

BIOFUELWATCH SUMMARY

Conformity with Government policy

The proposal is contrary to policies EN-1 and EN-3 in that it reduces UK electrical generating capacity and energy security.

The proposal is premature because the UK has not completed and assessed four pilot demonstration CCS projects to the extent set out in EN-1.

The examination has wrongly excluded consideration of the environmental impacts of the full carbon capture system comprising capture, transport and storage, contrary to the BEIS Biomass Policy Statement.

The examination is premature because the Government's Net Zero Policy is currently being revised.

The examination is premature because the specific sustainability requirements for BECCS referred to in the BEIS Biomass Policy Statement have not been published and therefore the application cannot be assessed against them.

The examination is premature because the specific air pollution standards and regulations for emissions from BECCS systems called for in the BEIS Biomass Policy Statement have not been set, and therefore the application cannot be assessed against them.

Air Quality and Emissions

Human health is already being harmed by air pollution in the vicinity of the facility. The proposal will add to pollution and increase harm. Emissions of pollutants currently released by Drax will increase, and new pollutants will be released by the PCC. There is very limited understanding of the behaviour of the new air pollutants and their effect on human health. Recently introduced Environmental Assessment Levels for the new releases (amines and nitrosamines) are unproven and are not sufficiently conservative given the paucity of evidence.

The decision by UKHSA not to comment on the impacts to human health from the novel air pollutants is very concerning, particularly as there are no real world examples on which to assess the release of amine degradation products from BECCS with woody biomass.

The Applicant is intending to use a proprietary amine mixture in the PCC, and has declined to provide full details of the compounds and mixture. As a result, the human health risks from nitrosamines, and other amine breakdown products, cannot be fully and adequately assessed.

There is inadequate provision for monitoring emissions from the PCC in operation. Neither the standards nor the technology currently exist to support continuous monitoring of nitrosamine emissions and the amine precursors to nitrosamines.

Biodiversity and Ecology

The Environmental Statement provides an incomplete and inadequate assessment of the impacts on wildlife and natural habitats of the deposition of air and water pollutants from the PCC system itself, and from the increased burning of woodfuel at the power station. The assessment of the impacts of those depositions is also inadequate.

Deposition modelling is an inexact science, and consequently any predictions are likely to have a considerable margin of error. The uncertainties are likely to be greater with the unproven system forming this proposal (large scale BECCS and novel amines). The Applicant must ensure sources of uncertainty are listed and quantified to support a quantified estimate of the cumulative uncertainty of the modelling predictions. Currently, the Applicant's air quality predictions are not sufficiently precautionary for compliance with the Habitats Directive.

Climate Change impacts

The intended purpose of the development is to capture carbon dioxide from the combustion emissions produced by the Drax power station. The Applicant has stated that the development is conditional on it reaching a satisfactory financial agreement with the government on funding. Government is developing a 'business model' to provide financial support to operators of BECCS. Because the development will be partially (and probably significantly) supported by public funding, its performance in capturing carbon dioxide is a matter of great public interest and must therefore be thoroughly scrutinised by the examination.

The Applicant has put forward projections of performance for the PCC. Its document submitted following the Issue Specific Hearing 1 and Open Floor Hearing 1 estimates that 9.2m tonnes (gross) of carbon dioxide would be captured per year, with a net figure for 'negative emissions' of 6.6m tonnes. These figures are based a) on a wholly implausible assumption of carbon capture efficiency which conflates best practice requirement with likely real-world performance, and b) on a very unrealistic expectation that the two biomass units to be equipped with BECCS will run continuously 8760 hours per year, and c) on ignoring fossil fuel emissions that are likely to arise to meet the energy shortfall caused by the drop in efficiency. The Applicant has provided no evidence to support the assumptions, and Biofuelwatch invites the Examining Authority to request the projections are revised to provide a more realistic estimate of overall performance.

Burning Trees to Generate Electricity is Not Sustainable Development

Burning millions of tonnes of imported wood to generate electricity is wasteful, inefficient, harms biodiversity and human health, and accelerates climate change. Production of woodfuel in the USA for the Drax power station adversely affects people there with noise and air pollution. The proposed development extends the previously expected life of the Drax power station by many years and there is evidence contained within the application that the proposed development will significantly increase the amount of wood to be burnt at Drax, due to the proposal to operate continuously in order to maximise carbon capture. As a result

the existing harms will be worsened and perpetuated for decades, and the proposal is not therefore sustainable development.

The signatories to the Leaders Declaration on Deforestation at COP26 committed to slow deforestation, recognising the negative impacts caused to nature, the climate, human health and society. The proposed development will increase deforestation in countries producing woodfuel for Drax, and is contrary to the Declaration.