

Drax Power Ltd
Application by Drax Power Ltd for an Order Granting
Development Consent for the Drax Re-power Project

Planning Inspectorate Reference: EN010091

The Environment Agency's response to the
Examining Authority's 1st Written Questions

Unique Reference Number: 20011848

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Submitted on behalf of the
Environment Agency by:
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Response to the Examining Authority's first written questions

Please find below answers to your questions directed to the Environment Agency and to other questions where we hope our comments will assist the Examining Authority.

Alternatives, Need and Climate Effects

ANC 1.7 – Carbon Capture Storage

To the Applicant

The Environment Agency in its RR [RR-292] states that additional information is required before they can conclude whether there are no foreseeable barriers to carbon capture with regards to technical feasibility, including the following:

- A scaled plan to identify the CO₂ pipeline and exit point;
- Details of the space requirements for the carbon capture equipment, along with an explanation of how space allocations have been determined;
- A statement of estimated cooling demand and that the space allocated is sufficient;
- A statement of estimated additional compressed air requirements, along with the
- size of the compressor and their location;
- Details of the estimated additional waste water treatment needs and that the existing effluent treatment plant can meet this demand;
- Confirmation that emissions will be the same or lower in Open Cycle Gas Turbine(OCGT) mode than in Combined Cycle Gas Turbine (CCGT) mode, and if not, an assessment of carbon capture readiness against OCGT mode; and
- Confirm how the carbon capture equipment will be able to operate at 90% efficiency in OCGT mode.

- i) Justify why this information is not required for this Application; or
- ii) Provide this information, and confirm the extent to which it alters the assessment presented in the ES. [APP-069 to APP-086].
- iii) Confirm that the parameters of the buildings as set out in the dDCO [AS-012] leave sufficient space for the carbon capture readiness.

Whilst this question is directed to the applicant, we have comments to make that we hope will be of assistance to the ExA in considering this point.

We have received documents from the applicant addressing the concerns raised in our Relevant Representations response. We are currently reviewing this information and will respond in due course. We remain in discussion with the applicant.

ANC 1.8 – Combined Heat and Power

For the Applicant

The Environment Agency in its RR [RR-292] states that a site layout plan has not been submitted indicating that sufficient space exists for combined heat and power. It also states that the selection of heat loads also could have planning implications as it could dictate the site infrastructure and affect the footprint of any development required.

- i) Provide a justified response to both concerns raised.**
- ii) Provide this plan.**

Whilst this question is directed to the applicant, we have comments to make that we hope will be of assistance to the ExA in considering this point.

We have received documents from the applicant addressing the concerns raised in our Relevant Representations response. We are currently reviewing this information and will respond in due course. We remain in discussion with the applicant.

Air Quality

AQ 1.2 – Environmental Permit

To the Environment Agency

The ExA notes your comments in your RR [RR-292]. However, it gives little steer as to whether, based on the assessment in the ES and the information provided in other dDCO application documents, any obvious errors or issues exist before the Environment Agency that would prevent the Environmental Permit from being granted. Provide this clarification.

The Environment Agency is of the opinion that a project of this type and nature should be capable of being adequately regulated under the Environmental Permitting Regulations (EPR) and at this point the Environment Agency knows of no obvious errors or issues which would prevent a permit being granted at this time. However, as the permit application has not yet been fully assessed it would be premature to provide comments on whether or not a permit would be issued at this stage.

AQ 1.3 – Environmental Permit Monitoring

To the Applicant and the Environment Agency

Chapter 6 of the ES [APP-074] identifies that the need for long-term air quality monitoring will be determined through the Environmental Permit pre-application discussions. Provide an update on such discussion and whether the need for monitoring has been determined.

AQE monitoring was conducted between 2005 – 2015 which demonstrated a significant reduction and eventual elimination of AQS breaches. The requirement for long term air quality monitoring will be assessed as part of the EPR Permit application.

AQ 1.5 – Emissions Monitoring

To the Applicant

Table 6-3 of Chapter 6 of the ES [APP-074] states that long-term air quality monitoring is required but will form part of the Environmental Permit application to be determined by the Environment Agency.

- i) Confirm whether air quality monitoring is or should be secured by the dDCO [AS- 012] and whether it forms part of Requirement 17.**
- ii) Explain whether ambient air quality monitoring is necessary for the monitoring of nitrogen oxides in specific areas and if so, how this is secured in the dDCO.**

Whilst this question is directed to the applicant, we have comments to make that we hope will be of assistance to the ExA in considering this point.

AQE monitoring was conducted between 2005 – 2015 which demonstrated a significant reduction and eventual elimination of AQS breaches. The requirement for long term air quality monitoring will be assessed as part of the EPR Permit application.

AQ 1.8 – Ammonia Cap

To the Applicant

Chapter 6 of the ES [APP-074] identifies that total ammonia concentrations and deposition levels exceed the critical levels and loads applicable at some sites and to specific habitats. As a result an ammonia cap has been proposed which limits the amount of emissions of ammonia to 120 tonnes annually.

- i) Confirm if the ammonia cap of 120 tonnes annually has been agreed with Environment Agency.**
- ii) Set out how ammonia levels will be measured and monitored.**

Whilst this question is directed to the applicant, we have comments to make that we hope will be of assistance to the ExA in considering this point.

The applicant has not included the requirement for SCR abatement within the EPR permit application. As a result the proposal of an annual ammonia cap is not included within the EPR permit application and has not been discussed.

AQ 1.9 – Ammonia Cap

To the Applicant

Paragraph 6.3.7 of Chapter 6 of the ES [APP-074] states that the ammonia cap can be achieved via other methods, such as only operating a single unit or by taking into account both emission rate and the number of operating hours in combined cycle mode for either or both units.

i) Confirm if a final decision has been made regarding the operation of the units in order to achieve the ammonia cap and has this been confirmed with the Environment Agency.

ii) Confirm that this has been factored into assessments elsewhere in the ES, including the assessment of biodiversity.

Whilst this question is directed to the applicant, we have comments to make that we hope will be of assistance to the ExA in considering this point.

The applicant has not included the requirement for SCR abatement within the EPR permit application. As a result the proposal of an annual ammonia cap is not included within the EPR permit application and has not been discussed.

Biodiversity and Habitats Regulations

BHR 1.2 – Gas Pipeline Crossing Techniques

To the Applicant, Natural England, Environment Agency and North Yorkshire County Council

Chapter 9 of the ES [APP-077] also sets out various mitigation measures to minimise adverse impacts on species such as otters, water voles and eels, in the event that trenchless techniques were not possible.

For the Applicant:

i) Demonstrate the impacts on protected species if trenchless crossings are not possible.

ii) Provide further details regarding mitigation measures to be employed if trenchless techniques are not possible.

iii) Explain how additional techniques would be secured in the dDCO [AS-012].

For Natural England, the Environment Agency and North Yorkshire County Council:

iv) Comment on the uncertainty associated with techniques proposed for the gas pipeline crossings under watercourses, drains and hedgerows.

All the gas pipelines in site relate to the crossing of ordinary watercourses and are therefore not within the remit of the Environment Agency. We therefore have no comments in relation to this question.

BHR 1.3 – Field Surveys

To the Applicant, Natural England, Environment Agency and North Yorkshire County Council

Table 9-2 of Chapter 9 of the ES [APP-077] identifies that a *“reptile survey report documenting the results of the reptile survey will be submitted after the dDCO [AS-012] submission date as an addendum.”* Paragraphs 9.5.14 to 9.5.24 identify that further surveys are being undertaken in 2018 for:

- Reptiles (two further surveys)
- Breeding birds
- Bats (activity surveys)

For the Applicant:

- i) Explain why these surveys were not carried out prior to submission of the application.
- ii) Provide an update with regard to further ecological surveys that are identified in the ES as to be undertaken in 2018.
- iii) Provide the results of these surveys and identify how the results of these affect the assessment in the ES, including mitigation proposed. For Natural England, The Environment Agency, North Yorkshire County Council and Selby District Council:
- iv) Comment on any concerns with regards to the current absence of this data.

This is not within the remit of the Environment Agency. Therefore we have no comments in relation to this question.

BH 1.4 – Field Surveys

To the Applicant, Natural England, Environment Agency, North Yorkshire County Council and Selby District Council

In respect to question BHR 1.3, the Applicant made the Inspectorate aware of this possibility at the scoping stage. Table 9-2 in response to comments made by the Inspectorate in the Scoping Opinion, states that the Applicant has agreed the scope of the biodiversity impact assessment, and the approach to addressing potential data omissions arising from incomplete or partial ecological survey data with Natural England (NE) and North Yorkshire Council Ecology Service (NYCES). Provide copies of agreements reached and/or confirm agreement with any Statement of Common Ground with these consultation bodies. *[N.B It is noted that no concerns regarding data omissions/approach to missing data has been identified in the respective RRs [RR-212 and RR-309] from NE and NYCES]*

This is not within the remit of the Environment Agency. Therefore we have no comments in relation to this question.

BHR 1.14 – Scope

To Natural England and the Environment Agency

The ExA note that NE and the Environment Agency have not raised any concerns regarding the scope in their RRs [RR-212 and RR-292],

respectively. The ES makes reference to agreements with NE on specific matters.

- i) Confirm that all agreements referred to in the ES are satisfactory.
- ii) Confirm details and provide evidence of such agreements.

This is not within the remit of the Environment Agency. Therefore we have no comments in relation to this question.

BHR 1.19 – Otters and fish species

To the Applicant, Natural England and the Environment Agency

Paragraph 5.3.16 in Section 5 in the HRA report [APP-134] relies on mitigation measures to avoid adverse effects on the integrity of European sites supporting otter, river lamprey and sea lamprey. The measures are stated to be delivered through the outline LBS [APP-135], which is secured through Requirement 8 of the dDCO [AS-012]. The majority of measures set out in 5.3.16 are not included within the outline LBS [APP-135] as provided with the application. Measures are also stated in Section 5 in the HRA report [APP-134] to be secured through the CEMP [APP-133], which is secured through Requirement 16 of the dDCO [AS-012]. Paragraph 5.3.18 of the HRA report states that the CEMP will contain detailed method statements to ensure the protection of otters and fish, yet the CEMP contains no reference to fish.

For the Applicant:

- i) Explain why the avoidance and mitigation measures as set out in paragraph 5.3.16 of the HRA report [APP-134] are not included in full within the outline LBS [APP-135].
- ii) Confirm that measures to control effects on fish species (including eels) form part of the CEMP, or provide further detail.

For Natural England and the Environment Agency:

- iii) Comment whether you are satisfied with the level of detail included in the outline LBS [APP-135] and outline CEMP [APP-133], together the wording of Requirements 8 and 16 of the dDCO [AS-012] in respect of these plans, such that they can be relied upon for the conclusions of the Applicant's HRA report [APP-134] as presented at Section 5 concerning the otter and fish qualifying features of the River Derwent SAC and Ramsar and Lower Derwent SAC.

This is not within the remit of the Environment Agency. Therefore we have no comments in relation to this question.

Draft Development Consent Order

DCO 1.16 – Ground Conditions – Schedule 2 Part 2 Requirement 14

For the Applicant

The Environment Agency in its RR [RR-292] states that the wording of this Requirement needs amending because it is insufficient to protect controlled waters.

Provide a response and if necessary amend the Requirement.

Whilst this question is directed to the applicant, we have comments to make that we hope will be of assistance to the ExA in considering this point.

Following our Relevant Representations response we understand the following wording is proposed for the requirement:

Prior to each phase of development approved by this planning permission no development shall commence until a remediation strategy to deal with the risks associated with contamination of the site has been submitted to, and approved in writing by, the Planning authority.

This strategy will include the following components:

1. A site investigation scheme, based on the preliminary risk assessment provided in the Environmental Statement, to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.
2. The results of the site investigation and the detailed risk assessment referred to in (1) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.
3. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (2) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

Any changes to these components require the written consent of the planning authority.

The scheme shall be implemented as approved.

a) Requirement [XX] of the DCO shall state:

Prior to each phase of development being brought into use a verification report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to, and approved in writing, by the planning authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met.

b) Requirement [XX] of the DCO shall state:

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Planning Authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to and approved in writing by the Planning authority. The remediation strategy shall be implemented as approved.

We are satisfied that the proposed wording addresses our concerns and is sufficient to protect controlled waters.

DCO 1.19 – Absence of separate Site Waste Management Plan

For the Applicant

The Environment Agency in its RR [RR-292] states that the Site Waste Management Plan should be specifically referred to in Requirement 16 of the dDCO [AS-012].

Provide a justified response.

Whilst this question is directed to the applicant, we have comments to make that we hope will be of assistance to the ExA in considering this point.

Following discussions we understand that the SWMP is to be included within the wording of the outline CEMP. Therefore we accept there is no additional requirement needed for this.

Flood Risk and Water Resources

FW 1.3 - Mitigation

Chapter 12 of the ES [APP-080] refers to continuous long term groundwater level monitoring and water user groundwater level and/or surface water level monitoring should be completed for baseline purposes to assess hydraulic linkages.

For the Applicant:

i) Confirm whether such monitoring has been put in place.

For the Environment Agency:

ii) Comment on the proposed monitoring.

We have been provided with the following information in relation to the need for long term monitoring by WSP:

Following further design development and gaining a better understanding of the local geology, WSP believe that the original assessment of groundwater and surface water connectivity within the Environmental Statement (paragraphs 12.4.29 and 12.6.32) was over cautious. We now understand that the pipeline will be installed between 2-3m below ground and the pipeline trench will be reinstated with backfill derived from the original excavation. This is important because the back fill will, therefore, have similar permeability to the adjacent ground - limiting the potential for it to act as a preferential groundwater flow path once the pipeline has been completed.

In the vicinity of the River Ouse the pipeline and Above Ground Installation will be founded within Warp ground materials (defined in ES chapter 12 Water Resources, Quality and Hydrology APP-080) – local

BGS borehole logs show that these ground materials are composed of clay, which have very low permeabilities. The Warp ground materials are therefore limiting the hydraulic connectivity with the River Ouse. As the Warp consists of low permeability ground materials, should sump pump dewatering of the proposed pipeline trench during construction and the Above Ground Installation be required it would have very limited lateral impact. Therefore, pipeline trench dewatering over a short period of time within these Warp ground materials would be unlikely to have an impact upon the River Ouse.

Further to the west the pipeline will be founded in the Hemingbrough Glaciolacustrine Formation, Brighton Sand Formation and Alluvium superficial deposits. The Hemingbrough Glaciolacustrine Formation and Alluvium deposits are composed of clay (very low permeability) and the Brighton Sand Formation is composed of a sandy clay (low permeability) down to approximately 2m below ground level (bgl). There is no significant hydraulic connectivity between the above deposits and the River Ouse. Should sump dewatering be required during construction (unlikely given the depth of excavation although possible in the event of prolonged wet weather), it would be for a short period of time and would be unlikely to have an impact upon the River Ouse.

Given the above we therefore consider that continuous long-term groundwater level and surface water level monitoring is not required.

We can confirm that we have discussed this with WSP and the applicant and agree that it is a suitable approach.

FW 1.4 – Outline Surface Water Drainage

For the Applicant and the Environment Agency

Provide a response as to the adequacy of this document (Chapter 6 of the Flood Risk Assessment [APP-136] and Requirement 13 of the dDCO [AS-012]).

We are satisfied with the outline surface water drainage strategy. There is no increase in surface water discharge to the River Ouse therefore no impact on flood risk in this regard. The other issues covered by the surface water drainage strategy are within the remit of North Yorkshire County Council and the Internal Drainage Board. The Environment Agency's remit is limited to the discharge into main rivers, which is covered by the existing discharge permit.

FW 1.5 – Flood Risk Assessment

For the Environment Agency and North Yorkshire County Council

Confirm whether or not they are content with the scope, assessment, methodology and conclusions of the Flood Risk Assessment [AS-014]. If

not, provide details of the specific areas of concern and confirm how these should be addressed by the Applicant.

Further to our response at the Relevant Representations stage, we can confirm we are content with the scope, assessment, methodology and conclusions of the Flood Risk Assessment. Details were agreed with the applicant during the pre-application discussions. As such, we have no further comments to add.

FW 1.6 – Water Framework Directive

For the Applicant and the Environment Agency

It is noted from Chapter 12 of the ES [APP-080] that a Water Framework Directive (WFD) Screening was submitted to the EA during the pre-application period and it is stated the Environment Agency (EA) confirmed to the Applicant that a full WFD assessment was not required. Provide the WFD Screening to the Examination and evidence of agreement with the Environment Agency regarding this matter.

We received a revised Water Framework Directive (WFD) screening assessment from WSP on 23 April 2018. We reviewed the document and agree with the findings of the screening assessment. We responded to WSP on 30 April 2018 to confirm that a full WFD assessment was not required in relation to hydromorphology or groundwater (please see appendix 1).

Appendix 1

creating a better place



Louise Markose
WSP

Our ref: RA/2018/138339/02

via email:
louise.markose@wsp.com

Date: 30 April 2018

Dear Louise

Drax Power Station, Selby, YO8 8PH.

Drax Repower WFD screening assessment.

Thank you for sending us your updated Water Framework Directive (WFD) screening assessment, received on 23 April 2018. We have reviewed this document and we agree with the findings of the screening assessment.

We agree that the proposed works will not have any adverse impacts on hydromorphology or groundwater from the perspective of the Water Framework Directive and that a full WFD assessment will not be required in respect to these issues.

Please note that this response is related to WFD only and does not prejudice any other advice we have provided with respect to environmental constraints within our remit, or your responsibilities to demonstrate that the proposed development will not cause unacceptable impacts to the environment, through the Development Consent Order and Environmental Permitting processes.

We recommend that you discuss WFD implications regarding Rusholme Lane Drain with Selby Area IDB in case they can offer additional advice or if they have any differing views.

If I can be of any further assistance, please don't hesitate to contact me.

Yours sincerely

Nick Beyer
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