



# **PROPOSED CHANGES**

# **APPLICATION REPORT**

## **Appendix 4 - Ecological Walkover**

## **Technical Note**

### **Drax Bioenergy with Carbon Capture and Storage**

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## TABLE OF CONTENTS

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1. INTRODUCTION AND BACKGROUND .....	1
2. METHODOLOGY.....	2
3. RESULTS .....	3
3.2. Proposed Change 01 .....	3
3.3. Proposed Change 02 .....	4

## TABLES

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Table 3.1 - Photographs of Habitats within Order Limits for PC-01 .....	4
Table 3.2 - Photographs of Habitats within the Order Limits for PC-02.....	7

# 1. INTRODUCTION AND BACKGROUND

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- 1.1.1. The Drax Bioenergy with Carbon Capture and Storage (BECCS) Development Consent Order (DCO) application was submitted to the Planning Inspectorate (PINS) on 23 May 2022. The 'Proposed Scheme' description is set out within Environmental Statement (ES) Chapter 2 (Site and Project Description) (APP-038). Since the submission of the Application, a number of design changes have been proposed to be incorporated into the Proposed Scheme. The proposed changes include the creation of a Flood Compensation Area (FCA) within the Drax Power Station Site (hereafter referred to as PC-01) and temporary overhead line (OHL) modifications along Rawcliffe Road, towards Goole (hereafter referred to as PC-02). The design information for PC-01 and PC-02 is set out within section 5.1 and 6.1 of the Proposed Changes Application Report (PCAR) (document reference 8.5.1) and on the updated Land Plans, extracts of which are set out within the PCAR.
- 1.1.2. Environmental Appraisals have been prepared to understand if PC- 01 and PC-02 have the potential to introduce material changes to the Environmental Statement (ES) that was submitted as part of the DCO Application.
- 1.1.3. To support the appraisal of impacts on biodiversity, an ecological walkover was undertaken of the proposed Order Limits for PC-01 and PC-02. The walkover was carried out to ascertain the ecological baseline and to allow for a robust assessment of the likely impacts and effects on potential ecological receptors.
- 1.1.4. This technical note summarises the methodology and findings of the ecological walkover only. Conclusions and associated impact assessment information is located within Table 5.1 and Table 6.1 of the PCAR.

## 2. METHODOLOGY

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- 2.1.1. The ecological walkover comprised a habitat survey utilising the Phase 1 habitat survey technique<sup>1</sup> and the UKHab Habitat Classification<sup>2</sup>. Condition assessment data<sup>3</sup> was also obtained to support updated Biodiversity Metric 3.1 calculations for PC-01 and PC-02.
- 2.1.2. Alongside the habitat survey a protected and notable species assessment was also undertaken to assess each habitat for their suitability to support legally protected animals and plants and those of conservation concern.
- 2.1.3. Habitats were mapped on a mobile mapping computer and photographs were taken where necessary. The ecological walkover was undertaken by an ecologist experienced in extended habitat surveying and holds a Level 4 Field Identification Skills Certificate (FISC) from the Botanical Society of Britain and Ireland (BSBI).
- 2.1.4. Freely available biological datasets were reviewed to support the ecological walkover where necessary. No third-party records were obtained.

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<sup>1</sup> JNCC (2016). Phase 1 Habitat Handbook. A Technique for Environmental Audit. JNCC, Peterborough,

<sup>2</sup> Butcher, B., Carey, P., Edmonds, R., Norton, L., Treweek, J. (2020) The UK Habitat Classification User Manual

<sup>3</sup> Natural England (2022) Biodiversity Metric 3.1 (JP039). Habitat Condition Assessment Sheets.

### 3. RESULTS

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3.1.1. The habitat composition of the proposed revised Order Limits for PC-01 is located on Landscape and Biodiversity Plan 1 (Figure 3 to the PCAR (document reference 8.5.2.3)). For the proposed Order Limits for PC-02 this is located on Landscape and Biodiversity Plan 2 (Figure 4 to the PCAR (document reference 8.5.2.4)). Photographs of habitats are located below in Table 3.1 for PC-01 and Table 3.2 for PC-02.

#### 3.2. PROPOSED CHANGE 01

- 3.2.1. The Order Limits are proposed to be extended in the north of Drax Power Station for the purpose of PC-01. Species poor semi-improved grassland was noted to be the dominant habitat within this area, dominated by Yorkshire fog *Holcus lanatus*. The topography of the area changed from north to south, with a steep gradient sloping towards the north of the area.
- 3.2.2. Other habitats were also identified within the proposed extended Order Limits for PC-01. These habitats included scrub, both dense and scattered and a species-rich hedgerow with trees located along the southern boundary of the Order Limits.
- 3.2.3. The dense scrub was located along the northern edge of the proposed extended Order Limits, protruding from the adjacent broadleaved woodland. The dense scrub was made up primarily of bramble *Rubus fruticosus* agg. and occasional common nettle *Urtica dioica* stands with encroaching *Salix* sp. (likely crack willow *Salix fragilis*) from the broadleaved woodland to the north. The scattered scrub comprised four hawthorn *Crataegus monogyna* shrubs near the eastern boundary of the proposed extended Order Limits, running in a north-south fashion. The southern hedgerow border comprised primarily hawthorn and blackthorn shrubs *Prunus spinosa* with intermittent semi-mature pedunculate oak *Quercus robur*. This is a habitat listed on Section 42 of the Natural Environment and Rural Communities Act 2006 as a Habitat of Principal Importance (HPI).
- 3.2.4. Habitats within the proposed extended Order Limits had suitability to support common and widespread breeding birds, primarily within the scrub habitats and species-rich hedgerow. The grassland / woodland interface and dense scrub edges could provide refuge opportunities for common and widespread species of reptile and amphibians including great crested newt *Triturus cristatus* (although the nearest aquatic habitat is more than 250 m away). The grassland and scrub habitats also offer foraging opportunities for badger *Meles meles*, with the connecting woodland providing sett creation opportunities, though no badger setts or signs of badger were found.
- 3.2.5. Incidental observations of the birds robin *Erithacus rubecula*, magpie *Pica pica* and blackbird *Turdus merula* were recorded within and in proximity to the proposed extended Order Limits. Multiple fruiting bodies of the fungus, stubble rosegill *Volvopluetus gloiocephalus* were identified within the grassland.



3.2.6. Except for the common and widespread bird species identified above (which receive protection under the general measures for wild birds in the Wildlife and Countryside Act 1981 (as amended), no protected and / or notable species were identified within the PC-01 Order Limits during the ecological walkover.

**Table 3.1 - Photographs of Habitats within Order Limits for PC-01**

<p><b>Photograph 1 – Species-poor semi-improved grassland and scattered scrub</b></p>	<p><b>Photograph 2 – Dense bramble scrub along northern boundary of Order Limits</b></p>
	
<p><b>Photograph 3 – Species-rich hedgerow with trees along the southern edge</b></p>	<p><b>Photograph 3 – Species-poor semi-improved grassland</b></p>
	

### 3.3. PROPOSED CHANGE 02

3.3.1. Three separate sections are proposed to be added to the Order Limits for PC-02, which are located to the north of Rawcliffe Road. For the purposes of this report these are referred to as ‘OHL1’ and ‘TCL1’ in the west and ‘OHL2’ in the east.

3.3.2. The most dominant habitat / feature within the proposed extended Order Limits for PC-02 was hardstanding. Hardstanding was an urban feature primarily made up of roads, pavements, gravel paths and car parks in OHL1, TCL1 and OHL2.

## OHL1 AND TCL1

- 3.3.3. With the exception of a small pocket of woodland and scrub in the west of this section, hardstanding, arable land and improved grassland were the most abundant habitats. A large section of arable land was identified to the north of Rawcliffe Road, bisected by a gravel track.
- 3.3.4. Improved grassland was made up primarily of road verge habitats and land that had previously been used for agriculture (in the south) and dominated by perennial ryegrass *Lolium perenne* and cock's foot *Dactylus glomerata*. The road verge grasslands comprised a short sward with intermittent forbs such as yarrow *Achillea millefolium* and common daisy *Bellis perennis*. A north-south species-rich hedgerow was located between the arable land and a hardstanding parcel in the east of OHL1.
- 3.3.5. A standing water ditch was identified in the south, running parallel to Rawcliffe Road. The standing water ditch was flanked by steep improved grassland banks. Intermittent *Callitriche* agg. and fool's water-cress *Helosciadium nodiflorum* macrophytes were identified within the ditch channel, which was stagnant.
- 3.3.6. Woody vegetation was identified in the west of OHL1. This included a dense scrub strip that had succeeded from a road verge grassland, this habitat was bordered by arable land. The scrub was dominated by bramble with intermittent tall forbs such as common nettle, and rosebay willowherb *Chamerion angustifolium*. Opposite this scrub strip was a linear section of broadleaved woodland comprising primarily silver birch *Betula pendula* with intermittent *Salix* sp. The woodland served as a screen between the adjacent road and a collection of land parcels comprising residential housing and a vehicle storage/repair facility, collectively referred to as 'Tanglewood'.
- 3.3.7. Tanglewood was made up of improved grassland, hardstanding and urban habitats such as concrete parking bays and gravel tracks. In the far west of OHL1, slightly northwest of Tanglewood was a dense section of bracken *Pteridium aquilinum* and bramble scrub.
- 3.3.8. Habitats within OHL1 had suitability to support common and widespread breeding birds, primarily within the scrub habitats, woodland and species-rich hedgerow. The interfaces between grassland, woodland and scrub in the west could provide refuge opportunities for common and widespread species of reptile and common and widespread species of invertebrates. The grassland and connecting woodland and scrub habitats also provided opportunities for the creation of badger setts, though no badger setts or signs of badger were found. Given the linear features identified during the ecological walkover such as woodland and scrub strips and hedgerow, there could be opportunities for commuting bats, though the wider landscape is quite open. The habitats within OHL1 and TCL1 are not considered suitable for other protected and / or notable species groups.
- 3.3.9. Incidental observations of magpie, carrion crow *Corvus corone* and kestrel *Falco tinnunculus* were recorded within and in proximity to OHL1 and TCL1. Except for these bird species identified (which receive protection under the Wildlife and





Countryside Act 1981 (as amended)), no protected and/or notable species were identified within the OHL1 and TCL1 during the ecological walkover.

## OHL2

- 3.3.10. OHL2 was a smaller section of the proposed extended Order Limits, located north and south of Rawcliffe Road and set around Airmyn roundabout. Hardstanding, urban features and grasslands were equally abundant within the Order Limits for OHL2. The hardstanding habitats were made up of Rawcliffe Road, public footpaths, other private roads and parking areas.
- 3.3.11. The largest parcel of improved grassland was in the south of OHL2, which is likely to have been arable farmland previously. This grassland was dominated by perennial ryegrass, Yorkshire fog and cock's foot *Dactylus glomerata*. Immediately north of this grassland was a dry ditch which had been colonised by multiple stands of common nettle.
- 3.3.12. The other type of grassland identified within OHL2 was a grassland characteristic of ephemeral / short perennial grassland. This grassland was made up of an assemblage of white clover *Trifolium repens*, creeping buttercup *Ranunculus repens*, common ragwort *Jacobaea vulgaris*, common groundsel *Senecio vulgaris*, and bristly ox-tongue *Helminthotheca echioides*.
- 3.3.13. Habitats within the OHL2 had limited suitability to support common and widespread breeding birds given the lack of scrub and habitats suitable for nesting. The ephemeral / short perennial grassland is fenced off from public footpaths and the wider landscape by a metal meshed fence, which could offer safe nesting opportunities for wading birds typical of farmland settings. Nesting opportunities for wading birds would be dependent on the sward length in the breeding season. No evidence of these birds was identified during the ecological walkover. This grassland could also support common and widespread species of invertebrates. The habitats within OHL2 are not considered suitable for other protected and / or notable species groups.
- 3.3.14. Incidental observations of dunnock *Prunella modularis*, carrion crow and black-headed gull *Chroicocephalus ridibundus* were recorded within and in proximity to OHL2. Except for these bird species identified (which receive protection under the Wildlife and Countryside Act 1981 (as amended)), no other protected and / or notable species were identified within OHL2.



**Table 3.2 - Photographs of Habitats within the Order Limits for PC-02**

<p><b>Photograph 1 – Standing water ditch in the foreground and Improved grassland in the background within OHL1/TCL1</b></p>	<p><b>Photograph 2 – Improved grassland within OHL 1/TCL1 in the south</b></p>
	
<p><b>Photograph 3 – Broadleaved woodland within OHL1/TCL1</b></p>	<p><b>Photograph 4 – Arable land within OHL1/TCL1</b></p>
	
<p><b>Photograph 5 – Dense bracken within OHL1/TCL1</b></p>	<p><b>Photograph 6 – Ephemeral/short perennial grassland within OHL2</b></p>



**Photograph 7 – Hardstanding within OHL2**



**Photograph 8 – Dry ditch within OHL2**

