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DEADLINE D9

In so far as the facts in this statement are within my knowledge, they are true. In so far as the facts in this statement are not within my direct knowledge, they are true to the best of my knowledge and belief.

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1 INTRODUCTION

- 1 This submission provides the ExA with the rolling position statement on the *Boswell* legal case as requested in the ExA's question ExQ3_Q2.1.1.
- 2 This submission provides detailed comments on the CEMP v3.0 document provided at deadline 8 as [REP8-088] and further comments the 9.8 Environmental Statement Addendum [REP7-154]. Inconsistencies, errors and anomalies between CEMP versions are analysed, with the level of anomalies being such that the claims being made that the CEMP v3.0 demonstrates secure delivery of decarbonisation from the scheme construction are simply not credible.
- 3 I notify the examination of related errors in the Planning Statement.
- 4 I respond to the applicant's responses in [REP8-119].

2 POSITION STATEMENT (D9): *R (Boswell) v Secretary of State for Transport [2023] EWHC 1710*

- 5 This section is the rolling position statement on the *Boswell* appeal case as requested in the ExA's question ExQ3_Q2.1.1.
- 6 "Nil return"

3 FURTHER REVISION TO CARBON AND ENERGY MANAGEMENT PLAN (CEMP)

7 I note that the applicant has provided a further revision to the Carbon and Energy Management Plan (“CEMP” [REP8-088]), now at v3.0.

3.1 Available CEMP versions are neither consistent, nor coherent

8 The table below lays out the CEMP versions of which I am aware: this is the three versions before the examination, and also the 2020 version of the CEMP which predates the examination. In my D8 submission, I referred to the “original” and “revised” version meaning CEMP v1.0 and CEMP v2.0 respectively. With the emergence of CEMP v3.0, I will now refer to each CEMP by the version number as assigned by the applicant to avoid possible confusion¹.

	Library number	Publication date	As referenced in REP8-174
2020 CEMP	n/a	October 2020	“2020 CEMP”
CEMP v1.0	APP-552	31 October 2022	“original” / “submitted”
CEMP v2.0	REP7-150	17 November 2023	“revised”
CEMP v3.0	REP8-088	5 December 2023	

9 CEMP v3.0 removes Appendix F from CEMP v2.0 which provided, in a single place, a summary of the “updated carbon emissions data and commitments” which changed between CEMP v1.0 and CEMP v2.0. With CEMP v3.0, these changes have now been distributed around the document, along with numerous other changes. It is reasonable for parties to expect that the three versions of the CEMP will be consistent, and coherently so, except for obvious differences such as where a change in the quantum of decarbonisation is being report for a material, a source, or a PAS 2080 module.

10 My analysis below shows that this is not the case. The data between the three CEMP versions is not consistent, nor coherent. The level of anomalies is such that the claims being made that the CEMP demonstrates secure delivery of decarbonisation from the scheme construction are simply not credible.

11 Put simply the numbers “do not add up”, nor is it possible to verify their provenance: this is demonstrable at the high-level of the data which the applicant has presented. When it is considered that the CEMP is essentially is black-box [REP8-174/17-18], it is extremely concerning that not even the exported high-level data from the black box is consistent or coherent.

12 When straight-forward coherence cannot be demonstrated at the external interface of a black box, it begs the question “are the internals of the black box in any way coherent?”. It

¹ I apologise to parties for any confusion in REP8-174 caused by me not referring to version numbers.

follows that if the external black box interface “doesn’t add up”, that the internals cannot possibly be trustworthy either.

- 13 It is also very concerning that such incoherent data is being presented at this stage of the examination, just a single number of working days before the examination closes, and in fact that the anomalies have only been highlighted by the very late emergence of CEMP v2.0 and v3.0 into the examination process.

3.2 *CEMP V2.0 – a rushed and flawed draft*

- 14 A further issue is that CEMP v2.0 is clearly a draft which was submitted before it was ready, and fully checked: ie: it was a rushed draft for deadline D7. Appendix F was provided at CEMP v2.0 and has now been removed in CEMP v3.0. I show below that there are inconsistencies between the now removed data in Appendix F, and the changes made to Appendix D between CEMP v2.0 and v3.
- 15 This has taken considerable time to disentangle, and it is unacceptable that IPs should have to do this because the applicant has not properly prepared and checked its submissions.
- 16 I appreciate that CEMP v3.0 may be a structural improvement on v2.0, but I also emphasise that this has been highly unclear for the ExA and other parties, and IPs have only had a few working days to respond to the further changes and these potentially baffling rearrangements of the document.
- 17 It is noted that the material relating to PAS 2080 has also been updated from PAS 2080:2016 to PAS 2080:2023, including updates of the relevant charts (eg: Plate A.2).
- 18 I respectfully request that the applicant makes a copy of PAS 2080:2023 available in the examination library so these changes may be fully understood.**
- 19 It is important to note that CEMP v3.0 is presented as a restructured version of CEMP v2.0. However, CEMP v3.0 does not make significant changes to CEMP v2.0 in terms of the CBN04 project emissions enumeration (which remains the same at 1.44 million tCO₂e), nor to the underlying decarbonisation strategies that give rise to the CBN04 figure. So as above, parties should have a legitimate expectation that the data in CEMP v2.0 and CEMP v3.0 would be fully consistent. This is not the case as there are very major inconsistencies, differences and anomalies between v2.0 and v3.0. These are considerable enough to make the claims of the v2.0 and v3.0 CEMP untrustworthy, and simply not credible as I now explain.

3.3 *Inconsistencies and anomalies between CEMP versions*

- 20 The main enumeration data on the decarbonisation claimed for the CEMP is given in Appendix D “Project Emissions” in all three versions (v1.0, v2.0 and v3.0). Plate D.1 and Table D.2 give enumerations for “Construction emissions by PAS 2080 module”, Plate D.2 for “Construction emissions by source”, and Plate D.3 for “Construction emissions by

material”. In CEMP v3.0 Plates D.4, D.5 and D.6 break down “Steel emissions by type and contract”, “Cement and concrete emissions by type and contract” and “Plant emissions by plant type and by contract” respectively.

- 21 In CEMP v1.0 and v2.0 Plate D.6 is “Diesel emissions by plant type and by contract. I note that CEMP v3.0, D5.9 explains that “[d]iesel accounts 94% of plant emissions and HVO (hydrogenated vegetable oil) accounts for 6%.”.
- 22 As noted above, this data in these Appendix D Plates can be considered as the external interface to the CEMP, with the detail delivery details of the CEMP being effectively hidden from parties within a black box, which the applicant is refusing to disclose to the ExA, SoS and other parties.
- 23 I have found a number of inconsistencies and anomalies in the data across Appendix D three CEMP versions. Some of these raise questions for the applicant to answer, and some raise serious questions about how much decarbonisation is actually being claimed to be achieved by the CEMP v2.0/3.0 revisions, and how. If there is confusion, as there is, as to what quantities of decarbonisation are being claimed, how can it be possible to even consider whether such claims are secure, and are guaranteed to be deliverable?
- 24 The concerns raised by these inconsistencies are very important. I have already raised, at deadline D8, robust concerns that transferring the CEMP CBN04 enumeration of construction emission (ie the 1.44 million tCO₂e figure) directly to the Environmental Statement and the EIA assessment is unlawful because it is not a genuine reasonable worst case [REP8-174/15], and the CEMP does not constitute a legitimate forecasting method for EIA purposes under Schedule 4, Paragraph 6 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the “**2017 Regulations**”) [REP8-174/34-35].
- 25 The related question for the ExA and the Secretary of State is “**How can it be legitimate to take an enumeration of claimed decarbonisation, which is just the unsecured, theoretical output from a procurement process which has not been completed, and for which delivery details, and any risk assessment of them, are deliberately withheld, and transfer it into the Environmental Impact Assessment which is the key formal and legal planning process for climate change impacts, and controlled by regulations?**”
- 26 The issues here are now magnified by the analysis which follows and demonstrates the anomalies and inconsistencies in the data within the CEMP v2.0 and v3.0, which are now explained.

3.4 Presentation of inconsistencies and anomalies between CEMP versions

27 Plates D.2 and D.3 give the projects emissions to the nearest percentage point. Whilst this can give rounding errors in some of the numbers, the high-level resolution of the data is fit-for-purpose for my analysis below.

Plate D.2	V1 (&V2)	tCO2e	V3	tCO2e	Decarbonisation (V1-V3)	Decarb %
By Source		1,762,967		1,444,500		
Permanent Works	53%	934,373	42%	606,690	327683	
Risk	16% †	282,075	20% †	288,900	-6825	
Diesel	10% ‡	176,297	6% ‡	86,670	89627	
Material Transport	13% †	229,186	6% †	86,670	142516	
Construction Works	4%	70,519	6%	86,670	-16151	
Other	3%	52,889	9%	130,005	-77116	
LUC Construction		0	10%	144,450	-144450	
TOTAL	99%	1,745,337	99%	1,430,055	315282	
Plate D.3	V1 (&V2)	tCO2e	V3	tCO2e	Decarbonisation (V1-V3)	
By material		1,762,967		1,444,500		
Steel	26%	458,371	16%	231,120	227251 (A)	50%
Risk	16% †	282,075	20% †	288,900	-6825 (G)	-2%
Concrete	15%	264,445	15%	216,675	47770 (B)	18%
Diesel	14% ‡	246,815	8% ‡	115,560	131255 (D)	53%
Material Transport	13% †	229,186	6% †	86,670	142516 (E)	62%
Cement	10%	176,297	5%	72,225	104072 (C)	59%
Other	6%	105,778	9%	130,005	-24227 (F)	-23%
LUC	0%	0	10%	144,450	-144450 (H)	50%
Aggregate	0%	0	5%	72,225 (J)	-	
Asphalt	0%	0	3%	43,335 (K)	-	
Plastic	0%	0	3%	43,335 (L)	-	
TOTAL	100%	1,762,967	100%	1,444,500	318,467	
Decarbonisation - steel, concrete, cement					379093 (A+B+C)	
Decarbonisation - steel, concrete, cement + diesel					510349 (A+B+C+D)	
Decarbonisation - steel, concrete, cement + diesel + material transport					652864 (A+B+C+D+E)	
Decarbonisation - steel, concrete, cement + diesel + material transport+other+risk					621812 (A+B+C+D+E+F+G)	
Decarbonisation - steel, concrete, cement + diesel + material transport+other+risk+LUC					477362 (A+B+C+D+E+F+G+H)	
Decarbonisation - steel, concrete, cement + diesel + material transport+other+risk+LUC+aggregate+asphalt+plastic					318,467 (A+B+C+D+E+F+G+H+J-K-L)	

Table 1: Evolution of applicant's construction emissions figures by source and material in the three CEMP versions

3.5 Notes on Table 1

- 28 The table above takes the percentages directly from the Plates and makes a simple conversion of them into emissions in tCO₂e. The decarbonisation percentage for each material is calculated from the relative emissions at the v1.0 (&2.0) and v3.0 plates. The applicant's claims for absolute decarbonisation emission quantities are totalled at the bottom.
- 29 I first note that "Risk" and "Material Transport" are consistently reported between Plate D.2 and D.3 as indicated by the † symbols. Material Transport is claimed to make a significant decarbonisation between v1.0 (&2.0) and v3.0 of 142516 tCO₂e (62%) whilst the carbon emissions associated with project risks have an over 2% increase (-6825 tCO₂e).
- 30 By material, claimed decarbonisation rates are steel 50%, concrete 18%, cement 59%, and diesel 53%.
- 31 The addition of enumerations for aggregate, asphalt and plastic in the CEMP v3.0 Plate D.3 where no enumeration previously existed is very unhelpful, and confusing. These comprise 11% of the CEMP v3.0 data (and 0% in CEMP v1.0 (&2.0)). It would appear that these materials were left out of CEMP v1.0 and v2.0: they are not readily decarbonisable. The only conclusion is that they have been added in at v3.0 to correct their omission in previous CEMP versions. It is not clear how these materials summing to over 150,000 tCO₂e were omitted until deadline D8, and how they are now accounted for within the total decarbonisation scenario.
- 32 Further, the "Other" category has increased by 3% from CEMP v1.0 (&2.0) (6%) and CEMP v3.0 (9%): this implies a 23% increase in absolute emission. Again it is not clear what materials are accounted for in this category and how their emissions have changed.
- 33 Having established these points, inconsistencies remain for LUC emissions and diesel emissions as explained in the following sub-sections.

3.6 False reason given for the reallocation of LUC emissions

- 34 The applicant claims that the reallocation of the land use emissions has been done to align with PAS 2080:2023 [CEMP v2.0, REP7-150, 1.1.1(b)]. **I submit that this reason is wrong, and a false claim.** The sequestration of land use emissions through the project lifecycle is consistently specified under module B1 ("Use") in both PAS 2080:2016 and PAS 2080:2023: the guidance has not changed.
- 35 The applicant's correction at v2.0 and v3.0 is the right one. But it is a correction to an error by the applicant, as the applicant had been claiming emissions from land-use sequestration during the 60-year project operation lifecycle as a decarbonisation benefit during construction (in CEMP v1.0). This is clear from the applicant's own Table C.1 "PAS 2080 modules in the carbon quantification" in both CEMP v1.0 (&v2.0) where against "B1: Use", it is stated "*Carbon sequestration from planting of trees and vegetation is included in*

land use change (A5)". The applicant correctly summarised the PAS 2080:2016 guidance, but then did not correctly enumerate the B1 emissions under B1, but instead allocated them to module A5.

- 36 So, the reason the change is required now is because the applicant was incorrectly claiming B1 LUC emissions as A5 construction emissions savings **NOT that the PAS 2080 guidance had changed**, and that the applicant needed to align with new 2023 guidance as the applicant is claiming.
- 37 The existence of this issue until deadline D7, and the then mischaracterisation of the error as other than the applicant's, is again very concerning, and has implications for the trustworthiness of the CEMP.

3.7 Details and implications of inconsistencies and anomalies for LUC emissions

- 38 There next comes the issue of the quantum of the LUC emissions which had previously been incorrectly assigned as A5 emissions. LUC emissions have been enumerated as 10% of the v2.0 and v3.0 project emissions, both by source (Plate D.2) and material (Plate D.3). This equates to 144,450 tCO₂e.
- 39 [APP-153] identified the LUC sequestration emissions as 133,955 tCO₂e over the 60-year appraisal period under Table 15.14.
- 40 However, the enumeration of operational emissions in Environmental Statement has been updated with the changes at CEMP v3.0 in REP8-092, Table E.2. The 60-year reallocation can be calculated using the 5-year 6th carbon budget operation emission figures as these give a full 5-year period corresponding 1/12th of the 60-year project lifecycle. The relevant figures are 462,173 tCO₂e at [APP-153, Table 15.17] and 439,036 tCO₂e at [REP8-092, Table E.2]. The full 60-year reallocation made by the applicant is, therefore, 277,644 tCO₂e on the operation emissions side [$12 * (462,173 - 439,036) = 277,644 \text{ tCO}_2\text{e}$].
- 41 So it would appear that the LUC sequestration emissions were originally enumerated as 133,955 tCO₂e [APP-153/Table 15.14]. However, the reallocation steps made with CEMP v3.0 has removed 144,450 tCO₂e from the construction emissions side but allocated as 277,644 tCO₂e (of emission reductions) on the operation emissions side. If this is the case, the EIA enumeration of operation emissions is now wrong and is not a true reasonable worst case, as the sequestration has been incorrectly allocated and over-estimated on the operation emissions side. This is a breach of the 2017 regulations.
- 42 Further inconsistencies are demonstrated by CEMP v2.0 Plate F.1 which shows the "[r]eallocation of land use emissions" as the brown bar on the chart. Whilst it is not possible to get a precise number for the reallocated emissions, a visual examination the chart shows that the brown bar spans from c.1,180,000 to 1,420,000 which corresponds to 240,000 tCO₂e being reallocated, which does not correspond to the original APP-153 figure (133,955 tCO₂e), nor the CEMP v3.0 (144,450 tCO₂e), nor the Environmental Statement figure (277,644 tCO₂e).

43 Approximately a 100,000 tCO₂ has been lost between CEMP v2.0 Plate F.1 and the CEMP v3.0 Plates D.2 and D.3.

44 The ExA is respectfully requested to ask the applicant to explain all these discrepancies.

3.8 *Details and implications of inconsistencies and anomalies for Diesel emissions*

45 Further discrepancies are apparent with the diesel emissions. This is important as the applicant has claimed, and has run a linked marketing campaign based on this outside of the planning examination, that significant reductions to this material will be secured by using fuel switching with hydrogen.

46 First, it is necessary to note that the diesel quantification differs markedly between Plates D.2 and D.3, as indicated by the symbol ‡ in Table 1 above. This results in the claimed decarbonisation between CEMP v1.0 (&2.0) and v3.0 being 89,627 tCO₂e from the Plate D.2 data and 131,255 tCO₂e from the Plate D.3 data (see Table 1 above).

47 Further, diesel has markedly different quantifications in the data from Plate D.6 “Diesel emissions by plant type and by contract” series. In CEMP v1.0 (&2.0), the diesel for each contract sums approximately, by visual examination of the Plates, to 237,000 tCO₂e ((65,000+130,000+42,000)=237,000), whilst on CEMP v3.0, the diesel for each contract sums approximately to 116,003 tCO₂e ((18,000+98,000+3)= 116,003).

48 The applicant appears, then, to be reporting 120,997 tCO₂ (237,000–116,003=120,997) of diesel emission decarbonisation by Plate D.6. Note, the switch from Plate D.6 plotting “Diesel” to “Plant” emissions in CEMP v3.0, as the applicant has said that diesel emissions are 94% of the Plant emissions [CEMP v3.0, D5.9] may change this figure slightly. Even given this, Plate D.6 is clearly inconsistent with the decarbonisation claimed for diesel at Plates D.2 (89,627 tCO₂e) and D.3 (131,255 tCO₂e).

49 The ExA is respectfully requested to ask the applicant to explain all these discrepancies.

3.9 *Flawed proposals for decarbonisation diesel by hydrogen fuel switching*

50 Further, as I noted at deadline D8, the applicant’s hydrogen procurement [applicant’s press release, REP8-174, Appendix A] indicates that the applicant is procuring 6 million kilograms (6000 tonnes) of hydrogen to replace 20 million litres of diesel. This would be expected to save a theoretical maximum of 53,600 tCO₂e if the replacing hydrogen has zero carbon intensity [REP8-174/66-67].

51 The applicant has not disclosed which type, or types, of hydrogen is being procured, and the actual savings from this procurement can be expected to be very much smaller than the 53,600 tCO₂e calculated assuming zero carbon intensity hydrogen.

- 52 The several inconsistent estimates of diesel decarbonisation (Plate D.2 data: 89627 tCO₂e, Plate D.3 data 131,255 tCO₂e, Plate D.6 data: 120,997 tCO₂e, and Plate F.2 data: c.140,000 tCO₂e [REP8-174/69]) all massively exceed the realistic decarbonisation achievable through the procurement, released to the press in the press release.
- 53 As stated at REP8-174/71, the applicant must explain the situation and answer a number of questions (which must now also be updated for the further discrepancies noted above). **The ExA is respectfully requested to ask the applicant to explain all of this.**
- 54 As the applicant is basing its formal EIA assessment on achieving between 89627 and 140,000 tonnes of decarbonisation of diesel, depending on which of the applicant's enumerations is selected. Currently, none of the figures are trustworthy, as there are multiple figures, and none of them are consistent with the advertised procurement which would deliver significantly less decarbonisation. This clearly amounts to a breach of the 2017 Regulations with the construction emissions being underestimated with every enumeration being presented, and confusion about which enumeration would be correct.
- 55 **The applicant must now fully disclose, and prove, what genuine carbon reductions can be made by substituting hydrogen for diesel, and how they will require contractors to fully secure them, including risk assessment and a full greenhouse gas lifecycle analysis.**

3.10 Summary on CEMP

- 56 LUC emissions and diesel decarbonisation are just two areas which each demonstrate the CEMP proposals to be very shaky, unproven and untrustworthy. These areas have been exposed due to the applicant presenting a rushed and flawed draft (with CEMP v2.0) which highlighted inconsistencies with the applicant's claims at a high level.
- 57 However, it is crucial that the ExA and the SoS realise that due to the black box nature of the CEMP, potential errors in other areas of decarbonisation such as steel, concrete, cement, and material transport may exist and are impossible to detect in any way. The relevant data necessary to verify the CEMP is being withheld by the applicant from the ExA, SoS and IPs. Instead, a "management speak" narrative about procurement processes has been presented, and ExA, SoS and IPs are expected to believe it. The evidence above and in [REP8-174] demonstrates inconsistencies and incoherences in the CEMP figures which are available, and provides sound reasons why the narratives around the CEMP should not be believed.
- 58 It is frequently said, correctly, by scientists that the issue of climate change and reducing carbon emissions is determined by physics. Put simply physics does not follow procurement procedures and contract penalties. The onus is up to the applicant to show how the decarbonisation claimed in applicant's CEMP proposals can be verified as delivering the carbon reductions (ie the physics). There can be no confidence of this from the CEMP with the inconsistencies, lack of coherence and errors outlined here.

59 Further, it must be noted that the errors identified for LUC and diesel emissions, which as stated are errors manifesting at a high-level, provide absolutely no confidence for the figures for other materials, both at the high-level and the inner workings of the black box CEMP. The errors, reported here, are just manifesting at the top-level breakdowns in Plates D.1-D.6. If the underlying models cannot produce consistency at the top-level, then there can be no trust in the levels below in the black-box decarbonisation by procurement model.

60 The key implications of this are two-fold:

- (A) The CEMP and its numerical outputs of claimed decarbonisation are untrustworthy;
- (B) As data in the CEMP provides input data to the Environmental Statement and EIA Assessment, for both construction and operation emissions, the 2017 regulations have been breached in several respects:
- The data is not “reasonable worst case”;
 - The data leads to underestimates for both construction and operation emissions;
 - The provenance of the data is completely unproven. It has been proven here to be inconsistent and incoherent. The data in the EIA (from the CEMP) is dependent upon future guessing of procurement scenarios without any risk assessment of their actual delivery. In effect, no adequate or reliable description of the forecasting methods has been provided for the EIA assessment, breaching Schedule 4, Paragraph 6 of the 2017 Regulations.

3.11 Statement of “no confidence” in Competence of practitioners involved

61 I previously had to note an error [REP8-174/section 4.6] which calls into question the whole CEMP and revised environmental statement, Chapter 15, and the competence of those who produced and checked it. I had expected the applicant to detect the error itself and correct it at deadline D8. It is disappointing to see the error persist into the applicant’s D8 submissions indicating a low level of quality control, and interest in accuracy, going into its submissions.

62 Regrettably, the sections presented above, show many more inconsistencies and questions about the CEMP, and the further transmission of incorrect and unsubstantiated data into the environmental statement and EIA assessment.

63 At this point, I formally submit to the ExA that I have no confidence in the competence of the practitioners involved in the generation of the applicant's relevant submissions relating the CEMP, and to the EIA assessment of GHG emissions. I respectfully request that this is reported in the ExA's recommendation report to the Secretary of State.

4 NOTIFICATION OF ISSUES AND ERRORS IN PLANNING STATEMENT

64 [REP7-138] provided an update of the document 7.2 Planning Statement Appendix I "Carbon Strategy and Policy Alignment" for CEMP v2.0, the original being [APP-504] corresponding to CEMP v1.0.

65 Only the high-level CBN04 figure is transferred so most changes are at a very high-level.

66 The following errors are noted:

- (A) [REP7-138/I.3.23] states that "[t]he Project's contribution to the 6th carbon budget is now estimated to be 0.045% down from 0.048%". This was based on the previously notified error that the incorrect distribution of construction emissions across the carbon budgets [REP8-174/section 4.6] has been made. The applicant has failed to correctly present that the project emissions² are 0.079% of the 5th Carbon budget, not 0.045% as mis-calculated by the applicant due to this error [REP8-174/52].
- (B) There is now the second error that the incorrect enumeration of the reallocated LUC emissions to the operation emissions has been made [described above]. A new version of the Planning Statement Appendix I is required to address both this and the point above.
- (C) [REP7-138/I.2.1(b), incorrectly labelled I.1.1(b)] states the reallocation of LUC sequestration has been made to align with PAS 2080:2023. As explained above, the change was required because the applicant had misallocated the sequestration emission to PAS 2080 module A5 (rather than B1) under PAS 2080:2016 in the CEMP v1.0. The correction has not been required because the PAS 2080 guidance has changed in this respect, but because the applicant misapplied PAS 2080 in the first place.

² Based on solus only operation emissions and my ball-park construction emission estimates [REP8-174/Table 2]

(D) [REP7-138/I.3.8, and also APP-504] states the applicant is “*investigating the opportunity to benefit from a proposed green hydrogen fuel supply network in the lower Thames area*”. This contradicts the applicant’s response in [REP8-119] “9.196 Applicant's comments on Interested Parties' submissions at D7” where the applicant says on PDF page 7 “*In response to section 8.12, no decisions have been reached at this stage regarding the type of hydrogen that could be purchased for use as fuel in connection with the construction of the Project.*” In other words, the applicant has made no commitment to the exclusive, or even predominant use, of green hydrogen. As I have explained elsewhere, the decarbonisation benefits of any type of hydrogen other than green hydrogen are extremely variable, and will reduce the capacity to decarbonise diesel emissions markedly (in any case the recent hydrogen proposals and press release are inadequate to secure the claimed quantity of decarbonisation of diesel even if the hydrogen was exclusively green hydrogen, as explained above). The sentence at I.3.8 should be changed to reflect reality.

5 RESPONSES TO APPLICANT’S RESPONSES IN [REP8-119]

67 Section 2 of [REP8-119] is in response to my submission [REP7-231].

5.1 CEPP D7: [REP8-119]: Page 2 [PDF Page 4]: bullet 2

68 At bullet 2, the applicant says “*Before addressing the detail of points raised by CEPP, it is important to recognise that much of CEPP’s concern amounts to a criticism of government policy (including sections 4-6 of CEPP’s D7 submission), rather than an objection to this DCO application. Matters relating to government policy should be addressed to the Government.*”

69 I raise objections to this DCO application on the basis that it is not consistent with a properly risk assessed appraisal of the government policy, in the form of the Carbon Budget Delivery Plan (CBDP), for the delivery of the UK climate budgets and targets. I have documented this through all my submissions to date, including [REP7-231]. The point is that a properly risk assessed appraisal of the government policy in the CBDP for the delivery of the UK climate budgets and targets is essential context of the decision on the DCO application.

70 The DCO decision is matter for the Government in the form of the Secretary of State, and for this reason, I have addressed matters relating to the project in the context of the risk assessment of the CBDP, and near-horizon carbon budgets and targets, for the attention of the Secretary of State.

5.2 CEPP D7: [REP8-119]: Page 2 [PDF Page 4]: bullet 3

- 71 At paragraph 3, the applicant refers back to its [REP6-094]. [REP7-231] was a response to [REP6-094]. The applicant is engaging circular arguments here.
- 72 I note in passing that to avoid making circular arguments myself, I will not reply to each point from the applicant, concentrating on just those where I can add new information for the ExA, SoS and parties. I appreciate and trust that at this stage the ExA understands the differences in view between the applicant, and myself, and will be able to present these in its Recommendation Report to the SoS, along with the items which I have requested, in particular, are highlighted to the SoS.

5.3 CEPP D7: [REP8-119]: Page 3 [PDF Page 5]: bullet 4 (and 5 and 6)

- 73 In this submission, and [REP7-231], I have highlighted many substantive errors and issues with the applicant's Carbon and Energy Management Plan. I do not agree with the applicant that the CEMP aligns the project with and contributes to securing the Net Zero Strategy (NZS) targets, nor that it is consistent with the IEMA guidance. Further, the information derived from the CEMP cannot legitimately be used as part of the EIA assessment for the reasons given above in the section on CEMP v3.0. As the EIA assessment of GHGs is where alignment with net zero may be tested, the application fails before it even gets to the first step (of EIA assessment) as the Environmental Statement is relying on unsecured data from the CEMP.

5.4 CEPP D7: [REP8-119]: Page 3/4 [PDF Page 5/6]: bullet 7 (and 8 and 9)

- 74 The applicant states "*[t]he Government is clearly aware of the risks and importance of the issue and has put in place comprehensive policies to achieve its net zero commitments.*" I have given many reasons why the delivery of the policy (ie the CBDP) to deliver the carbon budgets and targets is not secured throughout my submissions. The simplest response here is that the Government's own experts and advisors on Climate Change do not agree with the applicant here that the Government has "put in place comprehensive policies to achieve its net zero commitments". As reported in [REP7-231], the CCC Progress Report confirmed earlier in 2023 that Government is substantially off-track meeting its legal obligations with the headline statement that four times the rate of emissions reductions were required in all sectors except the electricity supply sector³. CCC could not have given the Government a stronger warning that it needs to be much more aware of the risk to the delivery of climate targets and budgets, and securing the policies for its delivery.

³ The CCC 2023 Progress report states: "The rate of emissions reduction will need to significantly increase for the UK to meet its 2030 NDC and the Sixth Carbon Budget. If the UK is to achieve its NDC, the rate of emissions reduction outside the electricity supply sector must almost quadruple, from 1.2% annual reductions to 4.7%."

5.5 CEPP D7: [REP8-119]: Page 4 [PDF Page 6]: bullet 10

- 75 The applicant says “[i]t is not for this Examination to doubt that commitment” meaning the Government’s commitment to delivering the carbon budgets and targets.
- 76 I acknowledge that the ExA cannot be expected to determine the extent to which there can be doubt around the government’s commitment. I have merely presented my position, and trust that the ExA will report it in the Recommendation Report. Further, it is exactly because the ExA (or “the examination”) is unable to resolve issue of doubt about government policy, that I have directed my comments on this issue to the SoS him/herself, emphasising that the SoS must reach a reasoned conclusion of the scheme GHG emissions, and make a decision on the DCO, based on the reality of a properly risk assessed appraisal of the government policy, in the form of the Carbon Budget Delivery Plan (CBDP), for the delivery of the UK climate budgets and targets.
- 77 As I stated at [REP7-231/14(B)(Condition i)(A) “[t]his is about whether the budgets and targets are achievable in practice. It is not about intentions and aspirations (for example, in the policies and proposals of the CBDP which are enumerated as if they each are assured to be 100% delivered) that may exist in strategy documents but do not necessarily correspond to reality (eg: the risks to delivery to each policy and proposal in a complex policy environment)”.
- 78 It may not be for the ExA, or the examination, to make determinations on the Government’s commitment. However, it is perfectly reasonable for serious concerns to be expressed, and for these to be presented to the Secretary of State in the ExA’s Recommendation Report. That is all I am doing. It would actually be irresponsible for me as a citizen not to express these concerns which are well founded on a deep analysis of the policy and risks to its delivery.
- 79 It is then for the Secretary of State who has the benefits of the Government’s full risk assessment data on the CBDP to make a reasoned conclusion on the scheme’s GHGs. I have respectfully laid out a number of issues which the SoS should take into account in doing this, for example: that the CCC 2023 Progress Report shows that emissions savings of 22.9MtCO₂e per year remain to be secured in the Industry sector in 2030, the NDC year whilst the scheme would generate approximately 250,000 addition tonnes of CO₂ [REP8-127/Table 2] from construction in the very same year, notwithstanding the fact that I submit that the CEMP on which the 250,000 tCO₂e figure is based has not been secured (and the 250,000 tCO₂e figure is not a reasonable worst case for the EIA assessment) [this document and REP8-174].

5.6 CEPP D7: [REP8-119]: Page 4/5 [PDF Page 6/7]: bullets 11-19

- 80 As above, on the evidence of this document, I submit that the applicant has not demonstrated that the CEMP is secured.
- 81 Even if the CEMP were to be secured (either at a CBN04 value of 1.763 million tCO₂e or 1.44 million tCO₂e), I have given evidence that when contextualised against the risk assessment of policy delivery, the scheme is “Major Adverse”.
- 82 At bullet 19, “industry good practice” alone is not enough to achieve carbon budgets and targets in practice. The numbers need to demonstrably add up too. The applicant continues to fail to address the question “*however much emissions are squeezed from the construction footprint, via the methods in the CMP⁴, is the construction emission footprint still too great?*”

5.7 CEPP D7: [REP8-119]: Page 5/6 [PDF Page 7/8]: bullets 20-22

- 83 The applicant still does not address the question “*however much emissions are squeezed from the construction footprint, via the methods in the CMP, is the construction emission footprint still too great?*”. It may plan, via the CEMP, to reduce emissions from construction which falls under the Industry sector: however, the applicant has not demonstrated that what it is proposing is sufficient in the context of the risks associated with the delivery of the ‘sectoral reduction strategies’ for Industry (not as a “hard target”, but as vital contextualisation).
- 84 **On bullet 22, I beg to differ** (on each of the three points: “*the significance of the effects of the Project’s GHG emissions is ‘not significant’; the NPSNN paragraph 5.18 test is passed; the SoS can reach a reasoned conclusion that subsections s104 (4)-(6) of PA2008 are not breached and the scheme can be lawfully approved*”). And more than that, I have provided ample evidence both via contextualisations [as described REP7-231/3.2 and 33] and laid out in the essence of my case at [REP7-231/14]. The arguments which I have given stand and I spare the ExA from rehearsing them again.

5.8 CEPP D7: [REP8-119]: Page 7/8 [PDF Page 9/10]: re: section 8.1

- 85 I have based my comments on the latest available science. I do not accept that my comments are “misguided”. The applicant makes a confusion between its professional work and the seriousness of the intention of that work, and whether the output of that work is actually adequate (and therefore a serious response) to the global climate crisis, now manifesting in geophysical changes at a global level (for which I provided some recent outline evidence at [REP3-148/Prelude]. There are two seriousness’s here.

⁴ This question was originally posed at REP-234/50 as “*however much emissions are squeezed from the construction footprint, even under legally binding commitment, is the construction emission footprint still too great?*”. However, I now do not agree that the CEMP is legally binding [REP8-174/28(K)] so I have replaced “even under legally binding commitment” with “*via the methods in the CMP*”.

- 86 Notwithstanding that I have laid out substantial errors and issue with the CEMP above, which have necessitated me formally making a statement of “no confidence” in the competence of the professional practitioner’s involved, I am not doubting the seriousness of the intention behind the applicant’s CEMP. The point which I am making that that serious of intention does not actually, necessarily, constitute an adequate and serious response to the climate disruption unfolding in real time⁵. At the end of the day, the applicant is proposing to add very significant quantities of additional emissions to the atmosphere. The applicant again is failing to address the simple question “*however much emissions are squeezed from the construction footprint, via the methods in the CMP⁶, is the construction emission footprint still too great?*”
- 87 I have never suggested that the applicant is responsible for “bring[ing] forward a global solution to the global crisis”. Therefore, I have also never made the criticism of the applicant that it is not doing this. The proposition that I am making such a suggestion is just sophistry on the applicant’s part.
- 88 The Applicant says it has made no submission that “*it is OK to go on generating, at large scale, the very carbon emissions which are creating the huge impacts now being observed and will continue to make the situation worse*”. It is true that the applicant has not used that wording. However, the wording captures precisely what the applicant is trying to do with its CEMP proposals, and its EIA assessment of the emissions from the scheme being “very minor” and “not significant”. The applicant’s mission at the DCO examination with respect to the scheme’s GHG emissions is make them “OK” by the EIA regulations, and via the CEMP proposals feeding into the EIA assessment: substitute the more formal word “compliant” for “OK” if you wish. I am merely pointing out the emissions are very substantive, and at a large scale both for construction and operation of the scheme. Critically additional emissions, at any scale, continue to make climate disruption (“the situation”) worse: these are large emissions. Large emissions make the situation worse faster. That is physics. And as said above, physics does not follow the procurement procedures and contract penalties in the CEMP.
- 89 On top of all this, I have shown in this document and [REP8-174] that the CEMP is not secure, and that the outputs of it cannot lawfully be transferred into the EIA assessment. So the CEMP and EIA assessment of the GHG emissions does not provide, in terms of legitimacy, the OK-ness, or compliancy that the applicant wants for the scheme’s application.
- 90 Further down, the Applicant states “*CEPP again contend that the Applicant has engaged in greenwashing in relation to this application. The Applicant would refer to REP6-094,*

⁵ I do not adopt here the applicant’s expression on this as “to the global climate change challenge” because we are beyond the point at which this is a “challenge”, it is an emergency of unprecedented scale. Challenge suggests a normalised response that if we are all clever enough somehow then we will “solve” the problem. The problem cannot be solved, if there is a challenge it is not to make the situation worse. Adding large amounts of emissions, however well-intentioned in some professional sense, makes the situation worse, and this is what the applicant contemplates doing.

⁶ This question was originally posed at REP-234/50 as ““however much emissions are squeezed from the construction footprint, even under legally binding commitment, is the construction emission footprint still too great?””. However, I now do not agree that the CEMP is legally binding [REP8-174/28(K)] so I have replaced “even under legally binding commitment” with “*via the methods in the CMP*”.

which explained why those claims were fundamentally misplaced.” This is a circular argument, and I simply state that I disagree for the reasons which I have given. And that, my reasons for disagreeing are stronger than they were previously given that I have now established [REP8-174] that the CEMP is not legally binding, is not secured, does not provide legitimate data for the EIA assessment and further that it contains the inconsistencies and errors laid out in this document.

5.9 CEPP D7: [REP8-119]: Page 9 [PDF Page 11]: Transport Decarbonisation Plan bounds

- 91 The applicant does not rely on what it calls the “Transport Decarbonisation Plan upper and lower bound estimates” for its EIA assessment of the scheme’s GHG emissions.
- 92 Despite presenting similar figures purporting to be “sensitivity” figures relating to the TDP on several schemes, the applicant has never provided any information on how the TDP upper and lower bound estimates are actually derived. This is further modelling and forecasting information which the applicant is withholding. So it is not possible to know what policy measures are being modelled.
- 93 Further, the data in the TDP has been superseded by the CBDP. I laid out at [REP1-323/28] how the baseline for road transport contained an error of 130 million tonnes of CO₂e in the NZS (on which the TDP was based) which was subsequently corrected in the CBDP, and further that no adequate risk assessment has been made of the road transport policies and proposals in the CBDP (ie those which supersede those in the TDP). The applicant’s “TDP bounds” predate all this, and therefore are not extant, and essentially not . Even if the TDP bounds presented had been viable in the first place, which they are not as the assumptions and modelling behind them has not been disclosed⁷, then their out-of-dated-ness renders them non-compliant.
- 94 The applicant’s statement “*CEPP again fails to give any credence to the range of policy measures being pursued by Government at a strategic level*” is utterly false. Nothing is further from the truth: I have examined the TDP, and then the CBDP in considerable detail. I have examined the CCC 2023 Progress Report on the risk to deliver of these policies in considerable detail too. My position is that the credibility of the policies and proposals within the CBDP (the successor the TDP for road transport) can only be understood in the context of a full risk assessment of the policies and proposals. I have made this abundantly clear throughout my submissions.
- 95 Again this comes back to whether the budgets and targets, which the CBDP is the plan to deliver, are achievable in practice. That “achievable in practice” test requires a full risk assessment of the policies and proposals.
- 96 I am merely saying that the DCO application has to be contextualised, first, by whether the CBDP and near-horizon targets in it like the 2030 NDC are achievable in practice [REP7-

⁷ If the applicant seriously presented the TDP bounds as part of the EIA assessment, this alone would be another breach of Schedule 4, Paragraph 6 of the 2017 Regulations

231/14(B)/Condition(i)] in their own right, and then secondly, whether the scheme itself compounds the risks to delivery of the CBDP and critical near-horizon targets like the NDC [REP7-231/14(B)/Condition(ii)]. My position after very considerable consideration of the TDP, CBDP and their delivery risks, and to the scheme, its CEMP and Environmental Statement, is that (1) there exists a very credible risk that that the CBDP and near-horizon carbon budgets and targets will not be delivered, and (2) that the scheme compounds that risk.

97 I submit that it is not helpful for the applicant to twist, and mischaracterise my position, in relation to the TDP, and CBDP as the successor to it, in the way that it has in claiming that I do not give credence to Government policy.

98 The reality of the delivery of Government policy is much more complex, and subtle, and that this is why risk assessment, currently completely lacking, is required for both the delivery of the policies themselves, as the context for the scheme in its EIA assessment.

6 RESPONSES TO APPLICANT'S RESPONSES IN [REP8-115]

99 Under ExQ3_Q2.1.1, the Applicant and I have been each asked to make a position statement "explaining any changes to the circumstances of this litigation" (the Boswell case). In [REP8-155], the applicant makes several paragraphs of submissions which go unnecessarily beyond the scope of this question, before answering in the final sentence "*there are no further procedural matters to note at this time.*"

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