

ANNEX 16

SAFETY CRITICAL EXPENDITURE

This Annex sets out a summary of the Board's understanding of the Safety Critical Expenditure which may be paid in priority to amounts due to the FDP Implementation Company in accordance with the terms of the Finance Documents and clause 31.1 (*Payments in relation to Safety Critical Expenditure*) of the FAP.

1. BACKGROUND

- 1.1 Safety Critical Expenditure is broadly defined in the FAP as “*any expenditure of the Operator which has been defined as being safety critical by the Operator's board of directors acting reasonably*”. This approach is consistent with the definition included in the HPC FAP.
- 1.2 Pursuant to clause 31.1 (*Payments in relation to Safety Critical Expenditure*) of the FAP and the cashflow waterfall provisions in the Finance Documents,¹ the Operator is permitted to meet Safety Critical Expenditure in priority to payments to the FDP Implementation Company, including from amounts received by the Operator in respect of the FDP Allowance Building Block under the SZC Economic Licence. However, as noted at row B.1 of Annex 5 (*Risk Matrix Identifying Key Potential Risks to Shortfall in Funding for the Cost of FDP Liabilities*), Special Condition 13 of the SZC Economic Licence requires the FDP Allowance Building Block to be used only for the purposes of paying amounts owed to the FDP Implementation Company pursuant to a Contributions Notice. As such, there will be no entitlement under the SZC Economic Licence for the Operator to apply the FDP Allowance Building Block to payment of Safety Critical Expenditure.
- 1.3 DESNZ has provided a summary note covering example categories and cost estimates in relation to the Safety Critical Expenditure set out in Attachment A to this Annex (the “**Summary Note**”).
- 1.4 Considering the extensive flexibility for the Operator to define costs as Safety Critical Expenditure, this category of expenditure could have a potentially broad scope. In particular, the Board understands from the Operator that costs arising from unforeseen issues would likely constitute Safety Critical Expenditure, meaning Safety Critical Expenditure could be a significant sum and ultimately be drawn from funds intended to be allocated to the FDP Implementation Company.²

¹ **Note:** This is as per the Financing Heads of Terms. As noted in Annex 2 (*The Board's Role and Scrutiny of the FAP*), the Board has only reviewed the Financing Heads of Terms, as it has not been presented with the long-form finance documents.

² **Note:** Pursuant to Section 56(4) of the 2008 Act, the manner in which the protected assets are to be applied is to be determined in accordance with the FAP and the NASTA. As the FAP provides that Safety Critical Expenditure may be paid in priority to payments to the FDP Implementation Company, applying the funds to Safety Critical Expenditure in accordance with clause 31.1 (*Payments in relation to Safety Critical Expenditure*) of the FAP would likely be consistent with the protected assets regime in Section 56(4) of the 2008 Act. As noted in row B.1 of Annex 5 (*Risk Matrix Identifying Key Potential Risks to Shortfall in Funding for the Cost of FDP Liabilities*), the Board expects the Operator will prioritise its compliance with the FAP (and therefore prioritise its compliance with clause 31.1 (*Payments in relation to Safety Critical Expenditure*) of the FAP over Special Condition 13 (*Funded Decommissioning Programme*) of the SZC Economic Licence).

- 1.5 In addition, the Operator may draw on the Fund Assets by requiring Emergency DTM Payments from the FDP Implementation Company in respect of Safety Critical Expenditure incurred following a Shutdown Notice where operational revenues and any available make safe reserves are insufficient in accordance with clause 38.2 (*Drawdown of funds prior to the Actual Decommissioning Start Date*) of the FAP.

2. SAFETY CRITICAL EXPENDITURE SCENARIOS

- 2.1 There are three (3) primary scenarios in which the Plant is expected to incur Safety Critical Expenditure:
- (A) during the normal operations of the Plant;
 - (B) where the Plant experiences early closure due to technical issues; and
 - (C) where the Plant remains technically operational, but the Operator ceases generation due to financial difficulties.
- 2.2 The Operator is required under the SZC Economic Licence to maintain a reserve to fund safety critical operating expenses up to 1/12 of the Safety Critical Opex Reserve Accrual Amount (as determined by the Authority considering forecast Safety Critical Expenditure in accordance with Part E (*Safety Critical Opex Reserve Account*) of Special Condition 18 (*Asset Management Plans*) of the SZC Economic Licence).³ The Board understands from the Financing Heads of Terms that the Finance Documents will also require the Operator to maintain a make safe reserve up to a “Make Safe Reserve Accrual Amount”, intended to cover the costs of orderly shutdown of the Reactors.⁴
- 2.3 As explained further in paragraph 3 below, in the ordinary course of operations, the Allowed Revenue is expected to cover Safety Critical Expenditure. As such, this reserve to fund safety critical operating expenses is very much a buffer which is not expected to be required in the ordinary course.
- 2.4 In the event the Plant experiences technical difficulties such that it has to cease operations, Safety Critical Expenditure would be incurred to ensure nuclear and environmental safety. In particular, for ten (10) years following closure, the Plant would have to maintain relevant systems and equipment, and staff support from various disciplines would be required, all of which would be funded out of Safety Critical Expenditure. Other than the Safety Critical Opex Reserve Accrual Amount referred to above, the SZC Economic Licence does not expressly include any provisions which set out how such Safety Critical Expenditure would be funded (assuming a Partial Revocation of the SZC Economic Licence following shutdown). The

³ **Note:** The Board expects that such Safety Critical Opex Reserve Accrual Amount would be based on the Authority’s estimate of the Operator’s annual Safety Critical Expenditure, which would mean that the reserving under the SZC Economic Licence will only be sufficient to discharge one month’s Safety Critical Expenditure.

⁴ **Note:** The term “Make Safe Reserve Accrual Amount” is undefined in the Financing Heads of Terms. However, DESNZ explained to the Board that the term is for make safe activities required under the Discontinuation and Compensation Agreement. On the other hand, the Board understands the Safety Critical Opex Reserve Accrual Amount is for safety critical opex requirements pursuant to the SZC Economic Licence.

Summary Note from DESNZ has provisionally estimated Safety Critical Expenditure to fall within the region of £75 million – £90 million annually (in real 2021 values) for ten (10) years following Reactor shutdown followed by £15 million – £20 million annually recurring costs until the commencement of normal decommissioning (see paragraph 3 of Attachment A).

- 2.5 In the event that the Operator experienced financial difficulties and, as a result, ceased operations, the Operator may look to maintain Sizewell C in a standby state. In this event, the Plant would need to safely cool and manage fuel and have all the equipment routinely maintained such that it can be restarted at a future date. Safety Critical Expenditure would be incurred in relation to the maintenance of such equipment and the Summary Note from DESNZ has provisionally estimated Safety Critical Expenditure in the region of £50mn – £70mn (in real 2021 values) in this standby scenario (see paragraph 4 of Attachment A). However, in this event, a relevant licensee nuclear company administration order could be made pursuant to part 3 of the 2022 Act, and a Nuclear Transfer Scheme could be applied to ensure continued generation (please see Annex 12 (*Nuclear Administration and Nuclear Transfer Schemes*) for further explanation regarding the nuclear administration regime and the Nuclear Transfer Scheme).

3. MITIGATION

- 3.1 While Safety Critical Expenditure ranks in priority to the payment of Contributions, the following factors act as mitigants against this risk: (i) the Allowed Revenue is calculated in the first instance, and explicitly, to meet all of the Operator's costs including Safety Critical Expenditure and Contributions; and (ii) the payment of Contributions ranks senior in the Operator's contractual cash flow waterfall, second only to Safety Critical Expenditure (and, under the Finance Documents, payments to the Make Safe Reserve Account). The base case expectation is that Allowed Revenue would be significantly in excess of Safety Critical Expenditure and FDP Secured Liabilities in ordinary circumstances.
- 3.2 The Operator should therefore have sufficient cash flow to fund Safety Critical Expenditure and Contribution payments in the ordinary course, provided the actual Safety Critical Expenditure that is recognised by the Authority is at least as great as that recognised by the directors of the Operator.
- 3.3 In the event that Safety Critical Expenditure exceeds the Operator's available cashflow and liquidity support, then it would enter into Nuclear Administration where: (i) the Allowed Revenue would continue to be paid until transfer pursuant to a Nuclear Transfer Scheme; and (ii) any such shortfall would be paid through Emergency DTM Payments (i.e., from the Fund Assets) for up to two annual periods⁵.
- 3.4 If the event leading to the incurrence of Safety Critical Expenditure results in the issuance of a Shutdown Notice and there are insufficient funds, the relevant Safety Critical Expenditure may be funded through Emergency DTM Payments for up to two annual periods that fall between the point at which the Operator issues a Shutdown Notice (i.e. either an Unplanned Permanent

⁵ **Note:** See row of B.1 of Annex 5 (*Risk Matrix Identifying Key Potential Risks to Shortfall in Funding for the Cost of FDP Liabilities*).

Shutdown or a Single Reactor Early Shutdown) and the Actual Decommissioning Start Date. As explained further in row B.1 of Annex 5 (*Risk Matrix Identifying Key Potential Risks to Shortfall in Funding for the Cost of FDP Liabilities*), such shutdown will trigger a "Partial Revocation" process under the SZC Economic Licence which will involve the FDP being modified to take account of the early closure of the Plant (see also paragraph 4 of Annex 11 (*SZC Economic Licence*)). To the extent that such Emergency DTM Payments are drawn in this way prior to the FAP being so modified, the amount of such payments will have been accounted for in the FDP modification (and therefore captured by the FDP Final Amount to be paid under the SZC Economic Licence during the relevant Partial Revocation Period). On the other hand, if such Emergency DTM Payments are drawn after the FDP is so modified, then the amount of such payments will not be accounted for in the FDP Final Amount or be paid under the SZC Economic Licence during any Partial Revocation Period. As such, the drawing of Emergency DTM Payments in this way could result in a real shortfall in the Fund Assets for decommissioning and waste management costs. The Board however considers that this risk is well mitigated for the reasons discussed in row B.1 of Annex 5 (*Risk Matrix Identifying Key Potential Risks to Shortfall in Funding for the Cost of FDP Liabilities*).

4. CONCLUSION

- 4.1 Safety Critical Expenditure during the Operational Period should generally be covered by the Opex Building Block and Totex Building Block (as applicable) under the SZC Economic Licence. Accordingly, the priority under the FAP of Safety Critical Expenditure to payments to the FDP Implementation Company to cover FDP Secured Liabilities should not create a Funding Shortfall in the ordinary course, given such Safety Critical Expenditure should be funded by Allowed Revenue.
- 4.2 The risk is therefore primarily after the closure of the Plant (or temporary shutdown or partial closure), particularly in an early closure scenario where such Safety Critical Expenditure may be funded by Emergency DTM Payments for up to two annual periods. For the reasons outlined in paragraph 3 above and in rows B.1, B.9 and B.11 of Annex 5 (*Risk Matrix Identifying Key Potential Risks to Shortfall in Funding for the Cost of FDP Liabilities*), the Board considers such risk to be well mitigated.
- 4.3 In particular, with respect to a potential draw of Emergency DTM Payments in an early closure scenario, the Board understands from the Summary Note from DESNZ that the maximum amount that would be drawn in this way would be £90 million per year (ie. £180 million in total, given Emergency DTM Payments may only be drawn for up to two (2) annual Financial Periods) – see paragraph 2.2 of Attachment A. Whilst noting the Board's view stated above that the risk of this creating a Funding Shortfall would be unlikely to occur, the Board also notes that £90 million per year would seem a relatively small amount compared to the overall capital and operational cost of Sizewell C (and the expected size of the Fund Assets, unless the closure of the Plant occurs very early in its life, which would seem unlikely particularly given the HPC replication strategy).

ATTACHMENT A

SAFETY CRITICAL EXPENDITURE

1. EXECUTIVE SUMMARY

- 1.1 Safety Critical Expenditure are costs considered to be 'safety critical' for the project, and so it is essential they are committed as required.
- 1.2 It is therefore key that the board of directors of the operator have the flexibility (in light of prevailing circumstances) to determine whether or not certain costs are safety critical.
- 1.3 If the flexibility is sought to be constrained / additional process requirements sought to be introduced, that may run counter to the driver of these costs being critical (and time-sensitive) to the safety of the project.
- 1.4 However, for illustrative purposes, we have set out what Safety Critical Expenditure may look like in the following specific scenarios: (i) when SZC is experiencing technical difficulties; and (ii) when SZC is experiencing financial difficulties.

2. SAFETY CRITICAL EXPENDITURE

- 2.1 After becoming operational, SZC will need to incur day-to-day expenditure to meet its various operational and maintenance requirements:
 - (A) during normal operations, the likely operational costs (for both units) are likely to be in the region of **c. £150mn – c. £180mn** annually (in real 2021 values);
 - (B) these costs will be incurred to meet the day-to-day operational requirements for the project (which by definition will include costs to keep the plant in a safe working condition); and
 - (C) these costs include, for instance, all operation and maintenance costs to ensure that the plant is both safe, and operates reliably, grid-related costs, business rates and insurance costs, but exclude fuel costs.⁶
- 2.2 Safety Critical Expenditure can be considered to be a sub-set of the wider category of normal operating costs, which are only those incurred to maintain the plant in a safe state (such costs also need to be incurred when the plant has been shut down / it is not in a state of normal operations):
 - (A) in summary, these are costs considered to be "safety critical" for the project and so it is essential that they are promptly incurred;

⁶ Note: Please note that the cost range(s) and categories provided above (and in this note) are indicative and illustrative in nature, and remain subject to further assessment.

- (B) it is not possible to provide a specific formulation for these costs as they are – by definition – dependent on the prevalent circumstances and what costs are critical from a safety perspective;
- (C) it is imperative that the board of directors of the operator have the flexibility to determine whether or not certain costs are safety critical (and the directors will do so in line with their duties and in accordance with the terms of the nuclear site licence);
- (D) however, we have provided a high-level outline below of what safety critical expenditure may look like in certain specific scenarios.

When Sizewell C is operating normally, Safety Critical Expenditure can be considered to be c. 50% of the normal operational costs, i.e. **c. £75mn – £90mn** annually.

3. SIZEWELL C – TECHNICAL ISSUES

3.1 It is possible that during the operational life of SZC, the plant may experience technical difficulties as a result of which it may have to cease operations:

- (A) if the plant was not operating (and needs to be shut down permanently), the Safety Critical Expenditure would be to essentially ensure nuclear and environmental safety;
- (B) it will be key to ensure that safety-related equipment, i.e. equipment that ensures a safe shutdown state (including for instance, environmental monitoring and to keep the fuel cooled) are in proper working condition;
- (C) for ten years (roughly, the amount of time it will take for the fuel to be cooled before it can be transferred to the Interim Fuel Storage Facility):
 - (i) the plant would have to maintain relevant systems and equipment such as those associated with fuel pond cooling and associated back-up systems, diesel systems, and cooling water security systems;
 - (ii) staff to support would be required from various disciplines such as operations, health physics, maintenance, engineering and security, including CNSS; and
 - (iii) in terms of the Safety Critical Expenditure for this period, this could be around 50% of the normal operational costs – i.e. **c. £75mn – £90mn** annually; and
- (D) after ten years (when the fuel is placed in the medium-term storage facility casks):
 - (i) there would be a much-reduced safety-related burden;
 - (ii) the storage facility can be looked after by a significantly smaller security, engineering and health physics team; and
 - (iii) in terms of the Safety Critical Expenditure for this period, this could be around 10% of the normal operational costs (until normal decommissioning commences) – i.e. **c. £15mn – £20mn** annually.

3.2 It is difficult to provide to provide a clear statement as to what (and how much) Safety Critical Expenditure will be, as this will be defined by the then circumstances:

- (A) for instance, if one of the reactors were to be shut down early, either that reactor may be decommissioned straight away; or
- (B) that reactor may be kept in a 'care and maintenance' state until the other reactor is ready to be decommissioned (depending upon the overall plant risks and conditions); and
- (C) therefore, what comprises Safety Critical Expenditure may differ accordingly.

4. SIZEWELL C – FINANCIAL ISSUES

4.1 Separately, it is also possible that SZC may be able to continue normal operations from a technical perspective, but may be experiencing financial difficulties as a result of which it may decide to cease operations:

- (A) in such a scenario, SZC is likely to want to look to maintain the power project as a running concern (so that there is a viable business case for prospective investors);
- (B) so, though SZC may not be carrying out generation, the plant would likely still remain (safely) fuelled and have all the equipment under routine maintenance so that it can be restarted without delay;
- (C) however, of course SZC will not be incurring any costs relating to fuelling or outages in this scenario.

4.2 In terms of the potential quantum of these costs, these are likely to be similar to the costs highlighted in paragraph 3 above (i.e. 50% of normal operating costs) less any costs relating to outages – i.e. **c. £50mn – £70mn** annually.