

# THE APPLICANT'S RESPONSE TO THE REPORT ON IMPLICATIONS FOR EUROPEAN SITES

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

Infrastructure Planning (Examination Procedure) Rules 2010

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### 1. INTRODUCTION

### 1.1. PURPOSE OF THIS DOCUMENT

- 1.1.1. This document presents the Applicant's response to the Report on Implications for European Sites (RIES) (PD-020) prepared by the Examining Authority for the Drax Bioenergy with Carbon Capture and Storage (BECCS) project (the Proposed Scheme).
- 1.1.2. The Applicant has not reproduced all text and tables provided within the REIS (PD-020). Where a response to specific text is deemed to be required this is provided in Table 1. For all other text that has not been reproduced in Table 1, the Applicant has no comment.

# 2. THE APPLICANT'S RESPONSE TO THE REPORT ON IMPLICATIONS FOR EUROPEAN SITES

Table 2-1: The Applicant's Response to the Report on Implications for European Sites

| Reference     | Text  | Applicant's Response   |  |  |  |  |  |  |  |
|---------------|---|--|--|--|--|--|--|--|--|
| Section 1.1 B | Section 1.1 Background  |  |  |  |  |  |  |  |  |
| 1.2.1         | The Applicant's DCO application concluded that there is the potential for likely significant effects (LSE) on 10 European sites and therefore provided a Habitats Regulations Assessment report (HRAR) to inform an appropriate assessment entitled 'Habitats Regulations Assessment – Volume 1 – Main Text' [APP-185] with the DCO application.  | The Applicant identified ten European Sites as being within the potential Zone of Influence (ZoI) of the Proposed Scheme. The potential for likely significant effects (LSE) was identified for nine of those sites, with no LSE identified for the tenth site (Thorne and Hatfield Moors SPA). A summary of the nine sites with potential for LSE is included in Table 3.18 of the Application HRA Report (APP-185).  |  |  |  |  |  |  |  |
| 1.2.8         | The Applicant provided updated versions of the HRAR [REP6-021] which responded to NE submissions, incorporated updates to the in-combination assessment and to reflect updates that had been made at D3 to Appendix 8 [REP3-009] of the HRAR, and addressed the second change request. All references in this report to the HRAR are to this version unless indicated otherwise. The Applicant also submitted updated screening and integrity matrices at D6 [REP6-023 and REP6-025, respectively]. | <ul> <li>The Applicant has submitted an updated HRA Report at Deadline 9, to reflect the following:</li> <li>a. The Applicant's responses to the ExA's Rule 17 Questions of 6 June 2023;</li> <li>b. Updates to baseline concentrations of NOx in air over the Humber Estuary SAC, SPA, and Ramsar;</li> <li>c. The latest Statement of Common Ground between Natural England and Drax Power Ltd (REP8-019)</li> </ul> |  |  |  |  |  |  |  |

| Reference   | Text   | Applicant's Response  |  |  |  |  |  |  |
|---|--|---|--|--|--|--|--|--|
| Section 2.1 European Sites Considered   |  |   |  |  |  |  |  |  |
| Table 2.1   | Table 2.1 includes a cell that lists the qualifying interests of Skipwith Common SAC (page 8 of the RIES). This identifies 'Northern Atlantic wet heaths with cross-leaved heath' as the only qualifying interest.   | As detailed in the HRA Report (REP6-021) European Dry Heaths (EUNIS code 4030) is also a qualifying interest of Skipwith Common SAC.  |  |  |  |  |  |  |
| Section 2.2 H   | RA Matters Considered During the Examination   |   |  |  |  |  |  |  |
|   |  | No comment.   |  |  |  |  |  |  |
| Section 3 Like  | ely Significant Effects  |   |  |  |  |  |  |  |
| 3.0.4   | It is subsequently determined in HRAR Table 3.14 that, following a review of the application documents for ID7, the impacts would be imperceptible and the in-combination impacts "de minimis". This was on the basis that the potential for in-combination impacts from ID7 was limited to receptors in Camblesforth. It was concluded that ID7 could not contribute to significant in-combination effects and it was not considered further. | The Applicant would highlight that Table 3.14 relates to the assessment of potential LSE from operational emissions to air. The potential for development ID7 to contribute to LSE from other impact pathways is also considered in Tables 3.8 to 3.13 and 3.15 to 3.17 of the HRA Report (REP6-021). |  |  |  |  |  |  |
| 3.0.10  It [the Deadline 6 HRA Report REP6-021] concluded that there would be no construction or decommissioning LSE on the qualifying features of the European sites as a resul of disturbance from noise and vibration. |  | The Applicant also identified in the Deadline 6 HRA Report (see paragraphs 3.5.91 to 3.5.95) that there would be no LSE from construction traffic noise emissions during construction or decommissioning. This is agreed with Natural England as per paragraph3.1.2 of the SoCG (REP8-019).           |  |  |  |  |  |  |

| Reference         | Text   | Applicant's Response   |
|-------------------|--|--|
| 3.0.15 –<br>3.016 | The application HRAR [APP-185] concluded that during operation the following impact pathways could result in LSEs from the Proposed Development in combination with other plans and projects on the qualifying features of the European sites (shown in Annex 1 of this RIES):  • treated flue gas to air emissions (nitrogen and acid deposition for Thorne Moor SAC with IDs 1, 4, 47 and 92; acid deposition for Skipwith Common SAC with IDs 1, 4, 47 and 74); and  • accidental releases of water-borne pollutants (with ID3, ID12 and ID102).  As a result of the additional air quality modelling and information gathered during the Examination the Applicant identified that the acid deposition CLo for the Skipwith Common SAC would not be exceeded and subsequently concluded in the D6 updated HRAR [REP6-021] that acid deposition would not result in an in-combination LSE on that site. | The application HRA Report (APP-185) also identified the potential for in-combination LSEs from treated flue gas to air emissions as follows:  a. Increased NH <sub>3</sub> concentrations over Thorne Moor SAC equivalent to up to 1.1% of critical level; and b. Increased rates of acid deposition over Lower Derwent Valley SAC and Ramsar that were predicted to exceed 1% of critical load.  The potential for these LSE was subsequently discounted, following additional survey and assessment work completed by the Applicant. This work is reported in Table 3.14 of the Deadline 6 HRA Report (REP6-021) and the Lower Derwent Valley Habitats and Soil Analysis Technical Note (REP3-009). |
| Section 4.2 T     | he Integrity Test  |  |
| 4.2.18            | Construction and decommissioning LSEs from increased risk of pollution from sediment load in combination with ID102  It is explained in the HRAR that the construction periods of the Proposed Development and ID102 could overlap and a LSE had been identified for the River Derwent SAC, Lower  | The Applicant wishes to clarify that, as set out in the HRA Report (REP6-021), this LSE was identified in terms of risks to potential functionally-linked land only. No risk of in-combination LSE from sediment loading has been identified to land within the boundary of any European Site. This is because there   |

| Reference | Text   | Applicant's Response  |
|-----------|--|---|
|           | Derwent Valley SAC, SPA and Ramsar, and the Humber Estuary SPA and Ramsar.   | is no conceivable pathway by which material sediment releases from the Proposed Scheme could reach any European Site.   |
| 4.2.19    | Construction and decommissioning LSEs from increased visual disturbance from plant and personnel on the European sites in combination with IDs 6, 44, 52, 99, 100, 102 and 103  A LSE had been identified during the construction and decommissioning phases of the Proposed Development for the River Derwent SAC, Lower Derwent Valley SAC/SPA/Ramsar and the Humber Estuary SPA/Ramsar in relation to increased visual disturbance.   | The Applicant wishes to clarify that, as set out in the HRA Report (REP6-021), this LSE was identified in terms of risks to otters and birds using potential functionally-linked land only. No risk of in-combination LSE from visual disturbance has been identified to land within the boundary of any European Site. This is because the distance between the Proposed Scheme and European Sites exceeds distances at which there is a conceivable risk of visual disturbance to European Site qualifying interests. |
| 4.2.28    | Construction, decommissioning and operational LSEs from accidental releases of water-borne pollutants on the European sites in combination with ID3, ID12, ID102 and ID103  A LSE was identified for the River Derwent SAC, Lower Derwent Valley SAC/SPA/Ramsar, and the Humber Estuary SAC/SPA/Ramsar for the construction, decommissioning and operational phases of the Proposed Development in combination with ID3 and ID102; during construction only with ID103; and during operation only with ID12. Potential was identified for effects on otter, river lamprey, sea lamprey and bird features of the respective European sites. | The Applicant wishes to clarify that, as set out in the HRA Report (REP6-021), this LSE was identified in terms of risks to potential functionally-linked land only. No risk of in-combination LSE from water-borne pollution has been identified to land within the boundary of any European Site. This is because there is no conceivable pathway by which material amounts of water-borne pollution from the Proposed Scheme could reach any European Site.  |

| Reference | Text   | Applicant's Response   |
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| 4.2.38    | NE noted in its D2 submission [REP2-085] that 'substantially' was not defined in the dDCO and in the absence of that considered that there was uncertainty about whether changes could be made to the proposed mitigation which could result in the measures committed to in the HRAR not being strictly implemented and the conclusions of the HRA being undermined. The Applicant responded at D3 [REP3-020] that without use of 'substantially', 'in accordance with' could be construed as meaning 'exactly the same as', and that would be inappropriate for inclusion in R10 (or any DCO Requirement) as the SWDS is a final scheme to be developed based on the detailed design of the Proposed Development and any update in legislation or guidance. NE restated within the dSoCG submitted at D5 [REP5-017] that it would welcome clarification of the definition of 'substantially'. At D6 it confirmed [REP6-050] that it agreed that dDCO R10 appropriately secured the relevant surface water drainage measures but reiterated its point about the dDCO terminology, as it did at D7. The Applicant responded at D7 [REP7-017] that, in order to provide more certainty, the procedure for discharge of the Requirements set out in dDCO Schedule 11 would be amended for D8 to require that a statement was submitted alongside an application to discharge a Requirement to confirm that its content (which would include mitigation) did not lead to a change to the HRA conclusions. | The Applicant and Natural England have since confirmed agreement to the use of the term 'substantially in accordance with' in DCO Requirements 7, 8, 14, 15, 17, and 19.  This follows the Applicant's updates to Schedule 11 of the dDCO (REP8-005) at deadline 8. The dDCO has been updated to state the following (Schedule 11, 2. (5 – 6), page 64) to state:  (5) Any application made to the relevant planning authority pursuant to sub-paragraph (1) must include a statement confirming whether it is likely that the subject matter of the application, including any mitigation measures, will give rise to a change in the conclusions of the habitat regulations assessment and if it will then it must be accompanied by information setting out what those changes are.  (6) Where an application has been made to the relevant planning authority for any consent, agreement or approval required by a requirement included in this Order and the relevant planning authority does not determine that application within the period set out in sub-paragraph (1) and is accompanied by a report pursuant to sub-paragraph (5) which states that the subject matter of such application, including any mitigation measures, will give rise to a change in the conclusions of the habitat regulations assessment then the application is to be |

| Reference | Text  | Applicant's Response   |
|-----------|---|--|
|           |   | taken to have been refused by the relevant planning authority at the end of that period.   |
|           |   | Agreement between the Applicant and Natural England is reflected in the Natural England Deadline 8 Representation (REP8-038), which states the following at para 1.5:  |
|           |   | Natural England's previous concerns regarding the phrasing of draft DCO requirements 7, 8, 14, 15, 17, and 19 have now been resolved with the applicant, subject to agreed updates to Schedule 11 (procedure for discharge of requirements) of the draft DCO at Deadline 8 to provide that, in submitting Requirements for discharge, the Applicant must demonstrate that the conclusions of the Habitats Regulations Assessment (HRA) will not change as a result of the detailed plans and strategies. |
| 4.2.57    | However, it stated that predicted concentrations of total amines in the atmosphere would be a maximum of 0.03% of the NH3 CLo over the designated sites, and that total concentrations of nitrosamines and nitramines would be a maximum of 0.001% of the NH3 CLe | As a minor point of correction, the Applicant would highlight that reference to 'CLo' in this section of the paragraph should be 'CLe'.  |

| Reference                      | Reference Text        |  | ference Text Applicant's Response             |  | Applicant's Response                                  |   |
|--------------------------------|-----------------------|--|---|--|---|---|
| River<br>Derwent<br>SAC        | Features River Derwer | Impact   | Screening<br>result*:<br>LSE alone<br>he OLs) | result*: LSE<br>in<br>combination              | Assessment<br>of effects<br>on integrity<br>required? | The Applicant wishes to highlight that in the latest version of their screening matrices (submitted at deadline 6, REP6-023) in-combination dust LSE on the otter qualifying interest are identified. The potential for in-combination AEOI arising from dust   |
|                                | Otter                 | Loss of FLL (through hedgerow planting in the Habitat Provision Area) during construction and decommissioning  Dust emissions on FLL during construction and decommissioning (Carr Dyke) | ✓   | *  | ✓   | are considered and discounted at paragraphs 4.3.18 to 4.3.21 of the HRA Report (REP6-021).  In-combination sediment-loading LSE with Development 102 are also identified for the otter feature only. The potential for in-combination AEOI arising from dust are considered and discounted at paragraphs 4.3.23 to 4.3.26 of the HRA Report (REP6-021). |
| Lower<br>Derwent<br>Valley SAC | Features              | Impact   | Screening<br>result*:<br>LSE alone            | Screening<br>result*: LSE<br>in<br>combination | Assessment<br>of effects<br>on integrity<br>required? | The Applicant wishes to highlight that in the latest version of their screening matrices (submitted at deadline 6, REP6-023) in-combination dust LSE on   |
|                                | River Derwer          | nt SAC (0.7km from t   | he OLs)                                       |  |   | the otter qualifying interest are identified. The potential for in-combination AEOI arising from dust   |
|                                | Otter                 | Loss of FLL (through hedgerow planting in the Habitat Provision Area) during construction and decommissioning  | <b>V</b>                                      | <b>V</b>                                       | <b>✓</b>  | are considered and discounted at paragraph 4.3.18 to 4.3.21 of the HRA Report (REP6-021).  In-combination sediment-loading LSE with Development 102 are also identified for the otter feature only. The potential for in-combination AEQL   |
|                                |                       | Dust emissions<br>on FLL during<br>construction and<br>decommissioning<br>(Carr Dyke)  | <b>~</b>                                      | ×  | <b>V</b>  | feature only. The potential for in-combination AEOI arising from sediment-loading are considered and discounted at paragraphs 4.3.23 to 4.3.26 of the HRA Report (REP6-021).  |

| Reference                      | Text  |  |                                    |  |              | Applicant's Response  |
|--------------------------------|---|--|------------------------------------|--|--------------|---|
| Lower<br>Derwent<br>Valley SAC | Habitats 1  | decommissioning  Treated flue gas to air emission during operation (acid deposition)  Treated flue gas *   | ×                                  | ×  |              | The Applicant wishes to highlight that in the latest version of their screening matrices (submitted at deadline 6, REP6-023) no LSE are predicted in relation to treated flue gas emissions to air.   |
| Lower<br>Derwent<br>Valley SAC | Features Otter All other features                       | Accidental releases of water-borne pollutants (into Carr Dyke or River Ouse) during operation  Accidental releases of water-borne pollutants during operation              | Screening<br>result*:<br>LSE alone | Screening<br>result*: LSE<br>in<br>combination | on integrity | The assessment of this impact for 'All other features' in Table 3.1 indicates that the Applicant's screening matrices suggest assessment of AEOI is required. The latest version of the Applicant's screening matrices (submitted at deadline 6, REP6-023), concludes no LSE for all features other than otter and therefore that assessment of AEOI is not required.   |
| Lower<br>Derwent<br>Valley SPA | Lower Derwent N Wildfowl and waders – teal and shoveler | Loss and disturbance of FLL (Habitat Provision Area and Off-Site Habitat Provision Area)  Dust emissions on FLL during construction (Habitat Provision Area and Carr Dyke) | on from the                        | OLs)   | <b>V</b>     | The Applicant wishes to highlight that in the latest version of their screening matrices (submitted at deadline 6, REP6-023) no LSE are predicted in relation to loss and disturbance of FLL in the Off-site Habitat Provision Area.  In the latest version of the Applicant's screening matrices (submitted at deadline 6, REP6-023) incombination dust LSE on the SPA bird qualifying interests are identified. The potential for incombination AEOI arising from dust are considered |

| Reference                            | Text   | Applicant's Response  |
|--------------------------------------|--|---|
|                                      |  | and discounted at paragraphs 4.3.18 to 4.3.21 of the HRA Report (REP6-021).   |
| Lower<br>Derwent<br>Valley SPA       | Wintering birds – Bewick's swan, teal, shoveler, wigeon, golden plover Wildfowl and waders  Wintering birds – Bewick's swan, teal, shoveler, wigeon, golden plover Construction and decommissioning (Carr Dyke)  | In-combination sediment-loading LSE with Development 102 are identified for the SPA bird qualifying interest feature in the Applicant's latest screening matrices. The potential for in-combination AEOI arising from sediment-loading are considered and discounted at paragraphs 4.3.23 to 4.3.26 of the HRA Report (REP6-021).   |
| Lower<br>Derwent<br>Valley<br>Ramsar | Wildfowl and waders/Wintering birds – teal and wigeon  Loss and disturbance of FLL (Habitat Provision Area and Off-Sike Habitat Provision Area)  Dust emissions on FLL during construction (Habitat Provision Area and Carr Dyke)  Increased risk of pollution from sediment load during construction and decommissioning (Carr Dyke)  Accidental of V | The Applicant wishes to highlight that in the latest version of their screening matrices (submitted at deadline 6, REP6-023) no LSE are predicted in relation to loss and disturbance of FLL in the Off-site Habitat Provision Area.  In the latest version of the Applicant's screening matrices (submitted at deadline 6, REP6-023) incombination dust LSE on the SPA bird qualifying interests are identified. The potential for incombination AEOI arising from dust are considered and discounted at paragraphs 4.3.18 to 4.3.21 of the HRA Report (REP6-021). |
|                                      |  | In-combination sediment-loading LSE with Development 102 are identified for the SPA bird qualifying interest features in the Applicant's latest screening matrices. The potential for in-combination  |

| Reference                            | Text       |   |   |   |   | Applicant's Response  |
|--------------------------------------|------------|---|---|---|---|---|
|                                      |            |   |   |   |   | AEOI arising from sediment-loading are considered and discounted at paragraphs 4.3.23 to 4.3.26 of the HRA Report (REP6-021).   |
| Lower<br>Derwent<br>Valley<br>Ramsar | Habitats 1 | Treated flue gas to air emissions during operation (acid deposition)  |   | × | · | The Applicant wishes to highlight that in the latest version of their screening matrices (submitted at deadline 6, REP6-023) no LSE are predicted in relation to treated flue gas emissions to air. Therefore, no assessment of AEOI is required.   |
| Lower<br>Derwent<br>Valley<br>Ramsar | 1          | Operational noise and vibration disturbance Increased levels of visual disturbance during operation   | × | × | * | The Applicant wishes to highlight that in the latest version of their screening matrices (submitted at deadline 6, REP6-023) no LSE are predicted in relation to increased levels of in-combination visual disturbance during operation. Therefore, no assessment of AEOI is required.                        |
| Humber<br>Estuary SAC                |            | Noise and vibration on FLL during construction and decommissioning Increased visual disturbance of FLL from plant and personnel during construction and decommissioning | × | * | × | The Applicant wishes to highlight that in the latest version of their screening matrices (submitted at deadline 6, REP6-023) no LSE are predicted in relation to increased levels of in-combination visual disturbance during construction and decommissioning. Therefore, no assessment of AEOI is required. |

| Reference             | Text   | Applicant's Response  |
|-----------------------|--|---|
| Humber<br>Estuary SPA | Wildfowl and waders/ Wintering birds - waterbird assemblage (lapwing, curlew, shoveler, mallard, wigeon), marsh harrier, golden plover  Wildfowl and waders/ Wintering birds - waterbird assemblage (lapwing, curlew, shoveler, mallard, wigeon), marsh harrier, golden plover  Dust emissions on FLL during construction (Habitat Provision Area and Carr Dyke)  Increased risk of pollution from sediment load during construction and decommissioning (Carr Dyke) | The Applicant wishes to highlight that in the latest version of their screening matrices (submitted at deadline 6, REP6-023) no LSE are predicted in relation to loss and disturbance of FLL in the Off-site Habitat Provision Area.  In the latest version of the Applicant's screening matrices (submitted at deadline 6, REP6-023) incombination dust LSE on the SPA bird qualifying interests are identified. The potential for incombination AEOI arising from dust are considered and discounted at paragraphs 4.3.18 to 4.3.21 of the HRA Report (REP6-021). |
|                       |  | In-combination sediment-loading LSE with Development 102 are identified for the SPA bird qualifying interest feature in the Applicant's latest screening matrices. The potential for in-combination AEOI arising from sediment-loading are considered and discounted at paragraphs 4.3.23 to 4.3.26 of the HRA Report (REP6-021).   |
| Humber<br>Estuary SPA | Increased levels of visual disturbance during operation  | The Applicant wishes to highlight that in the latest version of their screening matrices (submitted at deadline 6, REP6-023) no LSE are predicted in relation to increased levels of in-combination visual disturbance during operation. Therefore, no assessment of AEOI is required.  |

| Reference                   | Text   | Applicant's Response   |
|-----------------------------|--|--|
| Humber<br>Estuary<br>Ramsar | Humber Estuary Ramsar (2.9km from the OLs)  Wildfowl and waders – waterbird assemblage (lapwing, curlew, shoveler, mallard, wigeon), golden plover  Dust emissions on FLL during construction (Habitat Provision Area and Carr Dyke)  Increased risk of pollution from sediment load during construction and decommissioning (Carr Dyke) | The Applicant wishes to highlight that in the latest version of their screening matrices (submitted at deadline 6, REP6-023) no LSE are predicted in relation to loss and disturbance of FLL in the Off-site Habitat Provision Area.  In the latest version of the Applicant's screening matrices (submitted at deadline 6, REP6-023) incombination dust LSE on the SPA bird qualifying interests are identified. The potential for incombination AEOI arising from dust are considered and discounted at paragraphs 4.3.18 to 4.3.21 of the HRA Report (REP6-021).  In-combination sediment-loading LSE with Development 102 are identified for the SPA bird qualifying interest feature in the Applicant's latest screening matrices. The potential for in-combination AEOI arising from sediment-loading are considered and discounted at paragraphs 4.3.23 to 4.3.26 of the HRA Report (REP6-021). |
| Skipwith<br>Common<br>SAC   | Skipwith Common SAC (7.6km from the OLs)    Northern Atlantic wet heaths with cross-leaved heath (single feature)  | As detailed in the HRA Report (REP6-021) European Dry Heaths (EUNIS code 4030) is also a qualifying interest of Skipwith Common SAC.   |

| Reference          | Text   | Applicant's Response   |
|--------------------|--|--|
| Thorne<br>Moor SAC | decommissioning  Treated flue gas to air emissions during operation deposition)  Coorational | The Applicant wishes to highlight that as set out in Table 3.14 of the HRA Report (REP6-021), there is no exceedance of the 1% screening criteria for NH <sub>3</sub> in-combination with other plans and projects. Incombination LSE are therefore predicted in relation to nitrogen deposition and acid deposition only. |