the eastern booster station search area. NASH Maritime confirmed this had been identified within the AIS analysis and impacts would be further investigated.
	<ul style="list-style-type: none"> Construction activities and schedule 	Stena Line noted that communications and liaison plan with the cable lay operations involving sharing of movements, passage plans and timings, would assist managing vessel movements and interactions. This will be considered within the NRA. Stena Line commented that there would be cumulative impacts to operator routes if all windfarms were to be constructed concurrently – introducing various construction exclusion zones.

Table 2: Consultation Meeting 31 May 2023

Attendees	Subject	Summary
Trinity House, Chamber of Shipping, MCA, NASH Maritime	<ul style="list-style-type: none"> Application target date and Red Line Boundary updates 	The application target date was to be around Q2 or Q3 2024. The Generation Assets boundaries are known to have undergone recent updates since PEIR, so it was questioned why the Transmission Assets were still considering the PEIR boundaries within their NRA. The NRA for the Transmission Assets PEIR was based on publicly available information at the time it was prepared which was the Generation PEIR boundaries, albeit comments were welcomed on impacts of change of RLB on risks/impacts.
	<ul style="list-style-type: none"> Oil and gas operations 	The MCA asked what the South Morecambe gas field plans are for the DP3 and DP4 platforms. Later consultation with oil and gas operators revealed that there are planned decommissioning activities in proximity to the Transmission Assets. O&G operators suggested SIMOPS and Vessel Traffic Management Plans as a risk control.
	<ul style="list-style-type: none"> Location of the Morgan Offshore Wind Project: Offshore Booster Station 	The Chamber of Shipping asked why the booster station cannot be located within the Morecambe array area the same as the OSPs. They added that an isolated structure is inherently riskier than were it to abut to the Morecambe site. Trinity House noted that if the booster station is placed to the east of the Morecambe array, the booster may be in the middle of a traffic route caused by deviation around the Generation Assets. This could increase the risk of grounding.
	<ul style="list-style-type: none"> Future traffic 	The Chamber of Shipping cautioned that when projecting future vessel numbers, consideration should be given to the number of vessel trips during operations and maintenance of the Generation Assets in combination with the Transmission Assets. NASH Maritime noted that a % increase on background traffic is considered, accepting there is uncertainty around it, but that the Project vessel movements as detailed within each Project's PEIR / ES will be used as a worst case.

RECORD OF MEETINGS

Attendees	Subject	Summary
	<ul style="list-style-type: none"> Risk controls 	As an additional risk control, the MCA advised that the booster station is aligned with the Morecambe array layout and this would be necessary if less than 1nm separation.
	<ul style="list-style-type: none"> Survey data 	The summer 2022 survey data will not be compliant with MGN654 at the time of application; therefore a top-up survey was agreed to be undertaken to ensure compliance is maintained. MGN654 requires that the data is no older than 24 months at the time of application.

Table 3: Consultation Meeting 5 June 2023

Attendees	Subject	Summary
Eni, Spirit Energy, Harbour Energy, NASH Maritime	<ul style="list-style-type: none"> Maximum design scenario 	Spirit Energy asked if the booster station dimensions shown are a worst case scenario, noting that the numbers shown are large for the type of structure. It was confirmed that the dimensions noted were the Maximum Design Scenario under consideration for structure size. It was questioned if there was a booster station safety zone and if this is accounted for minimum distances shown between O&G platforms and the booster search areas. It was noted there will only be a 500m safety zone during construction and major maintenance and distances.
	<ul style="list-style-type: none"> Future oil and gas activities 	Spirit Energy noted the platform repurposing for carbon storage has been granted a license from the North Sea Transition Authority (NSTA). There will be on-going programme activities for this over the next four years. Eni discussed upcoming rig operations at wells for decommissioning as well as carbon capture projects in the Conwy area. There will be additional heavy lift vessel operations and they will be transiting between Liverpool and the wells. The Millom decommissioning is to take place between now and 2028/29. This will overlap with the Transmission Assets construction phase.
	<ul style="list-style-type: none"> Hazard scoring 	From O&G point of view, allision hazards would all be classed as Major Accident Hazards and it was suggested the scoring is revisited. NASH Maritime noted that the worst case scenario already has the highest scores for consequences.
	<ul style="list-style-type: none"> Cumulative issues 	Harbour Energy noted the cumulative issues with the Mona Offshore Wind Project. NASH Maritime explained a Cumulative Regional NRA (CRNRA) is currently being undertaken and the cumulative impacts will be assessed fully there.
	<ul style="list-style-type: none"> Location of the Morgan Offshore Wind Project: Offshore Booster Station 	<p>Spirit Energy questioned the rationale behind the booster station being situated outside of the Morecambe array area. NASH Maritime explained that each project needs to maintain electrical independence and the booster station needs to be associated with the Morgan Offshore Wind Project cables. It was noted that the MCA and Trinity House have already recommended that the booster station is aligned with the turbine array.</p> <p>Spirit Energy pointed out that an adverse booster station location could potentially put Calder into a 'shadow zone' for the early radar detection monitoring system which is used to monitor allision risks. They asked how the Transmission Assets plan to manage the risk. Furthermore, adverse siting could present an aviation obstruction for platform access. NASH Maritime noted that worst-case positioning of the booster station will be considered within the NRA, and that this concern will be fed back to the Applicants.</p>
	<ul style="list-style-type: none"> Risk controls 	Micrositing of the offshore booster station and bridging/liaising/SIMOPS plans were discussed and will be considered as potential additional risk controls.

RECORD OF MEETINGS

Table 4: Consultation Meeting 6 June 2023

Attendees	Subject	Summary
RYA, NASH Maritime	<ul style="list-style-type: none"> Reduction in under keel clearance 	Regarding under keel clearance at the landfall, NASH Maritime noted that protection was only expected to be needed at cable and pipeline crossings, the nearest of which lies in 10-15m water depth. Therefore, there would still be 7-12m clearance which is adequate for recreational activities. The RYA acknowledged and stated that most UK recreational craft have draughts less than 3m.
	<ul style="list-style-type: none"> Location of the Morgan Offshore Wind Project: Offshore Booster Station 	The booster station should not have an impact on recreational craft, providing it is sufficiently lit and charted. NASH Maritime confirmed that it would be charted and marked per guidance from IALA G1162, MCA and Trinity House. Notice to Mariners will also be circulated as a risk control.

Table 5: Consultation Meeting 7 June 2023

Attendees	Subject	Summary
Seatruck Ferries, IoMSPC, Isle of Man Government, West Coast Sea Products, The Scottish White Fish Producers Association, Applicants, NASH Maritime	<ul style="list-style-type: none"> Cumulative impacts 	Seatruck Ferries asked why the Mona wind farm was not being discussed within this meeting, as it will also have an impact on navigational safety within the area. NASH Maritime clarified that the purpose of the meeting was to discuss issues surrounding the Transmission Assets in particular, and that each wind farm project would have an associated NRA. It was also noted that a cumulative regional NRA is also being undertaken for the three offshore wind farms. It was noted that an offshore wind farm lease exists within Isle of Man waters.
	<ul style="list-style-type: none"> Location of the Morgan Offshore Wind Project: Offshore Booster Station 	Seatruck Ferries asked if it was correct that the Morgan booster station would be located outside the array areas, and questioned why this is the case. NASH Maritime confirmed and that both wind farm areas are run by separate developers with each project needing to maintain electrical independence and the booster station needs to be associated with the Morgan Offshore Wind Project cables.
	<ul style="list-style-type: none"> Vessel traffic data 	West Coast Sea Products queried whether the NRA takes into account other data sources aside from AIS, stating the limitations of AIS data and the need for VMS data use. NASH Maritime confirmed that the NRA includes AIS, radar surveys and VMS.
	<ul style="list-style-type: none"> Consultation 	It was queried whether Stena Line had been invited to the meeting. They were, although had also been consulted recently so did not attend. The Applicants have reached out to Orsted regarding obtaining further information about their plans in regards to the Isle of Man wind farm. Another MNEF meeting is to be held around early July once the Generation Assets PEIR comments have been reviewed.
	<ul style="list-style-type: none"> Fishing activity 	West Coast Sea Products said that their fishing vessel route begins at Kirkcudbright and goes down to the Bahama Banks. With Morgan, Morecambe, Mona, and the IoM wind farms all in place, this drastically limits searoom and routing to get to regular fishing sites. They expressed concern that fishers will be severely impacted over the coming years.



E.1.2 MNEF Technical Engagement Plan

1 TECHNICAL ENGAGEMENT PLAN

1.1 Overview

Stakeholder engagement activities, including the Marine Navigation Engagement Forum (MNEF), have been carried out to facilitate discussions and agreement between the Applicant and the key stakeholders in relation to the information that will be prepared to support the shipping and navigation assessment of the Environmental Statement. Consultation for different aspects of the shipping and navigation assessment has been undertaken with individual stakeholders or small groups where appropriate rather than through the MNEF.

A number of meetings have taken place between the Applicant and various stakeholders, as detailed in **Table 1.1** and full meeting minutes and any additional information has been included within **Appendix XX**.

1.2 Issues agreed

The following issues have been agreed with shipping and navigation stakeholders:

- It was agreed with the Maritime and Coastguard Agency (MCA) that Vessel Traffic Surveys would be Marine Guidance Note (MGN) 654 compliant once a Winter top-up survey had been completed, as the previous winter survey would be out of date at the time of Application.
- The NRA methodology and preliminary findings were reviewed with the MCA, Trinity House and the Chamber of Shipping.
- It was agreed with oil and gas operators that an allision with an oil or gas platform could lead to major consequences, and that the Navigation Risk Assessment (NRA) would reflect this.
- During consultation, concerns were raised in relation to the Morgan Offshore Booster Station. These issues have all been resolved following removal of the Morgan Offshore Booster Station from the Project Design Envelope.

1.3 Issues under discussion

The following issues are under discussion with shipping and navigation stakeholders:

- Potential cumulative effects with the Transmission Assets on commercial vessel routing
- Potential cumulative effects with Transmission Assets on safety of navigation.

1.4 Summary of progress

The impact on shipping and navigation from the Transmission Assets when considered along side the Morecambe and Morgan Generation Assets and the Mona Offshore Wind Project introduce cumulative effects which have been highlighted by stakeholders as a key concern. The Transmission Assets alone are not anticipated to have any significant impact on shipping and navigation when considered in isolation, and the cumulative impacts are mainly contributed to by the surface piercing structures associated with the wind farm arrays.

The Transmission Assets have committed to and are developing various plans. These include a Vessel Traffic Management Plan, Offshore Emergency and Response and Safety Plan(s), Safety Zone Statement, Construction method statement(s), Fisheries Coexistence and Liaison Plan(s), Offshore Construction Method Statement, Offshore Environmental Management Plan(s), Offshore Operations and Maintenance Plan and an Offshore Cable Specification and Installation Plan.

TECHNICAL ENGAGEMENT PLAN

Table 1.1: Summary of Engagement.

Date	Participants	Focus of Engagement
18 January 2023	MNEF Members, Applicants, NASH Maritime Stakeholder meeting	<ul style="list-style-type: none"> • Update on the Morgan Offshore Wind Project: Generation Assets, Morecambe Offshore Windfarm: Generation Assets, Mona Offshore Wind Project and Transmission Assets projects • Shipping and navigation work undertaken to date • Environmental Impact Assessment process and Preliminary Environmental Information Report (PEIR) statutory consultation • Planned activities
18 May 2023	Seatruck Ferries, P&O Ferries, Isle of Man Steam Packet Company (IoMSPC), Stena, Spirit Energy, Eni, Harbour Energy, Peel Ports, ABP, Whitehaven, Maryport, Royal Yachting Association (RYA), Ministry Of Defence (MOD), Boskalis, Chamber of Shipping, Maritime and Coastguard Agency, Trinity House, Northern Lighthouse Board, Isle of Man Government, National Federation of Fishermen's Organisations, Sea Fisheries Protection Authority, Scottish Fishermen's Federation, Welsh Fishermans Association, Scottish White Fish Producers Association, Fisheries Liaison Officer, Anglo-North Irish Fish Producers Organisation, Manx Fish Producers Organisation, Northern Ireland Fish Producers' Organisation, Irish South & East Fish Producers Organisation Consultation letter	<ul style="list-style-type: none"> • Transmission Assets project details • Invitation to consultation meetings
24 May 2023	Stena Line, Applicants, NASH Maritime Stakeholder meeting	<ul style="list-style-type: none"> • Location of the Morgan Offshore Booster Station • Potential risk of allision
24 May 2023	MOD Consultation response	<ul style="list-style-type: none"> • Co-ordinates/location of the Transmission Assets: Offshore were requested, including the Morgan Offshore Booster Station
31 May 2023	Trinity House, Chamber of Shipping, MCA, NASH Maritime Stakeholder meeting	<ul style="list-style-type: none"> • Location of the Morgan Offshore Wind Project offshore booster station • Potential impact to existing commercial routes, for example the dredger routes to/from Liverpool • Future project vessel numbers for Generation Assets to be considered within future traffic • Anchoring activity • Navigation simulations
5 June 2023	Eni, Spirit Energy, Harbour Energy, NASH Maritime Stakeholder meeting	<ul style="list-style-type: none"> • Increased level of activity in the area • Simultaneous operations (SIMOPS) and coexistence of users • Exclusion zones for ongoing oil and gas operations (as well as decommissioning) • Consideration of oil and gas activities within the vessel management plan

TECHNICAL ENGAGEMENT PLAN

Date	Participants	Focus of Engagement
		<ul style="list-style-type: none"> Ferry route deviations Cumulative issues with the other offshore wind projects Location of the Morgan Offshore Booster Station in relation to Calder and CPP1 platforms Radar Early Warning System, and preservation of line of sight Bridging/liaising Additional risk controls
6 June 2023 Stakeholder meeting	RYA, NASH Maritime Stakeholder meeting	<ul style="list-style-type: none"> Reduction in under keel clearance
7 June 2023 Stakeholder meeting	Seatruck Ferries, IoMSPC, Isle of Man Government, West Coast Sea Products, The Scottish White Fish Producers Association, Applicants, NASH Maritime Stakeholder meeting	<ul style="list-style-type: none"> Cumulative effects Location of the Morgan Offshore Wind Project offshore booster station Project vessel movements Fishing activity
21 September 2023 MNEF	Applicants, MNEF Members, NASH Maritime Stakeholder meeting	<ul style="list-style-type: none"> Update on the progress of the Morgan Offshore Wind Project: Generation Assets, Morecambe Offshore Windfarm: Generation Assets, Mona Offshore Wind Project and Transmission Assets projects
8 Feb 2024 MNEF	Applicants, MNEF Members, NASH Maritime Stakeholder meeting	<ul style="list-style-type: none"> Update on the progress of the Morgan Offshore Wind Project: Generation Assets, Morecambe Offshore Windfarm: Generation Assets, Mona Offshore Wind Project and Transmission Assets projects Changes to the Transmission Assets made since PEIR
8 March 2024 Letter	MCA and Trinity House Consultation response	<ul style="list-style-type: none"> Latest project design updates, including the removal of the offshore substation platforms, Morgan Offshore Wind Project offshore booster station and interconnector cables

Date	Consultation	Information Provided
18 January 2023	MNEF meeting 4	2023-01-18_MNEF4_MoMoMo_MNEF_20230118_Meeting_Minutes_R01-00
18 May 2023	Consultation letter 1	2023-05-18_23-NASH-0354 Transmission Assets NRA - Consultation Letter 18-May-2023
24 May 2023	Stena meeting 1	2023-05-23_23-NASH-0354_MoM_Consultation Stena R01-00
31 May 2023	MCA, Trinity House and Chamber of Shipping meeting 1	2023-05-31_23-NASH-0354_MoM_Consultation MCA, TH, CoS R01-00
5 June 2023	Oil and Gas operators meeting 1	2023-06-05_23-NASH-0354_MoM_Consultation O&G Operators R01-00
6 June 2023	Royal Yachting Association meeting 1	2023-06-06_23-NASH-0354_MoM_Consultation RYA R01-00
7 June 2023	Wider briefing meeting 1	2023-06-07_23-NASH-0354_MoM_Consultation Wider Briefing R01-00

TECHNICAL ENGAGEMENT PLAN

Date	Consultation	Information Provided
21 September	MNEF meeting 5	2023-09-01_MNEF5_MoMoMo_MNEF_20230921_Meeting_Minutes_R01-00
8 Feb 2024	MNEF meeting 6	2024-02-08_MNEF6_MoMoMo_MNEF_20240208_Meeting_Minutes_R01-00
8 March 2024	Consultation letter 2	2024-03-08_23-NASH-0354 Transmission Assets - Project Changes Update Letter_MCA
8 March 2024	Consultation letter 3	2024-03-08_23-NASH-0354 Transmission Assets - Project Changes Update Letter_TrinityHouse