

MORGAN OFFSHORE WIND GENERATION ASSETS NSIP (‘THE PROJECT’) (PROJECT REF. NO. EN010136)

SELECTED RESPONSES TO APPLICANT’S DEADLINE 5 SUBMISSIONS, ISSUE SPECIFIC HEARING 3 (ISH3) FOLLOW-UP AND FURTHER COMMENTARY AND SUBMISSIONS ON BEHALF OF BODORGAN MARINE LIMITED (BML)

DEADLINE 6

PART 1: TECHNICAL RESPONSES TO ExA’s ISH3 QUESTIONS

Foreword

BML attended the ISH3 Hearing on 12 February 2025 and was asked a number of technical questions by the ExA. Thereafter, the Applicant made a number of brief comments about the validity of BML’s written submission at D5. BML then made a number of brief summary statements regarding its position and on the issues.

BML sets out its responses to the ExA’s questions in Part 1 below. BML offers further comments related to these questions below in Parts 2 and Part 3, Sections 4 and 5: the Main Body of the Submission below.

Responses to ExA’s Technical Questions

- 1 BML have set out below the ExA’s technical questions (as taken from the ISH3 transcript Part 4 (**EV6-010**) and as required by Action Point 22 (AP22) (**EV6-011**). Each question is followed below by BML’s detailed response, which has been prepared following consultations with Mr. James Wilson of Deepdock Limited (DDL), a recognised leading aquaculture industry expert who, among other things:
 - a. Pioneered the sole example of UK aquaculture/OWF co-location at North Hoyle in 2010;
 - b. Was an author in the 2013 Shellfish Association of Great Britain report into co-location (refer to **Annex 3** below);
 - c. Was a leading participant in securing the new several order for the Menai Strait mussel fishery;
 - d. Is the industry participant in the current ULTFARMS/CoSARIS research project into ‘Co-location of shellfish aquaculture & renewables in the Irish Sea’ (refer to **Annex 1** below); and,
 - e. Is an Honorary Research Fellow at Bangor University.
- 2 There were seven ExA questions and the responses are, as follows.
 - I. Question: please explain the nature of the arrangements for the aquaculture blocks and lines set out in the schematic diagram on page 15 of BML’s D5 submission (blue diagram) (**REP5-093**) in more detail? Was this produced specifically for the Morgan OFW.

Response: this schematic diagram is an indicative illustration of how any aquaculture co-location could be arranged. It recognises the importance of

the keystone assets in the area, i.e. the windfarm structures (monopile/frames, etc.) and also the inter array cabling that connects the turbines to the sub stations, etc. What this schematic diagram illustrates is: 1) the area that lies between and outwith these important site features; and, 2) how multi-use of these areas could be arranged. This schematic diagram was not produced specifically for the Morgan OWF project. It is sourced from a Dutch project in the North Sea, 'NorthCNeutral', and that project attempts to provide a visual and analytical understanding of different combinations of multi-use within the North sea area, i.e. different combinations and trade-off scenarios.

- II. Question: is aquaculture provision and commercial fishing compatible, given these potential 5 blocks? In addition, Jimmy Kelly (Isle of Man/Irish Fisheries representative) commented that co-located aquaculture might present a danger to fast-sailing commercial fishing vessels.

Response: any aquaculture co-use of the OWF Order Limits would be subject to a separate marine licencing process, where such potential conflicts could be detailed and assessed as part of the Navigational Risk Assessment. Furthermore, the OWF Order Limits area proposed for aquaculture (an initial 250 hectares comprised of 5 blocks, each of 50 hectares in size) is only a small part of the Order Limits, i.e. approximately 0.89%. For the sub-surface shellfish cultivation that BML are proposing, then there are 3 key points to make:

(1) the areas will be fully and appropriately marked on charts and by sufficient visual markers (site buoys/lights, etc.) on the basis of direction from Trinity House (TH) and the Maritime and Coastguard Agency (MCGA), as part of the required Marine Navigational Risk Assessment process and other technical advice;

(2) in the European examples of aquaculture co-located with OWFs all areas are fully marked on navigation charts and are appropriately identified with visual markers. The headline of the shellfish cultivation equipment will all be set at least 3m below the surface (and all systems are held on tensioned ropes), so it is unlikely that any fast shellfish vessel or even semi displacement vessel, both likely to have keels set at 2m or less below the waterline, would come into contact with the headline structure and main cultivation equipment. There will be surface buoyancy, likely 2.5m plastic cylindrical buoys and any such interaction between these and a vessel will be a slight bump, if indeed it occurred (which is unlikely due to co-location site marking). For the larger offshore displacement whelk and crab vessels there could be some spatial intersection. This means that there is a very minimal risk of fast shellfish vessels becoming entangled in shellfish cultivation equipment. That said, all shellfish cultivation areas will be fully and appropriately marked (Admiralty charts and through visual markers). Should a vessel transit across the shellfish site, then cultivation long line systems will be separated by +50m from each other and headlines are set +3m below the surface of the sea, as such below the keel depth form any such fast potting vessel; and,

(3) in addition to the shellfish aquaculture sites being fully marked on charts, each line will also have corner marker buoys (such as: 1250cm diameter navigation buoy, e.g. Sealite SLB1250)) and these would be very visible

during daylight or at night with the vessel searchlight, significantly more visible than static gear Dahn buoys/pot buoys.

- III. Question: how can long-term access to any under-sea cables within the aquaculture blocks be assured in the long-term?

Response: the aquaculture blocks will be specifically selected to avoid any proximity or interaction with the inter-array cabling, see the illustrative schematic mentioned in II (1) above. However, until the OWF final layout has been determined it is not possible to set out proximity, set-off distance and how cabling will work. It should be noted that the Pylon separation arrangement of 1,400m provides an area of approximately 196ha within a 4-pylon block, which is considered ample space to minimise any effects.

- IV. Question: how will the mussel floats/ropes or the aquaculture array area be marked for safe navigation?

Response: the areas will be marked in full compliance with advice received from TH/MCGA and any such advice will be received as part of the marine licensing and Marine Navigational Risk Assessment process. They will also be fully marked on Admiralty Charts as fixed locations. This is something that is a central characteristic of all aquaculture.

- V. Question: how can marine emergency response be assured across or within the proposed 5 mussel farm arrays?

Response: this will be described within the marine licensing/Marine Navigational Risk Assessment process. It will have to be agreed with MCGA and will take into account the cumulative factors of working within an OWF area.

- VI. Question: has any EIA work been undertaken for this or other aquaculture proposals to understand the effects on the benthic environment. If so, what are the likely effects?

Response: considerable research and practical study has been undertaken that relates to conventional long-line based shellfish cultivation and also that which occurs in more exposed and dynamic offshore locations. For instance, Crawford C.M et al Aquaculture Vol. 224 Issue 1-4 pp117-130: 'The effects of shellfish farming on the benthic environment'; and, Mascorda-Cabre et al 2024:

[REDACTED]

There are some similarities between both (inshore/further offshore), but also notable differences. There appear to be limited negative impacts on benthic communities associated with the helical screw anchoring footprint. However, as the seabed take is only 40 sq.cm. per anchor (2 anchors per system) and does not require ground chains, it amounts to very small areas within each 50ha block – of less than 10sq.m. per 50ha block for the screw anchors.

In terms of other potential adverse impacts on benthic environments that are sometimes in more sheltered nearshore cultivation sites, i.e. the smothering of seabed with pseudo-faecal accumulations, etc., these are not seen in dynamic offshore locations due to the pseudo-faecal material being accommodated within the wider 'seston' (i.e. the particulate matter that is

suspended in any water column at any one time). There is some very recent research findings associated with the operation of the offshore shellfish farm in Lyme Bay that confirm significant and positive effects on biodiversity and ecosystem functioning. This John Holmyard/offshore shellfish site research is published in peer-reviewed papers and in the Bangor University papers, such as the Mascorda paper referenced above.

- VII. Question: does the current OFLCP (**REP5-028**) exclude aquaculture provision in the future? Does it provide for its possibility?

Response: BML would state that 'aquaculture' is not referred to specifically within the latest version of the OFLCP (**REP5-028**); and, co-location is only referred to in relation to either the SMZ or commercial fishing interests in the form of mitigation strategies only (not enhancement). BML has made previous representations that the SMZ, both for Morgan and for Mona, does not represent co-location, but rather its antithesis and a denial of co-location.

The OFLCP, as currently drafted, only considers co-existence and co-location in terms of the OWF and commercial fisheries industries) working together. BML therefore contend that, as currently drafted, the OFLCP makes no provision for or inclusion of aquaculture now or in the future.

Nevertheless, it is important to make a very clear distinction between the processes in obtaining access/use rights to undertake aquaculture, as opposed to capturing provision for commercial fisheries. The latter is in essence protected by the ancient public right of fishery, i.e. an appropriately licensed vessel is permitted to undertake its activities in all parts of the UK marine area, except for those it is excluded from. An aquaculture undertaking is required to obtain rights for the specific area in which it is undertaking its activity and so it requires spatial permission and also requires spatial security in terms of the assets it deploys and the species that it proposes to cultivate.

BML proposed in their D5 submission (**REP5-093**) in Section 8, Paragraph 80, some additional text for a new section within the OFLCP (as new Section 1.3.7) that would permit aquaculture within the OWF in the future. However, the Applicant has so far declined to include this new section and it therefore remains for the ExA's consideration.

Furthermore, even if the OFLCP is amended as BML have recommended, the OFLCP if amended of itself it is not sufficient to dispose of the relevant issues. This is because of the following:

1. TCE leasing is a barrier, i.e. co-location can never happen unless there is a change to the TCE leasing practice;
2. It appears clear that on a business-as-usual basis OWF permitting process, co-located aquaculture will not be delivered. This is because, as industry observers note, there is nothing in it (co-located aquaculture) for the OWF industry who, after the grant of the Crown lease, will enjoy exclusive possession for the 60-year lease term. Put simply, the OWF industry is not going to host co-located aquaculture unless it is 'Required' to do so. This is why BML have in their D5 submission (**REP5-093**) in Section 8, Paragraph 82 called for the ExA to provide for a new Requirement in the DCO;

3. The manner in which the OFLCP provides for aquaculture is key, BML are of the view that the OFLCP needs to be amended in line with BML's representations;
4. The manner in which the OFLCP is secured by the DCO, which BML has submitted is deficient: in short, there needs to be certainty that the OFLCP is properly secured. BML is of the view that the current draft DCO documentation is deficient in this respect: see BML's D5 submission (**REP5-093**), Section 8, Paragraphs 28 and 77-80; and,
5. It is the Applicant's duty to actually deliver enhancement (paragraph 2.8.251 of NPS EN3), i.e. to make it happen. Provision for future/vague potential co-located aquaculture in the OFLCP is simply not enough, as decades of OWF industry practice indicate that no co-located aquaculture is likely to be delivered.