



**Drax Bioenergy with Carbon Capture and Storage, PINS  
Reference: EN01012**

**Just Transition Wakefield response to R17QB.3. Deadline  
9, July 6<sup>th</sup> 2023**

**Interested Party Number: 20032286**

On June 22<sup>nd</sup>, the Examining Authority published a “Rule 17 Letter” in which comments were invited in response to question R17QB.3. This question specifically asked:

*In its response to R17QA.21 [REP8-029] the Applicant explains it is now seeking that it has seven years within which to commence the authorised development and exercise its compulsory acquisition powers.*

*Given that a seven-year commencement date is different to the Applicant’s previous position that there would be a two-year delay to the anticipated timescales originally given in Table 2.1 of the ES [APP-038], would there be any implications to baselines, survey work undertaken and/ or conclusions drawn as a result of this extended commencement period?*

1.0 Our first set of comments provide important context to the decision framework which has been altered by the seven year commencement proposal compared to a simple two year delay. Our interpretation of this is that the applicant reserves the right to delay use of the compulsory purchase powers, and therefore to begin construction, until 2030 – **this delay is significant, and is likely to extend the operation of any BECCS plant built well after 2050, by which time the UK is legally required to have attained net zero.**

1.1 There are a number of implications of this seven-year commencement date, which could take the project start date to 2030 and the operational date to well after 2030. 2030 is a significant date for a number of reasons including:

- The UK Government has enshrined in law that by 2030, UK emissions must be cut by 68% from 1990 levels, to followed by further cuts to 78% by 2035, a mere five years later;
- Recent government action on climate, particularly but not exclusively under the current Prime Minister, has been heavily criticised from public figures including Lord Deben, retiring chair of the UK Climate Change Committee. This criticism has focused on both lack of action and inappropriate action (such as licencing new oil and gas fields in the North Sea);
- The IPCC have been explicitly clear that to stay within a 1.5°C global average rise in surface air temperature, global emissions need to be cut by at least 45% by 2030. However, we also know that the later the emissions are cut, the bigger the required cut to maintain the same statistical likelihood of staying within 1.5°C.
- It remains our contention that this application is incompatible with net zero, however loosely that is defined, and so it is our view that the seven year

commencement, extending the operating life beyond 2050, provides further weight to our assertion that **this application should not be recommended for approval by the Secretary of State.**

1.2 Therefore, to attain the legally binding 68% emissions reductions by 2030, UK action on climate will have to accelerate within these seven years to 2030. This is not our conjecture, but necessary to meet the UK's legally binding targets. This fact will necessarily impact on government policy between now and 2030. Further, if commencement of the compulsory purchase powers is delayed until 2030, the project will put the 78% emissions reductions by 2035 at risk along with the requirement to achieve net zero by 2050.

1.3 It is not possible to say which policy areas will be strengthened to facilitate meeting these UK binding targets named in 1.2 above. However, likely policy areas are those which are already controversial, particularly within energy policy. These are likely to be new and recent oil and gas licences, but also biomass policy which is attracting significant attention in both Houses of Parliament.

1.4 There has been recent press and political interest shown in global carbon accounting rules which are known to contain anomalies. These anomalies include shipping and biomass emissions as well as those from flying. It is reasonable to expect that such carbon accountancy frameworks will be strengthened to account for emissions with greater accuracy and to specify the inclusion of emissions currently excluded in order to allow nations to hit their own legally binding targets, including the UK.

1.5 The implication of 1.4 above is that to protect the public purse and to control damaging climate emissions, it would be wise to leave "get-out clauses" in any permissions and consents on projects associated with both fossil fuels and biomass. Biomass in particular, even when abated through CCS, is problematic compared to fossil fuels. This is because of as yet unaccounted emissions from the biomass supply chain (such as soil carbon losses), to the excessively long payback times (decades to centuries) and the loss of vital active carbon sinks. It is therefore our contention that the extension of the commencement date to potentially seven years has significant implications for the Examining Authority who has to make recommendations that comply with **current** government policy, but also can be altered to reflect unknown but predictable **future** government policy.

1.6 In relation to 1.5 above, we further note that publication of the UK Government's Biomass Strategy has again been delayed and will not be available until after the close of this enquiry. This will mean that the entire planning enquiry into a major and controversial infrastructure project will have been undertaken on outdated policy which is known to be on the point of replacement. This leaves the Examining Authority in a very difficult position. For example, should Interested Parties be asked to comment on the Biomass Strategy after the close of the enquiry, to give the Examining Authority the best available advice to support decision making on recommendations? If not, will the Examining Authority be able and expected to use the anticipated Biomass Policy to influence their recommendations?

2.0 CO<sub>2</sub> pipeline and undersea storage. This delay or extension proposed by the applicant is due at least in part to the notice given by National Grid Pipelines that they intend to sell the project, most probably to the Northern Endurance Partnership. This reinforces a statement that we made in an early submission, that it makes no sense to consider 3 linked projects on entirely separate timelines. Indeed, because Drax's BECCS application is entirely dependent on the pipeline AND saline aquifer storage facility being granted planning and operating permissions and consents, it would still make sense to delay recommendations for this application until the necessary permissions and permits are granted for the systems on which this application depends. We still believe that this is a material consideration.

3.0 In addition to the general points and the context provided above, it is clear to us that there are specific impacts of the delay that will be material and predictable, even though they are necessarily future projections.

3.1 Impacts of climate change in the next seven years. We are receiving regular reports and updates from scientists that include:

- Arctic and Antarctic ice sheets melting earlier, more quickly and this melt accelerating;
- Significant ocean surface temperature anomalies;
- Higher than predicted and accelerating releases of methane to the atmosphere, from both natural and man-made sources, which will further accelerate global heating
- Continuing increase in atmospheric greenhouse gas concentrations which will also accelerate global heating;
- Reductions in atmospheric aerosols that will in the short term further accelerate global heating.

3.1.1 The above observations indicate that weather patterns will continue to change as further heating occurs, with heat, drought and flood increasing in frequency and severity. This is likely to affect the availability of cooling water derived from the river and from ground water for some periods during the plant's operation. Provision will have to be made for such periods, such as a required shut-down of the CCS facility – with consideration of the plant operating unabated in such conditions which has significant climate implications.

3.1.2 The above observations indicate that sea level rise will accelerate. Whether this on its own will impact on the plant within its operating period is not knowable. However, it is reasonable to assume that the risks of extreme rainfall events coinciding with storm tidal surges, intensified by sea level rise, will increase in probability. This will need to be reconsidered prior to commencement in the light of further observation and evidence throughout this decade.

4.0 Carbon Capture and Storage. At the present time, CCS does not have an impressive track record, with the majority of projects either closing early because of unacceptably high costs or failing to deliver promised capture rates, and other

projects not progressing to the build stage, cancelled on grounds of cost and financial risk.

4.1 With the delay, and proposed seven year period for commencement, by 2030 there will be more evidence from the UK of operational CCS projects at different scales. This evidence should be collated to inform final consent for this project, giving ministers the option to reconsider with both climate and the public purse in mind.

5.0 Amines and their degradation products. We and others have raised questions about public and ecological health impacts of amine emissions and subsequent degradation products such as nitrosamines which are known to be harmful to life.

5.1 The delay to commencement of this project will allow for further research to be completed, including

- A better understanding of the chemistry of the various solvent mixes and their breakdown under different atmospheric conditions;
- The cumulative impacts on both human and ecological health of amines and their degradation products, based on both real-life experience from other UK CCS facilities and on further academic research;
- Plume studies to better understand how amine plumes will behave at different temperatures, and the effects of multiple CCS projects creating a cumulative plume that has not yet been modelled but again is predictable based on current government policy to retrofit CCS to a number of incinerators and gas turbines.

5.2 Monitoring equipment. Current technology is not able to detect, measure and monitor amines and their degradation products effectively. This is likely to change in the coming years as more amine solvent CCS systems become operational globally. Therefore any recommendations to the Secretary of State need to be sufficiently flexible to allow them to reconsider permission to commence based on a review of developing science.

6.0 In Summary. It is clear that there are predictable and significant uncertainties over future climate impacts and greenhouse gas emissions which will become more apparent over this decade as well as further into the future. Therefore, it is our assertion that if the Examining Authority is minded to recommend approval to the Secretary of State, that this recommendation should be phrased in terms that give the Secretary of State sufficient flexibility to change their mind or impose additional conditions. Alternatively, if the Examining Authority is minded to recommend approval, they should seek permission to delay the decision until commencement is imminent.

6.1 This will sit well with the precautionary principle of not tying the nation to decisions that may be regretted within the foreseeable future.

6.2 Therefore, it remains our assertion that this proposal to retrofit CCS at Drax is not justified on climate, global biodiversity, sustainability or financial grounds and should not be recommended for approval by the Secretary of State.