

# MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

## Annex 3.2 to the Applicant's response to Harbour Energy's submission at Deadline 5

Deadline: 6

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Image of an offshore wind farm

# MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

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## MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

### Glossary

Term	Meaning
Applicant	Morgan Offshore Wind Limited.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP).
Morgan Array Area	The area within which the wind turbines, foundations, inter-array cables, interconnector cables, scour protection, cable protection and offshore substation platforms (OSPs) forming part of the Morgan Offshore Wind Project: Generation Assets will be located.
Morgan Offshore Wind Project: Generation Assets	This is the name given to the Morgan Generation Assets project as a whole (includes all infrastructure and activities associated with the project construction, operations and maintenance, and decommissioning).
The Planning Inspectorate	The agency responsible for operating the planning process for applications for development consent under the Planning Act 2008.

### Acronyms

Acronym	Description
ADS-B	Automatic Dependant Surveillance Broadcast
DCO	Development Consent Order
IMC	Instrument Meteorological Conditions
MNEF	Marine Navigation Engagement Forum
NPI	Non-Production Installation
PLEM	Pipeline End Manifold
VMC	Visual Meteorological Conditions

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# **1 Annex 3.2 to the Applicant's response to Harbour Energy's submissions at Deadline 5**

## **1.1 Introduction**

- 1.1.1.1 This document has been prepared in response to Harbour Energy's submissions and responses to the Examining Authority's second written questions (ExQ2), made at Deadline 5.
- 1.1.1.2 Table 1.1 provides the Applicant's response to these submissions.

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**Table 1.1 The Applicant's response to Harbour Energy's submissions at D5**

Reference	Harbour Energy's submission	Applicant's response
REP5-054.1 REP5-064a.1	<p><b>Harbour Energy Deadline 5 Comments on Applicant's Submissions and Proposed Mitigation</b></p> <p><b>1. Introduction</b></p> <p>Harbour Energy has reviewed and considered the submissions made by the Applicant over the course of the Morgan Generation Assets development consent order (DCO) Examination. There remain some material differences between the Applicant and Harbour Energy. As stated in Harbour Energy's Written Representation (REP1-045), Harbour Energy is committed to finding solutions that will allow the co-existence of its operations with other stakeholders, including the Applicant. To that end, Harbour Energy is committed to seeking pragmatic approaches to mitigate the adverse effects of Morgan Generation Assets. This document sets out the most material differences in view between the Applicant and Harbour Energy and proposes a pragmatic mitigation that could be implemented through Protective Provisions.</p>	No response required.
REP5-054.2 REP5-064a.2	<p><b>2. Summary of Material Differences</b></p> <p><b>2.1. Aviation</b></p> <p><b>2.1.1. Loss of currently available flying opportunities</b></p> <p>Whilst the Applicant acknowledges that the Morgan Generation Assets would adversely affect helicopter flights in support of Millom decommissioning (see for example: Appendix A within Volume 4, Annex 11.1 Aviation and radar technical report - Helicopter Access Report (APP-045) and item REP1-044.10 of Table 2.3 of the Applicant's Response to Written Representations (REP2-005)), the full extent of the resultant disruption and economic loss has not been accepted. Harbour Energy considers this issue to be of greater criticality than the marine access issues covered in Section 2.2.</p>	Please see the Applicant's response to REP5-054.3.

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Reference	Harbour Energy's submission	Applicant's response
REP5-054.3 REP5-064a.3	<p>The Applicant and Harbour Energy have calculated slightly different values for the loss of flying opportunities relative to those currently available. The difference of view was set out as item HE.AOME.5 in the initial draft Statement of Common Ground (REP1-031) submitted at DL1. Although the status of this item was marked as "Ongoing point of discussion", no further discussion on this matter has occurred since before DL1. As indicated in the initial draft Statement of Common Ground, Harbour Energy assesses that, after voluntarily limiting its proposed future flying to daylight hours, the proximity of the Morgan Generation Assets would result in a loss of 10% (annual average) or up to 16% (in winter months) of currently available daylight opportunities to fly to an NPI stationed at Millom East. By contrast, the Applicant states that 94.4% of daylight flights would be unaffected (Appendix A within Volume 4, Annex 11.1 Aviation and radar technical report - Helicopter Access Report (APP-045)) which, when expressed in comparable terms (i.e. as the percentage of currently available flying opportunities that would be lost as a result of the construction of the Morgan Generation Assets) corresponds to a loss of 4%<sup>1</sup> of currently available opportunities to fly to an Non-Production Installation (NPI) at Millom East. The Applicant has not presented the corresponding winter impact.</p>	<p>The Applicant assessed helicopter access using meteorological data supplied by Harbour Energy in the Helicopter Access Report submitted with the application (Appendix A within Volume 4, Annex 11.1: Aviation and radar technical report (APP-045)). The methodology applied has been accepted during other offshore wind farm DCO Examinations (for example Sheringham and Dudgeon Extension Examination Library Reference APP-205). It is usual for oil and gas Interested Parties to supply Vantage POB flight data covering the same period as the meteorological data. This permits the actual flight schedules to be overlayed onto the meteorological data to assess the theoretical impact on historic flight operations. Harbour Energy declined to provide Vantage data for this assessment. The data available to the Applicant indicates that the impact on flight operations to the Millom East area will be low.</p> <p>In the absence of Vantage data being provided by Harbour Energy, the Applicant purchased flight data from a third party which includes data for a Non-Production Installation (NPI) working at Millom West (Automatic Dependant Surveillance Broadcast (ADS-B) data transmitted by helicopters Mode S transponders). This has allowed the potential impact to be considered against historic flights in the vicinity of Millom East, and is presented in S_D6_3.3 Annex 3.3: Helicopter Access_Additional Flight Data F01 submitted at Deadline 6. The Applicant understands that similar NPI's will be used at Millom East and therefore the analysis is relevant to operations at Millom East. The ADS-B data showed for the NPI working at the adjacent Millom West location between February and October 2022, there were 117 landings, one at night, two in Instrument Meteorological Conditions (IMC) and 114 of these under Visual Meteorological Conditions (VMC). Therefore 2.6% would have been impacted by the presence of the Morgan Generation Assets.</p> <p>This trend is expected to continue if Harbour Energy charts a helicopter specifically for their decommissioning campaign at Millom East. This supports the Applicant's position that most flights are conducted under day VMC and their access assessment is valid.</p> <p>The meteorological data supplied by Harbour Energy shows that day VMC exist for an annual average of 94.4%. Weather forecasting in the Irish Sea is generally accurate due to the large number of aviation meteorological observations and forecasting stations in all directions. The meteorological data shows that multi-day periods of poor weather are unusual. Where they do occur, it is usually due to fog, high winds and storms which would affect operations even if the wind farm is not installed. Due to the short distance from Blackpool Airport to the Millom East area, the helicopter will be able to exploit the VMC and avoid periods of unsuitable weather.</p> <p>Harbour Energy stated in their Written Representation (REP1-044) that their flying limits have reduced sea state and wind parameters compared to those used in the Applicant's analysis. In</p>

<sup>1</sup> Loss of flights = 1 – post-wind farm availability / current availability. Assuming that Harbour Energy schedule all flights during decommissioning in daylight hours, loss of flights = 1 – 94.4% / 98.7%.



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		<p>addition, Harbour Energy stated a concern that analysing the meteorological data on an annual basis did not take account of seasonal variations, such as poorer weather and fewer hours of daylight in winter. The Applicant has submitted S_D6_3.4 Annex 3.4: Helicopter Access_Additional Meteorological Analysis F01 at Deadline 6 to analyse the VMC and IMC conditions by month rather than annually, over the period 2017 to 2022. This analysis shows the monthly percentages where day VMC access would be possible was over 90% in all months with the exception of December where the day VMC access reduced to 87.5%. The average calculated was 93.4%.</p> <p>The Applicant accepts that day access under IMC will not be available, but both the meteorological data and the third party flight data indicate that these conditions occupy a very small percentage of the time.</p>
REP5-054.4 REP5-064a.4	<p>In item REP1-044.10 of Table 2.3 of the Applicant's Response to Written Representations (REP2-005) the Applicant appears to believe that Harbour Energy's assessment of the loss of flying opportunities to an NPI at Millom East should be reduced as Harbour Energy has indicated that flights will not be required to any NPI in support of remaining Millom West decommissioning activities. The loss of flights quoted by Harbour Energy (an annual average of 10% of daylight flying opportunities currently available rising to 16% of daylight flying opportunities currently available in winter) was already calculated in the context of helicopter support for Millom East decommissioning activities only, so no further reduction is appropriate.</p>	<p>The Applicant's response relates to Harbour Energy's confirmation that helicopter flights will not be required in relation to the Millom West decommissioning. The Applicant agrees that this does not relate to the planned decommissioning activities at Millom East and no further reduction to the impacts would apply.</p>
REP5-054.5 REP5-064a.5	<p>The main reason for the difference between the Applicant's and Harbour Energy's assessment of flight losses arises from the Applicant considering each 10-minute data point within the met-ocean dataset and assuming that, if conditions are suitable for flying, a flight would go ahead. In practice, an aircraft would not leave Blackpool Airport without a reasonable expectation, based on a weather forecast, of being able to land. Harbour Energy has assumed (refer to Section A1.2.4 of Harbour Energy's Written Representation) that unless at least 2 of the next 3 data points are suitable for flying, a flight would not go ahead.</p>	<p>The Applicant's methodology is set out in the Helicopter Access Report (APP-045). As the Harbour Energy submission notes, this shows that an annual average of 94% of day conditions were VMC, indicating that the impact on short term access to the Millom area during decommissioning operations will be low. This is supported by the fact that the flights required in the Irish Sea (i.e. Blackpool to Millom East return) are short in duration and would easily be rescheduled as soon as the weather clears, therefore further supporting the conclusion that the impact would be low. This conclusion has been further supported by the analysis of historical flight data to NPI's carrying out operations at the adjacent Millom West location (S_D6_3.3 Annex 3.3: Helicopter Access_Additional Flight Data F01).</p>



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REP5-054.6 REP5-064a.6	<p><b>2.1.2. Disruption and economic impact</b></p> <p>Of greater significance than the difference in assessment of flights that would be lost is the difference in view between the Applicant and Harbour Energy concerning the resulting disruption and consequent economic loss. Harbour Energy has carried out detailed modelling based on several possible scenarios for aviation support during Millom East decommissioning. As set out in Section 2.2.1 of Harbour Energy's Written Representation (REP1-045), the most likely scenario is that a helicopter would be procured to support Millom East decommissioning for 3 days each week for the duration of the programme. During that time 2-3 flights would need to be executed each day. As a result, there would be quite a lot of flexibility in the scheduling of flights within a day which is why Harbour Energy believes that it could restrict itself to flying in daylight leading to a very significant reduction in flights that would be lost (from an annual average of 20% to 10% and from 42% in winter to 16%). A consequence of only having a helicopter available for 3 days per week would be that if flights were not possible on a day, it could be 1, 2 or 4 days before the next flight could be scheduled. This leads to Harbour Energy's assessment that a 120 day decommissioning programme would be extended by between 23 and 39 days. Under item REP1-044.11 of Table 2.3 in the Applicant's Response to Written Representations (REP2-005), the Applicant questions this assessment, citing only: "Based on data from similar decommissioning projects, including some in close proximity to current wind farms in Morecambe Bay, the figure of a 23 day delay is excessive and not a reasonable worst case." Every decommissioning programme is different. There is no reason to believe that the data referred to by the Applicant comes from projects that are comparable in terms of duration, complexity, or logistical constraints. Harbour Energy recognises that there are many uncertainties in seeking to predict the potential disruption that the Morgan</p>	<p>Harbour Energy notes that a helicopter will only be available for three days each week. The meteorological data shows that multi-day periods of poor weather are unusual in the east Irish Sea. Where they do occur, it is usually due to fog, high winds and storms which will affect operations regardless of the presence of the wind farm.</p> <p>If a helicopter is chartered for three days per week, then the flexibility mentioned by Harbour Energy will allow the helicopter to exploit periods of day VMC.</p> <p>It is acknowledged that each operation is different, however, as noted in REP5-054.3 the Applicant has analysed data for such operations in both the North and Irish Sea, with the results demonstrating that the vast majority of flights occur during the day (S_D6_3.4 Annex 3.4: Helicopter Access_Additional Meteorological Analysis F01), and following the initial manning of the NPI, the number of flights reduces significantly.</p>

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	Generation Assets may cause to the Millom East decommissioning programme. Harbour Energy has nevertheless sought to take a realistic approach.	
REP5-054.7 REP5-064a.7	In item REP1-044.13 of Table 2.3 in the Applicant's Response to Written Representations (REP2-005), the Applicant suggests that the impact of the Morgan Generation Assets amounts to "a minor logistical impact". This shows a lack of understanding of the external logistical constraints that result in a modest loss of flights (up to 16% depending on timing of the decommissioning) leading to significant disruption and economic loss. The Applicant notes that they are unable to comment upon the economic loss assessed by Harbour Energy (likely to be in excess of £10 million - see Section 2.2.2 of Harbour Energy's Written Representation (REP1-044)). This is understood as calculation of economic loss in each potential scenario requires a knowledge of costs and other factors which must remain confidential.	<p>The Applicant's analysis used meteorological data supplied by Harbour Energy. Data from previous decommissioning campaigns in the UK show that flights usually occur during daytime (S_D6_3.4 Annex 3.4: Helicopter Access_Additional Meteorological Analysis F01), where the data indicates the conditions are predominantly VMC.</p> <p>The Applicant has calculated the disruption due to being unable to fly in IMC conditions to be approximately 5% based on the analysis of meteorological data and additional analysis of flights using third party ADS-B data (see above response to REP5-054.3) (S_D6_3.4 Annex 3.4: Helicopter Access_Additional Meteorological Analysis F01 and S_D6_3.3 Annex 3.3: Helicopter Access_Additional Flight Data F01).</p> <p>The Applicant does not agree the quantum of economic losses quoted by Harbour Energy and notes that no evidence or vouching has been provided to support the figures quoted.</p>
REP5-054.8 REP5-064a.8	<p><b>2.2 Marine</b></p> <p>As indicated in the Joint Statement between Morgan Offshore Wind Limited (The Applicant) and Harbour Energy, submitted by email on 22 November 2024 (AS-011), the Applicant and Harbour Energy have been discussing the best mechanism to address Harbour Energy's concerns regarding mutually exclusive simultaneous operations and marine access (refer to sections 4 and 3 respectively of Harbour Energy's Written Representation (REP1-045)). The need for appropriate safeguards in the coordination of mutually exclusive simultaneous operations and the spatial requirements for marine access during decommissioning are not fundamentally disputed by the Applicant. Discussion has focussed on the mechanism by which Harbour Energy could gain adequate assurance on these matters. No mutually agreeable mechanism has been reached. Accordingly, Harbour Energy remains of a view that the DCO should contain</p>	<p>The Applicant agrees with Harbour Energy that a solution other than that originally proposed by the Applicant has not been identified. The Applicant has engaged in good faith with Harbour Energy on the two points of concern (marine access and mutually exclusive simultaneous operations) however it is clear a solution will not be reached unless Harbour Energy's concerns regarding economic losses associated with helicopter access (which the Applicant considers unfounded) are addressed and mitigated through a compensation mechanism.</p> <p>In relation to marine access, the Applicant does not consider there to be any basis for the residual concern given that the marine access zones requested by Harbour Energy have been incorporated into the design of the Morgan Generation Assets. In Harbour Energy's response to EXQ1, INF 1.2, they noted that the DCO and dMLs do on permit works outside the Order limits and went on to state that they 'accept that it would not be appropriate to seek protections for marine access through protective provisions' (see REP3-031). The Applicant considers this confirmation that the concern had previously been suitably addressed and does not understand why it is raised again now.</p> <p>In relation to mutually exclusive simultaneous operations the Applicant remains of the view that engagement via normal industry methods (particularly provision of notice to mariners) would be sufficient. In relation to the Morgan Generation Assets a further commitment has been made to extend the Marine Navigation Engagement Forum (MNEF) through construction and five years into</p>

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	protective provisions for the protection of Harbour Energy that require a mutually agreeable mechanism relating to mutually exclusive simultaneous operations and marine access to have been reached prior to the commencement of construction.	<p>the operational phase, which would provide detailed information to Harbour Energy and a forum to discuss such mutually exclusive activities.</p> <p>In the most recent submission by Harbour Energy, it is clear that should the aviation concerns raised by Harbour Energy be addressed, they would accept the Applicant's position on the marine access and mutually exclusive simultaneous operations points. This stance leads the Applicant to understand that in reality marine access and mutually exclusive simultaneous operations are not material concerns to Harbour Energy. The Applicant considers there is no need for further mitigation to address the points raised.</p>
REP5-054.9 REP5-064a.9	<p><b>3. Potential Mitigations</b></p> <p><b>3.1. 3nm exclusion zone</b></p> <p>A potential mitigation to the disruption and economic loss arising from the impact of the Morgan Generation Assets was proposed in Section 2.2.2.1 of Harbour Energy's Written Representation (REP1-045) – namely that no wind turbine generators be placed with any part thereof (including rotor tips) within 3nm of the Millom East pipeline end manifold (PLEM). It should be noted that this would still result in a loss of 4% of currently available opportunities to fly to an NPI at Millom East as instrument take-off would still be affected.</p>	<p>Harbour Energy's Written Representation (REP1-044, Appendix 1 A1.2.6) claims that an obstacle free radius of 1.9 nm is required around a helideck. In REP5-054.9 they further request an obstacle free distance of 3 nm around the Millom East PLEM (Pipeline End Manifold). Based on current practice and recent DCOs, a distance of 3 nm or 1.9 nm is excessive (see Figure A.1) and not supported by current Commercial Air Transport (CAT) operations in and around wind farms. Figure A.1 shows these distances in relation to the Morgan Generation Assets.</p> <p>For example, Protective Provisions were included in the Hornsea Four Offshore Wind Farm Order 2023 for the Johnston Wellheads<sup>2</sup>, situated inside the Hornsea Project Four Offshore Wind Farm. Helicopter access to a NPI during the decommissioning of the Johnston Wellheads will be required. Access to Millom East is a similar case, where short term helicopter access is required to a NPI helideck during decommissioning. In the case of the Johnston Wellhead, the Protective Provisions for the benefit of Harbour Energy secured:</p> <ul style="list-style-type: none"> <li>• an aviation corridor 1,400 m (0.76 nm) wide, measured tip to tip from any wind turbine generator</li> <li>• a wind turbine exclusion zone of 1,600 m (0.86 nm) radius of clear airspace measured from the centre of each of the Johnston production wellheads.</li> </ul> <p>The aviation corridor will enable helicopter access to the wellhead areas. The wind turbine exclusion zone around each wellhead will provide sufficient space for an approach and take-off. Both the Johnston and Millom East helicopter operations will be conducted under the same CAT Regulations.</p> <p>These distances are also consistent with other day VMC operations to helidecks located inside, or adjacent to offshore wind farms. An NPI has been working both adjacent to and within offshore wind farms in both the North and Irish Sea including within the nearby Walney Extension site where NPI's have been working at the Whitehaven and Rhyl wells inside the wind farm with turbines located between 1.1 and 1.3 nm from the NPI.</p>

<sup>2</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010098/EN010098-002330-DCO%20Hornsea%204%20OWF%20signed.pdf>

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		<p>Furthermore, as set out by the Applicant at ISH3 (see item 6b within the Applicant's written summary of oral submissions (S_D6_5 Written Summaries ISH3 F01)), recent precedent in The Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024 determined that a 1.26 nm 'buffer zone' between the offshore wind farm and the Waveney Platform was sufficient mitigation for the development to accord with the relevant policies in NPS EN-3.</p> <p>Therefore, the Applicant considers that there is no reason why Harbour Energy will require an exclusion zone of 3 nm around the Millom East PLEM.</p> <p>The existing separation distance of 2.07 nm between the Morgan Array Area and the Millom East assets is more than sufficient to allow safe day VMC access to an NPI working at Millom East.</p>
REP5-054.10 REP5-064a.10	<p><b>3.2. Compensation</b></p> <p>As described in Section 2.2.2.1 of Harbour Energy's Written Representation (REP1-045), compensation payments may provide an alternative or (in conjunction with another mitigation) partial mitigation. It was however noted that such payments would be inefficient when considered on a post-tax basis.</p>	<p>Given the analysis of helicopter operations presented in APP-045, S_D6_3.4 Annex 3.4: Helicopter Access_Additional Meteorological Analysis F01 and S_D6_3.3 Annex 3.3: Helicopter Access_Additional Flight Data F01, the Applicant does not consider compensation necessary given the minor logistical impact potentially and temporarily experienced by Harbour Energy.</p>
REP5-054.11 REP5-064a.11	<p><b>3.3. Phased Installation</b></p> <p>As noted by the Applicant under item REP1-044.14 of Table 2.3 of the Applicant's Response to Written Representations (REP2-005), the period required for Millom East decommissioning activity is relatively short in the context of the life of Morgan Generation Assets. Harbour Energy accepts that the proposed mitigation of not constructing wind turbine generators within 3nm of the Millom East PLEM (see Section 3.1 above) is disproportionate in the context of this short period, and therefore need only apply until decommissioning of the Millom East wells is complete.</p>	<p>Current day VMC operations to helidecks located adjacent to and within wind farms show that an obstacle free distance of 3 nm is excessive and exceeds recent precedence (see response to REP5-054.9 above).</p>
REP5-054.12 REP5-064a.12	<p>An alternative mitigation would be a phased installation of the Morgan Generation Assets, leaving installation of the towers and rotors of those wind turbine generators to be placed within 3nm of the Millom East PLEM until the end of the installation programme (installation of foundations and transition pieces need not be delayed). This would increase the probability that Harbour Energy could complete the Millom East decommissioning</p>	<p>Current day VMC operations to helidecks located adjacent to and within wind farms show that an obstacle free distance of 3 nm is excessive and exceeds recent precedence (see response to REP5-054.9 above).</p>

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	without material impact from the Morgan Generation Assets.	
REP5-054.13 REP5-064a.13	<p>Harbour Energy proposes that this mitigation could be implemented by inclusion within the DCO of a protective provision for the benefit of Harbour Energy based on the following principles:</p> <ul style="list-style-type: none"> <li>- A "3nm buffer" shall be defined as the overlap of a circle of radius 3nm centred upon the Millom East PLEM and the Order Limits.</li> <li>- Until the earlier of <ul style="list-style-type: none"> <li>o completion by Harbour Energy of Millom Field decommissioning; or</li> <li>o completion by the Applicant of construction activities out with the 3nm buffer,</li> </ul> </li> </ul> <p>no construction of wind turbine towers and/or rotors shall be undertaken by the Applicant within the 3nm buffer</p>	<p>Current day VMC operations to helidecks located adjacent to and within wind farms show that an obstacle free distance of 3 nm is excessive and exceeds recent precedence (see response to REP5-054.9 above). The proposed mitigation would constrain efficient construction of the Morgan Generation Assets, based on the suggested overlap and sequencing.</p> <p>The final design and layout of the Morgan Generation Assets, will be determined post-consent, following detailed site investigations, a turbine procurement process and then a validated energisation procedure. It will be very difficult for the Applicant to confirm with any certainty or timeliness which part of the array will be installed first and the sequence thereafter, as it depends on sea bed conditions, foundation allocations and site preparation activities. It is therefore not possible for the Applicant to commit to any specific construction sequence at this stage and doing so could have significant drawbacks on the project design, execution scheme and overall business case. A restriction of this nature would be wholly unjustified and disproportionate to the level of impact. At most, it would afford Harbour Energy a few more months to undertaking decommissioning activities (in the context of several years having passed by that point without doing so) whilst having the potential to cause material detriment to the construction of the Morgan Generation Assets.</p>
REP5-054.14 REP5-064a.14	<p>Even with the implementation of the above mitigation, there is a significant risk that construction of the wind turbine generators within 3nm of the Millom East PLEM will nevertheless take place prior to completion of decommissioning due to the uncertain nature of the scheduling of the resources and services to complete the Millom East decommissioning. However, in the interests of reaching a pragmatic solution, if this proposal were acceptable to the Applicant, Harbour Energy would be willing to bear this risk and seek no further protections from the Applicant with respect to aviation or mutually exclusive simultaneous operations and marine access, other than normal custom and practice for marine and industry co-ordination.</p>	<p>As referenced in response to REP5-054.8 (above), the Applicant concludes that the concerns raised related to marine access and mutually exclusive simultaneous operations are in reality immaterial given that Harbour Energy would be comfortable relying on custom and practice for marine and industry co-ordination which the Applicant has consistently maintained as sufficient and acceptable.</p> <p>The Applicant does not agree that this is a 'pragmatic' solution and for the reasons set out above does not consider there is any basis for further mitigation to be secured through the draft DCO.</p>
REP5-054.15 REP5-064a.15	<p><b>4. Conclusions</b></p> <p>As set out in the foregoing, Harbour Energy considers that the loss of flights as a result of the Morgan Generation Assets would cause considerable disruption and extension of decommissioning operations, resulting</p>	<p>See the Applicant's responses above.</p>

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	in significant economic loss. Such a loss is unacceptable and would require to be mitigated. Furthermore, in order to secure safeguards in respect of coordination of mutually exclusive simultaneous operations and the spatial requirements for marine access during decommissioning, Harbour Energy would require an agreement to have been entered into with the Applicant.	
REP5-054.16 REP5-064a.16	Substantial effort would be required to resolve the differences between the Applicant and Harbour Energy and implement any of the mitigations set out in Sections 3.1 to 3.2 above.	See the Applicant's responses above. Further, the Applicant is continuing efforts to discuss the points raised directly with Harbour Energy.
REP5-054.17 REP5-064a.17	The mitigation proposed by Harbour Energy in Section 3.3 above, would in contrast be easy to implement through an appropriate protective provision and would leave each party with an equitable share of logistical inconvenience. This proposal represents a significant concession by Harbour Energy in the interests of reaching a pragmatic solution.	See the Applicant's responses above. The Applicant would note that the scale of the works to construct the Morgan Generation Assets is significantly greater logistically and economically than the decommissioning of one non-producing oil and gas asset. The mitigation suggested therefore does not represent 'an equitable share of logistical inconvenience'.  The Applicant has suitably mitigated any adverse impact through the design of the wind farm, allowing a 2.07 nm distance between the Morgan Generation Assets Order limits and the Millom East assets. This distance far exceeds precedent from other offshore wind farm DCOs and exceeds the distance between NPIs and offshore wind farms where there are ongoing activities in the Irish Sea. The Applicant has complied with the relevant policy in NPS EN-3 and no further mitigation is necessary.



## Appendix A: Millom East Buffer Zones

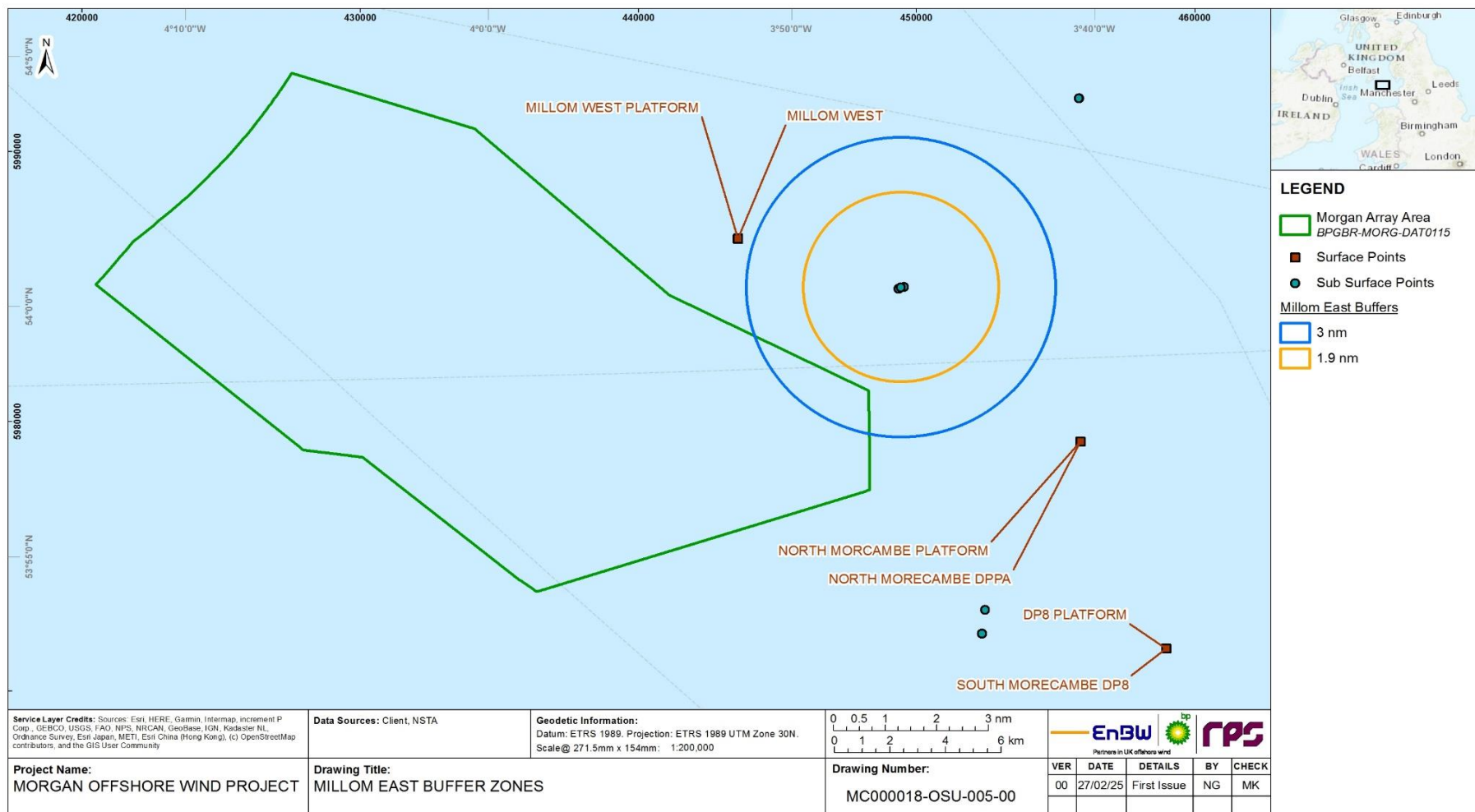


Figure A.1: Millom East Buffer Zones.