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MONA OFFSHORE WIND PROJECT

Offshore Ornithology Assessment of Pen y Gogarth & Great Orme's Head SSSI

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Image of an offshore wind farm

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Glossary

Term	Meaning
Applicant	Mona Offshore Wind Limited.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Project (NSIP).
Mona Offshore Wind Project	The Mona Offshore Wind Project is comprised of both the generation assets, offshore and onshore transmission assets, and associated activities.
The Planning Inspectorate	The agency responsible for operating the planning process for Nationally Significant Infrastructure Projects.

Acronyms

Acronym	Description
BDMPS	Biologically Defined Minimum Population Scales
DCO	Development Consent Order
EWG	Expert Working Group
NRW	Natural Resources Wales
PVA	Population Viability Analysis
SNCB	Statutory Nature Conservation Body
SPAs	Special Protection Areas
SSSI	Site of Special Scientific Interest
UK	United Kingdom

Units

Unit	Description
%	Percentage
km^2	Square kilometres
km	Kilometres
m	Metres

1 OFFSHORE ORNITHOLOGY ASSESSMENT OF PEN Y GOGARTH/GREAT ORME'S HEAD SITE OF SPECIAL SCIENTIFIC INTEREST

1.1 Introduction

1.1.1.1 As part of Natural Resources Wales' (NRW's) Relevant Representations (RR-011) to the Mona Offshore Wind Project, NRW provided a comment on the Pen y Gogarth/Great Orme's Head Site of Special Scientific Interest (SSSI) and its inclusion within Volume 2, Chapter 5: Offshore Ornithology (APP-057). This Applicant provided an initial response to this comment at the Procedural Deadline, which can be found in table 2.11 of the Applicant's Response to Relevant Representations (PDA-008). NRW's relevant representation comment and the Applicant's response are also provided here within 1-1 for reference.

1.1.1.2 As part of the Applicant's response to NRW's Relevant Representation, it was stated that a document would be submitted at Deadline 1, which considered the year-round impact on the Pen y Gogarth/Great Orme's Head SSSI.

1.1.1.3 This clarification note sets out what was and was not presented within Volume 2, Chapter 5: Offshore Ornithology (APP-057) for each of these species with reference to where this data can be found within the application documentation.

1.1.1.4 This clarification note also provides an annual assessment of the impact of the Mona Offshore Wind Project alone on black-legged kittiwake, razorbill and common guillemot from the Pen y Gogarth/Great Orme's Head SSSI.

Table 1-1: Extract from table 2.11 of the Applicant's Response to Relevant Representations (PDA-008) which covers NRW's comment on the Pen y Gogarth/Great Orme's Head SSSI

Reference	Relevant Representation Comment	Applicant's Response
RR-011.7	RR-011.7 2.1.2 Impacts to Sites of Special Scientific Interest (SSSIs) Reference is made to an assessment of operational displacement from the project alone to the guillemot feature of the Pen y Gogarth / Great Orme's Head SSSI in the Offshore Ornithology Chapter [APP-057]. However, we consider the assessment is unclear, and appears to be based on breeding season impacts only. Impacts to SSSI colony features should be apportioned to the colony in the non-breeding season as well, and the annual impact assessed against baseline mortality of the colony (calculated using the colony size in adults and the adult mortality rate). As the Mona project is located within foraging range of the guillemot, razorbill and kittiwake features of the Pen-y-Gogarth / Great Orme's Head Site SSSI, we again advise that detailed quantitative assessments of the potential impacts of the Mona project on all three of these features should be undertaken. The Applicant could consider following the approach taken by the applicant in the Awel-yMôr DCO (see Deadline 3a assessment REP3a-019).	Within Volume 6, Annex 5.5: Offshore apportioning technical report (APP-095), the breeding season apportioning on common guillemot, razorbill, and black-legged kittiwake is presented in table 1.8, table 1.11, and table 1.17, respectively. The increase in baseline mortality for razorbill and black-legged kittiwake did not indicate that Population Viability Analysis (PVA) was required, but the Applicant acknowledges that this calculation was not presented explicitly. The non-breeding season was not considered in Volume 2, Chapter 5: Offshore ornithology (APP-057) due to the size of the populations at the Pen-y-Gogarth / Great Orme's Head Site SSSI versus the BDMPS. With an adult breeding population of 3,578 birds at Pen-y-Gogarth/Great Orme's Head Site SSSI and a proportion of adults in UK western waters in the non-breeding season of 0.9 (taken from Skomer and Skokholm SPA (Furness, 2015)), the proportion of SSSI birds in the BDMPS (Adult UK Western waters of 656,156) is below 1%. For clarity, the Applicant recognises the value of presenting a specific document on the impact on the Pen-y-Gogarth/Great Orme's Head Site SSSI year-round and this will be provided for examination at Deadline 1.

1.2 Method of assessment

1.2.1.1 The impact and assessment for black-legged kittiwake, razorbill and common guillemot from Pen y Gogarth/Great Orme's Head SSSI from the Mona Offshore Wind Project presented in this clarification note have used the same methodology as presented within Volume 2, Chapter 5: Offshore Ornithology (APP-057). As suggested by NRW in their Relevant Representation (RR-011), the Applicant has reviewed the approach adopted by Awel y Môr to assess its impact on the Pen y Gogarth/Great Orme's Head SSSI (RWE, 2022) and does not consider it to be appropriate to present a PVA without first assessing whether this level of assessment is necessary (i.e. the project is predicted to result in a sufficient increase in baseline mortality to warrant further assessment). Therefore, in accordance with the assessment methodology presented in Volume 2, Chapter 5: Offshore Ornithology (APP-057), the Applicant has first assessed if the predicted impact of the Mona Offshore Wind would surpass the threshold for requiring further assessment using PVA (i.e. >1% increase in baseline mortality).

1.2.1.2 The impacts presented within Volume 2, Chapter 5: Offshore Ornithology (APP-057) are supported by the technical reports, specifically Volume 6, Annex 5.2: Offshore Ornithology Displacement Technical Report (APP-092), Volume 6, Annex 5.3: Offshore Ornithology Collision Risk Modelling Technical Report (APP-093) and Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (APP-095).

1.2.1.3 During the breeding season the Pen y Gogarth/Great Orme's Head SSSI was included within Volume 6, Annex 5.4: Offshore Ornithology Apportioning Technical Report (APP-095) for black-legged kittiwake, common guillemot and razorbill. Specifically, 15.6% of black-legged kittiwake, 15.6% of common guillemot and 21.1% of razorbill recorded within the Mona Offshore Wind Project during the breeding season are likely to originate from the Pen y Gogarth/Great Orme's Head SSSI. The calculations of these percentages are presented in table 1.17, table 1.8 and table 1.11 of Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (APP-095), respectively.

1.2.1.4 During the non-breeding season, the apportioning calculations were taken from Furness (2015). Furness (2015) defined Biologically Defined Minimum Population Scales (BDMPS) populations during the non-breeding season for most seabird species within the United Kingdom (UK). The report (Furness, 2015) and subsequent BDMPS populations focused on Special Protection Areas (SPAs) with SSSIs cumulatively presented within a single 'colony' called "West coast UK non-SPA populations" for each species. As no individual SSSIs were reported in Furness (2015) the impact during the non-breeding season on SSSIs was not quantified within Volume 2, Chapter 5: Offshore Ornithology (APP-057). This included the Pen y Gogarth/Great Orme's Head SSSI.

1.2.1.5 The species-specific calculation of non-breeding season impact on the Pen y Gogarth/Great Orme's Head SSSI is presented within section 1.3 of this clarification note.

1.2.1.6 When calculating the proportion of the non-breeding population which could have originated from Pen y Gogarth/Great Orme's Head SSSI, the population estimate from 2000 was used (Seabird Monitoring Programme, 2024). This data was chosen as Furness (2015) used the 2000 population estimates to determine the population estimate of "West coast UK non-SPA populations". All impacts presented for the non-breeding season and presented within the application documents use the apportioning from Furness (2015). The apportioning in Furness (2015) uses historical count data but is still the recommended resource (Parker *et al.*, 2022).

1.2.1.7 As recommended in NRW's Relevant Representations (RR-011), the Applicant has assumed, for the purpose of this clarification note, that 95.2% of black-legged kittiwakes during the breeding season are adult birds. This percentage has been derived based on the age structure derived from the Mona Offshore Wind Project's site-specific surveys. As outlined in response to RR 011.15 in the Applicant's Response to Relevant Representations (PDA-008), this differs from the proportion of adult birds during the breeding season assumed in the application documents, which used 87.8% and does not change the validity or conclusions of the previously presented work. Further information is provided in response to RR 0.11.15 presented in table 2.11 of the Applicant's Response to Relevant Representations (PDA-008).

1.3 Species assessments

1.3.1 Black-legged kittiwake

1.3.1.1 The apportioned proportion of black-legged kittiwake from Pen y Gogarth/Great Orme's Head SSSI is presented in table 1.17 of Volume 6, Annex 5.4: Offshore Ornithology Apportioning Technical Report (APP-095), with 15.6% of birds present within the Mona Array Area likely to originate from this SSSI during the breeding season.

1.3.1.2 As presented within table 5.48 of Volume 2, Chapter 5: Offshore Ornithology (APP-057), the combined impact from both collision and displacement on black-legged kittiwake during the breeding season was between 3.4 and 33.1 birds. Assuming 95.2% of birds being adults during the breeding season and considering that 15.6% of the birds originated from Pen y Gogarth/Great Orme's Head SSSI between 0.50 and 4.92 adult black-legged kittiwake

could be impacted from Pen y Gogarth/Great Orme's Head SSSI during the breeding season.

1.3.1.3 To calculate the impact during the non-breeding season, the percentage of the birds present within the Mona Array Area considered likely to have originated from the Pen y Gogarth/Great Orme's Head SSSI needs to be identified. The population of black-legged kittiwake at Pen y Gogarth/Great Orme's Head SSSI in 2000 was 1,147 apparently occupied nests, taken from the June 2000 count presented on the Seabird Monitoring Programme's website. Therefore, the population of adult birds in 2000 was 2,294. The count from 2000 is considered the best year to use as this correlates with the population used for the "West coast UK non-SPA populations" within Furness (2015).

1.3.1.4 The total adult population within the "UK Western waters and channel" during the spring migration period is 375,711 birds (Furness 2015). Therefore, the adults from Pen y Gogarth/Great Orme's Head SSSI represent 0.49% of the adult BDMPS population. This is calculated by dividing the adult population of Pen y Gogarth/Great Orme's Head SSSI, presuming that 80% of the adult birds stay within the "UK Western waters and channel" BDMPS (in line with the proportion used for Rathlin Island (County Antrim)), by the total adult birds in the BDMPS.

1.3.1.5 The total adult population within the "UK Western waters and channel" during the autumn migration period is 498,970 birds (Furness 2015). Therefore, the adults from Pen y Gogarth/Great Orme's Head SSSI represent 0.28% of the adult BDMPS population. This is calculated by dividing the adult population of Pen y Gogarth/Great Orme's Head SSSI, presuming that 60% of the adult birds stay within the "UK Western waters and channel" BDMPS (in line with the proportion used for Rathlin Island (County Antrim)), by the total adult birds in the BDMPS.

1.3.1.6 As presented within table 5.48 of Volume 2, Chapter 5: Offshore Ornithology (APP-057) the combined impact from both collision and displacement on black-legged kittiwake during the pre-breeding (spring migration) period was between 7.8 and 78.1 birds. With 53% of birds being adults during the non-breeding season and considering that 0.49% of the birds originated from Pen y Gogarth/Great Orme's Head SSSI between 0.02 and 0.20 adult black-legged kittiwake could be impacted from Pen y Gogarth/Great Orme's Head SSSI during the pre-breeding (spring migration) season.

1.3.1.7 As presented within table 5.48 of Volume 2, Chapter 5: Offshore Ornithology (APP-057) the combined impact from both collision and displacement on black-legged kittiwake during the post-breeding (autumn migration) period was between 4.6 and 47.5 birds (corrected from between 4.6 and 37.5). With 53% of birds being adults during the non-breeding season and considering that 0.28% of the birds originated from Pen y Gogarth/Great Orme's Head SSSI between 0.01 and 0.07 adult black-legged kittiwake could be impacted from Pen y Gogarth/Great Orme's Head SSSI during the post-breeding (autumn migration) season.

1.3.1.8 The baseline mortality from Pen y Gogarth/Great Orme's Head SSSI is estimated to be 165 adults per year (population of 1,128 in 2023 multiplied by the adult mortality rate of 0.146).

1.3.1.9 Based on the range of displacement and collision risk scenarios presented in Table 1-2, the annual impact on adult black-legged kittiwake is predicted to be between 0.54 (0.52 birds during the breeding period, 0.02 birds during the pre-breeding period and 0.01 during the post-breeding period) and 5.16 birds (4.89 birds during the breeding period, 0.20 birds during the pre-breeding period and 0.07 birds during the post-breeding period).

1.3.1.10 When considering the worst-case impact scenario, which was suggested by the JNCC during the Expert Working Group (EWG) meetings (Appendix D of the Technical Engagement Plan Appendices Part 1 (A to E) (APP-042)) to be 70% displacement and 10% mortality, and using the species-group avoidance rate, up to 5.18 adult black-legged

kittiwakes may be subject to mortality annually. This predicted impact could increase the baseline mortality by 3.13%.

1.3.1.11 When considering the Applicant's approach of 50% displacement and 1% mortality rates and the species-specific avoidance rates (highlighted in light blue within Table 1-2), the increase in baseline mortality is 0.40%. Therefore, as the increase in baseline mortality is <1%, in accordance with guidance (Parker *et al.*, 2022) and the approach at application (Volume 2, Chapter 5: Offshore Ornithology (APP-057)) a PVA for this species is not required.

1.3.1.12 The baseline mortality of black-legged kittiwake from Pen y Gogarth/Great Orme's Head SSSI is 165; therefore, an impact of >1.65 adult birds per year would have to occur for the increase in baseline mortality to >1%, and a PVA be required to investigate the population consequences of this impact (Parker *et al.*, 2022). As indicated in 1-2, there are several impact scenarios for which the potential impact does not exceed 1.65 adult birds per year and, therefore, would not require additional assessment (via a PVA).

Table 1-2: Predicted impact on adult black-legged kittiwake from Pen y Gogarth/Great Orme's Head SSSI

Displacement scenario	Number of adult birds impacted			
	Pre-breeding (2.3)	Breeding (52.7)	Post-breeding (0.8)	Annual (55.8)
30% displacement and 1% mortality (as advocated by NatureScot)	0.01	0.16	0.00	0.17
30% displacement and 3% mortality (as advocated by NatureScot)	0.02	0.47	0.01	0.50
50% displacement and 1% mortality	0.01	0.26	<0.01	0.28
50% displacement and 5% mortality	0.06	1.32	0.02	1.40
70% displacement and 1% mortality	0.02	0.37	0.01	0.39
70% displacement and 10% mortality	0.16	3.69	0.06	3.91
Collision mortalities				
Predicted collisions (species-group avoidance rate)	0.04	1.20	0.01	1.25
Predicted collisions (species-specific avoidance rate)	0.01	0.36	<0.01	0.38
Combined predicted impact on Pen y Gogarth/Great Orme's Head SSSI				
Applicant's approach (highlighted in blue above)	0.02	0.62	0.01	0.65
JNCC's recommended maximum impact scenario (70% displacement and 10% mortality and species-group avoidance rate)	0.20	4.89	0.07	5.16
Minimum impact scenario (30% displacement and 1% mortality and species-specific avoidance rate)	0.02	0.52	0.01	0.54
Applicant's approach as a percentage increase in baseline mortality (baseline mortality estimated at 165 birds)				0.40%
SNCBs recommended maximum impact scenario as a percentage increase in baseline mortality (baseline mortality estimated at 165 birds)				3.13%
Minimum impact scenario as a percentage increase in baseline mortality (baseline mortality estimated at 165 birds)				0.33%

1.3.1.13 Volume 2, Chapter 5: Offshore Ornithology (APP-057), paragraphs 5.7.2.24 to 5.7.2.27 set out the Applicant's position that 70% displacement and 10% mortality is highly unlikely to occur and empirical evidence to date has not shown this level of displacement and mortality. The rationale for using the species-specific or species-group avoidance rates is provided within section 1.5.2 of Volume 6, Annex 5.6: Offshore Ornithology Collision Risk Modelling Technical Report (APP-093). The use of the Applicant's approach is deemed proportionate.

1.3.1.14 It should also be noted that Natural England does not require any assessment of displacement impacts on black-legged kittiwake for English offshore wind projects (Appendix D of the Technical Engagement Plan Appendices Part 1 (A to E) (APP-042)). Whilst this assessment is required for Scottish projects, NatureScot recommends using 30% displacement and 1-3% mortality (NatureScot, 2023). During pre-application engagement, NRW did not indicate a preferred displacement rate but advised that a 1-10% mortality rate should be used (see Appendix D of the Technical Engagement Plan Appendices Part 1 (A to E) (APP-042) for full consultation with the SNCBs). Therefore, there is no precedent to assume 70% displacement and 10% mortality for black-legged kittiwake for the purpose of this assessment.

1.3.2 Common guillemot

1.3.2.1 Within the submitted documents for the Mona Offshore Wind Project development consent order (DCO) application, common guillemot from Pen y Gogarth/Great Orme's Head SSSI were assessed, and a PVA on the impact predicted during the breeding season (Volume 6, Annex 5.5: Offshore Ornithology Population Viability Analysis Technical Report (APP-096)) was undertaken. The conclusion of the PVA, presented in 5.7.2.107 of Volume 2, Chapter 5: Offshore Ornithology (APP-057) for the Pen y Gogarth/Great Orme's Head SSSI was that even when the worst case impact scenario of 70% displacement and 10% mortality was considered (as requested by the SNCBs during the EWG meetings, Appendix D of the Technical Engagement Plan Appendices Part 1 (A to E) (APP-042)) the population would still be increasing in size (median growth rate of 1.005 taken from table 1.9 of Volume 6, Annex 5.5: Offshore Ornithology Population Viability Analysis Technical Report (APP-096)). The Applicant considers the use of 70% displacement and 10% mortality to be highly precautionary and not evidenced in the empirical research (APEM, 2022).

1.3.2.2 The assessment within Volume 2, Chapter 5: Offshore Ornithology (APP-057) presented the apportioned impact on the site during the breeding season when 15.6% of the birds present within the Mona Array Area were considered likely to have originated from the Pen y Gogarth/Great Orme's Head SSSI. The apportioned percentage of adult birds is presented in table 1.8 of Volume 6, Annex 5.4: Offshore Ornithology Apportioning Technical Report (APP-095).

1.3.2.3 To calculate the impact during the non-breeding season, the percentage of the birds present within the Mona Array Area considered likely to have originated from the Pen y Gogarth/Great Orme's Head SSSI needs to be identified. The population of common guillemot at Pen y Gogarth/Great Orme's Head SSSI in 2000 was 1,512 individual birds, taken from the June 2000 count presented on the Seabird Monitoring Programme's website. To account for adult birds absent during the count period, the adult population can be calculated by multiplying the individuals counted by 1.34 (Walsh *et al*, 1995). Therefore, the population of adult birds in 2000 was 2,026. The count from 2000 is considered the best year to use as this correlates with the population used for the "West coast UK non-SPA populations" within Furness (2015).

1.3.2.4 The total adult population within the "UK Western waters" is 656,156 birds (Furness 2015). Therefore, the adults from Pen y Gogarth/Great Orme's Head SSSI represent 0.31% of the adult BDMPS population. This is calculated by dividing the adult population of Pen y Gogarth/Great Orme's Head SSSI, presuming that 100% of the adult birds stay within the "UK Western waters" BDMPS (in line with the proportion used for Rathlin Island (County Antrim) within Furness (2015)), by the total adult birds in the BDMPS.

1.3.2.5 As presented within table 1.10 of Volume 6, Annex 5.2: Offshore Ornithology Displacement Technical Report (APP-092), the impact on common guillemot during the non-breeding season is 19 (11 to 263) birds. The range of impacts presented in brackets represents the

different displacement and mortality scenarios considered, which range from 30% displacement and 1% mortality to 70% displacement and 10% mortality. The assessment presented within this document is based on 50% displacement and 1% mortality.

1.3.2.6 Furness (2015) predicts that during the non-breeding season, 57% of the birds present are adult birds. Therefore, the additional impact on the Pen y Gogarth/Great Orme's Head SSSI during the breeding season would be <0.1 (<0.1 to 0.4) birds when considering the range of potential impacts.

1.3.2.7 As presented in table 1.5 of Volume 6, Annex 5.5: Offshore Ornithology Population Viability Analysis Technical Report (APP-096), the impact during the breeding season was 3.3 (2.0 to 45.9) birds. Therefore, the addition of the non-breeding impact <0.1 (<0.1 to 0.4) would result in a marginal increase in the impact.

1.3.2.8 Due to the negligible predicted additional impacts (<0.1 (<0.1 to 0.4) birds) and the conclusions drawn from the PVA presented at application (table 1.9 of Volume 6, Annex 5.5: Offshore Ornithology Population Viability Analysis Technical Report (APP-096)), the marginal increase in adults birds impacted during the non-breeding season will not change the conclusion with respect to the population at the Pen y Gogarth/Great Orme's Head SSSI. It is expected that the population will continue to grow with a small difference in the counterfactual of population growth rate.

1.3.3 Razorbill

1.3.3.1 The apportioned proportion of razorbill from Pen y Gogarth/Great Orme's Head SSSI is presented in table 1.11 of Volume 6, Annex 5.4: Offshore Ornithology Apportioning Technical Report (APP-095), with 21.1% of birds present within the Mona Array Area likely to originate from this SSSI during the breeding season.

1.3.3.2 As presented in table 1.16 of Volume 6, Annex 5.2: Offshore Ornithology Displacement Technical Report (APP-092), the predicted impact on razorbill during the breeding season was 0 (0 to 6 birds). Therefore, when considering that 21.1% of birds originate from Pen y Gogarth/Great Orme's Head SSSI, between 0 and 1.3 razorbill could be impacted from Pen y Gogarth/Great Orme's Head SSSI during the breeding season. No age class apportioning is done in the breeding season, with 100% of birds considered to be adults.

1.3.3.3 The population of razorbill at Pen y Gogarth/Great Orme's Head SSSI in 2000 was 225 individual birds, taken from the June 2000 count presented on the Seabird Monitoring Programme's website. To account for adult birds absent during the count period, the adult population can be calculated by multiplying the individuals counted by 1.34 (Walsh *et al*, 1995). Therefore, the population of adult birds in 2000 was 302. The count from 2000 is considered the best year to use as this correlates with the population used for the "West coast UK non-SPA populations" within Furness (2015).

1.3.3.4 The total adult population within the "UK Western waters" during the migration periods (spring and autumn) is 316,928 birds (Furness 2015). Therefore, the adults from Pen y Gogarth/Great Orme's Head SSSI represent 0.09% of the adult BDMPS population. This is calculated by dividing the adult population of Pen y Gogarth/Great Orme's Head SSSI, presuming that 98% of the adult birds stay within the "UK Western waters" BDMPS (in line with the proportion used for Rathlin Island (County Antrim)), by the total adult birds in the BDMPS.

1.3.3.5 The total adult population within the "UK Western waters" during the winter is 179,183 birds (Furness 2015). Therefore, the adults from Pen y Gogarth/Great Orme's Head SSSI represent 0.07% of the adult BDMPS population. This is calculated by dividing the adult population of Pen y Gogarth/Great Orme's Head SSSI, presuming that 40% of the adult

birds stay within the "UK Western waters" BDMPS (in line with the proportion used for Rathlin Island (County Antrim)), by the total adult birds in the BDMPS

1.3.3.6 The total impact on razorbill during winter is 10 (6 to 135) birds during the pre-breeding season, 0 (0 to 6) birds during the post-breeding season and 2 (1 to 29) birds in the non-breeding season (table A. 1 of Volume 6, Annex 5.5: Offshore Ornithology Population Viability Analysis Technical Report (APP-096)) with full calculations presented within tables 1.15, 1.17 and 1.18 of Volume 6, Annex 5.2: Offshore Ornithology Displacement Technical Report (APP-092), respectively. The range of impacts is the various displacement and mortality scenarios from 30% displacement and 1% mortality to 70% displacement and 10% mortality. The assessment presented within this document is based impact uses 50% displacement and 1% mortality.

1.3.3.7 Furness (2015) predicts that during the non-breeding season, 57% of the birds present are adult birds. Therefore, the additional impact on the Pen y Gogarth/Great Orme's Head SSSI during the entire winter period (pre-breeding, post-breeding and non-breeding combined) would be <0.1 (<0.1 to 0.1) birds.

1.3.3.8 The baseline mortality from Pen y Gogarth/Great Orme's Head SSSI is estimated to be 52 adults per year (population of 496 in 2023 multiplied by the adult mortality rate of 0.105). Annually, up to 1.4 razorbill (up to 1.3 during the breeding season and up to 0.1 during the non-breeding season) may be subject to mortality when considering the worst case impact scenario (70% displacement and 10% mortality). This predicted impact could increase the baseline mortality by 2.69%.

1.3.3.9 Volume 6, Annex 5.2: Offshore Ornithology Displacement Technical Report (APP-092), paragraphs 5.7.2.14 to 5.7.2.19 set out the Applicant's evidence as to the fact that 70% displacement and 10% mortality is highly unlikely to occur and empirical evidence to date has not shown this level of displacement and mortality rates. Using the Applicant's approach (which assumes 50% displacement and 1% mortality) which was accepted by the Secretary of State for Awel y Môr (RWE, 2023 and DESNZ, 2023), the impact would be <0.1 birds. An annual impact of <0.1 birds is considered negligible and not detectable in the population. Therefore, no impact on razorbill from Pen y Gogarth/Great Orme's Head SSSI is considered likely.

1.4 Conclusions

1.4.1.1 Following NRW's request for within their Relevant Representation (RR-011.7) an annual assessment of black-legged kittiwake, common guillemot and razorbill from the Pen y Gogarth/Great Orme's Head SSSI this clarification note has been produced.

1.4.1.2 The inclusion of the non-breeding season for common guillemot does not change the conclusions presented within Volume 2, Chapter 5: Offshore Ornithology (APP-057) with only an additional <0.1 (<0.1 to 0.4) birds predicted to be impacted. It was not considered necessary to present an updated PVA in light of this minor additional impact, and the PVA results presented in table 1.9 of Volume 6, Annex 5.5: Offshore Ornithology Population Viability Analysis Technical Report (APP-096)) are considered to remain valid.

1.4.1.3 Both black-legged kittiwake and razorbill had predicted annual impacts of negligible magnitude, and no PVA was considered required due to the predicted level of impact.

1.4.1.4 It can be concluded that the Mona Offshore Wind Project alone would have a negligible impact on the Pen y Gogarth/Great Orme's Head SSSI.

1.5 References

DESNZ, 2023. Awel Y Môr Habitats Regulations Assessment

RWE, 2022. Awel Y Môr Offshore Wind Farm. Marine Ornithology Great Orme Assessment (Clean). Document reference: 3a.19

RWE, 2023. Awel Y Môr Offshore Wind Farm. Report 5.2: Report to Inform Appropriate Assessment. Deadline 8. Document reference: 8.40