



COVER LETTER

Drax Bioenergy with Carbon Capture and Storage

Planning Act 2008 (as amended)

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(q)

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PUBLIC

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The Planning Act 2008 – Section 37 ‘Applications for Orders granting Development Consent’

The Drax Power Station Bioenergy with Carbon Capture and Storage Extension Order

Dear Mr Harrold,

1. Please find enclosed an application (‘the Application’) from Drax Power Limited (‘the Applicant’) for a Development Consent Order (‘DCO’) under section 37 of the Planning Act 2008 (‘PA 2008’) in respect of the Drax Bioenergy with Carbon Capture and Storage Project.
2. The Applicant is seeking development consent to install post combustion carbon capture technology to capture carbon dioxide from up to two existing 660-megawatt electrical (‘MWe’) biomass power generating units at the Drax Power Station (Unit 1 and Unit 2). The installation of this technology constitutes an extension to the Existing Drax Power Station (of which biomass Units 1 and 2 are part) and is referred to as post-combustion carbon capture. The Proposed Scheme is designed to remove approximately 95% of the carbon dioxide from the flue gas from these two Units, resulting in overall negative emissions of greenhouse gases.
3. The Proposed Scheme involves the use by the Applicant of land at the Drax Power Station for a purpose directly related to the generation of electricity by that station. The Applicant considers that, in this particular case, the installation of post-combustion carbon capture technology (Work No. 1 as set out in Schedule 1 to the draft DCO) constitutes the NSIP by virtue of it being an extension to the Existing Drax Power Station. The design is unique to carbon capture plants and arises as a result of Units 5 and 6 (the last two remaining coal-fired units at the Existing Drax Power Station) being decommissioned before the Proposed Scheme is operational. This presents an opportunity to the Applicant to design a carbon capture plant that makes use of spare capacity in terms of water treatment, water cooling and steam flows that arise as a result of the decommissioning of Units 5 and 6. The Proposed Scheme therefore involves the modification, upgrade and extension of existing apparatus which will result in the Proposed Scheme becoming an integral part of the

process of generating electricity at the Existing Drax Power Station. The effect of the extension (the Proposed Scheme) will be that Units 1 and 2 of the Existing Drax Power Station will not only generate electricity but also produce negative emissions in generating that electricity. For example, the Proposed Scheme will form part of the water cycle of the Existing Drax Power Station and therefore part of the process of the generation of electricity. Indeed, it is akin to a carbon capture plant being incorporated in a new generating station, such as that being promoted at Net Zero Teesside and Keadby 3 (both current NSIP projects). The Proposed Scheme, therefore, comprises an extension of an existing generating station for the purpose of section 14(1)(a) of the PA 2008, and therefore is a Nationally Significant Infrastructure Project. A DCO is therefore required for the Proposed Scheme as it falls within the definition and thresholds for a "Nationally Significant Infrastructure Project" (a "NSIP") under sections 14 and 15(2) of the PA 2008. Further detail is provided in the Explanatory Memorandum (document reference 3.2).

4. The DCO, if made by the Secretary of State (SoS) for Business, Energy and Industrial Strategy, would be known as The Drax Power Station Bioenergy with Carbon Capture and Storage Extension Order.

Drax Power Limited

5. Drax Power Limited is part of the Drax Group and is a UK energy business committed to helping change the way energy is generated, supplied and used as the UK moves to a low carbon future.
6. The Applicant owns and operates the existing Drax Power Station, where the proposed technology combining energy generation from biomass with carbon capture and storage and associated works will be located.

Site Description

7. Drax Power Station is a large power station, comprising originally of six coal-fired units. It was originally built, owned and operated by the Central Electricity Generating Board and had a capacity of just under 2,000 MW when Phase 1 was completed in 1975. Its current capacity is 4,000 MW after the construction of Phase 2 in 1986.
8. It is now owned and operated by the Applicant. Four of the six main generating units (units 1 to 4) run on biomass, making Drax Power Station the UK's largest single site renewable power generator.
9. The two remaining units (units 5 and 6) run on coal, however they stopped generating electricity commercially in March 2021 and will cease operations prior to works to construct the Proposed Scheme commencing.
10. The Applicant has the benefit of a DCO (The Drax Power (Generating Stations) Order 2019), which allows it to repower up to two of the existing coal-powered generating units with new gas turbines that can operate in both combined cycle and open cycle modes ("Drax Repower"). The Applicant has publicly stated that it has no plans to progress the Drax Repower and this is confirmed by a proposed article in the draft DCO submitted with the Application (document reference 3.1). As such, for the purposes of the Application for the Proposed Scheme including this ES, it has been assumed that Drax Repower will not be built.
11. The Applicant has full planning permission under the Town and Country Planning Act 1990 for the demolition of the redundant Flue Gas Desulphurisation ('FGD') Plant and associated restoration works at Drax Power Station. The decommissioning and demolition works are scheduled to take place between 2022 and 2027. The decommissioning and demolition works of Absorber Units 4, 5

and 6 are scheduled to take place prior to the start of the construction of the Proposed Scheme, whilst the demolition of Absorber Units 1, 2 and 3 are assumed to take place following the completion of the Proposed Scheme.

12. The existing Drax Power Station is characterised by a number of large structures, including the main generating station buildings housing the four biomass units (retrofitted sequentially at Drax Power Station since 2013) and two coal units, a main emissions stack of 259 m in height, 12 cooling towers each of 116.5 m in height (six to the north and six to the south of the generating station buildings), offices, storage buildings and ash handling facilities, as well as overhead electricity cables and rail infrastructure.

Order Limits

13. Proposed Scheme would be located on the land which is bounded by the Order Limits. The Proposed Scheme is located at and in the vicinity of the existing Drax Power Station, west of the village of Drax and approximately 5km south east of Selby and 7.5km north west of Goole. The location of the Site is shown in document reference 2.1 - Site Location Plan.
14. The Order Limits are shown on Figure 1.1 (Order Limits) (document reference 6.2.1.1) and refer to the outer perimeter of the Site, including the maximum extent of all potential permanent and temporary works required as part of the Proposed Scheme, but excluding the Off-site Habitat Provision Area, detailed in paragraph 17 below.
15. The Site is approximately 125 ha and is split into the following parcels:
 - Drax Power Station Site – the land occupied by the Drax Power Station;
 - East Construction Laydown Area – area required during the construction phase of the Proposed Scheme for temporary works situated to the east of the Drax Power Station, across New Road. (N.B. There are several parcels of land within the Drax Power Station Site which would be used for construction laydown. These areas have been termed ‘Drax Power Station Site Construction Laydown Areas’);
 - Habitat Provision Area – the land within the Order Limits that may be used for environmental mitigation for the Proposed Scheme. This parcel is located to the north and north east of the Drax Power Station; and
 - Surrounding road network.
16. In addition, an Off-site Habitat Provision Area has been identified within land outside of the Order Limits, to the west of the Site, that will be used to provide some of the ecological mitigation and compensation associated with the Proposed Scheme. This area is shown on Figure 1.3 (Off-Site Habitat Provision Area) (document reference 6.2.1.3). The provision of these works will be secured via a development consent obligation under section 106 of the Town and Country Planning Act 1990 and draft Heads of Terms for that agreement are provided with the Application (document reference 7.1).

Environmental Impact Assessment

17. The Proposed Scheme represents development that requires an Environmental Impact Assessment (‘EIA’) and, therefore, the Application includes an Environmental Statement (‘ES’) (document reference 6.1, 6.2, 6.3 and 6.4) that reports the findings of the EIA that has been undertaken.

18. This Application is in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ('EIA Regulations 2017'), which came into force on 16 May 2017. The Proposed Scheme falls under Schedule 1, paragraph 23 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ("EIA Regulations) as 'Installations for the capture of carbon dioxide streams for the purposes of geological storage pursuant to Directive 2009/31/EC from installations referred to in this Schedule, or where the total yearly capture of carbon dioxide is 1.5 megatonnes or more.'
19. In accordance with regulation 8(1) of the EIA Regulations 2017, the Applicant submitted a request for an EIA Scoping Opinion accompanied by a Scoping Report (document reference 6.3.1.1), which was received by the SoS on 18 January 2021. A Scoping Opinion was received by the Applicant from the Planning Inspectorate ('PINS') (on behalf of the SoS) on 26 February 2021 (document reference 6.3.1.2).

The Application Submission

20. The Application Guide (document reference 1.3) lists the documents that comprise the Application and sets out how these meet the relevant legislative requirements. The Application Guide is a live document that will be updated throughout the examination of the DCO Application, as required.
21. Accompanying this Cover Letter (document reference 1.1) and forming part of the Application is the Application Form (document reference 1.2), and a Glossary (document reference 1.7).
22. The Site Location Plan (document reference 2.1) shows the location and extent of the Order Limits for the Proposed Scheme in the context of the local area. The Land Plans (document reference 2.2) show the extent of the land (the Order Limits) over which powers of compulsory acquisition are required for the Proposed Scheme, while the Works Plans (document reference 2.3) show the Order Limits and identify the location of the main components of the Proposed Scheme within the Site by reference to the Work Numbers set out in Schedule 1 of the dDCO. Access and Rights of Way Plans are provided in document reference 2.4. Indicative Plans and Elevations are provided in document reference 2.5.
23. Schedule 1 (Authorised Development) of the draft DCO ('dDCO') (document reference 3.1) provides the formal description of the Proposed Scheme and its components and identifies the individual Work Numbers for those components. A detailed description of the Proposed Scheme is provided in Chapter 2 (Site and Project Description) of the ES (document reference 6.1.2).
24. Schedule 2 (Requirements) of the dDCO contains a number of requirements that would control the detailed design of the Proposed Scheme, in addition to its construction and operation, to ensure that it remains within the scope of the EIA carried out and does not result in unacceptable impacts. These would require the submission to and approval by the local planning authority of further details of the Proposed Scheme.
25. Schedule 14 (Design Parameters) of the dDCO (document reference 3.1) provide maximum parameters for different aspects of the Proposed Scheme consistent with the details provided in Schedule 1 of the dDCO and as assessed in the EIA (see paragraph 28, below).
26. The dDCO provides for powers of compulsory acquisition of interests and rights in land (including new rights) within the Order Limits. The provisions relating to compulsory acquisition are set out at Articles 18 to 31 of the dDCO. These and other provisions of the dDCO are explained in the Explanatory Memorandum (document reference 3.2).
27. Information on the interests and rights that exist in relation to the land within the Order limits is provided by the Book of Reference (document reference 4.3). The justification for the proposed

compulsory acquisition of interests and rights in land is set out in the Statement of Reasons (document reference 4.1), with the ability of the Applicant to fund this confirmed by the Funding Statement (document reference 4.2).

28. The Applicant has consulted extensively on the Proposed Scheme. This has included a stage of non-statutory consultation (the Stage 1 Consultation), followed by a stage of statutory consultation (the Stage 2 Consultation) in accordance with sections 42, 47 and 48 of the PA 2008. The consultation undertaken and how responses received to that consultation have been taken into account is documented within the Consultation Report (document reference 5.1).
29. The assessment of the Proposed Scheme against the relevant National Policy Statements ('NPSs') and other relevant planning policy is set out in the Planning Statement (document reference 5.2).
30. The need for the Proposed Scheme alongside the benefits resulting from the Proposed Scheme are set out in the Needs and Benefits Statement (document reference 5.3).
31. A Statutory Nuisance Statement (document reference 5.4) is submitted to assess whether the Proposed Development could cause a statutory nuisance.
32. An Other Consents and Licences report (document reference 5.5) is submitted with the DCO Application and sets out what other consents and licences will or may be required to build and operate the Proposed Scheme.
33. A Grid Connection Statement (document reference 5.6) explains whether a grid connection is required and whether this is feasible.
34. The ES that reports the findings of the EIA undertaken for the Proposed Scheme comprises Volume 1 (Main Text), Volume 2 (Figures), Volume 3 (Appendices) and Volume 4 (Non-Technical Summary) (document references. 6.1 – 6.4). It has not been possible for Drax to fix all of the design details of the Proposed Scheme at this stage and, therefore, the Proposed Scheme has sought to incorporate some flexibility within its layout and design. To accommodate this flexibility and ensure a robust EIA of the Proposed Scheme, a 'Rochdale Envelope' approach has been adopted, meaning that the EIA has been undertaken within the maximum extents of the parameters of the Proposed Scheme. These parameters are secured in the dDCO via a requirement in Schedule 2, with the parameters being listed in Schedule 14.
35. Other documents accompanying the ES include:
 - A Register of Environmental Actions and Commitments (document reference 6.5);
 - An Outline Landscape and Biodiversity Strategy (document reference 6.6);
 - A Draft Lighting Strategy (document reference 6.7);
 - A Habitat Regulations Assessment Report (document reference 6.8);
 - A Design Framework Document (document reference 6.9); and
 - A Biodiversity Net Gain Assessment (document reference 6.10).
36. A draft Heads of Terms for a development consent obligation (s106 Agreement) is provided in document reference 7.1.
37. A 3-D Model Flyover Video has been prepared to assist the consideration of the Proposed Scheme in the context of the Drax Power Station site and is provided as document reference 7.2.

38. We enclose with this letter the Application documents (as listed in the Application Guide (document reference 1.3) and Electronic Application Index (document reference 1.5)) via WeTransfer, as agreed with PINS via email on 04 April 2022.
39. A completed Section 55 checklist (document reference 1.6) has been included with the Application to assist with PINS's compliance check of the Application.
40. The GIS Shapefile was sent to PINS via email on 22 April 2022. Receipt of the document was confirmed by the Case Manager via email on 25 April 2022.
41. As agreed with PINS via email with the Case Manager on 12 April 2022, the enclosed Application documents will not be published on the PINS website until acceptance has been issued. It was also agreed with PINS via email on 12 April 2022 that there is a degree of flexibility regarding the appropriate presentation of figures and plans enclosed within the Environmental Statement, where it may be necessary to use a scale departing from those confirmed in Regulation 5(3) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 to convey the information clearly. Accordingly, in the submitted ES there are figures and plans which use different scales to enable the information to be presented clearly.
42. The initial application fee of £7,488 has been paid to the PINS by CHAPS on 05 May 2022. The payment reference is EN00120 (Transaction Reference BX22050536437327). Please do not hesitate to contact me should you have any queries regarding the Application. We look forward to receiving acknowledgement of the Application and in due course, confirmation of its acceptance.

Yours sincerely



Jim Doyle
Environmental Consents Officer

