EN0100166 CONNAH'S QUAY LOW CARBON POWER

LEGAL SUBMISSIONS

on behalf of

CESL CONSULTANCY

INTRODUCTION

1. These legal submissions supplement the examination submissions made by Climate Emergency Science Law ("CESL") and should be read alongside them.

2. In summary, these legal submissions explain how the deficiencies in the ES identified by CESL would, if uncorrected, risk an unlawful decision that could be subject to a judicial review challenge.

CONTEXT

3. The applicant accepts that "upstream" emissions can and should here be assessed as part of the significant effects on the climate, as per regulation 5. Upstream emissions account for approximately 63% of operational lifecycle emissions in the ES once capture is applied.

4. As CESL explains in its analysis, the lifecycle emissions outcome in the ES depends materially on three parameters:

   a) Upstream methane emissions (WTT factor),

   b) Methane climate metric (GWP100),

   c) Assumed CO_2 capture rate (95%).

5. Each parameter materially influences the emissions outcome and has an associated uncertainty.

6. As CESL explains:

a) In respect of the WTT factor:

i. The ES uses a single UK Government WTT factor (DESNZ, 2025) for upstream gas supply emissions.

ii. The WTT factor has been static 2023–2025 despite LNG's share rising from 18.8% to 35.5%.

iii. Underlying intensity data is based on a pre-2015 study; recent satellite and research literature finds actual oil & gas emissions exceed inventories by significant margins.

iv. UK gas supply is projected to rely increasingly on imported gas, including LNG.

b) In respect of the methane climate metric:

i. The ES uses only GWP100 (100-year global warming potential). However, methane has far greater near-term warming impact.

ii. This impact is considered using the GWP20 metric which has not yet been used by the applicant.

c) In respect of the assumed CO_2 capture rate:

i. The ES uses 95% as the minimum CO_2 capture rate for Scope 1 emissions,

ii. The draft DCO has recently been amended to reflect the same design intent,

iii. However, no commercially operating system has achieved a 95% capture rate.

What follows sets out the legally required approach to the interdependencies and uncertainties above. The simple point is that unless the Examining Authority and the Secretary of State obtain sufficient information regarding the uncertainties surrounding upstream emissions, the climate metrics (particularly with respect to the short-term

impacts of methane) and the Scope 1 combustion emissions, they are at risk of making an unlawful decision.

APPLICABLE LAW

7. Regulation 4 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ("the EIA Regulations") requires that development consent must not be granted without the EIA process being carried out.

8. Regulation 5 requires that the EIA process must identify, describe and assess the direct and indirect significant effects of the development on (among other things) climate. The EIA must do so "in an appropriate manner" (regulation 5(2)) which necessarily involves taking into account all legally mandatory considerations (and thus all obviously material considerations), as to which see further below.

9. Regulation 14 requires that the Environmental Statement ("ES") must describe the likely significant effects of the project. It also provides that that the environmental statement must "[take] into account current knowledge and methods of assessment" (reg 14(3)(b)). Those matters – what is "likely", and matters arising out of current knowledge etc – must likewise be informed by all obviously material considerations.

10. Schedule 4 requires the description under regulation 14 to include "the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions)," the "technologies and the substances used," and "short-term, medium-term and long-term" effects: Schedule 4, paragraph 5. The description must also include "A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved": Schedule 4, paragraph 6. Evaluation of these effects again requires the decision-maker to take into account all obviously material considerations.

11. A decision-maker must have "full knowledge" of the project's likely significant effects on the environment, albeit that does not include "every conceivable scrap of environmental information about a particular project": ***R. v Rochdale M.B.C. exp Milne (no 1)*** [2000] Env. L.R. 1, 29; but it must plainly take into account all obviously material – and thus mandatory – considerations. The assessment of likely significant effects should be based on a "cautious 'worst case' approach": ***R. (Associated Petroleum Terminals (Immingham) Ltd) v SST*** [2025] EWHC 1992 (Admin) [47], applying ***Rochdale***; again, all obviously material considerations must be taken into account.

12. In ***R (Finch) v Surrey CC*** [2024] P.T.S.R. 988, Lord Leggatt emphasised that "Conjecture and speculation have no place in the EIA process" and "if there is insufficient evidence available to found a reasoned conclusion that a possible environmental effect is "likely", there is no requirement to identify, describe and try to assess this putative effect" ([77]). Moreover, whether a possible effect is likely and capable of assessment may, depending on the circumstances, be a matter of planning judgment: [78].

13. Regulation 21 requires that the SoS must examine the environmental information (which includes the ES), reach a reasoned conclusion on the environmental impacts, and integrate the conclusion into the decision on whether to grant development consent.

14. Regulation 30(2)(b)(i)(aa) requires the Decision to include a "reasoned conclusion" on the significant effects of the development on the environment, taking into account the results of the Examination.

15. There is no definition of "significant" in the EIA Regulations. In ***R. (Goesa) v Eastleigh Borough Council*** [2022] P.T.S.R. 1473 at [100] Holgate J said:

> "100. It is well established that issues as to whether an effect is significant and the adequacy of any assessment of significant effects are matters of judgment for the decision maker, in this case the local planning authority. Such judgments are only open to challenge in the courts applying the conventional Wednesbury standard…
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> …

> 102. In addition, the court should allow a substantial margin of appreciation to judgments based upon scientific, technical or predictive assessments by those with appropriate expertise."

Such judgements must plainly be based on the taking into account of all obviously material considerations.

16. In ***R (Boswell) v SSESNZ*** [2025] EWCA Civ 669 the Court of Appeal (Sir Keith Lindblom SPT, Stuart-Smith LJ and Holgate LJ) said:

> "80. In our view the evaluation of the significance of an estimated amount of GHG emissions and its acceptability is a matter of fact and judgment for the decision-maker. He or she may decide to choose benchmarks to help in arriving at that judgment. But that choice too is a matter of judgment for them. Any conclusion drawn on the acceptability of the GHG emissions in comparison with a benchmark is also a matter of judgment for the decision-maker. The 2017 Regulations do not determine how these matters should or may be approached…
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> 81. Nor is there any legal principle which requires a public authority deciding whether to grant a development consent to "contextualise" the GHG emissions or to compare them with a benchmark. It is not unlawful for the decision-maker, for example, to conclude, as in this case, that the GHG emissions will be managed across the economy to ensure consistency with carbon budgets and the 2050 net zero target. In any event, in the present case the Secretary of State did "contextualise" the GHG emissions from the development by making a sectoral comparison, whilst also relying upon the policy in EN-1 that made this exercise unnecessary…"

17. In that case, the essential basis for the challenge was to the adequacy of the reasoning given by the decision-maker ([15], [20]) rather than alleged irrationally in the way that benchmarks had been approached ([82]).

18. In ***R (Friends of the Earth) v SSBEIS*** [2023] 1 W.L.R. 225 ("***FoE***") Holgate LJ held that, when the Secretary of State was preparing such proposals and policies that he considered would enable the relevant carbon budgets to be met pursuant to section 13(1) of the Climate Change Act 2008 ("CCA 2008") he was necessarily undertaking an exercise of predictive judgment (i.e. working out what was likely to happen or not with each planned policy or proposal to ascertain its contribution to a package which – per section 13 CCA 2008 – "will enable" the statutory targets to be met).

19. In the context of those predictive judgments, the obviously material considerations which he was required to take into account included ([204], [211], [213–214], [216–217], [221], [279]):

    a) risk to the delivery of individual proposals and policies and to the achievement of the carbon budgets and the 2050 net zero target contained in s.1 CCA 2008,

    b) the contribution which each quantified proposal or policy would make to meeting the budgets,

    c) matters relating to the issue of how to meet any shortfall between the emissions reductions required to meet the carbon budget and the emissions reductions which quantified proposals and policies were estimated to deliver.

20. At [213] Holgate J said (emphasis in original) "without information on the contributions by individual policies to the 95% assessment, the minister could not rationally decide *for himself* how much weight to give to those matters and to the quantitative assessment in order to discharge his obligation under section 13(1)."

SUBMISSIONS

21. The assessment of the scheme's emissions must be done on a reasonable worst-case basis: *Rochdale.*

22. The "full knowledge" which a decision-maker requires from an ES must be based on "current knowledge and methods of assessment" (reg 14(3)(b)). There is a clear legislative steer in regulation 14 that knowledge and methods of assessment may evolve over time, such that reliance on a particular assumption or metric might be lawful in relation to one DCO decision but be unlawful in relation to a later DCO decision – if the knowledge or methods of assessment relied upon is no longer "current" at the later point in time.

23. The EIA Regulations also make an important distinction between "short-term, medium-term and long-term" effects (Schedule 4 para 5), demonstrating that all three must be considered separately.

24. Further, applying by analogy ***FoE***, there are circumstances where it would be irrational for a decision-maker not to factor in the breadth and degree of risk (including being aware of the uncertainties around interdependencies and confidence in the relevant factors) in climate-related matters, notwithstanding the high level of discretion and margin of appreciation given to decision-makers in this field. That being so in ***FoE*** in relation to a matter of high policy, namely the content of the government's Net Zero Strategy, it applies even more so in relation to risks associated with an individual DCO application. In the latter case, there is a specific statutory requirement to set out forecasting uncertainties in the EIA Regulations (see Schedule 4, paragraph 6).

25. All that being so:

a) In the present case, there is a clear risk that if the deficiencies identified by CESL are not corrected, the adoption and reliance upon the applicant's out-of-date upstream emissions, climate metrics (particularly with respect to the short-term impacts of methane), and the Scope 1 combustion emissions will lead to a decision that is:

i. Irrational,

ii. In breach of the EIA Regulations for

1. want of being based on "current" knowledge and methods of assessment,

2. failing to consider "short-term" effects of methane separately to its long-term effects, and

3. failing to assess the reasonable worst-case scenario.

b) Insofar as the decision-maker chooses to assess the upstream emissions against the UK's carbon budgets, that decision risks irrationality on the basis that there is a potential under-assessment of upstream emissions:

i. As is noted in CESL deadline D3 submission, B.6, while the upstream (or Well to Tank – WTT) factor used by the applicant has been taken from the conversion factor dataset issued by the UK Government, that factor does not adequately reflect foreseeable upstream variability. Upstream methane intensity varies materially by supply source and source intensity (CESL deadline D3 submission, B.6(E)).

ii. That variability is clearly capable of assessment, as are the different potential scenarios within it: ***Finch***. In any event, a degree of uncertainty is not a free pass to fail to assess likely significant effects. There is a requirement in Schedule 4, paragraph 6 of the EIA Regulations to describe details of difficulties and the main uncertainties involved.

iii. That variability needs to be understood and grappled with by the decision-maker, as per ***FoE***. If it is not grappled with, it could lead to under-assessment.

iv. That under-assessment would be material for the purposes of the decision-maker's significance assessment, given the potential implications for other additional policies and projects that may be required to make up for any shortfall in the UK's carbon budget delivery plan.

v. In the absence of sensitivity testing (as suggested by CESL) or some further work that allows the decision-maker to understand the extent and severity of risk – in other words, the statistical distribution of the potential impacts – the decision-maker will not have adequate information for the purposes of EIA. They will lack sufficient information on risk to make a lawful decision (***FoE***) and/or lack sufficient information to form a view on the reasonable worst-case scenario (***Rochdale***).

c) As to short-term methane impacts specifically, as is noted in CESL deadline D3 submission, C.1, methane has made a substantial contribution to observed anthropogenic warming to date. Its radiative forcing materially influences near-term temperature trajectories and its shorter atmospheric lifetime results in a substantially greater warming effect when evaluated over a 20-year horizon than under a 100-year horizon (158). At recent emissions levels of each gas, methane produces a greater warming effect than carbon dioxide after ten years (159). Increases and reductions in methane emissions therefore have a proportionately greater influence on near-term temperature outcomes, and thereby the climatic impacts of the development, than would be indicated by long-lived greenhouse gas metrics alone (160). This has clear and obvious implications for the significance of the upstream methane emissions of this project. These impacts must be grappled with by the decision-maker.

d) As to the assumed 95% CO2 capture rate, neither the revised draft DCO, nor the environmental permit regime, nor the EU ETS, secure the bounds of reasonably foreseeable operational performance across the project's lifecycle. In the absence of any commercially operating carbon capture development achieving this level of capture, the lack of uncertainty analysis could easily lead to an under-assessment of impacts.

e) The legal risks identified above are notwithstanding the high degree of discretion afforded to the decision-maker in the assessment and weighting of emissions. That includes setting out for the decision-maker the upper and lower ends of uncertainty, and where the emissions from this project are likely to fall within that range. On the uncontentious basis that upstream emissions need to be factored in, they need to be done so "in an appropriate manner" (reg 5(2)). As above, ***FoE*** is a clear legal precedent for a decision-maker needing to equip themselves with sufficient information as to extent of risk, in order for them to make a lawful decision – even in a matter of high policy.

f) Obtaining the additional information suggested by CESL – namely via a sensitivity analysis of the upstream emissions, the use of the short-term GWP20 methane metric, and the Scope 1 combustion emissions– would help correct the deficiencies in the ES that have been identified, which (as above) are legal as opposed to subjective deficiencies. There may be other legally adequate ways to do this, but none have yet been suggested.

DAVID WOLFE KC

Matrix

ALEX SHATTOCK

Landmark

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