APPENDIX 6: CONTEXTUALIZATION AGAINST CARBON BUDGET DELIVERY PLAN AND DRAFT REVISED NPS RESPONSE

1.1 INTRODUCTION

1.1.1 The Secretary of State for the Department of Energy Security and Net Zero published a Consultation Letter on 16th of May 2023 in respect of NZT. The Consultation Letter invites the Applicants to, inter alia, comment on recent Government publications.

1.1.2 This document forms part of the EIA and HRA addendum that the Applicants' are submitting to the Secretary of State in response to the 16th May Consultation Letter. This Appendix addresses matters of policy relating to carbon emissions, as follows:

1. The purpose of the first part of this appendix to the addendum is to address a development in Government Carbon and Greenhouse Gas policy that has been issued following the close of the Examination into NZT – namely, the Carbon Budget Delivery Plan (the 'CBDP'). This submission acknowledges this policy development as well as setting out the Applicants response to it with respect to NZT.

2. The purpose of the second part of this appendix to the addendum is to address the updated draft suite of energy National Policy Statement (NPSs).

1.1.3 The Applicants note that the CBDP sets Government projections for residual emissions across a range of sectors, including Fuel Supply and Power, that include the residual operational emissions resulting from NZT. In this submission, the Applicants provide a contextualisation of NZT's predicted operational GHG emissions against the relevant sectoral projections for residual emissions as provided in the CBDP. This contextualisation is provided noting the assumptions and limitations of the CBDP sectoral figures, as described in more detail below.

1.1.4 The Applicants provide this contextualisation in acknowledgement of this latest Government policy position and not as a revised or updated assessment of GHG emissions. The Applicants' assessment of GHG emissions is provided in Chapter 21 of the Environmental Statement [APP-103] as updated throughout Examination, particularly via the Applicants' Cumulative Onshore and Offshore GHG Assessment (Document Reference 9.29; [REP6-123] (the NZT – NEP cumulative GHG assessment"), the content and conclusions of which are not altered as a result of this added contextualisation exercise.

1.1.5 The Applicants note that a third party, Climate Emergency Planning and Policy ('CEPP'), has also responded to the 16th May Consultation Letter, making various submissions on Carbon grounds including with reference to the CBDP. The Applicants' response to CEPP's submission is provided separately to this Addendum.

2.0 CONTEXTULISATION AGAINST CARBON BUDGET DELIVERY PLAN (CBDP)

2.1.1 The CBDP was issued by the UK Government on 30 March 2023. This document sets out the Government's detailed proposals and policies to enable the delivery of Carbon Budgets 4, 5 and 6 (i.e. for the period to the end of 2037) in accordance with the UK's Net Zero carbon commitment under the Climate Change Act 2008. Budgets for later Carbon Budget periods have not yet been proposed or ratified.

2.1.2 The carbon budgets apply to the whole of the UK economy and society. The CBDP is based on an adjusted version of the Government's Energy and Emissions Projections, which apply assumptions of future economic growth, fossil fuel prices, electricity generation costs, UK population growth and other key variables. The CBDP sets out projected sectoral residual emissions across the UK carbon budget periods. As paragraph 19 of that document explains (with our emphasis added):

These figures represent the projected residual emissions, after proposals and policies set out in this report have taken effect. The figures shown for each carbon budget are total emissions over the five-year period. Alongside this, we have shown the actual emissions over the single year of 2021 to show current performance. ***These are only projections and should not be interpreted as hard sectoral policy targets****. Within our overall carbon budgets, it is vital to retain a degree of flexibility to adjust our plans as circumstances change given the complexity of the net zero system and the inherent uncertainty in any projections. Modelling cannot always consider systemic feedback effects, which are hard to quantify. Other factors such as consumer behaviour, technological innovation and the speed and structure of future economic growth further contribute to intrinsic uncertainties of long-term sectoral emissions projections.*

2.1.3 To assist the Examination the Applicants are voluntarily providing a contextualisation of the Proposed Development's GHG emissions figures (as presented in Chapter 21 of the ES, [APP-103] against the CBDP sectoral projections. This contextualisation is provided below.

Assumptions and Limitations of the Contextualisation

2.1.4 This contextualisation reviews the total Residual Emissions for the Proposed Development (after policy savings) in each of the budget periods for the Fuel Supply, Power, Domestic Transport, Industry, and Waste & F-Gases sectors.

2.1.5 These sectors have been selected on the basis of the brief sector definitions provided in Appendix A of the CBDP and the Applicants' interpretation (in the absence of guidance, a methodology or knowledge of the information supporting the CBDP) of which of these sectors are applicable to the various operational emissions sources to be contextualised. The Applicants note also the caveat provided within the CBDP that the sectoral budget figures are presented only as projections, and should not be interpreted as hard sectoral policy targets.

2.1.6 **Table 1** below shows the various operational emissions sources from the Proposed Development, their relative contribution to overall operational emissions, and the CBDP sectors against which they are contextualised. These figures are consistent with the operational emissions from the onshore element of the Cumulative Onshore and Offshore GHG Assessment (Document Reference 9.29; [REP6-123].

Table 1: Operational emissions from the Proposed Development categorised against CBDP sectors

NZT EMISSIONS SOURCE	ANNUALISED OPERATIONAL EMISSIONS (TCO2E)	PROPORTION OF OPERATIONAL EMISSIONS (%)	APPLICABLE CBDP SECTOR
Indirect (WTT) emissions from the supply of natural gas[1]	404,067	60%	Fuel Supply
Direct emissions from power station	237,175	35%	Power
Electricity consumption	471.2	0.07%	Power
Consumption of materials	15,700	2.3%	Industry
Waste disposal	12,356	1.8%	Waste and F-gases
Material transport	1,201	0.18%	Domestic transport
Worker transport	316.9	0.05%	Domestic transport

2.1.7 For the purposes of this contextualisation, the Fuel Supply and Power sectors have been identified as being of most relevance to the Proposed Development, accounting for over 95% of the Proposed Development's operational emissions. Well to Tank emissions from the natural gas supply chain contribute over 60% of total operational emissions, and these are contextualised against the residual emissions for the Fuel Supply sector. Direct, unabated emissions from the Proposed Development (the 10% of CO_2 in the flue gas that is not assessed as being captured in the CCS plant)

1 Upstream (Well to Tank) emissions from the supply of natural gas explicitly include emissions from venting, flaring and fugitive emissions of methane.

contribute a further 35% of operational emissions, and these are contextualised against residual emissions for the Power sector.

2.1.8 The remaining residual emissions sources account for less than 5% of the Proposed Development's lifetime operational emissions, and are variously contextualised against the Industry, Waste & F-Gases, and Domestic Transport sectors.

2.1.9 In addition, a further contextualisation of the overall net construction and operational emissions for the Proposed Development is provided considering the total (i.e. not sectoral) Residual Emissions (after policy savings) from the Proposed Development in each of the budget periods. This contextualisation considers construction for the Proposed Development is completed by the end of 2027, hence meeting the whole of the Fourth carbon budget period and operation of the plant continues as anticipated for the following 25 years.

2.1.10 The contextualisation provided below does not alter the assessment of GHG emissions that is provided and submitted by the Applicants in Chapter 21 of the ES [APP-103] as amended during Examination.

Contextualisation against CBDP sectoral projections

2.1.11 For ease of reference, the projected sectoral-based residual emissions from the CBDP are set out below, in **Table 2** below.

Table 2: Summary of sectoral residual emissions across carbon budgets ($MtCO_2e$) taken from the CBDP[2]

SECTOR	CURRENT (2021, PA)	CB4 4-YR (AVERAGE PA)	CB5 5-YR (AVERAGE PA)	CB6 5-YR (AVERAGE PA)
AGRICULTURE AND LULUCF	49	231 (46)	207 (41)	187 (37)
BUILDINGS	88	350 (70)	320 (64)	217 (43)
DOMESTIC TRANSPORT	109	546 (109)	422 (84)	254 (51)
FUEL SUPPLY	20	93 (19)	69 (14)	48 (10)
INDUSTRY	76	340 (68)	207 (41)	111 (22)
POWER	54	143 (29)	63 (13)	42 (8)
WASTE AND F-GASES	30	125 (25)	96 (19)	75 (15)
GREENHOUSE GAS REMOVALS	N/A	0 (0)	-32 (-6)	-117(-23)

2 Carbon Budget Delivery Plan (publishing.service.gov.uk)

Intl aviation and shipping (IAS)	20	217 (43)	210 (42)	184 (37)
Total excluding IAS	426	1829 (366)	1353 (271)	813 (163)
Total including IAS	444	2046 (409)	1563 (313)	997 (199)

2.1.12 In **Table 3** below the Applicants set out the contextualisation the Proposed Development's GHG emissions as presented in Chapter 21 of the ES [APP-103], as updated during Examination including by [REP6-123], against the residual emissions projections relative to the relevant CBDP sectors, shown as percentages against each sectoral carbon budget.

Table 3: Contextualisation of residual operational emissions, compared to relevant CBDP sectoral carbon budgets.

PROJECT STAGE	ESTIMATED NET GHG RESIDUAL EMISSIONS PER SECTOR (TCO2E) - TOTAL 25 YEARS OPERATION	ESTIMATED ANNUALISED NET RESIDUAL EMISSIONS PER SECTOR (TCO2E/YR)	RELEVANT (%) OF CARBON BUDGET		
			4TH (2023-27)	5TH (2028-32)	6TH (2033-37)
FUEL SUPPLY	10,101,668	404,067	0.43%	2.93%	4.21%
POWER	5,941,159	237,646	0.17%	1.89%	2.83%
INDUSTRY	392,506	15,700	0.005%	0.04%	0.07%
WASTE AND F-GASES	308,892	12,356	0.01%	0.06%	0.08%
DOMESTIC TRANSPORT	37,959	1,518	0.0003%	0.002%	0.003%

2.1.13 In **Table 3** above, the annual estimated net GHG emissions for the Proposed Development have been shown as a percentage of the annual residual emissions values in the Fourth, Fifth and Sixth Carbon Budget periods, for relevant sectors of the CBDP as discussed above. It is important to note that the Proposed Development will only be fully operational for the final year, i.e. 2027, of the Fourth Budget Period.

2.1.14 In addition, the Applicants set out in **Table 4** below a contextualisation of the overall Proposed Development's GHG emissions, whereby construction and operational

GHG emissions have been contextualised against the overall projections for residual emissions values for the Fourth, Fifth and Sixth Carbon Budget Periods.

Table 4: Contextualisation of overall Proposed Development emissions for the construction and operational phases, compared to overall UK Carbon Budgets

PROJECT STAGE	ESTIMATED OVERALL GHG EMISSIONS (TCO2E)	ESTIMATED ANNUALISED OPERATIONAL GHG EMISSIONS (TCO2E/YR)	RELEVANT (%) OF CARBON BUDGET PERIOD, RESIDUAL EMISSIONS (AFTER POLICY SAVINGS)		
			4TH (2023-27)	5TH (2028-32)	6TH (2033-37)
Construction	76,012	n/a3	0.021%	n/a	n/a
Operation	16,782,184	671,287	0.18%	1.07%	1.69%

3 Note: construction emissions are only contextualised for the Fourth Carbon Budget Period in Table 4, given that the construction for the Proposed Development is due for completion by 2027. As a result, there are no relevant construction emissions for the Proposed Development in the Fifth and Sixth Carbon Budget periods to contextualise and hence remains as not applicable, n/a.

3.0 SUMMARY IN RESPECT OF THE CBDP

3.1.1 This submission provides contextualisation of the Proposed Development's residual emissions against relevant sectoral emissions projections given in the CBDP.

3.1.2 This submission is provided for contextualisation and information only and does not provide an assessment of significance; nor does it alter the assessment of significance which may have been previously provided by the Applicants in Chapter 21 of the Environmental Statement [APP-103]. All Proposed Development values used in the assessment have been taken directly from the GHG assessment previously undertaken by the Applicants, as set out in [APP-103].

4.0 DRAFT SUITE OF NATIONAL POLICY STATEMENTS (NPS)

4.1.1 It is important to note that the Government's consultation document on the updated draft energy NPSs confirms that while the review of the energy NPSs is undertaken, the current suite of energy NPSs remains relevant Government policy and has effect for the purposes of the PA 2008. The current NPSs therefore continue to provide a proper basis on which the SoS can make decisions on applications for energy NSIPs. This has also been confirmed in recent SoS decisions, notably that for the Thurrock Flexible Generation Plant DCO (dated 16 February 2022). The updated draft NPSs are though a matter which are likely to be 'important and relevant' to the Secretary of State's decision on the DCO application. Please refer to Sections 4.2 to 4.4 and 4.7 of the Updated Planning Statement submitted in response to the Secretary of State's consultation letter dated 16 May 2023 (Document ref. 5.3, Revision 3.0).

4.1.2 Updated draft NPS EN-1 confirms that the need for the types of energy infrastructure set out in the NPS is "urgent" in contrast to the September 2021 draft, which states that the need "will often be urgent". The updated draft of EN-1 recognises the role of combustion power plants (with carbon capture) in providing dispatchable generation to complement intermittent renewables and continues to underline the importance of technologies such as carbon capture and storage in decarbonising power generation and industry in order to achieve Net Zero by 2050. It also confirms that there is "an urgent need" for new carbon capture and storage infrastructure to support the transition to a Net Zero economy.

4.1.3 Part 4 'Assessment Principles of updated draft EN-1 at para 4.1.3 states that "Given the level and urgency of need for infrastructure of the types covered by the energy NPSs set out in Part 3 of this NPS, the Secretary of State will start with a presumption in favour of granting consent to application for energy NSIPs. That presumption applies unless any more specific and relevant policies set out in the relevant NPSs clearly indicate that consent should be refused."

4.1.4 The Applicants have submitted an Updated Planning Statement in response to the Secretary of State's consultation letter dated 16 May 2023 (Document ref. 5.3, Revision 3.0), which has considered the updated draft NPSs. In summary, the Applicants consider that the Proposed Development aligns with the March 2023 draft NPSs and that they do not materially alter the overall assessment of the Proposed Development against policy as set out in the Planning Statement. The Proposed Development does not conflict with relevant policies in the NPS and if anything, updated draft EN-1 further reinforces the need for projects such as the Proposed Development to be delivered at pace.

4.1.5 With regard to Greenhouse Gas Emissions (Section 5.3 of Part 5 'Generic Impacts' of updated draft EN-1), paragraph 5.3.10 states that in light of the vital role energy infrastructure plays in the process of economy wide decarbonisations, the Secretary of State must accept that there are likely to be some residual emissions from construction and decommissioning of energy infrastructure. Paragraph 5.3.11 goes onto state that "Given the characteristics of these and other technologies, as noted in Part 3 of this NPS, and the range of non-planning policies that can be used to

decarbonise electricity generation, such as the UK ETS …. Government has determined that operational GHG emissions are not reasons to prohibit the consenting of energy projects or to impose more restrictions on them in the planning policy framework than are set out in the energy NPSs. Any carbon assessment will include an assessment of operational GHG emissions, but the policies set out in Part 2, including UK ETS, can be applied to these emissions." Paragraph 5.3.12 confirms that "Operational emissions will be addressed in a managed, economy-wide manner, to ensure consistency with carbon budgets, net zero and our international climate commitments. The Secretary of State does not, therefore need to assess individual applications for planning consent against operational carbon emissions and their contribution to carbon budgets, net zero and our international climate commitments."

4.1.6 The Applicants note that sections 2.3, 3 and 4 of CEPP's Post Examination Submission comprises a generalised commentary on recent Government policy papers, namely the draft Energy NPS, the 'Powering Up Britain' (PUB) document and the CBDP. In terms of a specific response to the CEPP Post Examination Submission, please see the Applicants' response to CEPP document that is provided alongside this Addendum.

4.1.7 By way of a general note, in so far as CEPP's commentary on these Government policy papers (referring to the PUB and CBDP together as the 'Net Zero Strategy' or the 'NZS') has not been particularised to the Proposed Development and the NZT DCO, the Applicants have not provided a response. To the extent that CEPP seeks to challenge the lawfulness of the NZS, it is the view of the Applicants that consideration of the NZT DCO application is not the proper forum in which to make submissions of that nature. Any challenges to Government policy documents can be made via judicial review of those policy documents directly and that is the appropriate forum to do so. In the absence of any Court Order quashing the adoption of a policy, policy which is material to a decision remains lawful and must be taken into account.

4.1.8 The Applicants note in this regard the recent judgment of the High Court in R (Together Against Sizewell C Limited) v Secretary of State for Energy Security and Net Zero [2023] EWHC 1526 (Admin) where, at paragraph 132, the Court dismissed an attempt by the claimant in that case to challenge Government policy via judicial review of the Sizewell C nuclear power station project. The Court held that: "The claimant should have abandoned ground 4, but chose instead, in effect, to try to continue its challenge to the merits of Government policy through the means of judicial review. The use of the court's process in that way is wholly inappropriate".