Author Details	
Name	Dr Andrew Boswell
Position	Scientist and Consultant
Drax BECCS Project	20032289
registration	
Organisation	Climate Emergency Policy and Planning (CEPP)
Examination Principle Issues	Climate Change

DEADLINE D10 CLOSING STATEMENT

1 GHG EMISSIONS IN THE DRAX BECCS APPLICATION

1.1 Unlawfulness of GHG gas emissions in the Environmental Statement (ES)

I now submit that the ES is unlawful in its treatment of GHGs for the following reasons.

I provided a detailed submission on this in REP9-032. I provide here, as my closing statement, a summary (without the full references which may be found in REP9-032) to summarise this key issue more simply as follows:

- 1. The applicant has not clearly distinguished Direct and <u>Indirect</u> impacts for the scheme. This error is made from the EIA Scoping report onwards.
- 2. Critically the applicant has not fully, nor correctly, considered the likely significant effects and climate impacts of both the Direct and <u>Indirect</u> impacts with respect to GHGs which is required by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the "2017 Regulations"), both at the scoping and environmental statement stages.
- 3. The application is a Schedule 1, paragraph 23 project under the 2017 Regulations a carbon capture and storage (CCS) scheme although the application in fact only addresses a carbon capture project. In particular, the <u>Indirect</u> impacts from the <u>upstream</u> biomass combustion emissions have not been estimated, nor assessed, in the ES (despite having been scoped-in in the EIA Scoping Report).
- 4. There is a strong causal inter-dependence between the upstream biomass combustion emissions and the application project. <u>The application project cannot take place without the upstream biomass combustion emissions first being generated to capture.</u>
- 5. Consideration of the likely significant effects and climate impacts of the upstream biomass combustion emissions requires those emissions, as strongly causal indirect effect of the project, to be estimated and assessed. The estimated quantity of emissions is not difficult to determine as the Applicant, itself, has provided it at the Table on PDF page 34 on REP-028. Whilst the figure given in REP-028 of 19,383,135tCO2/yr is for all four Drax biomass burning units, the value for the two units which provide the upstream biomass combustion

emissions generation for the project may be easily derived from it (ie: by halving the number).

- 6. The error is that <u>this known quantification of the combustion emissions</u> is then abandoned by the applicant who instead estimates the emissions as zero in Table 15.11 in the ES. Table 15.11 is the key data table in the ES against which the likely significant effects and climate impacts of the project are assessed <u>when the output values from Table 15.11 are taken</u> forward to comparison with the UK carbon budgets in Table 15.13.
- 7. The applicant, then, makes the false claim that the scheme has a "significant beneficial effect". However, this may only be claimed because the zero estimate of the combustion emissions has been used instead of the real value, which is already known to the applicant as above. This results in the scheme being falsely reported by the applicant for EIA purposes as a net negative producer of GHG emissions.
- 8. In [REP9-032] I calculated using the applicant's own data that the project is in fact a dangerous, and <u>net positive</u>, emitter producing over 2 million tonnes of CO2 a year, even if CCS efficiency attained 90% (an optimistic assumption) when the upstream combustion emissions are quantified and assessed for EIA purposes on the estimate already known to and calculated by the Applicant.
- 9. The EIA assessment of the climate impacts of the project, for the factor of GHGs, is therefore not lawful as a zero estimate has been given for upstream combustion emissions rather than actual quantity for which the applicant already has an estimate.
- 10. The Applicant has claimed during the examination that the estimate of zero may be given for Environmental Impact Assessment (EIA) purposes because there are conventions and rules in other regimes (such as IPCC national GHG accounting procedures) that rate the biomass combustion emissions as zero. This is also an error of law. The EIA regime requires an Environmental Statement which estimates and assesses the likely significant impacts of the environmental factors (including GHGs and climate) impacted by the project. Nowhere does the EIA regime says that the likely significant impacts of the GHGs (Direct and Indirect) from the project may be estimated on the basis of such conventions from other regimes. EIA assessment is about realistic assessment of environmental impacts, <u>not</u> about arbitrary, and irrelevant, GHG accounting rules.
- 11. It is particularly disingenuous for the applicant to estimate the emissions as zero for EIA assessment purposes (ie at Table 15.11) when they have provided the real estimate elsewhere to examination (ie in REP-028).
- 12. A further related issue is that the applicant falsely conflates the <u>upstream</u> biomass combustion emissions with the <u>downstream</u> carbon payback process. The carbon payback after forest harvesting takes decades or centuries but has been conflated by the Applicant as happening instantly at the same time as the combustion. The EIA process requires the

Direct and Indirect effects to carefully distinguished, and then the likely significant effects to be estimated and assessed. The correct way to treat the <u>downstream</u> carbon payback process is as a separate downstream Indirect effect. It may in time give rise to sequestration of carbon from the atmosphere although there is no guarantee of this, especially as climate breakdown advances: however, the recent science shows that the sequestration from forest regrowth is not likely to produce any significant sequestration in the 25-year project lifetime. Even if some sequestration might occur for wood burnt in the first years of the project in the latter years of the 25-year project, emissions from forest harvest of wood burnt in the latter years of the project will most likely see net positive GHGs as the impact of harvesting biomass fuel is to increase forest emissions for around 15 years (see REP9-032, 3.10).

- 13. Further the applicant claims that the upstream biomass combustion emissions would "happen anyway" and therefore do not need to be included in the EIA assessment for the project. This false because:
 - a. The continued biomass burning of Units 1 and 2 (without the CCS, the CC part being the project under consideration) is extremely unlikely to be financially viable for the applicant, and the applicant well knows this.
 - b. The applicant, itself, includes the biomass combustion emissions in Table 15.11 which provides "Estimated Operational GHG Emissions from the Proposed Scheme". So the Applicant, itself, considers the Indirect upstream emissions from the biomass combustion emissions to be part of the operation (and has scoped these emissions in the EIA Scoping report). This contradicts the Applicants claim that the emissions do not need to be counted as they would "happen anyway".
 - c. The 2017 Regulations requires the assessment of the Direct and Indirect likely significant effects of the project on the climate and GHG (and also all the other EIA environmental factors). The relevant legal issue that the upstream biomass combustion emissions are strongly functionally inter-dependent with the project being considered under Schedule 1, paragraph 23, and are an Indirect effect which has been scoped in in the EIA Scoping. Hypotheticals about the existing operation are irrelevant.
- 14. In [REP9-032] I have provided a more detailed analysis for the examination. <u>Further, I</u> request that the ExA fully reproduces these points in the Examination Report and explicitly requests that the SoS considers them, him or herself, in his/her decision making. The Application is in error(s) of law from the EIA Scoping report onwards. The error(s) infect(s) all subsequent processes including the decision making.

Dr Andrew Boswell, 17th July 2023