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Ofgem's response to the consultation on the methodology to determine the Initial Weighted Average Cost of Capital in the proposed Economic Licence for Sizewell C

Dear Secretary of State,

Thank you for your recent consultation setting out your intended approach to the calculation of the Initial Weighted Average Cost of Capital (IWACC), including your proposals for the cost of equity, cost of debt, notional gearing, cost of debt adjustment and approach to setting the lower and higher regulatory thresholds for Sizewell C. We¹ welcome the opportunity to respond.

Ofgem regulates the gas and electricity markets in Great Britain. Our principal objective is to protect the interests of current and future gas and electricity consumers. This includes their interests in the Secretary of State's compliance with the duties in sections 1 and 4(1)(b) of the Climate Change Act 2008 (the net zero target for 2050 and five-year carbon budgets). The Nuclear Energy (Financing) Act (the Act), which achieved Royal Assent on 31st March 2022, formally extends our statutory duties to cover designated nuclear Regulated Asset Base (RAB) licensees. We have, and continue to, provide advisory support to the Department for Energy Security and Net Zero's (DESNZ's) development of an economic regulatory regime (ERR) for nuclear RAB licensees, including on the methodologies that form a part of this consultation.

Overall, we agree with the majority of positions set out in the paper. We think the proposed approach to cost of equity is appropriate and would like to emphasise the importance of a robust approach to achieving competitive tension and value for money for consumers. We also agree with the notional gearing approach, and we are setting out a similar indicative view in the next version of our economic guidance. We note that this consultation reflects the final stages of government's decision-making, but the considerations and proposed approach appear to be suitable when considered in the round. We have recommended thorough consideration of the approach to hedging and derivatives. We also agree with the high-level process outlined for setting the lower and higher regulatory thresholds.

¹ References to the "Authority", "Ofgem", "us", "we", "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day-to-day activities.

We consider the Cost of Debt adjustment (CDA) mechanism to be an important part of the regulatory framework, and we support the principles behind the proposal. However, we have concerns regarding whether there are sufficient safeguards in place to ensure that Sizewell C is being incentivised only for effective financial management. While we recognise the extensive work that government has led to ensure the overall transaction contains protections, including government's role in shaping debt covenants and investor agreements, we believe that additional protections for consumers should be incorporated within the licence, particularly given the expected duration of the pre-PCR phase. We look forward to seeing further detail on exactly how this mechanism will work to enable us to take a final view on both its effectiveness and whether it is in consumers' interests.

Many of our views are predicated on our understanding of HMG's approach to government equity and debt. As part of the project's capital raise process, HMG's debt and equity contributions will be logged to the RAB at the same rate as private investment. However, HMG will acquire the funds it contributes at the lower gilt rate. It is our view that the spread between the prevailing market and gilt rates must be reimbursed to consumers by HMG, or else this spread effectively becomes a tax payable by consumers on HMG lending. The analysis we have seen from HMG indicates that reimbursing the spread lowers the cost of the project for consumers. We strongly believe that the arrangement whereby the spread would be used to reduce supplier levies should be clearly and transparently codified, with details agreed prior to the revenue commencement date. Suppliers would then be expected to use this saving to reduce consumer bills. We have been engaging with HMG to consider potential options and understand that HMG are considering a contractual arrangement, which we believe is clearly in the best interest of consumers.

Finally, as we set out in our response to the consultation on modifications to the Sizewell C Regulated Asset Base licence², prior to revenue commencement the Secretary of State should ensure that there is a robust case that the project is likely to deliver value for money. We consider this should be informed by the terms of the economic licence and related documents, supply chain contracts and the expected construction costs, and indicative information on the cost of capital consumers will bear. It should also take into account the significant transfer of risk from investors to consumers and taxpayers.

In the interests of transparency, we will be publishing this response on the Ofgem website. The attached appendix sets out our views in more detail. If you would like to discuss further, please contact Peter Burnill, Head of Ofgem's Nuclear RAB team.

Yours sincerely,
Gordon Hutcheson
Deputy Director, Low Carbon RAB

² [Response to the modifications to the Sizewell C Regulated Asset Base licence consultation | Ofgem](#)

Appendix: Our response to the six consultation questions

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?

We agree that option 2 strikes a reasonable balance between Sizewell C's financeability and safeguarding consumer interests and is the best way forward for DESNZ to set the IWACC, if there is sufficient competitive tension to ensure value for money for consumers.

Option 1

The capital asset pricing model (CAPM) framework outlined in Option 1 is a widely used approach favoured by Ofgem and the UK Regulators Network³ (UKRN). However, we do not recommend this option in this instance because we recognise the potential value of a competitive process if there is sufficient competitive tension to facilitate efficient price discovery. We see this option as a reasonable back up to Option 2 if:

- there is insufficient pricing tension in the capital raise process; and
- DESNZ believes there is still enough investor interest so that an appropriate IWACC can be set, and it can design a robust process to attract such investment at a price that offers value for money.

Under this approach DESNZ would need to carefully consider how to determine a competitive cost of equity (i.e., a single hurdle rate) so that the project is investible while avoiding unnecessarily high costs to consumers.

Using bid data from potential investors

We support the proposal to set the initial weighted average cost of capital (IWACC) using a bid Cost of Equity, provided there is sufficient competition at the equity raise. A competitive approach could help to deliver a lower overall allowed cost of finance compared to an approach that is based on asset pricing models administered by DESNZ, and deliver better value for money for consumers.

We agree that it will be important to ensure genuine competitive tension by reviewing the bid costs of equity against appropriate market data. This could include estimates of a CAPM-derived Cost of Equity, bid internal rates of return in other infrastructure sectors or infrastructure fund discount rates. Furthermore, value for money analysis should compare Sizewell C to other similar generation assets, taking into account the significant risk transfer to both consumers and government through the regulatory framework. Lessons from the National Audit Office's Value for Money report on Hinkley Point C⁴ should also be considered.

We look forward to seeing the finer detail of this approach relating to how exactly the bids will be assessed and the bid data will be used. It will be important to ensure that there is a clear and robust process for assessing equity bids, which is well understood by all stakeholders at the outset and with sufficient time for considered input to be sought and received on important decisions.

³ UKRN guidance for regulators on the methodology for setting the cost of capital available at: [CoC-guidance 22.03.23.pdf \(ukrn.org.uk\)](#).

⁴ [Hinkley Point C - National Audit Office \(NAO\) report](#)

Approach to indexation

We have carefully considered the two approaches to indexation outlined in Options 2 and 3, recognising that there are advantages and disadvantages to both for consumers.

For Option 2, investors would assume the financial risk of market changes, and so would be likely to price expected movements in the Risk Free Rate (RFR) into their IWACC bids. We expect that the potential investors DESNZ has said it is targeting⁵ as a part of this capital raise should be able to develop an informed view on potential movements in market rates and will reflect this in their bids, as many investors already do with other regulated utilities.

For Option 3, the RFR would not be fixed, and so consumers would bear the risk of market changes. In our regulation of network businesses, we adopt an approach that is similar to this. However, there are material differences between the two regulatory frameworks. Based on our understanding of the capital raise process, we also have no evidence to suggest that the additional risk borne by consumers under option 3 would be fully captured by a commensurate reduction in the cost of equity, which could result in poorer value for money. There are also several practical complexities involved in combining indexation with an otherwise competitively bid cost of equity.

For these reasons and due to the importance of providing stability and predictability of returns during the pre-PCR phase which will make it easier in turn to forecast the impact on consumers bills and therefore appraise overall value for money and determine supplier levies on balance we agree with DESNZ that Option 2 is the preferred approach. Under this approach it is important to be clear that the equity interest rate risk remains with investors through the duration of the IWACC period. Under both options 2 and 3 scenarios could arise that compress measures of 'financeability' during the pre-PCR phase of the project, however, committing to a single approach for the duration is vital to ensure a fair deal for consumers.

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.

The consultation highlights a range of appropriate considerations regarding the debt component of the IWAAC, the financeability of Sizewell C and safeguarding consumers' interests.

Overall approach

Our understanding is that DESNZ sets out two options for the setting the cost of debt:

1. An indexation approach, similar to the approach used in other regulated sectors.
2. An initial assessment of Sizewell C's expected cost of debt for the pre-PCR phase, which is then supplemented by the CDA mechanism that allows for a full or partial pass-through of Sizewell C's actual cost of debt.

Overall, we agree that there is justification for adopting a bespoke approach to setting the Cost of Debt as in Point 2 that broadly aligns with the UKRN view that *'in sectors with one*

⁵ [Sizewell C equity raise process - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/sizewell-c-equity-raise-process)

*regulated company, it would be reasonable to consider actual debt as long as there are sufficient safeguards to ensure that such debt has been prudently incurred*⁶ noting that the practicalities of implementing any approach to setting debt allowances will need to carefully take account of the specific circumstances relevant to Sizewell C.

Sources of Debt

Given the large financing requirements of Sizewell C, we consider the sources of debt proposed in the consultation document to be appropriate and that it is sensible to distinguish between the different components of Sizewell C's debt book.

- We welcome HMG's proposal to reduce consumer costs through providing government debt to fund Sizewell C in the pre-PCR phase. Sizewell C has significant financing requirements, and funding these through state-backed debt, at least in the earlier stages of the asset's life, is likely to be in consumers' interests.
- As set out in our overall comments above, we strongly support the principle that consumers are reimbursed for the difference between the gilt rate and the market cost of debt charged to Sizewell C for government debt, and our assessment of the overall proposed approach to financing is based on our understanding that this reimbursement will be implemented. We believe this arrangement should be clearly and transparently codified, particularly given the anticipated duration of the pre-PCR phase. This would ensure that consumers only pay the underlying cost of borrowing for government debt.
- We recognise the challenges of pricing this debt that are set out in the consultation, including a lack of straightforward comparators, the first of a kind nature of Sizewell C, and a history of little private debt financing in the nuclear sector. [REDACTED]. However, to a significant extent we would expect that the debt costs set upfront by HMG would be reflective of SZC's actual or expected credit rating.
- [REDACTED] We consider that the oversight of the process by the Secretary of State should not be limited to the competitiveness of the process but also consider whether the facility terms on which the pricing is sought are considered likely to derive efficient pricing and whether the process is considered consistent with best market practice. We consider this oversight as essential to provide the relevant assurance of the efficiency of the instrument absent of an applicable revenue incentive mechanism.
- We believe this approach is in line with the principles recommended by UKRN 2023 guidance of minimising interest cost and managing risk, and we encourage DESNZ to continue to apply these principles when considering the other sources of debt outlined in paragraph 5.16 of the consultation document.

Fees

On balance, we agree with the proposed approach to deciding whether commitment and arrangement fees are included in the Cost of Debt allowance at Revenue Commencement, based on the extent to which such commitment fees are known and payable or whether they are contingent and how the CDA mechanism operates. This appears to be an appropriate way to ensure that costs that are built into the IWACC allowance are those that Sizewell C is known to incur. However, this is conditional on DESNZ continuing to work towards ensuring such fees are efficient and represent value for money for consumers. We

⁶ P.32, [UK Regulators Network 2023 Cost of Capital Annual Report](#)

note there is detail to be confirmed regarding requirements for efficient financial instruments in the pre-PCR phase.

DESNZ should carefully consider its approach to hedging costs (considered in paragraph 5.24 of the consultation document) and derivatives in general. More clarity on the level of oversight, and/or efficiency of the arrangements is crucial for ensuring arrangements are efficient and in the interest of the consumers.

However, when determining its approach to derivatives, DESNZ should weigh up the potential benefits against the complexity of a sufficiently robust oversight process. In other sectors we regulate, Ofgem considers that the debt allowances can reasonably be achieved using standard debt instruments and derivatives are not a necessary feature for an efficient operator adopting the notional capital structure. In these sectors, we also consider that the time and resource requirements of conducting a sufficiently robust assessment to assess derivatives would not be proportionate to the benefits of doing so and that the risk and rewards for entering into such arrangements best resides with shareholders. This is consistent with the typical approach outlined in the UKRN guidance.

Such arrangements are highly complex. For example, in addition to market pricing, it would be necessary to also consider the cashflow profile of each derivative through its life (instruments could be used to manipulate price control assessment by cashflow reprofiling), tenor, timing of the transaction, and whether the rationale, instrument type and intent of entering into such an arrangement is in consumers' interests. Furthermore, the exercise to assess the overall value of derivatives over the full term would add significant complexity and resource burden to the CDA calculation.

We consider that further detail needs to be disclosed on the proposed approach with respect to hedging costs and, if DESNZ intends to provide an allowance for these costs, how DESNZ will ensure that oversight in place is robust and proportionate in context of the highlighted issues in other RAB based regimes. This includes how such an allowance would interact with the wider regime, considering that the IWACC will be set at FID while the CDA will need to remunerate changes in efficient debt costs throughout the pre-PCR period.

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.

We believe the approach to the setting the notional gearing level strikes a reasonable balance between the need to support the financeability of Sizewell C and safeguarding the consumer interest.

The overall analysis set out in the paper outlines a sensible approach to determining the notional gearing. We agree that, on balance, a notional gearing assumption of [REDACTED] is appropriate and in consumers' interests. We believe a higher level of gearing could have negative consequences for financial resilience, and strongly discourage DESNZ from considering higher levels of gearing. [REDACTED]

We strongly support DESNZ's decision to set a gearing cap in the government support package that is commensurate with the notional gearing level set at Revenue Commencement. Removal of this cap would present significant financial resilience concerns.

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?

We are supportive of the intention behind the CDA to remove the impact of deviations between the actual cost of debt and the cost of debt assumed in the IWACC due to changes in the market cost of debt and to incentivise Sizewell C to manage its debt costs and raise any Private Debt efficiently. Broadly, we consider that the proposed mechanism is likely to achieve these objectives, but we do not believe we have sufficient information to take a firmer view at this stage. Our comments on the private debt incentivisation, which we think may need some additional consideration, are included in the response to the next question.

We have reviewed the proposals and would recommend the CDA uses the average balance as the denominator in the formula calculations, not the opening balance. We support DESNZ's proposal to use the IWACC for the Time Value of Money adjustment for the CDA. We also agree that the gearing cap for the CDA should be in line with the proposed notional gearing assumption for the IWACC. Other areas are still to be resolved, including (i) how the market reference index will be determined (ii) how any mismatch in currency of Private Debt will be addressed and (iii) the role of derivatives (see above). We would like to see more detail on these components, as well as the final model, before giving DESNZ our final view on whether the mechanism is fit for purpose and in consumers' interests.

We note that as a consequence of the significant complexities in this area, there is now limited time to further refine and develop policy. Given the size of the financing requirements and the significance of this project for consumers and the government's net zero ambitions, it will be important to ensure that decisions in these areas are made in a robust and transparent way, making use of all the best available evidence. We look forward to continuing to work with you as you finalise these details.

5. In terms of the approach incentivising future Private Debt raises through the 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?

It is important for consumers that the approach to incentivising private debt rewards Sizewell C for efficiently raising private debt and protects financeability. We agree with the need for and underlying principles of this proposal. The model provides a simple and transparent mechanism for reimbursing Sizewell C for movements in efficient debt, and the costs of government debt. We recognise that DESNZ has made a reasonable and pragmatic choices in response to the evolution of this project on how this incentivisation should work.

As set out in our economic guidance, our approach to setting allowances in the operations phase is predicated on an effective incentive that rewards Sizewell C for raising private debt efficiently throughout the pre-PCR period. Further consideration should be given to whether there are sufficient safeguards to ensure the incentive provides value for money for consumers by only rewarding Sizewell C for genuine successful financial management, noting how the wider consumer protections in the regime could potentially evolve throughout the duration of the pre-PCR period. Without such protections, Sizewell C could, for example, be incentivised to make the first issue issuance of private sector debt as costly as possible so that they are able to outperform in later issuances. Furthermore, due to the

incentive upside Sizewell C could potentially be rewarded for issuing private debt at times when it is both unnecessary for the project and not in consumers' interests.

We note that there are ways to manage this risk through the broader package being offered to Sizewell C, for example, through debt covenants and investor agreements. However, we caution against overreliance on the broader package given the duration of the pre-PCR phase and the possibility that government's role in the project may change over time, and encourage DESNZ to consider how these safeguards might be further strengthened through the licence modifications and/or regulatory oversight. Without inclusion in the licence, such protections may not be maintained throughout the pre-PCR phase.

We would recommend that additional consideration is given the strength of safeguards in place to guard against inefficient debt and/or potentially inappropriate equity value transfer during the period between the Commercial Operations Date (COD) and PCR. As the model is currently structured, Sizewell C is more heavily penalised for underperformance on debt raised in the earlier years of the pre-PCR phase. Consideration could be given, for example, to increasing the strength of the incentive in the time during and leading up to the period between COD and PCR.

We would welcome further detail on the sharing bands and the analysis that supports the different basis point levels and associated consumer/equity shares. We note the proposal for Ofgem to have the ability to recalibrate the sharing bands. We consider that having the option to recalibrate sharing bands could be in both consumers' and investors' interests to help ensure an appropriate balance of risks over time.

As included in our overall comments, this response is partly based on the expectation that there will be an arrangement that ensures that consumers are reimbursed the difference between the cost of debt that government pays (the gilt rate) and the cost of debt it will charge the licensee (a market cost of debt set so that Sizewell C is not being subsidised by government). If this recycling were not implemented, we believe the incentive should be reconsidered, as Sizewell C may be in a position to achieve more efficient debt.

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?

We agree with the principle of the LRT and HRT being set by DESNZ, informed by Sizewell C's analysis. Considering the methodology outlined at paragraph 8.2 – 8.4 of the consultation, we caution that it will be important for DESNZ to supplement data and analysis provided by SCZ with its own, independent view.

DESNZ may wish to encourage Sizewell C to consider the IPA's 'best practice guidance' in developing its point estimate (which we understand will be based on a bottom-up assessment of the total construction and delivery costs derived from best observed supply chain data from Hinkley Point C, and other European Pressurised Reactor projects worldwide, including converged supply chain contracts). It will be important for DESNZ to carry out robust due diligence on these costs, including more subjective elements such as projected efficiency gains in developing the point estimate. DESNZ should supplement Sizewell C's modelling of risk and uncertainty with alternative approaches, in particular Reference Class Forecasting, in deciding the level of contingency. The recently announced

construction cost increases at Hinkley Point C highlight the need for a robust approach to assessing this cost estimate.

As DESNZ set out, LRT is the point at which the Capex Incentive ([REDACTED]) bites. It is therefore important for the LRT, in particular, to be set at a level that safeguards value for money for consumers and taxpayers. In a similar vein, we encourage DESNZ to set the HRT at a level that recognises the consumer impact of escalating costs, and any potential distortive impact this might have. Before finalising allowances, DESNZ should be satisfied that consumers will not be unduly exposed to high cost overruns.