

# Outer Dowsing Offshore Wind

## BMV Quantitative Cumulative Assessment

### Deadline 4

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## Acronyms & Definitions

### Abbreviations / Acronyms

Abbreviation / Acronym	Description
ALC	Agricultural Land Classification
BMV	Best Most Versatile Land
CEA	Cumulative Effects Assessment
CPRE	Campaign to Protect Rural England
DCO	Development Consent Order
DEFRA	Department for Environment, Food and Rural Affairs
EIA	Environmental Impact Assessment
ISH2	Issue Specific Hearing 2
ISH3	Issue Specific Hearing 3
NSIP	Nationally Significant Infrastructure Project
oCoCP	Outline Code of Construction Practice
OLEMS	Outline Landscape and Ecological Management Strategy
oSMP	Outline Soil Management Plan
UAA	Utilised Agricultural Area
Zol	Zone of Influence

### Terminology

Term	Definition
<b>The Applicant</b>	GT R4 Ltd. The Applicant making the application for a DCO. The Applicant is GT R4 Limited (a joint venture between Corio Generation (and its affiliates), Total Energies and Gulf Energy Development (GULF)), trading as Outer Dowsing Offshore Wind. The Project is being developed by Corio Generation, TotalEnergies and GULF.
<b>Cumulative effects</b>	The combined effect of the Project acting additively with the effects of other developments, on the same single receptor/resource.
<b>Development Consent Order (DCO)</b>	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP).
<b>Environmental Impact Assessment (EIA)</b>	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Regulations, including the publication of an Environmental Statement (ES).
<b>The Project</b>	Outer Dowsing Offshore Wind, an offshore wind generating station together with associated onshore and offshore infrastructure.

# **1 BMV Quantitative Cumulative Assessment**

## **1.1 Introduction**

1. Point 11 of the actions arising from ISH3 held on Thursday 5 December 2024 (EV7-010) states “Provide an equivalent assessment to that submitted for the Rampion 2 project in relation to consideration of the cumulative effects at a national and regional scale of the loss of best and most versatile land”.
2. Based on the above request, the following assessment has been based on that submitted for Rampion 2 (EN010117 - APP-061), particularly with regards to structure and style. However, some variations have needed to be made, particularly with regards to updated data published by DEFRA, and the approach taken to establish a Zone of Influence (ZoI) for cumulative effects.

## **1.2 Approach**

3. A cumulative effects assessment (CEA) examines the combined impacts of Outer Dowsing Offshore Wind (The Project) in combination with other developments on the same single receptor or resource and the contribution of the Project to those impacts. The overall method followed in identifying and assessing potential cumulative effects in relation to the onshore environment is set out in Appendix 5.3: Onshore Cumulative Effects Assessment Approach.
4. The Applicant has adhered to the four-stage approach for identifying projects that may result in cumulative effects, as outlined in the updated guidance: Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment. This guidance aligns with Advice Note Seventeen (Planning Inspectorate, 2019), which was utilised in the EIA at DCO submission
5. As discussed with the Examining Authority in ISH2 (summarised in REP3-041, page 17) the Applicant intends to update its Environmental Statement at Deadline 5. As part of this update, the discussion in this note will be updated into the Land Use chapter.

## **1.3 Cumulative Effects Assessment**

6. Soils and agricultural land are essentially finite. non-renewable resources. In addition to the Project, other planned developments at both regional and national levels can lead to temporary disturbance and permanent loss of soils as a result of above-ground development. Such developments may result in soil removal and / or soil sealing on land currently used for agriculture, nature conservation or woodland, or may result in damage to soils caused by construction work, resulting in long term or permanent adverse effects on soil functions (such as contamination, compaction, and erosion).

7. Data published by Defra (2024) indicates that the Utilised Agricultural Area (UAA) in England decreased by 1% between 2023 and 2024, reducing to 8.7 million hectares, which equates to 67% of the total area of England. A review of all available data indicates the decreasing availability of agricultural land at a national level (including grassland, crop land, set-aside and bare / fallow land, and uncropped land) since 1983, with a reduction of 876,999 ha by 2024, representing a 7.0% decrease). Data from DEFRA covering the period 1983 to 2024, shows that the average annual loss of UAA is 0.166%).<sup>1</sup> Although details of land use change are not recorded with this data it is likely that a significant proportion of permanent loss of agricultural land and soil, relates to 'hard development' (as opposed to 'soft' development such as conversion to forestry). The proportion of BMV land in the figures for UAA is also not provided.
8. Defra's regional agricultural statistics for the East Midlands (Defra, 2024<sup>2</sup>), indicate that the total farmed area in 2023 was 1,172,000 hectares representing approximately 13.47 percent of the total UAA for England. However, historical data on farmed areas in the East Midlands, which would allow a comparison are not provided. It is therefore assumed that the long-term average annual loss of 0.166% of UAA is also likely to apply to the East Midlands, with an unknown proportion being BMV land.
9. A report by the CPRE (formerly The Campaign to Protect Rural England) (CPRE, 2022) uses available data on BMV land (provisional ALC mapping for ALC Grades 1 and 2, and post-1988 mapping for Subgrade 3a) to estimate the total area of BMV land in the East Midlands at 510,140ha. However, this excludes land mapped as provisional ALC Grade 3, which does not distinguish between Subgrade 3a (BMV) and Subgrade 3b (not BMV). Although this figure will include some Grade 1 and 2 land developed since the provisional mapping was produced, it is acknowledged by the CPRE that the true area of BMV land in the East Midlands is likely to be higher due to some Subgrade 3a land being unaccounted for. In the absence of data for the East Midlands showing the annual change in UAA, it is assumed that the annual loss of agricultural land is likely to be close to the average national rate of 0.166 percent<sup>3</sup>.
10. Overall, the Project will result in the permanent loss of up to 26.38ha of agricultural land, all of which is classified as BMV. The permanent loss represents 0.00225% of the 1,172,000 ha of total farmed area in the East Midlands in 2023 (Defra, 2024).
11. As previously noted, the Project has a three-year construction period over which temporary effects will occur, over a maximum area of 820.728ha, after which will follow an aftercare period as outlined in the OLEMS, oSMP, and oCOCP.

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<sup>1</sup> [https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fmedia%2F66f52505e84ae1fd8592e918%2FAgricultural\\_land\\_use\\_in\\_england-26sep24i.ods&wdOrigin=BROWSELINK](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fmedia%2F66f52505e84ae1fd8592e918%2FAgricultural_land_use_in_england-26sep24i.ods&wdOrigin=BROWSELINK) [Accessed 23 January 2025]

<sup>2</sup> <https://www.gov.uk/government/statistics/agricultural-facts-england-regional-profiles/agricultural-facts-east-midland-region> [Accessed 23 January 2025]

<sup>3</sup> <https://www.gov.uk/government/statistics/agricultural-land-use-in-england/agricultural-land-use-in-england-at-1-june-2024>

12. As described in Chapter 3: Project Description (APP-058), the Proposed Development is linear in nature and will be constructed in phases. As such, the temporary effects on BMV agricultural land and agricultural activity / productivity will not occur simultaneously.
13. For example, as detailed in the oCOCP, soil stockpiles will be present for the shortest practicable timeframe during construction, before soils are reinstated as work progresses along the ECC. With the implementation of mitigation measures set out within the oCOCP, oSMP and OLEMS, there will be limited temporary effects on soils (and soil functions) and agricultural land quality (meaning the capacity of the land for growing biomass, crops etc.).
14. As set out in the oSMP, all temporarily affected agricultural land would be restored to its pre-construction status (including ALC grade). These effects were assessed in Section 25.7.1.2 of Chapter 25: Land Use to be Minor (Not Significant). Temporary effects on soil functions and agricultural land quality are confined to the proposed DCO Order Limits and have been deemed Not Significant in EIA terms. Therefore, no significant cumulative effects or additional measures are needed for soil or agricultural land quality.
15. Permanent loss of agricultural land (particularly BMV land) and soil will always have some cumulative effect, given that agricultural land and soils are effectively finite resources, however the area of land / soil permanently lost due to the Project is relatively small; up to (26.38ha), compared to the 1,172,000 ha of land recorded in 2024 as farmed in the East Midlands.
16. At a regional level, potential cumulative effects could be identified with other large or linear developments across the East Midlands. At present, there are 22 NSIP projects in development within the East Midlands region. As BMV agricultural land is a finite resource of national importance, it is not considered appropriate to define a Zone of Influence (Zoi) for the Cumulative Effects Assessment. Doing so would suggest that effects on a finite resource diminish with distance, which is clearly not the case. As such, the approach to the cumulative assessment of impacts to BMV agricultural land is to undertake quantitative assessments of NSIP projects within the East Midlands (Regional) using data published by the developers of these NSIP Projects in the form of their EIA documentation.
17. The project has used amalgamated data on agricultural land loss published by DEFRA to establish the cumulative effects on a National Scale.
18. **Error! Reference source not found.** provides a summary of all NSIP developments within the East Midlands region, and their impact on BMV Land.
19. Section 5.6.3 of Chapter 5 Appendix 3: Cumulative Effects Assessment Approach Onshore (APP-148) sets out a tiered approach to the CEA. Tier 1 (most certainty) included permitted and under-construction projects for which reliable data was available, Tier 2 included projects where the developer has published some information through the planning process, whereas Tier 3 (least certainty) was assigned to developments without formal planning information being publicly available. These same criteria have been applied to the values as set out in Table 1 below.

Table 1: Areas of BMV Agricultural Land affected by NSIPs in the East Midlands Region

ID	Development Name	Case Reference	Tier	Confidence in Assessment	Grade 1 (ha)	Grade 2 (ha)	Grade 3a (ha)	Grand Total (ha)
1	Beacon Fen Energy	EN01015	3	Low	0	0	528.18	528.1
2	Boston Alternative Energy Facility*	EN010095	2	Medium	26.76	0	0	26.76
3	Cottam Solar Project <sup>4</sup>	EN01013	2	Medium	0	6.1	42	48.1
4	Fosse Green Energy*	EN01015	3	Low	0	279.8	766.26	1046.
5	Gate Burton Energy	EN01013	2	Medium	0	0	73.6	73.6
6	Heckington Fen Solar	EN01012	2	Medium	58	39	160	257
7	Lincolnshire Reservoir*	WA0100	3	Low	0	174.0	1448.0	1622.
8	Mallard Pass <sup>7</sup>	EN01012	2	Medium	0	35	181	216
9	Meridian Solar Farm*	EN01016	3	Low	9.00	1101.	0	1110.
10	Springwell Solar Farm <sup>8</sup>	EN01014	2	Medium	0	25.3	282.7	308
11	Temple Oaks Renewable Energy Park*	EN010126	3	Low	0	0	342**	342
12	Tillbridge Solar Project <sup>9</sup>	EN010142	2	Medium	0	9.2	51.1	60.3
13	West Burton Solar <sup>10</sup>	EN010132	2	Medium	17.6	9.5	172.4	199.5

(\*) Data not available in the public domain, area of permanent BMV loss assumed from the application of BMV data to the shapefiles provided by each project.

(\*\*) Grade 3 data not disaggregated. assumed to be grade 3a land for worst-case scenario.

<sup>4</sup> [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010133/EN010133-000239-C6.2.19%20ES%20Chapter%2019\\_Soils%20and%20Agriculture.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010133/EN010133-000239-C6.2.19%20ES%20Chapter%2019_Soils%20and%20Agriculture.pdf) [Accessed 24 January 2025]

<sup>5</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010131/EN010131-000882-EN010131%208.11%20Technical%20Note%20-%20Cumulative%20Impact%20on%20BMV%20Agricultural%20Land.pdf> [Accessed 24 January 2025]

<sup>6</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010123/EN010123-000137-6.1.16%20-%20Chapter%2016%20-%20Land%20Use%20and%20Agriculture.pdf> [Accessed 24 January 2025]

<sup>7</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010127/EN010127-000163-Appendix%2012.4%20ALC%20Survey.pdf> [Accessed 24 January 2025]

<sup>8</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010149/EN010149-000170-6.1%20Environmental%20Statement%20Volume%201%20Chapter%2011%20-%20Land,%20Soil%20and%20Groundwater.pdf> [Accessed 24 January 2025]

<sup>9</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010142/EN010142-000229-6.1%20Chapter%2015%20Soils%20and%20Agriculture.pdf> [Accessed 24 January 2025]

<sup>10</sup> [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010132/EN010132-000370-WB6.2.19%20ES%20Chapter%2019\\_Soils%20and%20Agriculture.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010132/EN010132-000370-WB6.2.19%20ES%20Chapter%2019_Soils%20and%20Agriculture.pdf) [Accessed 24 January 2025]

14	One Earth Solar Farm <sup>11</sup>	EN010159	2	Medium	0	243	455	689
15	Steeple Renewables Project <sup>12</sup>	EN010163	2	Medium	43.32	151.62	440.42	635.56
16	Green Hill Solar Farm <sup>13</sup>	EN010170	2	Medium	14.2	296.8	473.2	784.2
17	Oaklands Farm Solar Park <sup>14</sup>	EN01022	2	Medium	0	35	79	114
18	A46 Newark Bypass <sup>15</sup>	TR010065	2	Low	0	5.9	34.8	40.7
19	Hinckley National Rail Freight Interchange <sup>16</sup>	TR050007	2	Medium	0	0	2.9	2.9
20	A38 Derby Junctions <sup>17</sup>	TR010022	2	Medium	0	0	1.48	1.48
21	East Midlands Gateway Phase 2 <sup>18</sup>	BC0410001	2	Low	35.2 <sup>19</sup>			35.2
22	East Northants Resource Management Facility Western Extension <sup>20</sup>	WS010005	2	Medium	0	0	5.9	5.9
Grand Total (ha)					204.08	2411.46	5540.02	8155.56

<sup>11</sup> [REDACTED]  
 [REDACTED]  
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<sup>14</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010122/EN010122-000803-EN010122%20D6.1%20ES%20Chp15%20Agriculture%20and%20Soils%20Clean.pdf> [Accessed 24 January 2025]

<sup>15</sup> [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010065/TR010065-000799-6.3%20Environmental%20Statement%20-%20Appendix%209.3%20Agricultural%20Land%20Classification%20Report%20-%20Rev%202%20\(Clean\).pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010065/TR010065-000799-6.3%20Environmental%20Statement%20-%20Appendix%209.3%20Agricultural%20Land%20Classification%20Report%20-%20Rev%202%20(Clean).pdf) [Accessed 24 January 2025]

<sup>16</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR050007/TR050007-000808-6.2.11.3%20Hinckley%20NRFI%20ES%20Appendix%2011.3%20Soils%20and%20Agricultural%20Land%20Quality%20Report.pdf> [Accessed 24 January 2025]

<sup>17</sup> [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010022/TR010022-000452-TR010022\\_A38\\_6.1\\_Environmental\\_Statement\\_Chapter\\_10.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010022/TR010022-000452-TR010022_A38_6.1_Environmental_Statement_Chapter_10.pdf) [Accessed 24 January 2025]

<sup>18</sup> <https://nsip-documents.planninginspectorate.gov.uk/published-documents/BC0410001-000005-BC0410001%20-%20Scoping%20Report.pdf> [Accessed 24 January 2025]

<sup>19</sup> East Midlands Gateway Phase 2 has not disaggregated Grade 1-3a land. Land has been assumed to be Grade 1.

<sup>20</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/WS010005/WS010005-000309-5.4.15.1%20Appendix%20ES15.1%20Agricultural%20and%20soil%20impact%20assessment.pdf> [Accessed 24 January 2025]



#### **1.4 Cumulative Effects on BMV on a regional (East Midlands) Scale**

20. The combined area of the above developments impacting upon BMV agricultural land, listed in Table 1, is 8,155.56 ha. This amounts to approximately 0.696% of the total farmed area of 1,172,000 ha in the East Midlands (Defra, 2024) and **1.59%** of BMV land (assuming all of the above Grade 3 in Table 1 is BMV).
21. With the addition of the permanent loss of agricultural land associated with the Outer Dowsing Project, the total agricultural land lost would be 8181.94 ha, totaling up to 0.698% of agricultural land within the East Midlands Region, and **1.60%** of BMV land (assuming all the above Grade 3 in Table 1 is BMV).
22. If it were to be assumed that all of the above projects (including the Outer Dowsing Project) were to be constructed over a 5 year period, which is in line with the approach taken in the IEMA Land and Soils Guidance, the annual loss of land would be 0.139%.
23. As the average annual loss of Agricultural land is below the expected 0.166% average loss nationally, it is therefore concluded that the cumulative effects of the Outer Dowsing Project and the other would not result in significant cumulative effects.

#### **1.5 Cumulative Effects on BMV on a National Scale**

24. From a national perspective, where the total area of agricultural land is 8.7 million hectares, the Outer Dowsing Project would account for a loss of 0.000303% of available farmland. On the basis that annual losses of farmland from all other activities is estimated to be 0.166%, it is concluded that a loss of 0.000303%, should constitute a negligible, non-significant effect in EIA terms.