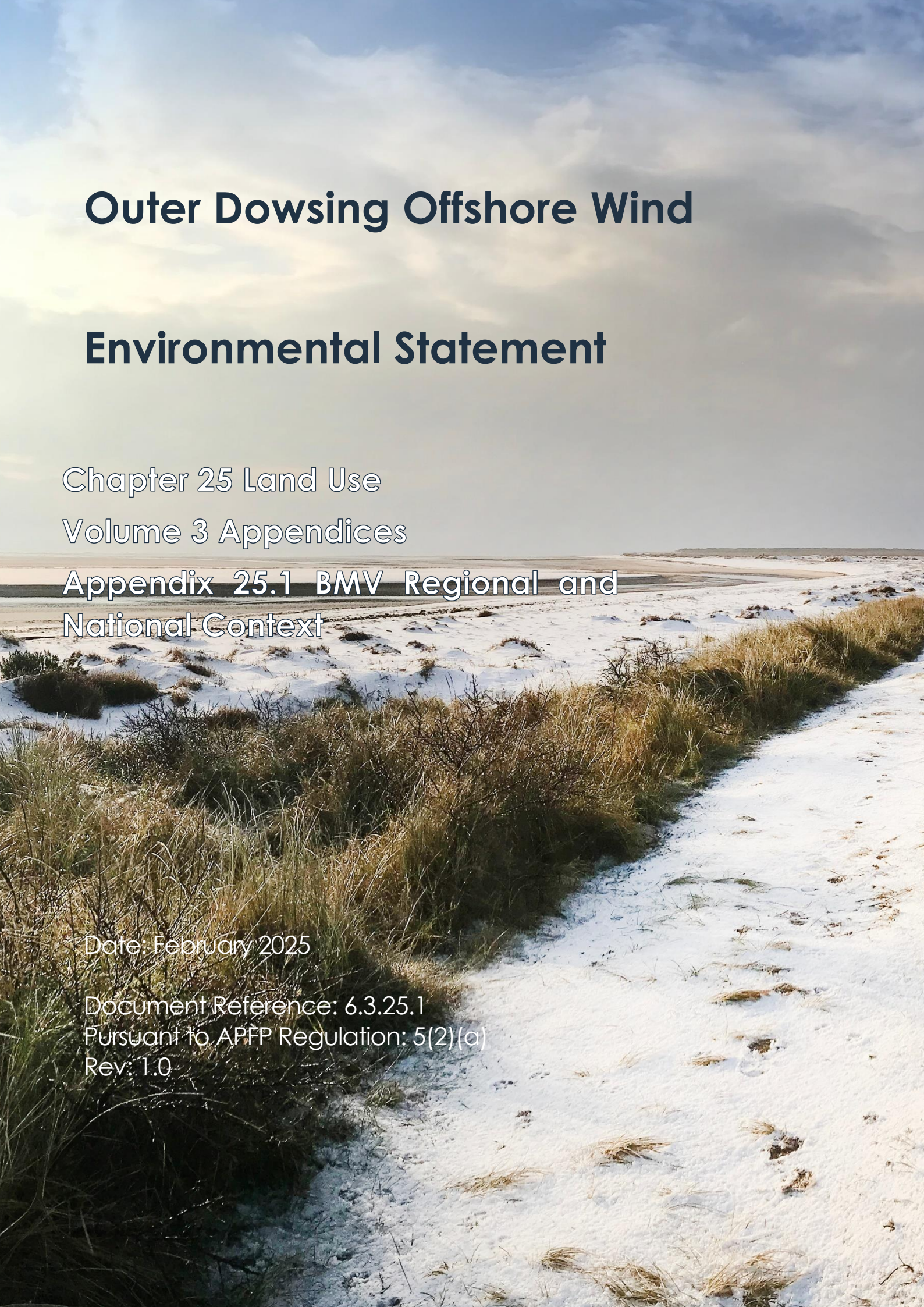

# Outer Dowsing Offshore Wind

# Environmental Statement

## Chapter 25 Land Use

## Volume 3 Appendices

## Appendix 25.1 BMV Regional and National Context

Date: February 2025

Document Reference: 6.3.25.1
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# Acronyms & Definitions

## Abbreviations / Acronyms

| Abbreviation / Acronym | Description |
|---|---|
| ALC | Agricultural Land Classification |
| BMV | Best and Most Versatile |
| CPRE | Campaign to Protect Rural England |
| Defra | Department for Environment, Food & Rural Affairs |
| ECC | Export Cable Corridor |
| EIA | Environmental Impact Assessment |
| ha | Hectares |
| IEMA | Institute of Environmental Management & Assessment |
| 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 |
| ZoI | Zone of Influence |

## Terminology

| Term | Definition |
|---|---|
| Cumulative effects | The combined effect of the Project acting additively with the effects of other developments, on the same single receptor/resource. |
| Effect | Term used to express the consequence of an impact. The significance of an effect is determined by correlating the magnitude of the impact with the sensitivity of the receptor, in accordance with defined significance criteria. |
| Impact | An impact to the receiving environment is defined as any change to its baseline condition, either adverse or beneficial. |
| Landfall | The location at the land-sea interface where the offshore export cables and fibre optic cables will come ashore. |
| Mitigation | Mitigation measures are commitments made by the Project to reduce and/or eliminate the potential for significant effects to arise as a result of the Project. Mitigation measures can be embedded (part of the project design) or secondarily added to reduce impacts in the case of potentially significant effects. |
| Order Limits: | The area subject to the application for development consent, The limits shown on the works plans within which the Project may be carried out. |
| Pre-construction and post-construction | The phases of the Project before and after construction takes place. |
| The Project | Outer Dowsing Offshore Wind, an offshore wind generating station together with associated onshore and offshore infrastructure. |

# 1 Introduction and Document Purpose

1. In addition to the consideration of cumulative loss of agricultural land at the local and county levels, as detailed in Section 25.8 of Chapter 25: Land Use, the Project has adopted the methodology established by the Rampion 2 offshore wind project to assess the loss of agricultural land on a regional and national scale. This approach recognises that soils and agricultural land are essentially finite, non-renewable resources and that the Project, along with other planned developments at both regional and national levels, can lead to temporary disturbances and permanent losses of soils due to above-ground development. These developments may result in soil removal, soil sealing, or damage to soils caused by construction activities, leading to long-term or permanent adverse effects on soil functions such as contamination, compaction, and erosion.
2. The method of assessment relies on the use of long term trends in agricultural land use, Utilised Agricultural Area (UAA) to assess whether the rate of loss in agricultural land is greater or less than the national average rate of decline.

# 2 Cumulative Loss of Agricultural Land on a Regional and National Scale

1. 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).
2. 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%).[1] 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.
3. Defra's regional agricultural statistics for the East Midlands (Defra, 2024[2]), 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.
4. 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

[redacted] Accessed 23 January 2025]

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

land is likely to be close to the average national rate of 0.166 percent[3].

5. Overall, the Project will result in the permanent loss of up to 36.48ha 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).
6. As previously noted, the Project has a three-year construction period over which temporary effects will occur, over a maximum area of 432.79ha, after which will follow an aftercare period as outlined in the OLEMS (document 8.10), oSMP (8.1.3), and oCOCP (document 8.1).
7. 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.
8. 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.).
3. 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 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.
9. 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 (36.48ha), compared to the 1,172,000 ha of land recorded in 2024 as farmed in the East Midlands.
10. 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.
4. Table 1 provides a summary of all NSIP developments within the East Midlands region, and their impact on BMV Land. Nationally, the project has used amalgamated data on agricultural land loss, published by DEFRA, to establish the cumulative effects at that scale.

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

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 Park* | EN010151 | 3 | Low | 0 | 0 | 528.18** | 528.18 |
| 2 | Boston Alternative Energy Facility* | EN010095 | 2 | Medium | 26.76 | 0 | 0 | 26.76 |
| 3 | Cottam Solar Project[4] | EN010133 | 2 | Medium | 0 | 6.1 | 42 | 48.1 |
| 4 | Fosse Green Energy* | EN010154 | 3 | Low | 0 | 279.88 | 766.26** | 1046.13 |
| 5 | Gate Burton Energy Park[5] | EN010131 | 2 | Medium | 0 | 0 | 73.6 | 73.6 |
| 6 | Heckington Fen Solar Park[6] | EN010123 | 2 | Medium | 58 | 39 | 160 | 257 |
| 7 | Lincolnshire Reservoir* | WA010003 | 3 | Low | 0 | 174.01 | 1448.08** | 1622.09 |
| 8 | Mallard Pass[7] | EN010127 | 2 | Medium | 0 | 35 | 181 | 216 |
| 9 | Meridian Solar Farm* | EN010169 | 3 | Low | 9.00 | 1101.15 | 0 | 1110.15 |
| 10 | Springwell Solar Farm[8] | EN010149 | 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[9] | EN010142 | 2 | Medium | 0 | 9.2 | 51.1 | 60.3 |

[4](*) 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.
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]

[5]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]

[6] 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]

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

[8] 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]

[9] 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]

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 13 | West Burton Solar[10] | EN010132 | 2 | Medium | 17.6 | 9.5 | 172.4 | 199.5 |
| 14 | One Earth Solar Farm[11] | EN010159 | 2 | Medium | 0 | 243 | 455 | 689 |
| 15 | Steeple Renewables Project[12] | EN010163 | 2 | Medium | 43.32 | 151.62 | 440.42 | 635.56 |
| 16 | Green Hill Solar Farm[13] | EN010170 | 2 | Medium | 14.2 | 296.8 | 473.2 | 784.2 |
| 17 | Oaklands Farm Solar Park[14] | EN01022 | 2 | Medium | 0 | 35 | 79 | 114 |
| 18 | A46 Newark Bypass[15] | TR010065 | 2 | Low | 0 | 5.9 | 34.8 | 40.7 |
| 19 | Hinckley National Rail Freight Interchange [16] | TR050007 | 2 | Medium | 0 | 0 | 2.9 | 2.9 |
| 20 | A38 Derby Junctions[17] | TR010022 | 2 | Medium | 0 | 0 | 1.48 | 1.48 |
| 21 | East Midlands Gateway Phase 2[18] | BC0410001 | 2 | Low | 35.2[19] | | | 35.2 |
| 22 | East Northants Resource Management | WS010005 | 2 | Medium | 0 | 0 | 5.9 | 5.9 |

[10] 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]

[11] https://oneearthsolarfarm.co.uk/wp-content/uploads/2024/05/Volume-1_Chapter-9_Land-and-Soils.pdf [Accessed 24 January 2025]

[12] https://www.steeplerenewablesproject.co.uk/media/1oplycwx/steeple-renewables-peir-chapter-15-land-use-and-agriculture.pdf [Accessed 24 January 2025]

[13] https://greenhillsolar.co.uk/wp-content/uploads/2024/consultation-documents/PEIR/Volume-1/Vol%201_Green%20Hill%20PEIR%2020.%20Agricultural%20Circumstances.pdf [Accessed 24 January 2025]

[14] 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]

[15] 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]

[16] 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}

[17] 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

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

[19] East Midlands Gateway Phase 2 has not disaggregated Grade 1-3a land. Land has been assumed to be Grade 1.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Facility Western Extension[20] | | | | | | | |
| Grand Total (ha) | | | | | 204.08 | 2411.46 | 5540.02 | 8155.56 |

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

5. 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).
6. With the addition of the permanent loss of agricultural land associated with the Outer Dowsing Project, the total agricultural land lost would be 8192.04 ha, totalling up to 0.699% of agricultural land within the East Midlands Region, and **1.606%** of BMV land (assuming all the above Grade 3 in Table 1 is BMV).
11. 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%.
12. 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 projects would not result in significant cumulative effects.

#### 2.1.1.2 Cumulative Effects on BMV on a National Scale

13. 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.

[20] 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]