



The Planning Inspectorate

Drax Re-Power (EN010091)

Correspondence received after the
close of the Examination at 23:59 on
04 April 2019

No.	From	Organisation	Date Received
1.	Jim Doyle	National Grid Carbon Limited	15 July 2019
2.	Richard Griffiths	Drax Power Limited	04 September 2019

From: [Jim Doyle](#)
To: [Drax Re-power](#)
Cc: [Gregory, Michele](#)
Subject: Letter from National Grid Carbon regarding Drax Repower Project - Planning Inspectorate reference EN010091
Date: 15 July 2019 15:11:47
Attachments: [Letter to PINS 120719.pdf](#)

Dear Michele,

DCO Application for the Drax Re-Power Project
Planning Inspectorate reference EN010091

Following some discussion with National Grid Carbon Limited, a letter received from National Grid Carbon Limited has been received and attached for information.

As you will see from the attached letter, National Grid Carbon Limited has realised that an Asset Protection Agreement should have been sought for infrastructure which is yet to be built. Drax Re-Power is working to assist National Grid Carbon Limited in order that we may resolve the position before the end of August.

As you will see, National Grid has been clear that it is not seeking any changes to the Drax Re-Power DCO application.

Yours Sincerely,

Jim

Jim Doyle

Environmental Consents Officer
Drax Power Limited
D: 01757612047
Jim.Doyle@drax.com
www.drax.com



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The Planning Inspectorate,
Temple Quay House
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Bristol
BS1 6PN.

For the attention of
DraxRe-power@planninginspectorate.gov.uk.

Date: 12th July 2019

Dear Sirs,

DCO Application for the Drax Re-Power Project
Planning Inspectorate reference EN010091

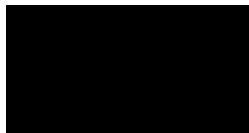
We are writing to inform you of a proposal for an additional Asset Protection Agreement (APA) to be completed. For the avoidance of doubt, no amendment is being sought to the Drax Re-Power DCO application; this is more for information and for completeness.

The APA concerns the land rights for unbuilt assets belonging to National Grid Carbon Limited. These were acquired for the Yorkshire and Humber Carbon Capture and Storage (CCS) pipeline project, which was the subject of a DCO application (reference EN070001). These assets could be useful to facilitate the new Carbon Capture Usage and Storage (CCUS) initiative which is being taken forward by Drax, Equinor and National Grid Carbon Limited following the completion of a Cooperation Agreement just a few weeks ago.

We believe the APA will be complete before the end of August. A copy will be forwarded to you and to the Secretary of State so that you can be assured of the safeguarding of assets which may assist any emerging CCUS initiative before any decision is made on the Drax Re-Power DCO application.

It may assist you to know that Drax Re-Power notified the National Grid Carbon as required under the DCO process. An administrative error within National Grid Carbon resulted in the benefit of asset protection being overlooked. The Company is grateful for the prompt and helpful assistance of the Drax Re-Power team in overcoming this difficulty. We have asked Drax Re-Power as the applicant to forward this letter to the Planning Inspectorate.

Yours faithfully,



Liz Wells,
Consents Manager.
For and on behalf of **National Grid Carbon Limited.**

From: [GRIFFITHS Richard](#)
To: [Gregory, Michele](#); [Drax Re-power](#)
Cc: [COLEMAN Alexis](#); [GRIFFITHS Richard](#)
Subject: Drax Repower [PM-AC.FID3169416]
Date: 04 September 2019 15:48:46
Attachments: [Scan-to-Me from PM1129 2019-09-04 123946.pdf](#)
[Drax Repower - submission to SoS \(04.09.2019\).pdf](#)

Dear Ms Gregory,

PINS REFERENCE: EN010091
DRAX REPOWER

Please find attached a cover letter and submission on behalf of Drax Power Limited to the Secretary of State. We should be grateful if you would bring this to the attention of the Secretary of State and confirm receipt.

Richard Griffiths
Partner
for Pinsent Masons LLP

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BY E-MAIL

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E richard.griffiths@pinsentmasons.com

4 September 2019

Dear Ms Gregory

PINS REFERENCE: EN010091
DRAX REPOWER
SUBJECT: SUBMISSION TO SECRETARY OF STATE

Please find enclosed a submission on behalf of Drax Power Limited to the Secretary of State for Business, Energy and Industrial Strategy. We should be grateful if you would bring this to the attention of the Secretary of State and confirm receipt.

Yours sincerely



Richard Griffiths
Partner
for Pinsent Masons LLP

Enclosure(s): Submission

Pinsent Masons LLP

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Drax Repower – post-Examination submission to the Secretary of State

1. INTRODUCTION

- 1.1 This is a submission made on behalf of Drax Power Limited, the Applicant with respect to the Drax Repower DCO Application (Planning Inspectorate reference number EN010091). The Examination of the Application closed on 4 April 2019. On 4 July 2019 the Examining Authority made its recommendations to the Secretary of State, and the matter is now with the Secretary of State for determination by 4 October 2019.
- 1.2 This submission is made to the Secretary of State in light of the amendment to the Climate Change Act 2008 (by virtue of the Climate Change Act 2008 (2050 Target Amendment) Order 2019) which took effect on 27 June 2019, and to which the Secretary of State must therefore have regard in her decision.

2. CURRENT CONTEXT

- 2.1 The effect of the amendment to the Climate Change Act 2008 (“**CCA 2008**”) is to require that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline (previously this reduction was 80%). There is as yet no additional legislation or policies stipulating the pathway to achieving this 100% reduction (also referred to as “net zero”). The UK’s Committee on Climate Change (“**CCC**”) is required to provide advice to the Government on meeting this 2050 net-zero emissions target and did so in May 2019 where it recommended that the 2050 target be adopted. As part of these recommendations it included a cost effective pathway for the UK to adopt, and this included advice about the use of gas in power generation.
- 2.2 National Grid has published its latest Future Energy Scenarios in July 2019. The Future Energy Scenarios reflect the net zero 2050 targets and include a scenario to meet that target. This is addressed in more detail below.
- 2.3 There has been no amendment to the Energy National Policy Statements (“**NPSs**”) (in the case of the Drax Repower Application, the relevant NPSs are EN-1, EN-2, EN-4 and EN-5), which are the primary basis for the Secretary of State’s (“**SoS**”) decision on the Drax Repower Application, and those NPSs therefore remain in effect, as they were during the Examination into the Application.
- 2.4 There has also been no amendment to the Carbon Capture Readiness (Electricity Generating Stations) Regulations 2013, and therefore the legal requirements with respect to carbon capture readiness with respect to Drax Repower remain as they were during the Examination.

3. THE IMPLICATIONS OF THE AMENDMENT TO THE CLIMATE CHANGE ACT 2008 FOR THE APPLICATION

3.1 The relevance of the amended CCA 2008 to the Application

- 3.1.1 Pursuant to section 104(3) of the Planning Act 2008 (“**PA 2008**”), the SoS must decide the Application in accordance with the Energy NPSs. The Applicant’s position (as set out in its submissions made during the course of the Examination), is that deciding the Application in accordance with the Energy NPSs would require the SoS to approve the Application and make the DCO in line with the final draft provided by the Applicant (Revision 6, Examination Library Reference REP9-004).
- 3.1.2 Sub-sections 104(5) and (6) of the PA 2008 provide exceptions where deciding an application in accordance with the relevant NPSs would lead to the SoS being in breach of any duty imposed on the SoS by or under an

enactment. Sub-section 104(4) provides an exception where deciding an application in accordance with the NPSs would lead to the United Kingdom being in breach of any of its international obligations. A consideration of the CCA 2008 is relevant in this respect; it imposes obligations nationally, and also implements international obligations.

- 3.1.3 The amended CCA 2008 is therefore relevant to the decision of the SoS in this Application, and regard must be had to the amended targets it implements in order to comply with sections 104(4) to (6) of PA 2008.

3.2 **A decision to approve the Drax Repower in accordance with the Energy NPSs would not result in a breach of the amended CCA 2008**

- 3.2.1 The Applicant's position, as set out above with respect to section 104(3) of the PA 2008, is that deciding the Application in accordance with the Energy NPSs would require the SoS to approve the Application and make the DCO in line with the final draft provided by the Applicant (Revision 6, Examination Library Reference REP9-004).

- 3.2.2 Whilst the SoS has to consider the amended CCA 2008 in order to determine whether any of the exceptions in sections 104(4) to (6) apply, the Applicant's submission is that consenting Drax Repower in accordance with the Energy NPSs would not result in a breach of the provisions of the amended CCA 2008. The position, as set out in the Applicant's submissions during the Examination, with respect to how the provisions of section 104 of the PA 2008 should be applied to the Application, has not changed by virtue of the amendments to the CCA 2008.

- 3.2.3 It is not possible to determine that a decision to approve one project would place the UK in breach of its climate change obligations (internationally and nationally) at an economy wide level in 2050. Such an approach would set a dangerous precedent for all other Nationally Significant Infrastructure Projects (or any development for that matter) producing greenhouse gases ("GHG") and fails to take into account the indirect benefits from new, more efficient energy generation displacing existing less efficient and higher GHG emitting sources of energy as well as from supporting electrification of other sectors. It is clear from NPS EN-1 and the Government's approach to how it has implemented its climate change obligations (for example, with national carbon budgets) that dealing with climate change on a project by project basis is a short sighted, unsophisticated approach, which fails to have regard to the global nature of GHG emissions, the economy wide budgets and obligations, and the indirect carbon reduction benefits of a single project.

- 3.2.4 The exceptions are therefore not triggered by deciding the Application in accordance with the relevant Energy NPSs.

- 3.2.5 Climate change obligations are measured at the national scale and the Government must be free through legislation and policy to balance emissions across the economy as a whole such as to enable the transition to low carbon. If a project-by-project approach is taken it could stand in the way of achieving the national goals. In this case, Drax Repower would make the electricity generation sector more efficient and lower its carbon intensity and allow other sectors to electrify. The implications of not consenting Drax Repower, therefore, would be:

- (a) to not realise the improvement this project could bring to the electricity generation sector; and

- (b) to slow down the decarbonisation of other sectors.

If that approach were to be replicated systematically it would prevent the UK from meeting its climate change obligations. We set out further detail below.

- 3.2.6 Drax Repower would result in an increase in GHG emissions of 90% at the Drax site, which is a direct, significant adverse effect. However, it is overly simplistic to look at that effect on its own. Drax Repower also delivers a 173% increase in capacity, at an improved carbon intensity. The reduction in carbon emissions per MW is from the current Units 5 and 6 operating at 840g CO₂/kWh to 380g CO₂/kWh for proposed Units X and Y. Drax Repower has indirect benefits on GHG emissions given it would:

- (a) displace less efficient, higher GHG producing generating plant, and
- (b) facilitate decarbonisation and hence lower GHG emissions in other sectors due to electrification. Reducing the emission intensity of electricity generation is essential in order to decarbonise other more-difficult sectors. Drax's submissions during the Examination have demonstrated that Repower will provide for a reduction in average emissions intensity of electricity generation, therefore contributing to this aim, not conflicting with it.

- 3.2.7 It is not as simple as saying this one project will produce 'x' amount of GHG emissions, when it will provide capacity for energy security, support renewable energy generation and meet future increases in demand (particularly from the electrification of sectors such as industry, heating and transport), combined with providing such benefits at a lower emissions intensity than alternatives. The impact of Drax Repower on GHG emissions and climate change needs to be considered on a national and global basis, rather than being focussed on a single project or sector alone. If the contribution from Repower is not delivered, that leaves an energy gap which still needs to be filled.

- 3.2.8 Drax Repower is most likely to run when there is high demand for electricity and low supply from renewables, and these are the same conditions under which other fossil fuel plant would run in the absence of Repower. The Applicant has explained fully during the course of the Examination why the gap left by not consenting Repower would not be filled by renewable energy sources. In the absence of Repower, the 3600MW of capacity it would provide would be delivered by generation at a greater emissions intensity. For that reason, it would be overly simplistic to conclude that if Repower is not consented, that is 3600MW of capacity not provided and the commensurate GHG emissions are avoided. Given the need for the contribution from Repower, then the resultant capacity gap would have to be met by other plant, most likely existing gas plant (given the particular role of the plant in the supply mix (e.g. inter alia the provisions of flexible generation to support intermittent renewables)) such that the CO₂ emissions would be similar to existing, older generation gas plant (i.e. 450g CO₂/kWh). The benefits of Repower are therefore obvious: more power at a lower carbon intensity.

- 3.2.9 Essentially, when considering GHG emissions, the SoS needs to consider those emissions globally or at least nationally, in the context of UK-wide targets for carbon. What needs to be considered is providing 3600MW of capacity at an emissions intensity of 380g CO₂/kWh by consenting Drax Repower, or providing that same amount of capacity at an intensity of approximately 450g CO₂/kWh (representing existing, less efficient gas plant). The implication of not consenting Repower is that the potential for a

positive impact on climate by providing more efficient and lower carbon emission energy is not only reduced, but the opportunity to then take off line or displace a source of energy generation with a higher carbon intensity is also reduced. This makes meeting carbon budgets more difficult, and supporting the transition of other sectors to electrification as well as the energy sector to greater reliance on renewables, less effective.

- 3.2.10 Drax Repower is entirely consistent with the Government's position on climate change and the transition to a low carbon economy, and supports that aim rather than conflicting with it. As a result, it is consistent with the obligations in the amended CCA 2008. Accepting that there is a role for fossil fuel generation in the decarbonisation of other sectors (which is apparent from the Climate Change Committee's Net Zero report and National Grid's 2019 Future Energy Scenarios, both discussed below), as well as with respect to energy security and enabling the growth of renewables, the benefit of Drax Repower is that it can fulfil those roles at a lower carbon intensity than the plant that would otherwise be called upon; without Repower those roles are fulfilled at a greater carbon intensity, and therefore with greater national GHG emissions. The implication of not consenting Drax Repower is a failure to deliver on the benefit that Repower would deliver in terms of meeting climate change obligations and the UK's carbon budgets.

3.3 **A decision to approve Drax Repower in accordance with the Energy NPSs does not result in a breach of any other relevant and important matters**

- 3.3.1 There is no new policy or legislation which Drax Repower would be in breach of.
- 3.3.2 As set out above, there is no new or amended policy or legislation sitting alongside the CCA 2008 amendment, and therefore, other than the amendment to the CCA 2008 itself, the policy and legislative context remains as it was during the Examination into the Application. There is therefore nothing in addition for the SoS to consider as a result of the change to the CCA 2008, other than whether consenting the Application would put the UK in breach of its obligations to meet the target of 100% by 2050.
- 3.3.3 Drax Repower is entirely consistent with achieving the 100% target by 2050, in particular:
- 3.3.4 **CCC's Net Zero report**
- 3.3.5 The CCC in its report, recommending the 100% by 2050 target, highlighted that gas will still play a significant role in power generation out to 2050 and beyond, albeit in a decarbonised manner either through the use of Carbon Capture, Usage and Storage ("**CCUS**") or hydrogen.
- 3.3.6 Drax Repower will be highly efficient gas generation, able to meet the need for flexible and responsive generating capacity and support the transition to net zero in 2050. Drax Repower will be carbon capture ready ("**CCR**") in accordance with current legislation and policy, and will comply with any new applicable policy or legislation requiring its operation with CCUS (or fuelled by hydrogen or achieving lower carbon intensity by other means).
- 3.3.7 Although the Net Zero report does not constitute policy, it is important to note that there is nothing in the report and its recommendations for achieving net zero in 2050 that is inconsistent with Drax Repower.

3.3.8 National Grid's 2019 Future Energy Scenarios

3.3.9 National Grid Electricity System Operator ("ESO") updates their Future Energy Scenarios ("FES") each year and, following the Government's amendment to the target of net zero by 2050, the 2019 FES has included an additional net zero scenario to take account of the change in legislation. Previous analysis and submission provided to the Examination have referenced the role which natural gas is predicted to play in the FES scenarios that would allow climate change obligations to be met. These scenarios are updated yearly and contain detailed analysis of generation and demand up to 2050. The net zero scenario, as a new scenario, is portrayed as a snapshot of the indicative energy mix required to hit a net zero target by 2050. For this reason, we have provided analysis of both the Two Degrees scenario (which meets the previous Climate Change Act 2008 target of achieving 80% reduction in green house gas emissions) and the net zero scenario in this document.

3.3.10 As part of the FES 2019 documentation, the National Grid ESO identifies some key requirements outlined below in order to meet the net zero target by 2050:

- (a) Gas generation will continue to play a significant role, indeed a greater role than in the Two Degrees scenario, in the electricity mix in 2050, on the basis that it will be decarbonised through CCUS technically or the use of hydrogen as a low carbon fuel;
- (b) The electricity system will need to operate using only zero carbon generation and the power sector will need to deliver negative emissions (e.g. biomass with CCUS);
- (c) The gas system will need to be transformed to accommodate hydrogen.

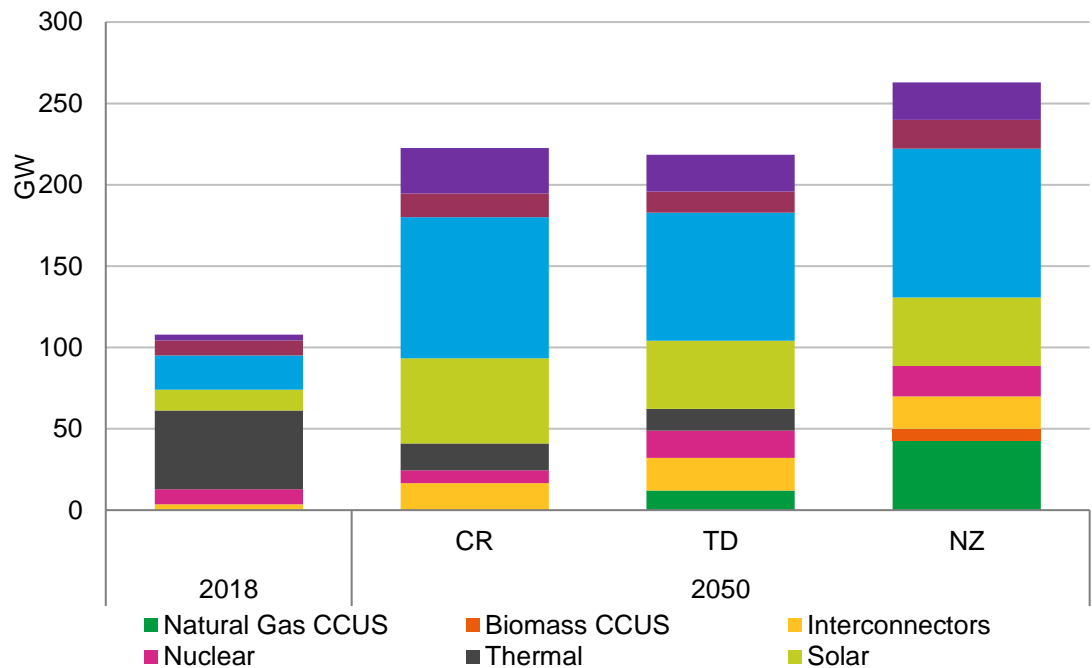
3.3.11 As well as the Net Zero compliant scenario, the FES 2019 (and previous years' FESs) includes an in-depth Two Degrees scenario which reflects the previous 80% carbon reduction target. Both scenarios show an increased demand for generation (for the net-zero compliant scenario this is due to the increase in electrification necessary in order to meet the 100% target in 2050) and a continued role for gas generation (with CCUS by 2050). Drax Repower will contribute to the move to a lower carbon economy and will support the move to electrification. It will also be CCR, as noted above, and will be able to transform to CCUS.

3.3.12 Chapter 6 of the FES 2019 document looks specifically at which aspects of the energy and electricity sector would have to change in order to meet a net zero target. CCUS becomes essential to allow decarbonisation to occur across a range of sectors and notably to enable negative emissions to account for sectors and processes which are difficult to decarbonise entirely. There is an increase in electrification in all sectors including heat and industry. In the net zero scenario (which is compliant with the amended CCA 2008), 'annual demand for electricity increases considerably reaching 491 TWh per year by 2050' which is an increase of 71 TWh compared with the Two Degrees scenario associated with an 80% reduction in carbon.

3.3.13 The installed capacity of natural gas paired with CCUS by 2050 is 42 GW, which represents an increase from the Two Degrees scenario of approximately 31 GW, see graph below. Given that a large proportion of the UK's current gas fleet is approaching retirement, there is a need to replace

these aging and inefficient power stations with new and efficient alternatives (as explained in our submissions made during the Examination).

- 3.3.14 Graph taken from the Future Energy Scenarios 2019, page 155 Figure 6.3: Installed electricity generation capacity: Community Renewables [CR], Two Degrees [TD] and Net Zero [NZ] in 2050



- 3.3.15 The net zero scenario shows an increase in electrification particularly in order to decarbonise the transportation and heat sectors, resulting in increased peak demand for electricity, with the peak expected to increase to approximately 115 GW in 2050, which is almost twice today's level. Flexible plant as such as Repower and other system flexibility plans will be needed to balance this demand (as per our submissions made during Examination).
- 3.3.16 Given the net-zero scenario in the FES 2019 only reflects a snapshot of the UK's generation mix in 2050, it is also important to consider the forecast roles of gas in the more detailed Two Degrees scenario in the 2019 report. The 2019 Two Degrees scenario has been updated from the 2018 version which Drax has previously used during the Examination to highlight the continued role gas generation is forecast to play in the electricity mix in the coming years.
- 3.3.17 The Two Degrees scenario, as with the net-zero scenario, highlights the role that CCUS enabled gas will play on the system out to 2050. Under the 2019 FES, the Two Degrees scenario shows installed gas capacity with CCUS at 12.1 GW and other gas generation (unaccompanied by CCUS) has an installed capacity of 13.2 GW. This reflects a slight increase on the 2018 Two Degrees scenario where gas capacity (without CCUS) was modelled at 9.5 GW in 2050. **In short, both the Net Zero Report and the FES 2019 demonstrate an increasing need for gas powered generation in order to meet global climate change obligations. The need for Repower is further increased by the changes to the CCA.**

- 3.3.18 The submissions Drax has made during Examination with respect to the Repower Scheme supporting the transition to a decarbonised economy continue to apply, albeit it is clear that meeting the net zero target, as opposed to the 80% target, means an even greater level of electrification and therefore greater demand for electricity generation, with a corresponding increase in gas generation (and gas generation with CCUS capability or fuelled by hydrogen by 2050).
- 3.3.19 **In simple terms, new electricity generation is required to meet growing demand and to help other sectors decarbonise. In providing that electricity generation, the power sector must be prepared to decarbonise further, but over time. Drax Repower not only assists in the transition to a decarbonised power sector as explained above, but will be able to decarbonise even further once CCUS is proven and the Government, should it consider it necessary, legislate that gas generating stations, both existing and new, operate in CCUS mode.**
- 3.3.20 **Energy security**
- 3.3.21 Achieving the 100% by 2050 target is not simply a matter of reducing carbon intensity of generation; there are also considerations of energy security, particularly as there is an increased reliance on renewable energy sources. Consideration of energy security needs to be considered alongside the requirement to meet a net-zero emissions target, particularly as there is an increased reliance on intermittent renewable energy sources. Drax Repower is able to provide that energy security whilst supporting the transition to a lower carbon economy (as made clear in submissions made during the Examination).
- 3.3.22 The importance of energy security alongside considerations of reductions in carbon, is reflected in the NPS EN-1, which discounted greater carbon reduction due to energy security concerns. The Appraisal of Sustainability (“AoS”) for NPS EN-1 considered various alternatives to NPS EN-1, including “Alternative A3” which “*places more emphasis on reduction in greenhouse gas emissions*”. That option was discounted in the AoS, in part due to concerns about security of energy supply, as follows:
- “Whilst in principle Alternative A3 would be an attractive option, as noted in paragraph 3.4.4 above, it seems unlikely that it would be possible to give practical effect to such an alternative in the next ten years or so without running at least some risk either of greater negative impacts than EN-1 on security of supply or the natural environment. The former would arise if the alternative NPS policies were built on assumptions either that unproven technologies (e.g. CCS) will be proven (which subsequently fail to be proven) or that proven technologies (e.g. onshore wind) can be developed at a pace or on a scale which turns out not to be feasible (e.g. significantly beyond the rate needed to achieve our 2020 targets).”*
- 3.3.23 Drax Repower would make a significant and important contribution to need with respect to the security and resilience of electricity supply. Repower would provide system services which are essential to grid stability and security of supply and which cannot be provided by intermittent renewable sources. Repower would provide those services more efficiently (and at a lower carbon emissions intensity) than existing fossil fuel plants. The Applicant has set out the benefits of Repower in this respect in further detail at Section 3 of its paper entitled **Note on Substantial Weight to be Given to Need and Application of Tests Under S104 (REP5-021)**.

- 3.3.24 This role for gas generation is reflected in the FES 2019 and CCC's net zero report. Repower is consistent with achieving carbon targets and security of supply.
- 3.3.25 **Drax is a key player in the development of the CCUS technologies needed to reach net zero carbon by 2050**
- 3.3.26 Drax is a key player, leading the innovation needed in order to achieve 100% by 2050 in its demonstrated commitment to developing CCUS technologies.
- 3.3.27 Drax is currently working with two technology suppliers, C-Capture and Fuel Cell Energy, under BEIS funded CCUS programmes. Both technologies, if successfully commercialised, could be applicable to Drax Repower. In addition, Drax is a lead company on the 'Zero Carbon Humber' Initiative, which is developing plans for a CCUS and Hydrogen cluster in Yorkshire and the Humber with Drax Power Station at the centre of the plans. This initiative is expected to present Drax with two decarbonisation options in the future by developing and constructing CCS infrastructure enabling Repower (which will be CCR) to potentially retrofit post combustion carbon capture technology. This would utilise the infrastructure to sequester the CO₂ into the Southern North Sea.
- 3.3.28 The initiatives planned for hydrogen will use advanced reformation technology to reform natural gas to hydrogen, aiming to capture over 98% of the CO₂. This then offers gas decarbonisation opportunities for Repower via the blending of zero-carbon blue hydrogen as a dual fuel source, and potentially full fuel switching in the future when turbine technology is ready for the conversion.
- 3.3.29 Whilst these technologies are still in their development stages, Drax is an integral innovator in progressing these technologies which will be relied upon in order to meet the net zero targets in 2050 (as is clear from the CCC's Net Zero report and National Grid's FES 2019 discussed above). Drax Repower is CCR (in line with the policy and legislative requirements), and with Drax's role in leading innovation in this respect, Repower will be well placed to provide decarbonised gas generation when the Government requires gas generation to be CCUS enabled.

3.4 The effect of refusing consent for Drax Repower

- 3.4.1 A decision by the SoS to refuse consent for Drax Repower (or to only consent one generating station), on the basis of carbon emissions would have the effect of:
- 3.4.2 **Creating new policy, which is not the SoS' role when determining individual applications**
- 3.4.3 As stated above, there has been no new policy or legislation introduced alongside the amendment to the CCA 2008, setting out requirements for how the 2050 targets are to be met. It is important to make clear that the only change to the policy and legislative context since the Examination of the Application is the change to the CCA 2008; all other policy, in particular the Energy NPSs have remained the same, as have policy and regulations with respect to CCR. To therefore refuse the Application based on assumptions as to how net zero is to be reached in 2050, would be to create new policy (and would in any event go against recommendations and projections for how the 2050 target can be reached, as set out above with respect to the

CCC's Net Zero report, National Grid's FES 2019, and Repower being CCR and Drax's key role in innovation in CCUS to meet the 2050 targets).

- 3.4.4 Making new policy is the Government's role and it has the means to withdraw or change current policy or introduce new policy or legislation at any time. When such policy or legislation is introduced and if it is applicable to Repower, Drax will be required to comply with it. It is not the role of the SoS to pre-judge what that policy may be.
- 3.4.5 **Imposing a cap on gas generation at a carbon intensity equal to or higher than Drax Repower**
- 3.4.6 Refusing consent for Drax Repower (or consenting only Unit X) on the basis of GHG emissions (in reliance on the amended CCA 2008, and putting aside the earlier submissions, that no breach, and therefore reason for refusal, can be demonstrated on this basis) would have the effect of worsening climate impacts from GHG emissions. Such a decision would effectively introduce a cap on consents for gas plants (or indeed any generating plant (or potentially any development) which has the effect of increasing GHG emissions).
- 3.4.7 The effect of such a decision is to put a limit on the need for generating plants and a limit on the type of generating technology (neither of which is in accordance with NPS EN-1, and would also not appear in keeping with meeting net zero 2050, based on the recommendations and predictions of the CCC and National Grid, as set out above), and to impose a restriction on consenting a further 3600MW of capacity at this emissions intensity. That decision has far-reaching implications for the energy sector, and potentially projects in other sectors with similar carbon emissions intensities.
- 3.4.8 When considering GHG emissions, and their impact on the ability for the UK to meet national carbon budgets, there is no distinction between consenting (i) eighteen x 200MW gas generating stations anywhere in the UK, or (ii) consenting two 1800MW gas generation stations (assuming they operate at the same carbon intensity). The effect of not granting consent for two 1800MW gas plants (i.e. Repower) is to impose a cap on the capacity that can be consented, which begs the question, what amount of capacity is acceptable? The implication of consenting only Unit X is that such a cap on gas generating stations (or in fact any energy generation at this carbon intensity or greater) is somewhere at or more than 1800MW, but not as much as a further 1800MW. This may mean three more 200MW gas plants can be consented, but not nine more. Similarly, refusing to consent the whole of Repower sets a cap on gas generating stations at somewhere less than 3600MW.
- 3.4.9 Of course, it is not entirely accurate to say that one 1800MW gas generating station is the equivalent of nine 200MW gas generating stations (or that two 1800MW generating stations are equivalent to eighteen 200MW generating stations), because whilst their carbon intensity per MW generated may be the same, and therefore from an operational GHG perspective they have the same GHG output and effect on the national carbon budget, the wider implications of building nine small gas plants are a loss in efficiency in terms of land use, construction costs, use of materials and the embedded carbon costs associated with nine individual projects. Further, whilst a 1800MW or 3600MW gas plant will be required to be carbon capture ready (CCR), and therefore has the future potential to mitigate carbon emissions, those nine (or more) 200MW gas plants would not be CCR.
- 3.4.10 Further, there is a risk that, given the benefits Repower (with both Units) would provide (see Section 4 of the *Note on Substantial Weight to be Given*

to Need and Application of Tests Under S104, REP5-021), the limited adverse effects (also set out in Section 4 of REP5-021), and no demonstrated breach of any national or international obligations, a decision to not consent Repower creates a precedent not only for a cap on energy generation at the same or higher carbon intensity, but a cap on other projects, which are otherwise acceptable in policy terms but which have the same or higher carbon intensity, such as airport expansion projects. The implications of a decision to not consent would therefore be significant and far reaching, with real consequences for the UK's energy sector and ability to achieve its budgets and obligations with respect to carbon and climate change.

4. **CONCLUSION**

- 4.1 This submission is made to the Secretary of State in light of the amendment to the Climate Change Act 2008 (by virtue of the CCA 2008 (2050 Target Amendment) Order 2019) which took effect on 27 June 2019, and to which the Secretary of State must therefore have regard in her decision.
- 4.2 The effect of the amendment to the CCA 2008 is to require that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline (previously this reduction was 80%). There is as yet no additional legislation or policies stipulating the pathway to achieving this 100% reduction (also referred to as "net zero"). The amended CCA 2008 is relevant to the decision of the SoS in this Application, and regard must be had to the amended targets it implements in order to comply with sections 104(4) to (6) of PA 2008.
- 4.3 The Applicant's submission is that consenting Drax Repower in accordance with the Energy NPSs would not result in a breach of the provisions of the amended CCA 2008. The position, as set out in the Applicant's submissions during the Examination, with respect to how the provisions of section 104 of the PA 2008 should be applied to the Application, has not changed by virtue of the amendments to the CCA 2008.
- 4.4 In terms of any breach of the CCA 2008, it is not possible to determine that a decision to approve one project would place the UK in breach of its climate change obligations (internationally and nationally) at an economy wide level in 2050, and the exceptions in section 104(4) to (6) are therefore not triggered by deciding the Application in accordance with the relevant Energy NPSs.
- 4.5 The implications of not consenting Drax Repower would be:
 - (a) to not realise the improvement this project could bring to the electricity generation sector; and
 - (b) to slow down the decarbonisation of other sectors.
- 4.6 If such an approach were to be replicated systematically it would prevent the UK from meeting its climate change obligations.
- 4.7 The impact of Drax Repower on GHG emissions and climate change needs to be considered on a national and global basis, rather than being focussed on a single project or sector alone.
- 4.8 As has been explained in the above submissions, both the Net Zero Report and the FES 2019 demonstrate an increasing need for gas powered generation in order to meet global climate change obligations. The need for Repower is further increased by the changes to the CCA 2008. Drax Repower is entirely consistent with the Government's position on climate change and the transition to a low carbon economy,

and supports that aim rather than conflicting with it. As a result, it is consistent with the obligations in the amended CCA 2008. Accepting that there is a role for fossil fuel generation in the decarbonisation of other sectors (which is apparent from the Climate Change Committee's Net Zero report and National Grid's 2019 FES), as well as with respect to energy security and enabling the growth of renewables, the benefit of Drax Repower is that it can fulfil those roles at a lower carbon intensity than the plant that would otherwise be called upon; without Repower those roles are fulfilled at a greater carbon intensity, and therefore with greater national GHG emissions.

- 4.9 The increased role for gas generation is reflected in the FES 2019 and CCC's Net Zero report. Repower is consistent with achieving carbon targets and security of supply. There is nothing to demonstrate that consenting Drax Repower in accordance with the Energy NPSs would result in a breach of the provisions of the amended CCA 2008.

Pinsent Masons LLP, 4 September 2019