

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Review of Cumulative Effects Assessment and In- Combination Assessment at Deadline 6

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Image of an offshore wind farm

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Glossary

Term	Meaning
Applicant	Morgan Offshore Wind Limited.
Cumulative effects assessment	Assessment of the likely effects arising from the Morgan Generation Assets alongside the likely effects of other development activities in the vicinity of the Morgan Generation Assets.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Project (NSIP).
Effect	The consequence of an impact.
Environmental Statement	The document presenting the results of the Environmental Impact Assessment (EIA) process for the Morgan Generation Assets.
Impact	A change that is caused by an action.
In-combination effect	The combined effect of the Morgan Generation Assets in-combination with the effects from a number of different projects on the same feature/receptor.
The Planning Inspectorate	The agency responsible for operating the planning process for Nationally Significant Infrastructure Projects.

Acronyms

Acronym	Description
CCS	Carbon Capture and Storage
CEA	Cumulative Effects Assessment
CRNRA	Cumulative Regional Navigational Risk Assessment
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ISAA	Information to Support an Appropriate Assessment
MU	Management Unit
NSIP	Nationally Significant Infrastructure Project
REWS	Radar Early Warning Systems
SSC	Suspended Sediment Concentrations

1 REVIEW OF CUMULATIVE EFFECTS ASSESSMENT AND IN-COMBINATION ASSESSMENT AT DEADLINE 6

1.1 Introduction

- 1.1.1.1 This document forms an addendum to the Review of Cumulative Effects Assessment and In-Combination Assessment (REP2-023) submitted at Deadline 2, in order to present the most up to date position at the close of the Morgan Generation Assets Examination. This review considers new projects not previously considered in the Cumulative Effects Assessment (CEA) that have entered the public domain up to 31 January 2025, and new or updated assessment material that has been published on projects up to 31 January 2025 that had been considered in the CEA.
- 1.1.1.2 The Applicant has undertaken a screening review of its CEA and in-combination assessment to determine whether the updated information could change the conclusions of the assessments presented in the application.
- 1.1.1.3 Two other addendums to the Review of Cumulative Effects Assessment and In-Combination Assessment (REP2-023) have previously been submitted by the Applicant, as follows:
- Review of Cumulative Effects Assessment and In-Combination Assessment: Offshore ornithology (REP3-019)
 - Review of Cumulative Effects Assessment and In-Combination Assessment: Morgan and Morecambe Offshore Wind Farms: Transmission Assets (REP4-024).
- 1.1.1.4 These documents have been prepared to supplement the CEA undertaken for the Morgan Generation Assets within the topic specific chapters in Volume 2 of the Environmental Statement. Table 1.1 signposts to where a summary of the conclusions of the CEA is presented for each topic chapter. The Cumulative effects screening matrix submitted with the application is available within APP-031, with screening for projects since application presented in REP2-023, REP4-024 and this note.

Table 1.1: Signposting to conclusions of Morgan Generation Assets CEA.

Chapter	Table/section reference
Volume 2, Chapter 1: Physical processes (S_D6_16)	Table 1.16 and Table 1.23
Volume 2, Chapter 2: Benthic ecology (S_D6_17)	Table 2.27 and Table 2.37
Volume 2, Chapter 3: Fish and shellfish ecology (S_D6_18)	Table 3.32 and Table 3.42
Volume 2, Chapter 4: Marine mammals (S_D6_19)	Table 4.52 and Table 4.60
Volume 2, Chapter 5: Offshore ornithology (S_D6_20)	Table 5.65 and Table 5.173 and the Applicant's Errata Sheet (REP3-011).
Volume 2, Chapter 6: Commercial fisheries (APP-024)	Table 6.33 and Table 6.39
Volume 2, Chapter 7: Shipping and navigation (S_D6_21)	Table 7.29 and Table 7.42
Volume 2, Chapter 8: Marine archaeology and cultural heritage (APP-026)	Table 8.21 and Table 8.27
Volume 2, Chapter 9: Other sea users (S_D6_22)	Table 9.16 and Table 9.22

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Chapter	Table/section reference
Volume 2, Chapter 10: Seascape, landscape and visual resources (S_D6_23)	Table 10.21 and Table 10.24, as updated in the SLVIA Clarification note (REP3-010)
Volume 2, Chapter 11: Aviation and radar (APP-015)	Table 11.17 and Table 11.21
Volume 2, Chapter 12: Climate change (APP-016)	Section 12.12 and 12.13 and Table 12.20
Volume 2, Chapter 13: Socio-economics (S_D6_24)	Table 13.84, Table 13.95, Table 13.96, Table 13.97 and Table 13.98
Volume 2, Chapter 14: Human health (APP-018)	Table 14.16 and Table 14.25.

1.2 Methodology

- 1.2.1.1 The full methodology for the CEA and in-combination assessment review is provided within REP2-023. This includes the screening process to identify projects to be taken forward in the CEA and in-combination assessment review.
- 1.2.1.2 A summary of the projects that updated information has become available for since 27 September 2024 (when the previous CEA review was conducted (REP2-023)), and that have the potential to result in a change to the Morgan Generation Assets CEA is presented in Table 1.2.

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Table 1.2: Projects reviewed for potential cumulative effects, with status at application and Deadline 6 (D6), and programme details.

Project	Capacity/ scale/ description	Status at application	Status at Deadline 6	Tier at D6	Construction period	Operation period	Distance to Morgan Array Area (km)
East Irish Sea Transmission Project	Transmission and grid connection for the Moor Vannin Offshore Wind Farm. Grid connection agreement secured with the National Grid Electricity System Operator for a proposed connection into the Penwortham Substation.	Project not in the public domain and therefore not considered in the CEA.	New project, pre-application	Tier 3 (Scoping report has not been submitted and is not in the public domain)	Q4 2029 (see REP5-077)	Unknown	0.0*
Eni Hynet – Carbon Capture and Storage (CCS) Project – offshore	CCS project in the east Irish Sea. Works will include installation of a new cable, a new Douglas CCS platform and work on the existing Hamilton, Hamilton North and Lennox wellhead platforms.	Pre-application (for offshore elements of the project). Considered in the CEA as a Tier 2 project.	Submitted but not yet determined	Tier 1	Q4 2024** to 2026	2027 onwards	31.0
Sceirde Rocks Wind Farm	Proposed offshore wind farm consisting of 30 turbines with gravity based fixed bottom foundations with a 450 MW capacity.	Pre-application. Screened out of the CEA due to either no conceptual or physical effect-receptor pathway	Submitted but not yet determined	Tier 1	2026 to 2029	2030 onwards	386.3

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Project	Capacity/ scale/ description	Status at application	Status at Deadline 6	Tier at D6	Construction period	Operation period	Distance to Morgan Array Area (km)
	Application submitted to An Bord Pleanála on 16/01/2025.	or low data availability.					
Moor Vannin Offshore Wind Farm	Proposed offshore wind farm comprising up to 87 wind turbines. Application to be submitted March 2025.	Considered in the CEA as a Tier 2 project.	Pre-application. Environmental Statement not published. The following refinements to the project have been published (Ørsted, 2025): <ul style="list-style-type: none"> • Reduction in the array area • Reduction in maximum wind turbine height • Reduction in maximum number of wind turbines • Reduction in maximum number of offshore platforms • Increase in the minimum blade tip height. 	Tier 2	2030 to 2032	2033 onwards	7.6 km (4.1 nm)

*The publicly available location of the East Irish Sea Transmission project is only indicative and covers a large area. The southern extent of the indicative boundary for the East Irish Sea Transmission project runs directly alongside the northern boundary of the Morgan Array Area, whilst the northern boundary, at its closest point, is 47.0 km north of the Morgan Generation Assets (Ørsted, 2024).

**Application documents state Q4 2024 but as of 31 January 2025 the project is yet to be consented (OPRED, 2025).

1.3 Screening for the Morgan Generation Assets cumulative effects review

1.3.1.1 Table 1.4 provides the results of the screening exercise carried out to determine if a project is taken forward into the CEA review, following the process described in REP2-023.

1.3.1.2 This screening exercise was carried out based on the level of detail available as well as the potential for interactions with the Morgan Generation Assets on a conceptual, physical and temporal basis, following the methodology set out in Volume 3, Annex 5.1 Cumulative effects screening matrix (APP-031), adapted for the CEA review, and the criteria in Table 1.3. The projects which have been screened in have been carried forward into the CEA review presented in Table 1.5 and Table 1.6 in section 1.4.

Table 1.3: Screening criteria (based on Volume 3, Annex 5.1 Cumulative effects screening matrix (APP-031)).

Code	Screening criteria
a	Included as part of the topic baseline with no anticipated impacts Not relevant to CEA review
b	Part of the baseline but has an ongoing impact Not relevant to CEA review
c	Potential cumulative effect exists, or change to cumulative effect previously assessed Screened into the CEA review
d	No conceptual or physical effect-receptor pathway Screened out of the CEA review
e	Low data availability Screened out of the CEA review
f	No temporal overlap Screened out of the CEA review
g	Project has been withdrawn from development or operation Screened out of the CEA review
h	Updated project information does not result in the potential for a change to cumulative effect previously assessed, or additional cumulative effects Screened out of the CEA review

1.3.1.3 Justification for projects screened out of the CEA review for each topic in accordance with these criteria is provided in Appendix A:.

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Table 1.4: Screening of new project information that may affect cumulative effects assessment and in-combination assessment for the Morgan Generation Assets Environmental Statement and ISAA.

Topic	Summary of Morgan Generation Assets CEA and in-combination assessment conclusions for Scenario 3 as presented within the Environmental Statement/ISAA	Projects with potential for additional cumulative effects with the Morgan Generation Assets			
		East Irish Sea Transmission Project	Eni Hynet – Carbon Capture Project	Sceirde Rocks Windfarm	Moor Vannin Offshore Windfarm
Physical processes (Volume 2, Chapter 1 (S_D6_16))	There will be no significant cumulative effects from the Morgan Generation Assets alongside other projects/plans.	Yes (c)	No (d)	No (d)	No (h)
Benthic subtidal ecology (Volume 2, Chapter 2 (S_D6_17))	There will be no significant cumulative effects from the Morgan Generation Assets alongside other projects/plans.	Yes (c)	Yes (c)	No (d)	No (h)
Fish and shellfish ecology (Volume 2, Chapter 3 (S_D6_18))	There will be potentially significant cumulative effects from the Morgan Generation Assets alongside other projects and plans to herring and cod during their respective spawning seasons through the impact of underwater sound from piling (moderate adverse significance). No residual significant cumulative effects are expected to occur.	Yes (c)	Yes (c)	No (d)	No (h)
Marine mammals (Volume 2, Chapter 4 (S_D6_19))	Overall, it is concluded that for most impacts there will be no significant cumulative effects from the Morgan Generation Assets alongside other projects/plans, except as a result of behavioural disturbance during piling for bottlenose dolphin within the Irish Sea Management Unit (MU) and potential injury from Unexploded Ordnance (UXO) clearance for harbour porpoise, which have a potential significant cumulative effect.	No (h)	Yes (c)	Yes (c)	No (h)
Offshore ornithology (Volume 2, Chapter 5 (S_D6_20))	There will be no significant cumulative effects from the Morgan Generation Assets alongside other projects/plans.	No (d)	Yes (c)	No (d)	No (h)
Commercial fisheries (Volume 2, Chapter 6 (APP-024))	There will be no significant cumulative effects from the Morgan Generation Assets alongside other projects/plans.	Yes (c)	No (h)	No (d)	No (h)

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Topic	Summary of Morgan Generation Assets CEA and in-combination assessment conclusions for Scenario 3 as presented within the Environmental Statement/ISAA	Projects with potential for additional cumulative effects with the Morgan Generation Assets			
		East Irish Sea Transmission Project	Eni Hynet – Carbon Capture Project	Sceirde Rocks Windfarm	Moor Vannin Offshore Windfarm
Shipping and navigation (Volume 2, Chapter 7 (S_D6_21))	A cumulative regional navigational risk assessment (CRNRA) was undertaken (Appendix E of APP-060), which adopted a regional (co-ordinated) approach to assessment for the Mona Offshore Wind Project, Morgan Generation Assets and Morecambe Offshore Windfarm: Generation Assets projects, as well as known Tier 1 projects, and measures put in place to mitigate for significant effects. An addendum for the Moor Vannin project was presented in Appendix D of Appendix E of APP-060.	Yes (c)	No (h)	No (d)	Yes (c)
Marine archaeology and cultural heritage (Volume 2, Chapter 8 (APP-026))	There will be no significant cumulative effects from the Morgan Generation Assets alongside other projects/plans.	Yes (c)	No (d)	No (d)	No (d)
Other sea users (Volume 2, Chapter 9 (S_D6_22))	There will be no significant cumulative effects from the Morgan Generation Assets alongside other projects/plans.	Yes (c)	No (h)	No (d)	No (h)
Seascape, landscape and visual resources (Volume 2, Chapter 10 (S_D6_23)) as clarified in Annex 4.4 to the Applicant's response to EXQ1: SLVIA Clarification note (REP3-010)	Significant cumulative effects are assessed to arise due to the addition of the Morgan Generation Assets alongside Tier 1 projects. These significant effects will apply to Marine Character Area 38 Irish Sea South, Isle of Man Landscape Character Type E: Rugged Coast at the coast, and for individuals on the Raad ny Foillan coastal path and the settlements of Douglas and Laxey where panoramic views of the Irish Sea are currently available.	No (h)	No (h)	No (d)	No (h)
Aviation and radar (Volume 2, Chapter 11 (APP-015))	No significant cumulative effects from the Morgan Generation Assets alongside other projects/plans in relation to the potential impact: creation of obstacle to aircraft operations. Significant cumulative effects arising from the Morgan Generation Assets alongside other projects/plans due to	No (d)	No (d)	No (d)	No (h)

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Topic	Summary of Morgan Generation Assets CEA and in-combination assessment conclusions for Scenario 3 as presented within the Environmental Statement/ISAA	Projects with potential for additional cumulative effects with the Morgan Generation Assets			
		East Irish Sea Transmission Project	Eni Hynet – Carbon Capture Project	Sceirde Rocks Windfarm	Moor Vannin Offshore Windfarm
	wind turbines causing interference on aviation Primary Surveillance Radar (PSR) systems.				
Socio-economics (Volume 2, Chapter 13 (S_D6_24))	There will be no significant adverse cumulative effects from the Morgan Generation Assets alongside other projects/plans. Significant beneficial cumulative effects (moderate beneficial) identified for potential impact on economic receptors including employment and gross value added.	No (h)	No (h)	No (d)	No (h)
Human health (Volume 2, Chapter 14 (APP-018))	In relation to collision and allision risk when including the effects of the Moor Vannin Offshore Wind Farm within the assessment, there would be a cumulative moderate adverse effect for human health. There will be a minor adverse and minor beneficial cumulative effect relating to community identity influences on population health, employment, and income. Minor beneficial cumulative effect to climate change and public health and moderate beneficial effect on wider societal infrastructure and resources.	No (h)	No (d)	No (d)	No (h)
HRA Stage 2 ISAA - Annex II diadromous fish (APP-097))	No adverse effect on the integrity of assessed sites from the Morgan Generation Assets alongside other projects/plans.	Yes (c)	Yes (c)	No (d)	No (h)
HRA Stage 2 ISAA - Annex II marine mammals (APP-097))	No adverse effect on the integrity of assessed sites from the Morgan Generation Assets alongside other projects/plans.	No (h)	Yes (c)	Yes (c)	No (h)
HRA Stage 3 ISAA - Offshore ornithology (APP-098)	No adverse effect on the integrity of assessed sites from the Morgan Generation Assets alongside other projects/plans.	No (d)	Yes (c)	No (d)	No (h)

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1.4 Review of the Morgan Generation Assets CEA

Table 1.5: Review of project updates that may affect cumulative effects assessment in the Morgan Generation Assets Environmental Statement.

Topic	Review of potential for further cumulative effects	Effect on conclusions of the ES
Physical processes (Volume 2, Chapter 1 (S_D6_16))	<p>The proposed route of the East Irish Sea Transmission Project is currently unknown, however based on the indicative location made available by Moir Vannin Offshore Wind Farm Limited (2024) there is potential for the cable to be located within the physical processes CEA study area for the Morgan Generation Assets. There is potential for the construction phases to overlap based on information provided by Moir Vannin Offshore Wind Limited (REP5-077). It should be noted that no information is currently available in the public domain concerning the East Irish Sea Transmission Project to quantify the potential cumulative physical processes impact from this project, and therefore a high level review has been carried out on a conceptual basis. The cumulative effects assessed in Volume 2, Chapter 1: Physical processes (S_D6_16)) with potential to be influenced by the new project information include:</p> <ul style="list-style-type: none"> Potential increases in suspended sediment concentrations (SSC) and associated deposition during the construction phase. Depending on the cable route, the East Irish Sea Transmission Project may pass through the north and eastern section of the physical processes CEA study area. Cable installation is likely to be via trenching with associated construction sediment plumes. If installation of the offshore section of the East Irish Sea Transmission Project (adjacent to Moir Vannin Offshore Wind Farm) occurs in close proximity to the northern boundary of the Morgan Array Area and is also undertaken during the Morgan Generation Assets construction phase, then there is potential for cumulative impacts. In the Morgan Array Area and environs, the tidal current floods to the east-northeast and ebbs to the west-southwest therefore plumes from the two projects along this section of the East Irish Sea Transmission Project would be advected on the tide and not towards one another limiting the cumulative SSC of any coalesced plume. Therefore, under these specific circumstances any additional effect to that assessed in the Morgan Generation Assets CEA is negligible, and the cumulative effects are considered to remain of negligible significance during construction. 	No change to the conclusions of the Environmental Statement.
Benthic subtidal ecology (Volume 2, Chapter 2 (S_D6_17))	<p>The East Irish Sea Transmission Project and Eni Hynet – CCS Project are two projects that have been identified as having potential for additional cumulative effects with the Morgan Generation Assets for benthic ecology. The proposed route of the East Irish Sea Transmission Project is currently unknown, however based on the indicative location made available by Moir Vannin Offshore Wind Farm Limited (2024) there is potential for the cable to be located within the benthic subtidal ecology CEA study area for the Morgan Generation Assets. It should be noted that no information is currently available in the public domain concerning the East Irish Sea Transmission Project to quantify the potential cumulative benthic ecology impact from this project, and therefore a high level review has been carried out on a conceptual basis. The Eni Hynet – CCS Project has moved from a Tier 2 project to a Tier 1 project following the submission of the application.</p>	No change to the conclusions of the Environmental Statement.

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Topic	Review of potential for further cumulative effects	Effect on conclusions of the ES
	<p>The cumulative effects assessed in Volume 2, Chapter 2: Benthic subtidal ecology (S_D6_17) with potential to be influenced by the information available for these projects include:</p> <ul style="list-style-type: none"> • Temporary habitat loss/disturbance: the East Irish Sea Transmission Project and the Eni Hynet – CCS Project have the potential to contribute to cumulative temporary habitat loss/disturbance during construction/decommissioning and operations and maintenance. The East Irish Sea Transmission Project is unlikely to result in significant additional cumulative impacts with the Morgan Generation Assets, as the footprint of the works is unlikely to be large and buried cables will have minimal long term effects with recovery of sediments and communities predicted following installation. For the Tier 1 Eni Hynet – CCS Project, Chapter 7: Marine Biodiversity assessment of the Environmental Statement (Liverpool Bay CCS Ltd., 2024) predicted up to 1.91 km² of subtidal habitat loss/disturbance during construction and up to 72,000 m² during operations and maintenance. These are small increases compared to the Tier 1 cumulative temporary habitat loss/disturbance during the construction phase of 196.28 km² and the Tier 1 cumulative temporary habitat loss/disturbance during the operations and maintenance phase of 58.76 km² identified in Volume 2, Chapter 2: Benthic subtidal ecology (S_D6_17). Therefore, there is no change from the Morgan Generation Assets CEA (for temporary habitat loss/disturbance), and the cumulative effects remain of minor adverse significance during construction, operations and maintenance and decommissioning. • Increases in SSC: the East Irish Sea Transmission Project has the potential to cause increases in SSC during the construction phase (the Eni Hynet – CCS Project is outside the physical processes CEA study area; see Appendix A:). Cable installation is likely to be via trenching with associated construction sediment plumes. If installation of the offshore section of the East Irish Sea Transmission Project (adjacent to Mooir Vannin Offshore Wind Farm) occurs in close proximity to the northern boundary of the Morgan Array Area and is also undertaken during the Morgan Generation Assets construction phase, then there is potential for cumulative impacts. In the Morgan Array Area and environs, the tidal current floods to the eastnortheast and ebbs to the westsouthwest therefore plumes from the two projects along this section of the East Irish Sea Transmission Project would be advected on the tide and not towards one another limiting the cumulative SSC of any coalesced plume. Therefore, the change is negligible compared to the Morgan Generation Assets CEA, and the cumulative effects are considered to remain negligible during construction. • Long term habitat loss/disturbance: the East Irish Sea Transmission Project and the Eni Hynet – CCS Project have the potential for long term habitat loss during the operations and maintenance phase. The East Irish Sea Transmission Project is unlikely to result in significant additional cumulative impacts with the Morgan Generation Assets, as the footprint of the works is unlikely to be large and most cables will likely be buried with some localised requirement for cable protection. For the Tier 1 Eni Hynet – CCS Project, Chapter 7: Marine Biodiversity assessment of the Environmental Statement (Liverpool Bay CCS Ltd., 2024) predicts up to 64,159 m² of long term habitat loss which is a very small increase on the Tier 1 cumulative long term habitat loss of 3.10 km² identified in Volume 2, Chapter 2: Benthic subtidal ecology (S_D6_17). Therefore, there is no change from the Morgan Generation Assets CEA (for long term habitat loss), and the cumulative effects remain of minor adverse significance during construction and operations and maintenance. 	

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Topic	Review of potential for further cumulative effects	Effect on conclusions of the ES
	<ul style="list-style-type: none"> Introduction of artificial structures and Increased risk of introduction and spread of invasive non-native species: the introduction and spread of invasive non-native species (INNS) during all phases may be facilitated by increased vessel traffic and the presence of introduced hard substrate. For the East Irish Sea Transmission Project, whilst there may be some introduced hard substrate in the form of cable protection, the project is unlikely to give rise to significant marine traffic levels. For the Tier 1 Eni Hynet – CCS Project, Chapter 7: Marine Biodiversity assessment of the Environmental Statement (Liverpool Bay CCS Ltd., 2024) accounts for the creation of up to 64,169 m² of new hard substrate, up to 236 vessel return trips during the construction phase and up to 750 return trips over the 25 year lifetime of the project. These represent small increases compared to the Tier 1 cumulative introduction of artificial structures of 7.10 km² identified in Volume 2, Chapter 2: Benthic subtidal ecology (S_D6_17). The increases associated with the East Irish Sea Transmission Project and the Eni Hynet – CCS Project are not considered to result in a change to the Morgan Generation Assets CEA, and the cumulative effects remain of minor adverse significance during construction, operations and maintenance and decommissioning. 	
Fish and shellfish ecology (Volume 2, Chapter 3 (S_D6_18))	<p>The East Irish Sea Transmission Project and Eni Hynet – CCS Project are two projects that have been identified as having potential for additional cumulative effects with the Morgan Generation Assets for fish and shellfish ecology. It should be noted that no information is currently available in the public domain concerning the East Irish Sea Transmission Project to quantify the potential cumulative fish and shellfish impact from this project, and therefore a high level review has been carried out on a conceptual basis. The cumulative effects assessed in Volume 2, Chapter 3: Fish and shellfish ecology (S_D6_18)) with potential to be influenced by the new project information include:</p> <ul style="list-style-type: none"> Temporary habitat loss/disturbance: both projects have the potential to cause temporary habitat loss/disturbance during the construction phase. Should the East Irish Sea Transmission Project cable route pass through the north and east section of the fish and shellfish CEA study area, cable installation (methods are currently not specified but are likely to be via trenching with associated sidelaying of sediment) may cause temporary habitat loss/disturbance. There is potential for cumulative impacts if the construction periods for the East Irish Sea Transmission Project and the Morgan Array Area overlap, however the cable installation impacts are likely to represent only a small footprint, and the impacts will be temporary and reversible. For the Eni Hynet – CCS Project, Chapter 7: Marine Biodiversity assessment of the Environmental Statement (Liverpool Bay CCS Ltd., 2024) accounts for up to 1.91 km² of temporary habitat loss/disturbance, which is only a small increase compared to the cumulative 200 km² of temporary habitat loss identified for Tier 1 projects across the fish and shellfish CEA study area in Volume 2, Chapter 3: Fish and shellfish ecology (APP-021), with recovery of habitats and associated species associated with them occurring following completion of works. Therefore, there is no change in the conclusion to the Morgan Generation Assets CEA, and the effects are considered to remain negligible to minor adverse. Increases in SSC: the East Irish Sea Transmission Project has the potential to cause increases in SSC during the construction phase, which could have a cumulative impact if the construction phases for this project and the Morgan Generation Assets overlap. Should the East Irish Sea Transmission Project cable route pass through the north and east section of the fish and shellfish CEA study area, cable installation via trenching with associated construction sediment plumes may cause increases in SSC. The cable installation impacts are likely to represent only a small 	No change to the conclusions of the Environmental Statement.

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Topic	Review of potential for further cumulative effects	Effect on conclusions of the ES
	<p>footprint, and the impacts are known to be temporary and reversible. Therefore, there is no change to the conclusion of the Morgan Generation Assets CEA, and the effects are considered to remain negligible to minor adverse.</p> <ul style="list-style-type: none"> • Long term habitat loss: both projects have the potential to cause long term habitat loss cumulatively with the Morgan Generation Assets during the construction and operations and maintenance phases. Should the East Irish Sea Transmission Project cable route pass through the north and east section of the fish and shellfish CEA study area, any cable protection (if required on unburied cable) will represent an area of long term habitat loss which could potentially impact fish and shellfish communities. However, any additional cable protection is likely to be small, relative to that assessed for the Morgan Generation Assets, and habitats in the surrounding fish and shellfish CEA study area. For the Eni-Hynet – CCS Project, Chapter 7: Marine Biodiversity assessment of the Environmental Statement (Liverpool Bay CCS Ltd., 2024) accounts for up to 64,169 m² of long term habitat loss due to the installation of foundations and cable crossing protection, which is a negligible increase compared to the >6 km² of cumulative long term habitat loss identified from Tier 1 projects in Volume 2, Chapter 3: Fish and shellfish ecology (S_D6_18). Therefore, there is no change to the conclusion of the Morgan Generation Assets CEA, and the effects are considered to remain negligible to minor adverse. • Electromagnetic fields: the East Irish Sea Transmission Project has the potential to cause cumulative impacts from the introduction of additional electromagnetic fields around cables during the operations and maintenance phase. Should the East Irish Sea Transmission Project cable route pass through the north and east section of the fish and shellfish CEA study area, the increased electromagnetic field impacts from the addition of the cable(s) are unlikely to be significant due to the attenuation of electromagnetic fields over distance (with effects, should they occur, limited to a few metres from the buried cable), and as the cable(s) is expected to be buried either beneath surface sediments or by cable protection, further reducing any potential impact on fish and shellfish receptors. Therefore, there will be no change to the conclusion of the Morgan Generation Assets CEA, and the effects are considered to remain negligible to minor adverse. • Colonisation of hard structures: both projects have the potential to provide habitat which allows the colonisation of hard structures during the construction and operations and maintenance phases. Should the East Irish Sea Transmission Project cable route pass through the north and east section of the fish and shellfish CEA study area, any cable protection (if required) will represent an area of hard structures on which colonisation could occur. This is likely to be small relative to that assessed for the Morgan Generation Assets. For the Eni-Hynet – CCS Project, Chapter 7: Marine Biodiversity assessment of the Environmental Statement (Liverpool Bay CCS Ltd., 2024) accounts for the introduction of up to 64,169 m² of hard structures on which colonisation could occur, which is a negligible increase compared to the >6 km² of cumulative introduction of hard structures for all Tier 1 projects identified in Volume 2, Chapter 3: Fish and shellfish ecology (S_D6_18). Therefore, there is no change to the Morgan Generation Assets CEA, and the effects are considered to remain minor adverse. • Underwater sound (UXO, piling or other construction sounds): both projects have the potential to cause increased underwater sound impacts during the construction phase. Should the East Irish Sea Transmission Project cable route pass through the north and east section of the fish and shellfish CEA study area, cable installation via trenching is highly unlikely to significantly increase the overall underwater sound impacts if the construction periods overlap. 	

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	<p>The requirement for the disposal of unexploded ordnance (UXO) for the East Irish Sea Transmission Project is not currently known, but effects associated with clearance operations are unlikely to be considerably different to those identified for the Morgan Generation Assets. For the Eni-Hynet – CCS Project, Chapter 7: Marine Biodiversity assessment of the Environmental Statement accounts for clearance of UXO with a net explosive quantity of up to 1,000 kg, which is similar to the net explosive quantity of 907 kg identified in Volume 2, Chapter 3: Fish and shellfish ecology (S_D6_18), but is only likely to have a significant cumulative impact if the UXO clearance operations overlap temporally due to their very short term effects (particularly on fish behaviour). In light of recent policy guidance on UXO clearance it is anticipated that there will be a priority for low order clearance (rather than high order detonation) in which case there are unlikely to be cumulative effects. The Eni-Hynet - CCS Project also involves installation of up to four pin-piled jacket foundations with two piles per leg, with a maximum piling time of approximately 13.5 hours, which is a negligible increase compared to the cumulative total number of days piling (i.e. >300 days) for all Tier 1 projects including the Morgan Generation Assets. Therefore, there is no change to the overall conclusion in the Morgan Generation Assets CEA, and the effects are considered to remain minor to moderate adverse during construction, with mitigation measures to reduce effects on spawning herring and cod to be agreed via the Underwater Sound Management Strategy (UWSMS; S_D6_30).</p>	
<p>Marine mammals (Volume 2, Chapter 4 (S_D6_19))</p>	<p>The Eni Hynet – CCS Project and Sceirde Rocks Wind Farm are two projects that have been identified as having potential for additional cumulative effects with the Morgan Generation Assets for marine mammals. The cumulative effects assessed in Volume 2, Chapter 4: Marine mammals (S_D6_19)) with potential to be influenced by the new project information include:</p> <ul style="list-style-type: none"> Underwater sound (piling, UXO clearance or other construction sounds): all three projects have the potential to cause increased underwater sound impacts during the construction phase. <ul style="list-style-type: none"> Eni-Hynet – CCS Project: Chapter 7: Marine Biodiversity assessment of the Environmental Statement for this project accounts for clearance of UXO with a net explosive quantity of up to 1,000 kg, which is similar to the net explosive quantity of 907 kg identified in Volume 2, Chapter 4: Marine mammals (S_D6_19). In light of recent policy guidance on UXO clearance it is anticipated that there will be a priority for low order clearance (rather than high order detonation) in which case there are unlikely to be cumulative effects. In addition, clearance operations are short term activities and therefore there is unlikely to be any overlap between the two projects and so less potential for a cumulative effect pathway. The Eni-Hynet - CCS Project involves installation of up to four pin-piled jacket foundations with two piles per leg, with a maximum total piling time of approximately 13.5 hours, which is a negligible increase compared to the Morgan Generation Assets which assessed up to 1,152 hours of piling for wind turbine foundations and 216 hours of piling for Offshore Substation Platforms. Site investigation (SI) surveys were assessed for the Eni-Hynet project with respect to up to two survey vessels carrying out two surveys each over a maximum of three months. Short timescales for these surveys mean that there is a low likelihood of overlap with the Morgan Generation Assets SI surveys and the cumulative assessment already considered the worst case in terms of the numbers of SI surveys that could coincide within the marine mammals CEA study area. In addition, the modelled ranges of effect for injury were up to 490 m (maximum across all species) and up to 800 m for strong disturbance and 13 km for mild disturbance (Liverpool Bay CCS 	<p>No change to the conclusions of the Environmental Statement.</p>

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Topic	Review of potential for further cumulative effects	Effect on conclusions of the ES
	<p>Ltd, 2024). Therefore there is no change to the overall conclusion in the Morgan Generation Assets CEA, and the cumulative effects of underwater sound (all activities) are considered to remain minor to moderate adverse during construction, with mitigation measures to reduce effects on marine mammals to be agreed via the Underwater Sound Management Strategy (UWSMS; S_D6_30).</p> <ul style="list-style-type: none"> – Sceirde Rocks Wind Farm: The Sceirde Rocks Environmental Statement identified acoustic impacts to marine mammals associated with pre-construction activities (site investigation), seabed preparation associated with foundation installation (gravity bases) for 30 wind turbines and one offshore substation platform and cable installation (trenching, rock placement and cable laying), and UXO clearance (Sceirde Rocks Offshore Wind Ltd, 2025). The assessment found that for most construction activities effects would be of low magnitude and not significant for both injury and behavioural effects. The exception to this was for UXO clearance in respect of high order detonation where, in the absence of mitigation, a significant effect was found for minke whale. However, the project has stated a commitment to using low order clearance (deflagration) where possible and adherence to a marine mammal mitigation protocol (MMMP) to ensure the risk of injury is reduced, and with these measures in place the project has concluded no significant effect. In addition, there is unlikely to be any spatial overlap in effects as this project is located off the west coast of Ireland and temporally, it is unlikely that UXO clearance activities would overlap due to differences in construction schedules. Therefore there is no change to the overall conclusion in the Morgan Generation Assets CEA, and the cumulative effects of underwater sound (all activities) are considered to remain minor to moderate adverse during construction, with mitigation measures to reduce effects on marine mammals to be agreed via the Underwater Sound Management Strategy (UWSMS; S_D6_30). • Underwater sound and collision risk associated with an uplift in vessel activity during the construction, operations and maintenance and decommissioning phases of the cumulative projects. <ul style="list-style-type: none"> – Both projects will contribute to an uplift in vessel activity at different phases of the project within the marine mammal CEA study area. The Eni-Hynet – CCS Project (Liverpool Bay CCS Ltd, 2024) assessed up to 236 and 750 vessel round trips over the construction and operations and maintenance phases respectively. The assessment concluded that the magnitude of effects would be negligible (construction)/minor (operations and maintenance) and therefore not significant in Environmental Impact Assessment (EIA) terms. Similarly, there was no significant effect predicted for injury due to collisions with vessels for any phase of the project. Sceirde Rocks Wind Farm (Sceirde Rocks Offshore Wind Ltd, 2025) has estimated up to 23 vessels associated with pre-construction and construction phases (over a four year timeframe) with up to 11 on site at any one time. During the operations and maintenance phase there would be up to three vessels on site at any one time. The assessment concluded that there would be an imperceptible negative effect of physical disturbance from vessels on marine mammals at the offshore site and a slight negative effect on bottlenose dolphin within the coastal areas of the Lower River Shannon Estuary SAC during the construction phase only. Similarly, vessel activities are associated with a slight negative effect of injury to marine mammals from collisions. With mitigation in place via a Vessel Management Plan, overall there would be no significant effect for either physical disturbance or injury from collisions. In summary, there is no change to the overall conclusion in the Morgan Generation Assets CEA, and the cumulative effects of vessel presence (underwater sound and collision risk) are considered to 	

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Topic	Review of potential for further cumulative effects	Effect on conclusions of the ES
	<p>remain minor adverse during the construction, operations and maintenance and decommissioning phases, with best practice measures for the Morgan Generation Assets implemented via the Outline vessel traffic management plan (REP5-037) and Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels (REP5-046).</p> <ul style="list-style-type: none"> Changes to fish and shellfish assemblages affecting prey availability associated with all phases of the cumulative projects. <ul style="list-style-type: none"> Both additional projects may lead to potential changes in fish and shellfish assemblages which have been assessed in full in Volume 2; Chapter 3: Fish and shellfish ecology (APP-021).. The Eni-Hynet – CCS Project (Liverpool Bay CCS Ltd, 2024) assessed changes in prey species arising from temporary and long term habitat loss (all phases), underwater sound (construction and decommissioning) and increased SSCs and associated deposition (construction and decommissioning). For all phases the impact was assessed as low magnitude and not significant. Sceirde Rocks Wind Farm (Sceirde Rocks Offshore Wind Ltd, 2025) assessed changes in habitat associated with the presence of wind turbines and offshore substation platforms which will be on gravity base foundations. The assessment highlighted that whilst there is some loss in seabed there will also be habitat creation which may infer benefits via colonisation of benthic and fish communities. Both adverse and beneficial effects were, however, assessed as negligible and not significant. Marine mammals exploit a range of prey species and can cover extensive distances to forage, therefore, small localised impacts are unlikely to affect individuals which may move to alternative habitat. In summary, there is no change to the overall conclusion in the Morgan Generation Assets CEA, and the cumulative effects of changes in fish and shellfish communities are considered to remain minor adverse during the construction, operations and maintenance and decommissioning phases. 	
Offshore ornithology (Volume 2, Chapter 5 (S_D6_20))	<p>The Eni Hynet – CCS Project has been identified as having potential for additional cumulative effects with the Morgan Generation Assets for offshore ornithology. The cumulative effects assessed in Volume 2, Chapter 5: Offshore ornithology (S_D6_20)) with potential to be influenced by the new project information include:</p> <ul style="list-style-type: none"> Disturbance and displacement from airborne noise, underwater sound, and presence of vessels and infrastructure. <ul style="list-style-type: none"> The Eni-Hynet – CCS Project assessed up to 236 and 750 vessel round trips over the construction and operations and maintenance phases respectively. This is considered to represent a small increase in the total number of vessel movements that will occur in the offshore ornithology CEA study area. The cumulative assessment for the Morgan Generation Assets concluded that the magnitude of effects would be negligible for all species in all construction phases and therefore not significant in EIA terms. In summary, there is no change to the overall conclusion in the Morgan Generation Assets CEA, and the cumulative effects of disturbance and displacement from airborne noise, underwater sound, and presence of vessels and infrastructure are considered to remain unchanged during the construction, operations and maintenance and decommissioning phases. Indirect impacts from underwater sound affecting prey species. 	No change to the conclusions of the Environmental Statement.

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Topic	Review of potential for further cumulative effects	Effect on conclusions of the ES
	<ul style="list-style-type: none"> – The Eni-Hynet – CCS Project may lead to potential changes in benthic, fish and shellfish assemblages which have been assessed in full in Volume 2, Chapter 2: Benthic subtidal ecology (S_D6_17) and Volume 2, Chapter 3: Fish and shellfish ecology (S_D6_18). In Volume 2, Chapter 5: Offshore ornithology, it was considered that the magnitude of temporary habitat loss/disturbance and increased SSCs would not be significant at a population level for any offshore ornithology receptor and would therefore not be significant. This conclusion is considered to remain valid even with the inclusion of the additional projects identified. • Temporary habitat loss/disturbance and increased SSCs. <ul style="list-style-type: none"> – In Volume 2, Chapter 5: Offshore ornithology, it was considered that the magnitude of temporary habitat loss/disturbance and increased SSCs would not be significant at a population level for any offshore ornithology receptor and would therefore not be significant. This conclusion is considered to remain valid even with the inclusion of the Eni-Hynet – CCS Project. 	
Commercial fisheries (Volume 2, Chapter 6 (APP-024))	<p>The proposed route of the East Irish Sea Transmission Project is currently unknown, however based on the indicative location made available by Moir Vannin Offshore Wind Farm Limited (2024) there is potential for the cable to be located within the commercial fisheries CEA study area for the Morgan Generation Assets. The cumulative effects assessed in Volume 2, Chapter 6: Commercial fisheries (APP-024)) with potential to be influenced by the new project information include:</p> <ul style="list-style-type: none"> • Cable laying and maintenance activities may result in a temporary loss of or restricted access to fishing grounds: As these activities will be short term and confined to discrete spatial areas, no cumulative effect on temporary loss of or restricted access to fishing grounds is expected. • Permanent seabed infrastructure (e.g. external rock protection where target burial depth cannot be achieved) may increase the risk of gear snagging: Due to the predominantly subsurface nature of the East Irish Sea Transmission Project, no cumulative effect on gear snagging risk is anticipated. 	No change to the conclusions of the Environmental Statement.
Shipping and navigation (Volume 2, Chapter 7 (S_D6_21))	<p>The proposed route of the East Irish Sea Transmission Project is currently unknown, however based on the indicative location made available by Moir Vannin Offshore Wind Farm Limited (2024) there is potential for the cable to be located within the shipping and navigation CEA study area for the Morgan Generation Assets. The cumulative effects assessed in Volume 2, Chapter 7: Shipping and navigation (S_D6_21)) with potential to be influenced by the new project information include:</p> <ul style="list-style-type: none"> • Effects on sea lanes or vessel routing in typical or adverse weather conditions: Given the subsurface nature of the East Irish Sea Transmission Project, no cumulative effect on sea lanes or vessel routing in typical or adverse weather conditions is anticipated. • Increase in search and rescue requirements: Whilst there may be an increase in search and rescue requirements as a result of more activities within the Irish Sea, the cumulative increase is not anticipated to be substantially different to the projects in isolation. 	<p>Following the increased separation between the Morgan Array Area and Moir Vannin Offshore Array Area, the cumulative impact on vessel to vessel collision risk and allision risk with Tier 1 and Tier 2 projects is now concluded to be minor.</p> <p>There are no other changes to the</p>

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Topic	Review of potential for further cumulative effects	Effect on conclusions of the ES
	<ul style="list-style-type: none"> • Increase in collision risk involving Morgan Generation Assets vessels and vessels constructing or maintaining the East Irish Sea Transmission Project: It is not anticipated that the increased vessel movements associated with the East Irish Sea Transmission Project will substantially alter the risk of collision, given the presence of proposed risk controls and international conventions such as the Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGs). • Increase in allision risk with structures in the Irish Sea: Allision risk may increase during construction periods associated with the East Irish Sea Transmission Project by offsetting vessel traffic towards the Morgan Generation Assets. This is anticipated to be a for a short duration and there is sufficient searoom around the Morgan Generation Assets to accommodate this without a substantial increase in risk. • Effects on recreational passages or vessel equipment: Given the subsurface nature of the East Irish Sea Transmission Project, no cumulative effect on recreational passages or vessel equipment is anticipated. • Increase in snagging risk due to increased underwater infrastructure: It is anticipated that cable protection and/or burial will manage the risk in line with industry best practice. • Reduction in Under Keel Clearance in areas of cable crossings: The depth of water is deep enough that this will not affect the risk of grounding for vessels in the shipping and navigation CEA study area. <p>The Moor Vannin Offshore Wind Farm was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The Moor Vannin site area has reduced since the publication of the Scoping Report, increasing the gap between the Morgan Array Area and the Moor Vannin Offshore Wind Farm to 4.1 nm, and the number of wind turbines has reduced. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets. The implications of the increased separation distance between the Morgan Generation Assets and the Moor Vannin Offshore Wind Farm has been set out in the Applicant's Morgan - Moor Vannin gap - navigational safety review technical clarification note (S_D6_42), where it was concluded that there are no unacceptable risks to navigational safety associated with the Morgan Generation Assets, including cumulative effects with the refined Moor Vannin Offshore Wind Farm, and all risks have been reduced to ALARP. The cumulative impact on navigational safety with Tier 1 and Tier 2 projects is now concluded to be minor, which is not significant in EIA terms. There is no change to the conclusions of other cumulative impacts assessed within Volume 2, Chapter 7: Shipping and navigation (S_D6_21).</p>	conclusions of the Environmental Statement from the CEA Review.
Marine archaeology and cultural heritage (Volume 2, Chapter 8 (APP-026))	<p>The proposed route of the East Irish Sea Transmission Project is currently unknown, however based on the indicative location made available by Moor Vannin Offshore Wind Farm Limited (2024) there is potential for the cable to be located within the marine archaeology CEA study area for the Morgan Generation Assets. The cumulative effects assessed in Volume 2, Chapter 8: Marine archaeology and cultural heritage (APP-026)) with potential to be influenced by the new project information include:</p> <ul style="list-style-type: none"> • Sediment disturbance and deposition leading to indirect impacts on marine archaeology receptors: As these activities would be of limited spatial extent and frequency and unlikely to interact with sediment plumes from the Morgan Generation Assets, the magnitude of any cumulative impact is considered to be low. Therefore, there will 	No change to the conclusions of the Environmental Statement.

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Topic	Review of potential for further cumulative effects	Effect on conclusions of the ES
	<p>be no change to the conclusion of the Morgan Generation Assets CEA, and the effects are considered to remain minor adverse.</p> <ul style="list-style-type: none"> • Direct damage to marine archaeology receptors: As there will be no spatial overlap between the Morgan Generation Assets and the East Irish Sea Transmission Project, there will be no impact pathway for direct cumulative effects between these projects. • Alteration of sediment transport regimes: As there is not expected to be any infrastructure above the seabed for the East Irish Sea Transmission Project, there will be no impact pathway for this indirect cumulative effect. 	
Other sea users (Volume 2, Chapter 9 (S_D6_22))	<p>The proposed route of the East Irish Sea Transmission Project is not currently known however based on the indicative location made available by Moir Vannin Offshore Wind Farm Limited (2024) there is potential for the cable to be located within the other sea users CEA study area for the Morgan Generation Assets. The following potential cumulative impact is of relevance to this project:</p> <ul style="list-style-type: none"> • Displacement of recreational activities: Recreational vessels may be displaced by activities underway at multiple offshore wind and cable projects, however the frequency of the potential impact is considered to be low as individual offshore cruising routes and activities are unlikely to cross multiple project areas. The spatial extent of the potential impact will be relatively small in the context of the available sailing and recreational fishing area in the east Irish Sea, with the potential for localised displacement of recreational craft. Recreational vessels are able to alter their route, dependent on the target destination. Notices to Mariners will be publicised regularly in line with industry standard, advising of the location and nature of any construction or operational activities, ensuring that recreational activities can be planned accordingly. As such, there are no changes to the conclusions of the Morgan Generation Assets CEA and the potential impact remains of minor adverse significance. 	No change to the conclusions of the Environmental Statement.

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Table 1.6: Review of project updates that may affect in-combination effects assessment in the Morgan Generation Assets ISAA.

Topic	Review of potential for further in-combination effects	Effect on conclusions of the ISAA
HRA Stage 2 ISAA - Annex II diadromous fish (APP-097)	<p>There is potential for the East Irish Sea Transmission Project to be located within the fish and shellfish ecology CEA study area. Review of the cumulative effects with potential to be influenced by this project is presented in Table 1.5 above. For all potential in-combination effects, there is no predicted change to the conclusions of the ISAA.</p> <p>There is potential for the Eni-Hynet – CCS Project to be located within the fish and shellfish ecology CEA study area. Review of the cumulative effects with potential to be influenced by this project is presented in Table 1.5. For all potential in-combination effects, there is no predicted change to the conclusions of the ISAA.</p>	No change to the conclusions of the ISAA.
HRA Stage 2 ISAA - Annex II marine mammals (APP-097)	<p>There is the potential for in-combination effects from underwater sound generation as a result of the construction phase of the Morgan Generation Assets with other projects that involve pile driving and UXO clearance (as set out in Table 1.5). As noted in the review for marine mammals in Table 1.5 there is no predicted significant change to the conclusions in the Morgan Generation Assets CEA, and the cumulative effects of subsea noise (all activities) are considered to remain the same. Furthermore, in light of recent policy guidance on UXO clearance it is anticipated that there will be a priority for low order clearance for all future projects (rather than high order detonation) in which case there are unlikely to be cumulative effects.</p> <p>The Morgan Generation Assets ISAA concluded that, even though a conclusion of moderate (adverse) significance was identified for bottlenose dolphin for the impact of disturbance from piling sound (for the Irish Sea MU), adverse effects on the integrity of any sites considered in the ISAA could be ruled out.</p> <p>Therefore, as there is no change to the conclusions of the Morgan Generation Assets CEA, then no change is considered to apply to the conclusions of the ISAA.</p>	No change to the conclusions of the ISAA.
HRA Stage 3 ISAA - Offshore ornithology (APP-098)	<p>The Eni Hynet – CCS Project has been identified as having potential for additional cumulative effects with the Morgan Generation Assets for offshore ornithology.</p> <p>Review of the cumulative effects with potential to be influenced by this project is presented in Table 1.5. For all potential in-combination effects, there is no predicted change to the conclusions of the ISAA.</p> <p>There are no further impacts considered in HRA Stage 2 information to support an appropriate assessment Part Three: Special Protection Areas and Ramsar Site assessments (APP-098) that the additional project will contribute to in-combination with the Morgan Generation Assets.</p>	No change to the conclusions of the ISAA.

1.5 Conclusions

- 1.5.1.1 This document has presented a review of the CEA and in-combination assessments presented in the Morgan Generation Assets application documents, published in April 2024. This review has considered all relevant known projects that have been published since the previous review (REP2-023) up to 31 January 2025. New or further information has been published on a number of projects, and the review identified four projects that have the potential to result in cumulative effects. Of these projects:
- One is a transmission and grid connection project for an offshore wind farm (identified as a new project at Tier 3)
 - One is a CCS project (Tier updated from Tier 2 to Tier 1)
 - One is an offshore wind project (Tier updated from Tier 2 to Tier 1)
 - One is an offshore wind project that additional information has been made available for (remains at Tier 2).
- 1.5.1.2 The Applicant has undertaken a review of the projects, including reviewing applicable Environmental Statements and application documents where available, to identify if these projects could result in a change to the conclusions of the CEA and in-combination assessments presented in the Morgan Generation Assets application. For all four projects reviewed, there is no potential for new cumulative effects to arise or an increase in cumulative effects for each of the topics considered. The conclusions of the Morgan Generation Assets CEA and in-combination assessments therefore remain unchanged, except for shipping and navigation, where following the increased separation between the Morgan Array Area and Mooir Vannin Offshore Array Area, the cumulative impact on vessel to vessel collision risk and allision risk with Tier 1 and Tier 2 projects is now concluded to be minor, which is not significant in EIA terms.
- 1.5.1.3 As no changes to the assessment conclusions have been identified for Scenario 3 (except for shipping and navigation, as noted above), which considers the Morgan Generation Assets plus Morgan and Morecambe Offshore Wind Farms: Transmission Assets plus other projects and plans, the same conclusion automatically applies to Scenario 2, which considers the Morgan Generation Assets plus Morgan and Morecambe Offshore Wind Farms: Transmission Assets and the Morecambe Offshore Windfarm: Generation Assets.

1.6 References

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Sceirde Rocks Offshore Wind Farm (2025) Environmental Statement Chapter 12: Marine Mammals and other Megafauna. Available: [REDACTED]. Accessed: January 2025.

Appendix A: CEA Screening Justification

The justification for projects screened out of the CEA review in accordance with the defined criteria is presented in Table A.1 and Table A.2.

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Table A.1: Justification for projects screened out of the CEA review.

Topic	Projects with potential for additional cumulative effects with the Morgan Generation Assets			
	East Irish Sea Transmission Project	Eni Hynet – CCS Project	Sceirde Rocks Wind Farm	Moor Vannin Offshore Wind Farm
Physical processes (Volume 2, Chapter 1 (S_D6_16))	Yes (c)	No (d)	No (d)	No (h)
	<p>Eni Hynet – CCS Project and Sceirde Rocks Wind Farm are both beyond the physical processes CEA study area and are therefore not considered further in the review (i.e. no physical effect-receptor pathway).</p> <p>The Moor Vannin Offshore Wind Farm was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The Moor Vannin site area has reduced since the publication of the Scoping Report, and the number of wind turbines has reduced, therefore the magnitude of the potential cumulative impacts is likely to be the same, or less, than that assessed in the Morgan Generation Assets CEA. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets.</p>			
Benthic subtidal ecology (Volume 2, Chapter 2 (S_D6_17))	Yes (c)	Yes (c)	No (d)	No (h)
	<p>Sceirde Rocks Wind Farm is beyond the benthic subtidal ecology CEA study area and therefore not considered further in the review (i.e. no physical effect-receptor pathway).</p> <p>The Moor Vannin Offshore Wind Farm was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The Moor Vannin site area has reduced since the publication of the Scoping Report, and the number of wind turbines has reduced, therefore the magnitude of the potential cumulative impacts is likely to be the same, or less, than that assessed in the Morgan Generation Assets CEA. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets.</p>			
Fish and shellfish ecology (Volume 2, Chapter 3 (S_D6_18))	Yes (c)	Yes (c)	No (d)	No (h)
	<p>Sceirde Rocks Wind Farm is beyond the fish and shellfish ecology CEA study area and therefore not considered further in the review (i.e. no physical effect-receptor pathway).</p> <p>The Moor Vannin Offshore Wind Farm was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The Moor Vannin site area has reduced since the publication of the Scoping Report, and the number of wind turbines has reduced, therefore the magnitude of the potential cumulative impacts is likely to be the same, or less, than that assessed in the Morgan Generation Assets CEA. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets.</p>			

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Topic	Projects with potential for additional cumulative effects with the Morgan Generation Assets			
	East Irish Sea Transmission Project	Eni Hynet – CCS Project	Sceirde Rocks Wind Farm	Moor Vannin Offshore Wind Farm
Marine mammals (Volume 2, Chapter 4 (S_D6_19))	No (h)	Yes (c)	Yes (c)	No (h)
	<p>Little is known about the project parameters for the East Irish Sea Transmission Project however it is considered there is no potential for temporary cable installation activities associated with the East Irish Sea Transmission Project to significantly increase the cumulative effects assessed within the Morgan Generation Assets application based on receptor-impact pathways, and therefore this project was screened out of the CEA review.</p> <p>The Moor Vannin Offshore Wind Farm was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The Moor Vannin site area has reduced since the publication of the Scoping Report, and the number of wind turbines has reduced, therefore the magnitude of the potential cumulative impacts is likely to be the same, or less, than that assessed in the Morgan Generation Assets CEA. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets.</p>			
Offshore ornithology (Volume 2, Chapter 5 (S_D6_20))	No (d)	Yes (c)	No (d)	No (h)
	<p>There is no potential for temporary cable installation activities associated with the East Irish Sea Transmission Project to increase the cumulative effects assessed within the Morgan Generation Assets application, and therefore this project was screened out of the CEA review.</p> <p>Sceirde Rocks Wind Farm is beyond the offshore ornithology CEA study area and therefore not considered further in the review (i.e. no physical effect-receptor pathway).</p> <p>The Moor Vannin Offshore Wind Farm was screened out of the CEA for offshore ornithology receptors in Volume 3, Annex 5.1: Cumulative effects screening matrix (APP-031) as relevant information to inform the cumulative assessment with the Moor Vannin Offshore Wind Farm was not available. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not provide additional information that would allow for the inclusion of the project in the cumulative assessments conducted for the Morgan Generation Assets.</p>			
	Yes (c)	No (h)	No (d)	No (h)

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Topic	Projects with potential for additional cumulative effects with the Morgan Generation Assets			
	East Irish Sea Transmission Project	Eni Hynet – CCS Project	Sceirde Rocks Wind Farm	Moor Vannin Offshore Wind Farm
Commercial fisheries (Volume 2, Chapter 6 (APP-024))	<p>The Eni Hynet – CCS Project will repurpose pre-existing oil and gas infrastructure, effectively transforming the site into a CCS facility with minimal changes to the surrounding marine environment. Where new infrastructure is required, it will be installed either within the existing operational footprint or in close proximity to existing linear infrastructure. Given the limited environmental changes and additional activities associated with this project, it was screened out of the CEA for commercial fisheries receptors in Volume 3, Annex 5.1: Cumulative effects screening matrix (APP-031). The updated information presented in the final application does not introduce new potential cumulative effects with the Morgan Generation Assets, and therefore, the project has been screened out of the CEA review.</p> <p>Sceirde Rocks Wind Farm is outside the commercial fisheries CEA study area and therefore not considered further in the review (i.e. no physical effect-receptor pathway).</p> <p>The Moor Vannin Offshore Wind Farm was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The Moor Vannin site area has reduced since the publication of the Scoping Report, and the number of wind turbines has reduced, therefore the magnitude of the potential cumulative impacts is likely to be the same, or less, than that assessed in the Morgan Generation Assets CEA. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets.</p>			
Shipping and navigation (Volume 2, Chapter 7 (S_D6_21))	Yes (c)	No (h)	No (d)	Yes (c)
	<p>The Eni Hynet – CCS Project was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The updated information presented in the final application does not result in the potential for additional cumulative effects with the Morgan Generation Assets due to limited additional activities and the spatial separation from the Morgan Generation Assets, and therefore this project has been screened out of the CEA review.</p> <p>Sceirde Rocks Wind Farm is beyond the shipping and navigation CEA study area and therefore is not considered further in the review (i.e. no physical effect-receptor pathway).</p>			
Marine archaeology and cultural heritage (Volume 2, Chapter 8 (APP-026))	Yes (c)	No (d)	No (d)	No (d)
	Eni Hynet – CCS Project, Sceirde Rocks Wind Farm and Moor Vannin Offshore Wind Farm are all beyond the marine archaeology and cultural heritage CEA study area and are therefore not considered further in the CEA review (i.e. no physical effect-receptor pathway).			
	Yes (c)	No (h)	No (d)	No (h)

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Topic	Projects with potential for additional cumulative effects with the Morgan Generation Assets			
	East Irish Sea Transmission Project	Eni Hynet – CCS Project	Sceirde Rocks Wind Farm	Moor Vannin Offshore Wind Farm
Other sea users (Volume 2, Chapter 9 (S_D6_22))	<p>The Eni Hynet – CCS Project was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The updated information presented in the final application does not result in the potential for additional cumulative effects with the Morgan Generation Assets due to limited additional activities and the spatial separation from the Morgan Generation Assets, and therefore this project has been screened out of the CEA review.</p> <p>Sceirde Rocks Wind Farm is beyond the other sea users CEA study area and is therefore not considered further in the CEA review (i.e. no physical effect-receptor pathway).</p> <p>The Moor Vannin Offshore Wind Farm was assessed as a Tier 2 project within the Morgan Generation Assets CEA for the potential impacts of displacement of recreational activities and reduction or restriction of other offshore energy activities. The Moor Vannin site area has reduced since the publication of the Scoping Report, and the number of wind turbines has reduced, therefore the magnitude of the potential cumulative impacts is likely to be the same, or less, than that assessed in the Morgan Generation Assets CEA. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets.</p> <p>The Moor Vannin Offshore Wind Farm was screened out of the Morgan Generation Assets CEA for potential impacts to Radar Early Warning Systems (REWS) as relevant information to inform the cumulative assessment with the Moor Vannin Offshore Wind Farm was not available. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not provide additional information that would allow a cumulative assessment to be conducted on REWS.</p>			
	No (h)	No (h)	No (d)	No (h)

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Topic	Projects with potential for additional cumulative effects with the Morgan Generation Assets			
	East Irish Sea Transmission Project	Eni Hynet – CCS Project	Sceirde Rocks Wind Farm	Moor Vannin Offshore Wind Farm
Seascape, landscape and visual resources (Volume 2, Chapter 10 (S_D6_23)) as clarified in Annex 4.4 to the Applicant's response to EXQ1: SLVIA Clarification note (REP3-010)	<p>The East Irish Sea Transmission project is a new project identified within the SLVIA CEA study area, however, based on the information available to date, the construction of the subsea cable would not change the CEA for the Morgan Generation Assets.</p> <p>The Eni Hynet – CCS Project was screened out of the CEA for SLVIA receptors in Volume 3, Annex 5.1: Cumulative effects screening matrix (APP-031) as it was considered to have no potential to result in significant cumulative effects on seascape, landscape and visual receptors. The updated information on this project, presented in the final application, does not change the screening outcome. This is due to the scale and nature of the project along with the distance (31 km) to the Morgan Array Area.</p> <p>Sceirde Rocks Wind Farm is outside the SLVIA CEA study area and is therefore not considered further in the CEA review (i.e. no physical effect-receptor pathway).</p> <p>The Moor Vannin Offshore Windfarm was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets.</p>			
Aviation and radar (Volume 2, Chapter 11 (APP-015))	No (d)	No (d)	No (d)	No (h)
	<p>The East Irish Sea Transmission project is a new project identified within the aviation and radar CEA study area, however, there is no conceptual effect-receptor pathway with Morgan Generation Assets and therefore this project was screened out of the CEA review.</p> <p>The Eni Hynet – CCS Project was screened out of the CEA for aviation and radar receptors in Volume 3, Annex 5.1: Cumulative effects screening matrix (APP-031). The updated information presented in the final application does not change the screening outcome.</p> <p>Sceirde Rocks Wind Farm is beyond the aviation and radar CEA study area and therefore was not considered further in the CEA review (i.e. no physical effect-receptor pathway).</p> <p>The Moor Vannin Offshore Wind Farm was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets.</p>			
	No (h)	No (h)	No (d)	No (h)

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Topic	Projects with potential for additional cumulative effects with the Morgan Generation Assets			
	East Irish Sea Transmission Project	Eni Hynet – CCS Project	Sceirde Rocks Wind Farm	Moor Vannin Offshore Wind Farm
Socio-economics (Volume 2, Chapter 13 (S_D6_24))	<p>The East Irish Sea Transmission project is a new project identified within the socio-economics CEA study area. No additional cumulative effects with Morgan Generation Assets are anticipated, and therefore this project was screened out of the CEA review.</p> <p>The Eni Hynet – CCS Project was screened out of the CEA for socio-economics receptors in Volume 3, Annex 5.1: Cumulative effects screening matrix (APP-031) due to low data availability. The updated information presented in the final application does not result in the potential for additional cumulative effects with the Morgan Generation Assets, and therefore this project was screened out of the CEA review.</p> <p>Sceirde Rocks Wind Farm is outside the socio-economics CEA study area and therefore was not considered further in the CEA review (i.e. no physical effect-receptor pathway).</p> <p>The Moor Vannin Offshore Wind Farm was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets.</p>			
Human health (Volume 2, Chapter 14 (APP-018))	No (h)	No (d)	No (d)	No (h)
	<p>The projects, plans and activities scoped into the human health CEA are informed by those considered within the CEA for commercial fisheries, shipping and navigation, other sea users, SLVIA and socio-economics. The review for shipping and navigation and commercial fisheries identified the East Irish Sea Transmission Project as having potential to cause additional cumulative effects with the Morgan Generation Assets. The review for these topics, presented in Table 1.4, concluded that there would be no additional cumulative effects. All projects were therefore screened out of the CEA review for human health on the basis that the new or updated project information does not result in the potential for additional cumulative effects.</p>			

MORGAN OFFSHORE WIND PROJECT: GENERATION ASSETS

Table A.2: Justification for projects screened out of the in-combination assessment review.

Topic	Projects with potential for additional cumulative effects with the Morgan Generation Assets			
	East Irish Sea Transmission Project	Eni Hynet – Carbon Capture Project	Sceirde Rocks Windfarm	Moor Vannin Offshore Windfarm
HRA Stage 2 ISAA - Annex II diadromous fish (APP-097))	Yes (c)	Yes (c)	No (d)	No (h)
	<p>Sceirde Rocks Wind Farm is beyond the fish and shellfish ecology CEA study area and therefore was not considered further in the review (i.e. no physical effect-receptor pathway).</p> <p>The Moor Vannin Offshore Wind Farm was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets.</p>			
HRA Stage 2 ISAA - Annex II marine mammals (APP-097))	No (h)	Yes (c)	Yes (c)	No (h)
	<p>Little is known about the project parameters for the East Irish Sea Transmission Project however it is considered there is no potential for temporary cable installation activities associated with the East Irish Sea Transmission Project to significantly increase the cumulative effects assessed within the Morgan Generation Assets application based on receptor-impact pathways, and therefore this project was screened out of the CEA review.</p> <p>The Moor Vannin Offshore Wind Farm was assessed as a Tier 2 project within the Morgan Generation Assets CEA. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not result in the potential for additional cumulative effects with the Morgan Generation Assets.</p>			
HRA Stage 3 ISAA - Offshore ornithology (APP-098)	No (d)	Yes (c)	No (d)	No (h)
	<p>There is no potential for temporary cable installation activities associated with the East Irish Sea Transmission Project to increase the cumulative effects assessed within the Morgan Generation Assets application, and therefore this project was screened out of the CEA review.</p> <p>Sceirde Rocks Wind Farm is beyond the offshore ornithology CEA study area and therefore was not considered further in the CEA review (i.e. no physical effect-receptor pathway).</p> <p>The Moor Vannin Offshore Wind Farm was screened out of the CEA for offshore ornithology receptors in Volume 3, Annex 5.1: Cumulative effects screening matrix (APP-031) as relevant information to inform the cumulative assessment with the Moor Vannin Offshore Wind Farm was not available. The refinements to the project boundary and offshore infrastructure presented in Ørsted (2025) do not provide additional information that would allow for the inclusion of the project in the in-combination assessments conducted for the Morgan Generation Assets.</p>			