Department for Energy Security & Net Zero

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United Kingdom

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Dear Consultee,

Government Response to the consultation on the methodology to determine the IWACC, CDA, LRT and HRT in the proposed Economic Licence for SZC

1 Introduction

1.1 The Nuclear Energy (Financing) Act was passed in 2022 ("**NEFA**"), which introduced a statutory framework for a new Regulated Asset Base ("**RAB**") financing model intended to support investment into nuclear companies which are designing, constructing and operating new nuclear plants and which have been designated by the Secretary of State (the "**SoS**") in accordance with section 2 of NEFA. The overall cost of finance is one of the main drivers of overall cost of delivering a nuclear project and the use of the RAB framework can reduce the cost of financing, leading to better value for money for consumers over the lifetime of a nuclear project. On 28 November 2022, the SoS designated Sizewell C Limited ("**SZC**") as a designated nuclear company under the powers included in NEFA. This designation allows the SoS to modify the terms and conditions of SZC's electricity generation licence to put in place the RAB financing model for which would support the SZC project (the "**Project**").

1.2 On 6 November 2023, the Government launched a consultation (the "**Economic Licence Consultation**") seeking views on the proposed modifications to SZC's electricity generation licence. These modifications are to be made through the introduction of specific "special conditions" (the "**Economic Licence**"). Government published a response to the Economic Licence Consultation on 8 April 2024.

1.3 On 20 March 2024, the SoS launched a consultation seeking views on proposed methodologies setting: (i) the Initial Weighted Average Cost of Capital (the "**IWACC**"); (ii) the Cost of Debt Adjustment ("**CDA**"); and (iii) the Lower Regulatory Threshold ("**LRT**") and the Higher Regulatory Threshold ("**HRT**").

1.4 Consultees included:

- SZC
- Office for Gas and Electricity Markets (Ofgem)

- Citizens Advice
- Consumer Scotland
- Environment Agency (EA)
- Office for Nuclear Regulation (ONR).

1.5 The SoS also consulted with EDF and potential new shareholders in SZC.

1.6 The consultation questions were as follows:

1.6.1 In terms of the approach to setting the cost of equity, do consultees consider that Option 2 strikes a reasonable balance between the need to support the financeability of SZC and safeguarding consumer interests?

1.6.2 In terms of the approach to setting the cost of debt, do consultees agree that the range of considerations being considered by the SoS are appropriate in order to support the financeability of SZC and safeguarding the consumer interest?

1.6.3 In terms of the approach to the setting the notional gearing level, do consultees consider that proposed approach strikes a reasonable balance between the need to support the financeability of SZC and safeguarding the consumer interest?

1.6.4 In terms of the approach to determining the cost of debt adjustment, do consultees consider that the proposal strikes a reasonable balance between the need to support the financeability of SZC and safeguarding the consumer interest?

1.6.5 In terms of the approach to incentivising future Private Debt raises through cost of debt adjustment, do consultees consider that this strikes a reasonable balance between the need to support the financeability of SZC and safeguarding consumer interests?

1.6.6 Do consultees have any comments on the manner in which the SoS is proposing to set the LRT and HRT thresholds in the Economic Licence?

1.7 Consultees were also encouraged to read the consultation document in conjunction with the draft Economic Licence available on GOV.UK.

1.8 The consultation closed on 24 April 2024. A range of views from consultees were received, all of which the SoS has considered carefully in accordance with their statutory duties under NEFA.

1.9 Following the General Election on 4 July 2024 the new government has confirmed that new nuclear will play an important role in helping the UK achieve energy security and clean power. Subject to a Final Investment Decision, SZC will provide low carbon electricity that supports delivery of the net zero objective at a low system cost as well as security of supply (through domestic generation) and energy system stability (by contributing to reliable non-intermittent baseload capacity). The new government is supportive of leveraging private-sector investment to support the UK's infrastructure needs.

1.10 The Autumn Budget included the support for the Project. It stated "*New nuclear will play an important role in helping the UK achieve energy security and clean power, while securing thousands of good, skilled jobs. This settlement provides £2.7bn of funding to continue Sizewell C's development through 2025-26. The equity and debt raise process for this project will shortly move into its final stages and will conclude in the spring. As with other* *major multi-year commitments, a Final Investment Decision on whether to proceed with the project will be taken at Phase 2 of the Spending Review*."

1.11 This document summarises the responses received from consultees and the SoS's response to these.

2 Summary of Responses

2.1 A number of responses to the consultation were received. Respondents included all the statutory consultees as defined in the NEFA:

- SZC (the "licensee")
- Ofgem (the "economic regulator")
- EA
- ONR

Consultation responses were also received from further consultees:

- EDF
- Consumer Scotland
- Citizens Advice
- potential equity investors.

2.2 Consumer groups, EDF and potential investors were consulted due to the reasons outlined above and in the consultation document, including the requirement to ensure the structure remained a financeable prospect whilst properly balancing the interests of consumers. Due to commercial sensitivities surrounding the ongoing equity raise process, the identity of the potential shareholders who responded to the consultation have not been included throughout this document, nor have any details that could jeopardise their anonymity or the competitive nature of the process.

2.3 The responses to the consultation were varied and provided a wide range of views.

2.4 General feedback from consultees included:

2.4.1 The importance of balancing risk between consumers and investors and a robust case that the Project will deliver value for money for consumers.

2.4.2 The need for transparency and engagement with consumers ahead of the final licence modifications. As noted above, the SoS has already published a response to the earlier Economic Licence Consultation. This consultation response picks up issues which were not covered in that consultation.

2.5 There is no statutory requirement for further consultation and the SoS is not intending to consult further on their decisions reached applying this methodology.

3 Question 1

In terms of the approach to setting the cost of equity, do consultees consider that the Option 2 strikes a reasonable balance between the need to support the financeability of SZC and safeguarding consumer interests?

General summary of responses

3.1 Overall, the feedback from respondents was that it would be preferable to set the cost of equity (Ke) for the IWACC by reference to market data (to the extent available). Whilst some consultees were comfortable that this could be achieved either through Option 2 (i.e. setting it using bid data obtained from the Equity Raise Process) or Option 3 (i.e. setting it using bid data from the Equity Raise Process with adjustments for movements in the risk free rate (RFR)), other consultees expressed a clear preference for a fixed Ke and were not in favour of an indexation component. Option 1 (i.e. using the CAPM methodology) was recognised by some respondents as an appropriate fall-back option if the equity raise process was not sufficiently competitive.

3.2 The SoS has requested that officials and advisors gather data from a pool of potential investors prior to the SoS taking a final decision on the Ke. This may include seeking specific feedback in respect of a minimum Ke to invest from potential investors.

3.3 Specific matters raised by consultees and the SoS's response to them is set out below.

Value for money (VfM)

3.4 Some consultees stressed the importance of a value for money analysis, including comparisons and accounting for risk transfer. While it was agreed that the preferred option should deliver the best value for money outcome (citing the perceived success of the same approach for Thames Tideway Tunnel), it was noted by some consultees that this is predicated on sufficient competition driving tension.

The SoS Response

3.5 The SoS continues to monitor VfM during the equity and debt raise process. This work on value for money will be assessed by the SoS prior to any decision being taken to direct the revenue collection counterparty to enter into a revenue collection contract with SZC (i.e. before the Economic Licence would become effective). Additionally, the SoS notes that under section 6 of NEFA it must have regard to a number of matters in making any determination to modify SZC's generation licence. This includes having regard to the interests of existing and future consumers of electricity, where the SoS considers that the applicable VfM analysis may be relevant.

CAPM

3.6 Some responses gave views on Option 1 (i.e. setting the cost of equity using CAPM). While one consultee opined that this was a reasonable backup option to the preferred Option 2, another stated that it would be too narrow given the Project is the first nuclear plant with a long construction period to use a RAB model and that limitations would include an implication that investors are equally exposed to upside and downside risks, a failure to capture the resolution of uncertainty over time, a lack of comparators to estimate the asset beta parameters and the possibility of non-systematic risks not being diversifiable.

The SoS Response

3.7 Use of the CAPM is an established tool for estimating the cost of equity in regulatory, finance and investment practice, and is in line with the RIIO price control methodology which Ofgem currently uses for electricity and gas networks.

3.8 The SoS understands the limitations of the CAPM approach that flow from a lack of direct and suitable comparators and the fact that the single-asset nature and novelty of the project presents the possibility of non-systematic risks not being diversifiable. The SoS would observe that this model may be used as a cross check to triangulate on a cost of equity having regard to available market data based evidence which has been provided in the Equity Raise Process (as further described below).

3.9 The SoS has concluded that whilst there was some support for Option 3, the SoS notes that not all respondents were supportive of Option 3 and that, in comparison, Options 1 or 2 are simpler, provide cash flow stability to SZC to ensure the Project is managed and delivered in an effective way and ensure that the impact on consumers is predictable from year to year, with neither impacted by changes to the Risk-free rate (RFR).

3.10 The SoS also notes that Option 2 is more familiar to investors who will be used to participating in equity raise and mergers and acquisition transaction processes. The simplicity and familiarity of this approach are considered positively from a financeability point of view which the SoS considers may ultimately drive stronger competition and better value for money for consumers than other approaches (e.g. Option 1).

3.11 [redacted]

3.12 The SoS is mindful of feedback received from consumer groups who have encouraged the SoS to consider expert analysis from economic consultants in reaching its decision on setting the Ke[redacted].

3.13 When taking account of any data received from different sources, and considering the weight that should be attributed to this, the SoS will keep in mind that:

3.13.1 the regulatory regime for SZC is a novel regime with no prior history of regulation;

3.13.2 the CAPM model is based on regulatory and economic theory that relies on suitable comparators to assess the asset beta. Unlike other regulatory businesses, there are no obvious suitable comparators for a nuclear project that is under construction and single-asset in nature;

3.13.3 the Equity Raise Process has provided detailed evidence from the market based on actual potential investors who are competing to invest and the returns at which such investors are prepared to invest;

3.13.4 data from the Equity Raise Process takes into account the financial model which SZC will operate and the impact on equity returns of the assumed equity injection profile, the duration the investment is held, the impact of changes to macro-economic factors and the impact of performance incentives under the economic regulatory regime;

3.13.5 notwithstanding the robust incentives included in the RAB Economic Licence to ensure cost control, historic data on nuclear construction projects has demonstrated a high likelihood of cost of overruns; and

3.13.6 investing in new nuclear projects during construction may still be perceived as a novel investment which makes it difficult for investors to have confidence of future sell downs until the market is more fully developed, which may need to be recognised by a small liquidity premium during construction.

3.14 [redacted]

4 Question 2

In terms of the approach to the setting the cost of debt, do consultees agree that the range of considerations being considered by the Secretary of State are appropriate in order to support the financeability of SZC and safeguarding the consumer interest?

General summary of responses

4.1 Overall, consultees were generally supportive of the proposed approach to setting the Cost of Debt outlined in the consultation and considered an approach which took account of UKRN guidance was appropriate.

4.2 One consultee suggested that a RAV-weighted cost of debt mechanism should be considered (similar to Scottish Hydro in RIIO). Another consultee called for more information on how the SoS would determine the RPI-CPI wedge required to deflate nominal yields to CPI or CPIH real.

Indexation

4.3 One consultee noted that given the IWACC provided for a real rate of return, in order to pass through the cost of debt it would be necessary to consider how to allow for inflation. In particular, it noted Ofgem's consideration of this issue as part of the RIIO price control last year, noting that Ofgem's proposals merit consideration and evaluation in the context of SZC's Economic Licence. The consultee further considered an approach based on "break-even inflation" was not useful, noting that distortions in the gilt market make the differential between yields on index-linked and nominal a poor proxy for expected inflation.

[redacted] ***pricing***

4.4 A number of consultees acknowledged the challenges of pricing the debt described in the consultation, including the lack of direct comparators. Another consultee noted challenges with fixing a benchmark cost of debt for a business which is not established, as this would require assumptions about the likely credit quality/credit rating, tenor of debt, scale of any differential between the SZC cost of debt and other corporate debt with the same rating and tenor, timing of any private debt raises and borrowing amounts. Some consultees considered that this should result in more weight being placed on actual issuance rather than that of a notional company. One consultee suggested that existing debt market indices like [redacted] may not be of great relevance to the Project.

4.5 Taking account of views from [redacted] was considered appropriate. One consultee also considered that the pricing should be reflective of SZC's actual or expected credit rating.

pricing

4.6 A number of consultees were supportive of the proposed approach to pricing the [redacted] (see 4.19 below) through a competitive process of banks to derive a market cost of debt. One consultee emphasised that this process should be subject to appropriate levels of oversight by the SoS.

Fees

4.7 One consultee supported the treatment of fees in the cost of debt included in the IWACC (Kd) being tied to the extent to which they were known at Revenue Commencement. Some consultees called for more information on how fees would be treated.

[redacted]

[redacted]

4.8 There was support for addressing the [redacted] as part of the CDA rather than in the Kd for IWACC purposes.

4.9 [redacted]

Hedging

4.10 Some respondents called for more information on how hedging and derivatives would be approached. With respect to derivatives, one consultee considered that they were not a necessary feature for an efficient operator adopting a notional capital structure. The consultee emphasised the complexity of derivative arrangements when assessing the cost of debt.

The SoS Response

4.11 The SoS has fully considered all the feedback provided. Responses on specific points raised are set out below but as an overarching comment the SoS would emphasise the importance of considering the way the cost of debt is set for IWACC purposes in the context of the application of the CDA.

4.12 As regards the suggestion to align the mechanism of a RAV-weighted cost of debt mechanism, the SoS can confirm that this has already been taken into account and is a feature of the way the CDA (as outlined in the consultation) is designed. The SoS notes that the Scottish Hydro precedent referenced by one consultee was introduced in RIIO1, continued in RIIO2 and is also part of the RIIO3 SSMD Finance Annex for energy transmission companies. The approach is substantively similar to the way the CDA works (i.e. it assumes an annual buildup based on the lower of the actual debt amount and the notional gearing cap level).

Indexation

4.13 With respect to the approach to indexation, the SoS has further considered consultee feedback as well as concerns raised by Citizens Advice that the equivalent approach on networks under RIIO-2 left scope for licensees to make windfall gains on inflation. In July 2024, Ofgem acknowledged this risk stating that "*Use of a long run assumption to deflate the cost of debt allowance means the real allowance does not adjust for short term inflationary spikes or troughs, and only adjusts if there is a structural shift in long run expectations. This means the real cost of debt allowance remains invariant to outturn inflation. However, because the interest on fixed rate debt (ie the nominal cost) does not change with inflation, when outturn inflation rises, the real cost of fixed rate debt falls. The reverse is also true in periods where inflation falls below long run assumptions. This generates a mismatch between the allowed return on debt and the cost of debt incurred where inflation deviates from long run expectations. This mismatch generates out or underperformance potential for equity*".

4.14 The SoS has also considered Ofgem's RIIO-3 SSMD decision in which it considered 3 options for addressing this risk and concluded that it would address this issue by setting a nominal allowance for fixed rated debt.

4.15 The SoS further noted that the outperformance which network companies benefited from was driven by a high spike in inflation due to geopolitical instability measured over the relatively shorter regulatory period (5 years compared to c15 years expected for the Pre-

PCR Phase for SZC). The longer regulatory period for SZC would be more likely to dilute the impact of short term spikes in inflation and indeed there would be more opportunity for spikes to be counterbalanced by troughs.

4.16 Having considered whether it would be appropriate to adjust the approach to indexation risk for SZC, the SoS considers that there are some material differences between networks and SZC which mean that adopting the same change implemented by Ofgem as part of RIIO-3 may not be appropriate. In particular, the SZC structure contemplates a fixed cost of equity for the Pre-PCR Phase and, as part of the equity raise process, bidders have already taken into consideration potential upsides and downsides of indexation when making their competitive submissions to DESNZ. This means that the SoS already receives the benefit of equity taking the risk of indexation and as such there is not the same pressure to make a separate adjustment. Moreover, were a separate adjustment to be implemented, the change to the overall risk allocation could have an overall negative impact on consumers because it is possible adjusting the structure would be likely to drive up the bid cost of equity levels for consumers as it would apply for the entire Pre-PCR Phase in exchange for a potential upside that may or may not materialise. Given that separate adjustments represent a contingent adjustment that would only benefit consumers if there was a long term net spike in inflation, the SoS considers it would be more important to guard against an increase to the cost of equity which will be funded by consumers in all circumstances.

[redacted] ***pricing***

4.17 With respect to observations made on the lack of direct comparators, the SoS agrees that this is a challenge when setting the cost of debt for SZC. Whilst there is no guarantee that an [redacted] will be a close fit for SZC, overall, the SoS considers that this approach has the advantage of being consistent with the approach regulators have used in comparable sectors and utilising the [redacted] is also consistent with views provided to the SoS by [redacted]

4.18 The pricing of the [redacted] is expected to increase in the event of a credit rating trigger event. Whilst any such cost increase would not be reflected in the IWACC, it would be picked up through the CDA mechanism and therefore funded by consumers.

pricing

4.19 The SoS agrees with feedback from consultees with respect to ensuring that the SoS has appropriate levels of oversight over the competitive bank process for pricing the [redacted] loan which benefits from [redacted] political and commercial risk insurance from [redacted] (the [redacted]).

4.20 As explained in the consultation, SZC has run a competition for banks to participate in funding the [redacted] with oversight from the SoS. This process has involved the following key stages, subject to considerable oversight from the SoS at every stage:

(i) **Preliminary Phase** – a competitive process to appoint an [redacted] bank in August 2023

(ii) **Phase 1** – an initial market sounding with [redacted] lenders: September 2023 to February 2024

(iii) **Phase 2** – identifying additional lenders after the Phase 1 process to ensure the market is systematically tested: February to March 2024

(iv) **Phase 3** – competitive process to establish market appetite and key terms [redacted].

4.21 The SoS is content that the process has been effectively designed and implemented to support a competitive process which will deliver an efficient cost of debt.

Fees

4.22 Following further consideration on the treatment of fees, the SoS considers that it would be beneficial to include all fees in the CDA (as opposed to including some fees in the Kd for IWACC purposes). More specifically, accounting for [redacted] fees through the CDA (rather than accounting for them in the Kd for IWACC purposes) means that CDA will more closely match the timing and profile of [redacted] fees incurred, thereby reducing the licensee's financing requirements relative to recovery via the IWACC.

[redacted]

4.23 Consistent with feedback from consultees, the SoS has concluded that it is appropriate to address the cost associated with the [redacted] as part of the CDA rather than in the Kd for IWACC purposes.

Reimbursement

4.24 The SoS is continuing to consider how consumers could benefit by a reduction in the funding they contribute through the revenue support provided by suppliers where there is also taxpayer funding. Any adjustment will sit outside the scope of the RAB Economic Licence or IWACC methodology, and therefore is not covered in this document.

Hedging

4.25 The SoS notes no interest rate swaps are anticipated in respect of the debt expected to be put in place at Revenue Commencement. In particular, the [redacted] is expected to be predominantly fixed rate but the licensee will have an option to select floating rate issuances. Additionally, whilst the [redacted] debt is expected to be floating rate debt, the proportion of this debt (relative to the total debt amount) is expected to be within the permitted allowances under the hedging policy.

4.26 The CDA provisions in the Economic Licence are expected to clarify that any standalone fees associated with an FX forward will count towards the calculation of the Cost of Debt Adjustment Building Block. However, the cost of any other hedging agreements or transactions will not count towards the calculation of the Cost of Debt Adjustment Building Block, nor will it cover any break costs associated with any hedging agreements or any make whole, or modified spens in respect of financing.

4.27 The SoS further considers it appropriate for SZC to be under a licence obligation to ensure its forex hedging process (in respect of capex which is invoiced in non-GBP denominations) is competitive.

5 Question 3

In terms of the approach to the setting the notional gearing level, do consultees consider that proposed approach strikes a reasonable balance between the need to support the financeability of SZC and safeguarding the consumer interest?

General summary of responses

5.1 Overall, consultees were supportive of the approach to setting the notional gearing level, appreciating the importance of gearing for financeability. One consultee specifically called for it to be fixed at the upper end of the range [redacted]. On the other hand, another consultee observed that the proposed gearing was on the high side compared to other regulated sectors. Whilst this consultee recognised the benefits to consumers of higher leverage, it noted that care should be taken to ensure that the model does not result in heightened risks of future financial failure that would likely have to be socialised across bill or taxpayers.

The SoS Response

5.2 The SoS welcomes the feedback received. Having considered this alongside further advice from financial consultants and modelling the impact of the upper and lower ends of the proposed gearing range, the SoS considers that it would be appropriate to set the notional gearing at the upper end of the range proposed in the consultation [redacted]. In considering the appropriate gearing for IWACC purposes, the SoS has considered recommendation 9 of the UKRN Guidance which states that the notional gearing assumption should reflect the regulator's assessment of the balance of risks facing the regulated company, a wide range of benchmarks on gearing levels and overall regulatory policy objectives - not just the gearing level of the actual company (or companies) in question.

5.3 In particular, the SoS has also considered:

5.3.1 **Credit rating** – the robustness of the structure is likely to support an investment grade rating at [redacted] gearing level. Additionally, the SoS notes feedback that as well as considering the actual credit rating, lenders are also likely to consider the consistency of that rating and the nature of any commitment to maintain it over the long term. In this regard, it is anticipated that, as part of its financial policy, SZC will be indicating a commitment to maintain an investment grade rating;

5.3.2 **Availability of capital and lower cost of equity** – feedback that suggests that a higher gearing level would promote the availability of equity at a lower, more competitive cost, whilst not unduly impacting the project credit rating;

5.3.3 **Debt pricing** – feedback that suggests that private debt pricing is expected to be driven primarily by the credit rating level (i.e. by reference to equivalent-rated credits trading for similar tenors). Whilst gearing levels will in turn be relevant to the credit rating, it is not expected to have a direct, material impact on debt pricing (which would be impacted by a number of factors including prevailing market conditions);

5.3.4 **Refinancing risk –** in respect of concerns raised by one consultee with respect to heightened risks of future financial failure, the SoS notes that there are a number of safeguards in the structure against this and the current expectation is that SZC would be able to obtain an investment grade rating at this gearing level. Refinancing risk is mitigated by the following:

(i) Refinancing needs would be staggered as different tranches of debt fall due for repayment;

(ii) During the course of the construction period, the sterling market is anticipated to grow, enhancing available debt market capacity by the time SZC's refinancing need is triggered;

(iii) As well as accessing debt in the sterling market (whether from the bank, bond or private placement markets), the licensee will also have the opportunity to draw on the Euro and US dollar markets, with the support of cross currency swaps; and

(iv) The licensee will have access to a [redacted] which gives it cover [redacted] of principal repayments, mitigating the risk of temporary adverse market conditions at a time when the licensee is seeking to enter the debt markets.

5.3.5 **Relative cost of capital** – recognising that the cost of private debt is typically lower than the cost of equity, a higher gearing level is expected to lower the overall cost to consumers of the delivering the Project;

5.3.6 **Absence of direct comparators** – it may not be appropriate to directly compare the gearing level of other regulated utilities. The distinctive nature of a greenfield regulated nuclear energy project under construction with a significant period of regulation (up to [redacted]) when compared with an operational asset with more limited capex (and therefore less new debt) and a 5 year regulation period;

5.3.7 **Consistency between the Pre-PCR Phase and Operations Phase** – the importance of consistency between the Pre-PCR Phase (i.e. construction, commissioning and early operations) and the position at the PCR is anticipated to support stability of the financing structure during this transitional period. In this regard, it is noted that the Economic Regulator has indicated in its Economic Guidance that if it were to set the notional gearing for the operations phase today, [redacted] may be an appropriate level.

6 Question 4

In terms of the approach to determining the cost of debt adjustment, do consultees consider that the proposal strikes a reasonable balance between the need to support the financeability of SZC and safeguarding the consumer interest?

General summary of responses

6.1 Overall, feedback from consultees indicated general support for the approach outlined in the consultation. More detailed feedback from consultees on the proposed approach included:

6.1.1 [redacted]

6.1.2 support for the approach to adjustments to reflect the time value of money;

6.1.3 a suggestion that the CDA should be calculated by reference to a weighted average debt balances (instead of the opening balance) or applying more frequent CDA calculations; and

6.1.4 calls to consider the impact of index-linked debt.

6.2 Where consultees provided feedback as part of this question on the approach to:

6.2.1 setting benchmark indices generally, this is addressed in the response to question 2;

6.2.2 the approach to setting the gearing cap, this is addressed in the response to question 3;

6.2.3 the approach to incentivising SZC to manage the cost of any private debt raises, this is covered in the response to question 5; and

6.2.4 the approach to setting the benchmark for private debt, this is covered in the response to question 5.

The SoS Response

6.3 Having carefully considered all the feedback from consultees, the SoS agrees with comments raised by consultees that the CDA calculation should be calculated by reference to a weighted average debt balance (rather than the opening balance) to provide a more accurate assessment of the licensee's cost of debt for the relevant period. The change has been reflected consistently across the calculation so that all components (i.e. both the interest and principal amounts) which were calculated by reference to the opening balance are instead calculated by reference to the weighted average balance.

6.4 Following further consideration, the SoS has concluded that it would be preferable to calculate the CDA for Charging Year t on a forecast basis in Charging Year t-1, subject to reconciliation to true up the CDA to actuals in Charging Year t+1 and t+2. This approach is expected to give SZC a more accurate allowance for its cost of debt on an 'in-year' basis, mitigating liquidity pressures created by the cost of debt allowance being provided on a 2-year lag. The reconciliations are implemented through the CDAIR and CDAFR components of the formula. These include adjustments to reflect the time value of money (by reference to the IWACC).

6.5 With respect to calls to consider the impact of index-linked debt, the SoS notes that it is not currently envisaged index-linked debt would form part of the [redacted]. However, SZC could choose to raise index-linked debt post Revenue Commencement, in which case the CDA would compensate the licensee for index-linked debt by calculating an effective interest rate which captures the indexation element as well as the cash interest element.

More specifically, the cost of debt in nominal IRR terms would be calculated based on forecast debt cash flows for the tenor of the relevant index-linked instrument in nominal terms on the basis of the Bank of England CPI inflation target as at the date of the relevant issuance.

6.6 At the time of the original consultation, the day-1 debt was expected to include a [redacted] In addition to the debt instruments that were anticipated at the time of the consultation, SZC is now also expected to have a credit facility to be used primarily for issuing annual bank guarantees, bonds and/or letters of credit, although this facility is expected to be capped. The SoS has considered how the cost of this facility should be accounted for under the economic regulatory regime.

6.7 The SoS has concluded that it is unlikely to be efficient to account for the cost of this debt in the Kd which forms part of the IWACC and this should instead be accounted for as part of the CDA. The CDA will include an allowance (set by the SoS at Revenue Commencement) which covers the fees associated with this facility subject to SZC demonstrating that it has followed a suitable process of market testing. It will also include an allowance to cover utilisation costs for normal working capital requirements subject to a cap to be set in the Economic Licence to ensure SZC remain properly incentivised not to rely on the working capital facility more than necessary. However, it is important to note that there will be no allowance for the cost of a call on any bonds, guarantees and/or letters of credit issued under the working capital facility. The allowance may be subject to a reopener which can be triggered if either Ofgem or SZC considers that the actual cost of the facility has materially diverged from the allowance.

7 Question 5

In terms of the approach to incentivising future Private Debt raises through cost of debt adjustment, do consultees consider that this strikes a reasonable balance between the need to support the financeability of SZC and safeguarding consumer interests?

General summary of responses

7.1 Most consultees considered it appropriate to set incentives on future Private Debt raises in order to balance consumer interests and financeability. However, one consultee suggested all SZC debt costs should be treated on a pass-through basis, considering that there were other incentives on SZC to manage this.

7.2 More detailed feedback from consultees on the proposed approach included:

7.2.1 the need for sufficient safeguards to ensure incentives provide value for money for consumers by only rewarding SZC for genuine successful financial management, including the need to guard against perverse incentives on SZC to seek an expensive first issuance (to make it easier to outperform against that benchmark in future) or raising private debt when it is not required;

7.2.2 calls for careful consideration of how any benchmark index for private debt is set;

7.2.3 suggestions to increase the strength of the incentive later in the Pre-PCR Period to counterbalance the current approach whereby SZC is more heavily penalised for underperformance on debt raised in the earlier years of the Pre-PCR Phase

7.2.4 recognition that the sharing bands would be difficult to calibrate coupled with some calls for further information on how the SoS proposal had been reached;

7.2.5 the need for a cap on SZC's downside exposure to promote financeability;

7.2.6 how any mismatch in the currency of private debt would be addressed; and

7.2.7 an observation that there had been challenges with a similar mechanism on the Thames Tideway Tunnel project (i.e. the Financing Cost Adjustment) associated with raising private debt at a more accelerated pace than originally anticipated.

7.3 Finally, one consultee also sought clarification on the scope of the definition of Private Debt.

The SoS Response

7.4 Having reflected on the feedback from consultees on the proposed approach to incentivising SZC to raise any private debt at an efficient cost, the SoS is content that the overall approach strikes a reasonable balance between the need to support SZC's financeability and safeguarding consumer interests.

7.5 With respect to concerns about the potential for perverse incentives, the SoS considers the risk of these materialising in practice is mitigated by the following in-built protections which should be considered in the round:

7.5.1 under the economic regulatory regime, Ofgem will have discretion with respect to how embedded debt from the Pre-PCR Phase is treated in the RWACC during the Operations Phase. Ofgem's guidance will acknowledge that the CDA is designed to incentivise SZC to raise private debt efficiently in the Pre-PCR Phase and, on this basis, Ofgem expects to set an allowance for Pre-PCR Phase debt based on SZC's observed financing costs for as long as these remain relevant, unless there is demonstrable evidence that these instruments are inefficient;

7.5.2 the CDA in the Economic Licence will only automatically accommodate certain types of debt instruments (defined in the Economic Licence) and were SZC to take out a different type of debt Ofgem will have discretion to consider how the cost of debt for other instruments would be compensated at the time;

7.5.3 the economic guidance will also set a requirement for SZC to inform Ofgem in advance of its expected approach to raising [redacted] private debt in the Pre-PCR period and to demonstrate how this approach is economic and efficient;

7.5.4 there are other guardrails included in the wider structure designed to:

(i) ensure that any private debt raise process is fair, transparent and competitive;

(ii) set criteria for formal market testing ahead of [redacted] private debt issuance and set an appropriate cap and collar on the quantum of debt being raised and a minimum credit rating requirement;

(iii) ensure SZC has obtained requisite shareholder and board approvals before putting new private debt in place;

(iv) give the SoS and Ofgem oversight of any private debt raise plan and provide an opportunity for them to make recommendations to SZC where it considers the process would benefit from changes to better promote an efficient debt raise that represents value for money for consumers

7.5.5 there are incentives on SZC to implement disciplined treasury management to support its submissions to Ofgem when it comes to set the RWACC. In general, a lower, more efficient debt cost will reduce SZC's exposure to cost disallowances post-PCR;

7.5.6 under the financing, a debt maturity concentration test will apply to restrict incurrence of debt which would result in debt above a specified threshold level in a given period.

7.6 To avoid unintended consequences of a mismatch between the debt which SZC may have in place from time to time, compared with the debt which is accounted for in the CDA, the Economic Licence is expected to require SZC to report annually on the cost of debt for all debt instruments which are not captured within the CDA.

7.7 In terms of the private debt incentive, the proportion of costs incurred in connection with Private Debt that is passed through the CDA will depend on the difference between:

7.7.1 the actual 'all-in' cost of the relevant private debt issuance, less the Applicable Market Index at the time of the issuance; and

7.7.2 the actual 'all-in' cost of:

(i) the first private debt issuance, less the Applicable Market Index at the time of the first issuance; or

(ii) for any debt issuances following the application of the reopener (described in paragraph 7.9), less the Applicable Market Index at the time of the relevant debt issuance most recently specified by Ofgem as part of the reopener.

7.8 Taking account of the likely tenor of the debt, the SoS considers an appropriate benchmark for this purpose to be the [redacted]. In effect, this approach insulates the licensee against movements in the [redacted].

7.9 The Economic Licence will include a mechanism for Ofgem to adjust the reference point (described in paragraph 7.7.2) once every 4 years since the reference point was set. As part of this reopener, Ofgem would have the opportunity to change the Applicable Market Index.

7.10 The portion of the difference between the ARF and the ORF that is passed through under the CDA will depend on the private debt incentive sharing bands set out in the Economic Licence. These sharing bands can be modified by Ofgem at the 4 year reopener points referenced above.

7.11 The proposed calibration of the sharing bands for the incentive reflects a balancing of the need to ensure there are sufficient incentives on SZC to raise private debt efficiently, whilst at the same time recognising that the cost of private debt will, to some extent, be outside of its control. SZC will also be further constrained by the substantial quantum of debt it needs to refinance. The calibration of the sharing bands also reflects an upper limit on SZC exposure to non-recovery of a portion of its debt costs, with costs beyond a specific threshold being fully recoverable through the Cost of Debt Adjustment. This is consistent with feedback from one consultee which called for a cap on SZC's downside exposure to promote financeability.

7.12 In respect of the relative strength of the incentive at the start of the Pre-PCR Period compared to the end, the SoS recognises that the proposed approach could potentially result in SZC being more heavily penalised for underperformance on debt raised in the earlier years of the Pre-PCR Phase, simply by virtue of the duration of the period which the incentive applies. However, the SoS is content that if this were to manifest in a way Ofgem considers inappropriate, Ofgem would have the ability to adjust the impact of the incentive through recalibrating the sharing bands at the 4 yearly reopener points.

7.13 In terms of the potential for a currency mismatch, the hedging policy under the financing arrangements is expected to require all foreign currency conversion to GBP to be fully hedged. As such, all debt costs will effectively be translated into GBP for inclusion in the CDA meaning no currency mismatch is expected to arise. The CDA will pass through the cost of any cross-currency swaps used to so convert such debt to GBP.

7.14 With respect to observations made on the equivalent mechanism for Thames Tideway Tunnel (the Financing Cost Adjustment), this has been considered but the SoS notes that there are some material differences to the Cost of Debt Adjustment proposed for SZC and the challenges associated with debt being raised according to more accelerated profile would not cause the same issue under the Cost of Debt Adjustment mechanism.

7.15 For the Project, the cost of hedging instruments (other than cross-currency swaps) will be outside of the scope of the CDA and the licensee will therefore need to take this into account in setting its financing plan.

7.16 With respect to the way Private Debt is defined, the SoS proposes that this should be defined to mean debt from private sector banks, private placement or bonds raised or issued by the licensee or an Issuer Co following the Licence Modification Date (which would not e.g. include the [redacted] covered lending put in place at Licence Modification).

7.17 The CDA mechanism will be designed to cover specified Class A debt instruments (including fixed rate bonds, index linked bonds, floating rate term loans and fixed rate term loans). Where SZC wishes to raise debt through another type of instrument, it will need to notify Ofgem and Ofgem will determine how the cost of debt for this instrument will be reflected in the Allowed Revenue.

8 Question 6

Do consultees have any comments on the manner in which the Secretary of State is proposing to set the LRT and HRT thresholds in the Economic Licence?

General summary of responses

8.1 Consultees were broadly supportive of setting the LRT and HRT using SZC analysis as a primary reference. Responses emphasised the need for the SoS taking an independent view of this, applying suitable scrutiny to ensure VfM for consumers. There was an expectation that the SoS will take advice from sources other than SZC, for example the IPA, Ofgem and independent consultants, as well as calls to follow IPA best practice guidance for estimation. There was support for use of scenario modelling, Monte Carlo analysis and Estimating Uncertainty.

8.2 One consultee recommended government supplement SZC modelling with reference class forecasting.

8.3 Some consultees cautioned against setting the HRT too high, noting that this may not be value for money as it could increase financing costs of the Project due to additional equity commitments and that same time could have limited benefit for consumer or taxpayer's risk exposure (assuming the risk of reaching the HRT is already remote).

8.4 One consultee called for the gap between LRT and HRT to be minimised, noting that this would be more attractive to investors given that the RAB only builds up at [redacted] between the LRT and HRT due to the application of the capex incentive. It suggested that a smaller gap between the LRT and HRT would result in a lower cost of equity. This feedback must be balanced against comments from another consultee which caution against chasing the lowest cost of equity if it can only be achieved by heavily exposing consumers to overrun risks.

8.5 One consultee raised the language used to describe the level at which the HRT will be set in the consultation when compared to the description provided in the Economic Licence consultation.

8.6 Two consultees commented that there was insufficient information on actual pricing to fully engage with the proposals, including a request for more information on how the SoS has countered optimism bias in its estimates.

The SoS Response

8.7 The SoS welcomes the feedback provided and has given careful consideration to how the LRT and HRT should be set, taking account of the relevant issues and available information. The SoS has concluded that the LRT should represent a realistic outturn position for the Project, whilst the HRT should represent a severe outturn position – in each case these judgements should be informed by a fully developed and assured estimate prepared by SZC, including risk and uncertainty analysis on the level of contingency which would be appropriate. These estimates should be subject to assurance by SZC's advisors.

8.8 In considering the level of contingency that would be appropriate when setting the LRT and HRT, the SoS notes that there are reopeners to the LRT and HRT under the Economic Licence for Relevant Change in Circumstances (which covers qualifying changes in law/regulation and pandemics) and Additional Heat Infrastructure (required to export heat from the site).

8.9 The SoS has reviewed SZC's approach to developing its cost estimate and notes that this takes account of best practice guidance (including IPA cost estimation guidance). The SoS further notes that SZC's cost estimate has been reviewed by specialist external consultants and has been matured over time to take account of recommendations coming out of their review as well as to reflect updates for the most up to date position. SZC's cost estimate has been produced using scenario based modelling, Monte Carlo analysis, reference class forecasting and quantitative schedule risk analysis ("**QSRA**"), which is appropriate for this stage of the project.

8.10 The SoS considers it appropriate to set the LRT somewhat higher than SZC's point estimate, to build in a degree of contingency against what the SoS considers represents an ambitious forecast cost, with gain share incentives on the upside with consumers to encourage SZC to control costs. At the same time, the SoS is conscious that the LRT should not be set higher than a realistic outturn position to ensure the capex incentive would apply to expenditure above this level. It is noted that having some headroom above the point estimate incentivises the licensee and its investors to achieve an outturn cost below the LRT as [redacted] of the difference between the outturn cost and LRT would be added to the RAB, which could increase returns for shareholders.

8.11 The SoS recognises a careful balance needs to be struck when setting the HRT to support delivery of the overarching purpose of NEFA which was to create a delivery model which facilitates private investment into nuclear projects of this nature at a value for money cost of equity. Competing considerations include:

8.11.1 ensuring the HRT is suitably remote to minimise the likelihood of calls on the contingent financing support arrangements which are provided by the SoS above this level, which should be considered as high-impact but low probability events and is consistent with the need to ensure any subsidy is proportionate and the minimum necessary;

8.11.2 ensuring there is a sufficient gap between the LRT and HRT across which the capex incentive under the Economic Licence would apply.

8.12 With respect to suggestions by one consultee that reference case forecasting should be used, the SoS notes that this is not considered appropriate for the Final Business Case ("**FBC**") stage (per IPA guidance that recommends bottom-up techniques for FBC to reflect organisational and project maturity). Instead, the SoS considers it appropriate to set the thresholds as follows:

8.12.1 the LRT should align to SZC's scenario-based modelling (SBM) 'moderate' outcome analysis. This corresponds to the comparative Monte Carlo positions in the [redacted] decile on cost and schedule; and

8.12.2 the HRT should reflect a modified version of SZC's SBM modelling of a 'severe' outcome, subject to adjustment to allow for a more extended lag between completion of Unit 1 and Unit 2 to take account of technical advice and learning from global performance of EPRs. This is consistent with comparative Monte Carlo positions in the [redacted] decile on cost and schedule.

9 Summary and next steps

9.1 The SoS would like to thank all consultees for their engagement and detailed feedback.

9.2 The SoS does not currently envisage carrying out further consultations on the methodologies or on the numbers which are set by the SoS in applying these methodologies, but reserves the right to revise this position.

9.3 The final version of the Economic Licence will be publicly available at the time of licence modification, following the conclusion of the capital raise process.

Please do not hesitate to contact us with any questions you may have.

Yours sincerely,

Department for Energy Security and Net Zero

This consultation is available from: www.gov.uk/desnz

If you need a version of this document in a more accessible format, please email alt.formats@energysecurity.gov.uk. Please tell us what format you need. It will help us if you say what assistive technology you use.