The Planning Inspectorate

Application by NNB Generation Company (SZC) Limited for an Order Granting Development Consent for The Sizewell C Project

The Examining Authority's written questions and requests for information (ExQ1)

ExQ1 PART 3 OF 6

<table>
<tr><th>ExQ1</th><th>Question to:</th><th>Question:</th></tr>
<tr><td colspan="3">Chapter 9 - CC.1 Climate change and resilience</td></tr>
<tr><td>CC.1.3</td><td>The Applicant</td><td>Green House Gas emissions
The ES VII Chapter 26 26.4.15 [APP-342] acknowledges that as a result of the amended 2050 carbon reduction target to net zero carbon, the Committee on Climate Change (CCC) would be reviewing the current carbon budgets and to achieve the revised 2050 target, the emissions reduction trajectory set out in the budgets through to 2050 will need to steepen. What are the implications of the CCC’s 6th carbon budget for the assessment presented?</td></tr>
<tr><td></td><td>Response by SZC Co. at Deadline 2</td><td>The 6th carbon budget was published by the Committee for Climate Change in 2020 and is currently under consideration by the Government. It is the first budget to reflect the amended carbon reduction trajectory to net zero by 2050.
The greenhouse gas assessment presented in Volume 2, Chapter 26 of the ES [APP-342] was undertaken before the publication of the 6th carbon budget.
The table below presents the impact of the proposed development in each carbon budget period. The 6th carbon budget period includes the final year of construction and first four years of operation. Despite the 6th budget being a significant reduction from previous years, the emissions only account for 0.06% of this budget. Under the significance criteria used, this would remain as of low magnitude and not having a significant effect on the UK’s ability to meet its carbon budget commitments.
<table>
<tr><th>UK Carbon Budget</th><th>Total Budget (Mt CO_{2e})</th><th>Estimated Emissions During Budget Period (Mt CO_{2e})</th><th>Project Emissions as Percentage of Carbon Budget</th></tr>
<tr><td>3rd (2018-2022)</td><td>2,544</td><td>0.52 (1 year of construction)</td><td>0.02%</td></tr>
<tr><td>4th (2023-2027)</td><td>1,950</td><td>2.62 (4 years of construction)</td><td>0.13%</td></tr>
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ExQ1	Question to:	Question:

5th (2028-2032)	1,725	2.62 (4 years of construction)	0.15%
6th (2033-2037)	**965**	**0.61 (1 year of construction, 4 years of operation)**	**0.06%**

Since the preparation of the ES, SZC Co. have undertaken a Life Cycle Carbon Assessment to inform its Environmental Product Declaration (refer to **Appendix 9A**). The Life Cycle Carbon assessment provides a more detailed calculation of the GHG emissions from the Sizewell C Project over its lifetime and calculates a carbon intensity value to achieve the energy output. This independent assessment calculated the carbon intensity to be 6.1 g CO_2e per kWh generated (compared 4.5 g CO_2e per kWh within the ES). The updated analysis identifies a lower total construction carbon footprint of c3.8Mt (compared to the estimated c5.7Mt provided in the ES). The updated analysis does not provide impacts on a year by year basis, so is not directly comparable with the table above, but the lower total construction number is supportive of the conclusions in the table above.

The information provided above only considers the impact of the carbon emissions produced by Sizewell C in the context of the UK's carbon budgets. However, the importance of low carbon power generation projects such as Sizewell C (and other nuclear or renewable projects) for the UK's carbon budgets should also be considered from the perspective of the carbon emissions that would otherwise be produced by other sources, if they were not generating.

In simple terms, if there is insufficient low carbon power being produced to meet electricity demand, then a fossil fuelled gas plant would be expected to be operating producing significant carbon emissions. Furthermore, in order to meet the future carbon budgets, it is considered likely that there will have to be widespread electrification of transport and heating with low carbon power providing the electricity consumed by those sectors.

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		In summary, the impact of the steepening carbon budgets for the assessment provided in the ES (and further information provided in responses to the Examining Authorities questions on this subject) shows: • the emissions produced during the construction are insignificant relative to the carbon budget; • meeting the steepening carbon budgets is expected to require an increased need for new low carbon power generation projects such as Sizewell C. The **Planning Statement Update** (Doc Ref 8.4Ad) explains the role of new nuclear generation in the context of the 6th carbon budget and the latest statements of Government policy.
	Response by Together Against Sizewell C at Deadline 3	In their answer to question CC.1.3, the Applicant states that they have updated their analysis of the construction carbon footprint and calculated a revised carbon footprint of 3.8Mt. This figure compares to 6.2Mt stated in the documents submitted in January 2021. TASC have been unable to find a detailed explanation for this huge change in figures. TASC would like to see a detailed explanation for this change, setting out how the two figures have been calculated and a reconciliation of the differences. As was mentioned in CC.1.5, TASC's view is that there is a lack of transparency in information supplied in relation to carbon calculations and in TASC's opinion the Applicant's answers continue this trend. The LCA appears to provide data by way of percentages but offers no reconciliation of absolute figures in terms of the carbon debts arising from the relevant contributory elements and the calculations that use these figures to produce the summarised figures in the LCA report. Elements of the SZC project will likely decarbonise at different rates. The Applicant needs to explain what assumptions have been adopted in their revised calculations and which transport strategies have been assumed.
	Response by SZC Co. at Deadline 5	The two carbon calculations differ for a number of reasons. These include the use of updated and more granular input data that was available at the time of the second calculation in the Life Cycle Carbon Assessment; use of different databases to provide lifecycle carbon impacts; and use of a different software tool to undertake the calculation. The report which explains the Life Cycle Carbon Assessment calculation has been submitted as part of the earlier response [Appendix 9A in REP2-110]. This explains in detail the data used for the calculation and how the calculation has been performed.

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		As the report states, the methodology followed in the calculation and the level of detail provided in the report by Ricardo (the Environmental Consultants) and verified by an Independent Third Party (WSP) follow Product Category Rules for electricity generation which sets out how lifecycle carbon calculations should be calculated and reported.
CC.1.5	The Applicant	**Green House Gas emissions** Together Against **Sizewell C (TASC) [RR-1231] complain that there is a** lack of information for independent verification of EDF's carbon emission claims. Please explain further how the calculation has been made setting out the assumptions which underline the carbon calculations and support the conclusion reached.
	Response by SZC Co. at Deadline 2	The assumptions that underpin the GHG assessment within the ES are detailed within **Volume 2, Chapter 26** of the **ES** [APP-342]. However, since the preparation of the ES, SZC Co. has commissioned an updated Lifecycle Carbon Assessment to assess the carbon footprint of the project and with the aim of producing an Environmental Product Declaration (EPD), which considers other environmental impacts as well as the carbon footprint. A copy of the carbon focused life cycle assessment report, hereafter "LCA" (which provides the assessment of Sizewell C's potential future carbon footprint) is provided within **Appendix 9A** and the full EPD report, covering categories beyond carbon is expected to be published in the coming months. The LCA was carried out under the most relevant Product Category Rules (PCR) for electricity generation. PCRs specify how a LCA should be conducted and reported via an EPD for products that fulfil similar requirements. The PCRs that the LCA has been conducted under is that for *'Electricity, Steam and Hot Water Generation and Distribution PCR2007:08, version 4'*. This PCR was created by the International EPD® System (IES) in accordance with standards such as ISO 14025 and ISO 14044. The LCA has been independently reviewed and verified by a third-party (WSP), with the verification statement certificate attached to the report. The LCA provides a more detailed calculation of the GHG emissions from the Sizewell C Project over its lifetime than the carbon assessment provided in the ES, with updates to data (where available), and was performed using different software tools. The LCA includes the full 'cradle to grave' lifecycle activities of Sizewell C including:

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		• all upstream activities required for the supply of nuclear fuel (including uranium mining, conversion, enrichment, and fuel fabrication); • construction materials and activities; • Sizewell C operational activities (in addition to the supply of nuclear fuel); • decommissioning and waste management infrastructure and activities. Inventory data covering the activities described above were used to calculate the potential carbon footprint per kWh generated by Sizewell C. In addition, the PCR requires that a measure of carbon per kWh *'distributed to a potential consumer'* is provided with an assessment of the carbon impact of downstream infrastructure (the UK's transmission and distribution electricity grid). It should be noted that downstream impacts of a similar magnitude would be expected to apply to all large power generators. The LCA assessed the potential carbon intensity of Sizewell C's generation as 6.1 g CO_2e/kWh of electricity generated. Whilst the Lifecycle Carbon Assessment provides an updated estimate of GHG emissions associated with the Sizewell C Project, it does not change the overall conclusions of the assessment presented within **Volume 2, Chapter 26** of the **ES** [APP-342], namely that the Sizewell C Project will provide a significant contribution to reducing GHG emissions from electricity generation in the long term. In the short-term, the updated assessment shows that the expected GHG emissions associated with the construction of Sizewell C will be lower than the estimate provided in the ES. Therefore the ES conclusion that the construction of Sizewell C will not affect the ability of the Government to meet its relevant carbon budgets (refer to response **CC.1.3**) remains robust.
	Response by Together Against Sizewell C at Deadline 3	In their answer to question CC.1.3, the Applicant states that they have updated their analysis of the construction carbon footprint and calculated a revised carbon footprint of 3.8Mt. This figure compares to 6.2Mt stated in the documents submitted in January 2021. TASC have been unable to find a detailed explanation for this huge change in figures. TASC would like to see a detailed explanation for this change, setting out how the two figures have been calculated and a reconciliation of the differences. As was mentioned in CC.1.5, TASC's view is that there is a lack of transparency in information supplied in relation to carbon calculations and in TASC's opinion the Applicant's answers continue this trend. The LCA appears to provide data by way of percentages but offers no reconciliation

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	Response by SZC Co. at Deadline 5	See response to CC.1.3.
CC.1.13	ONR	**The role of the Nuclear Regulators** The ONR [RR-0992] explains that in June 2020, NNB Generation Company (SZC) Ltd applied for a nuclear site licence to allow it to install and operate two EPR™ reactors at the Sizewell C site. The ONR is currently assessing this application: (i) Does the ONR have any concerns at this stage associated with the proposed development in relation to climate change impacts and the adaptation measures proposed in the light of experience gained since its assessment of the generic EPR design in 2012? (ii) In the light of EN-6, paragraph 2.7.5, are there any reasons at this stage for the ExA to be concerned that any necessary licence, permit or authorisation will not subsequently be granted? (iii) In the light of EN-6, paragraph 2.7.6, is the ONR aware of any regulatory requirements that are likely to be attached to the grant of a licence and the anticipated timing of the process?
	Response by SZC Co. at Deadline 2	No response from SZC Co. required.
	Response by ONR at Deadline 2	(i) As part of ONR's assessment, ONR is currently engaging with the Applicant in relation to climate change. Information shared to date suggests it is likely that the Applicant's approach to assessing and managing climate change, including adaptation measures, will meet ONR's expectations for nuclear site licensing. (ii) Regarding para 2.7.5 of EN-6, although we have yet to complete our assessment of NNB GenCo (SZC) Ltd's nuclear site licence application, currently there are no matters of concern that undermine our view that we should be in a position to grant a licence for Sizewell C by mid-2022, provided NNB GenCo (SZC) Ltd can provide the necessary

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		reassurances in relation to its corporate competences and the acceptability of the SZC site. (iii) Regarding para 2.7.6 of EN-6, although there is provision in the legislation for ONR to attach any conditions it considers appropriate to a nuclear site licence, our policy is to attach the same set of 36 standard licence conditions to every licence we grant. We foresee no exception to this policy for a nuclear site licence granted for Sizewell C. Our aim is to be in a position to grant such a licence by mid-2022.
	Response by SZC Co. at Deadline 3	No further response from SZC Co. is required.
	Response by Together Against Sizewell C at Deadline 3	We are dismayed that all regulators have to work to the Regulators' Code obliging them to ensure that their regulatory activities do not restrict the social, environmental or economic performance of the regulated body. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/300126/14- 705-regulators-code.pdf Such demands made of the regulators is not in the interests of protecting the public nor ensuring that regulators are fully independent and free from Government interference. i) Climate change adaptation. Serious concerns have been raised by many respondents about flood defences. Building in flood zone 3 should not be allowed. The knock-on effect to neighbouring property including NDA-owned Sizewell A and EDF-operated Sizewell B suggests that flood risk could increase with time, causing problems for the neighbouring sites of Sizewell A and B. This has already occurred at Hinkley C where neighbouring villages and HPA and HPB sites have increased flood risk as a result of the flood defence wall of HPC (see EA Flood Zone Map for Hinkley: https://flood-map-for-planning.service.gov.uk/confirmlocation?easting=320267&northing=145443&placeOrPostcode=Hinkley%20%20Somerset. See also HPC community forum Community Forum minutes - 15 November 2018.pdf). ii) Ability to grant a Licence EN6 2.75 and 2.76. TASC recognises that the granting of a site licence for Sizewell C is solely the responsibility of the ONR. TASC has raised the concern with the regulator and others pointing out that that the builder of Sizewell C may not be the owner of Sizewell B. This means that the operation of an EdF-owned Sizewell B may be in conflict with a project next door – Sizewell C – which

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		is under the financial control of an independent or subsidiary, private company intent on returning a profit for shareholders, an issue which the ONR has to consider from the perspective of fitness to operate and decommission the plant. TASC is also concerned about the risk posed by adjacent cranes, noise and vibration from the 'C' site impacting the monitoring systems and safety of the 'B' workforce.
	Response by SZC Co. at Deadline 5	Under the Nuclear Site License, Sizewell C will need to demonstrate via its Safety Case that the design, construction, commissioning, operation and decommissioning of Sizewell C can be undertaken in a safe and secure manner, and any risks to the workers, public and environment are suitably and sufficiently controlled. Sizewell C operator's emergency plan will also be integrated and coordinated with Sizewell B's equivalent emergency arrangements and SZC Co. is closely liaising with Sizewell B with regards to any updates required to the existing Sizewell B emergency arrangements during the construction and operation of Sizewell C. SZC Co. also refers the Examining Authority to ONR's response at Deadline 2.
Chapter 10 - CG.1 Coastal Geomorphology		
CG.1.0	The Applicant	**Impacts on coastal processes** The ES V II, Chapter 20 [APP-311], identifies potential impacts on coastal change. The Change Request provided additional information in relation to coastal geomorphology and hydrodynamics including the draft Coastal Processes Monitoring and Mitigation Plan appended to the ES Addendum. In the light of EN-1, paragraphs 5.5.7 and 5.5.10 and EN-6 paragraph 3.8.5, please demonstrate how the decision-maker can be satisfied in relation to the changed application: (i) That the potential impacts would be minimised; (ii) That the proposed development will be resilient to coastal erosion and deposition, taking account of climate change, during the project's operational life and any decommissioning period.
	Response by SZC Co. at Deadline 2	(i) The design process for the elements likely to affect coastal processes that have been altered by the Accepted Changes (April 2021) have taken full cognisance of the need to minimise impacts on coastal processes. - The temporary BLF has been designed with widely spaced piles so that it is transmissive (i.e. does not block) to currents and waves. The chosen design, one of four consulted on, is the longest and minimises impacts on coastal processes

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		by removing the need for navigational dredging and placing the head far enough offshore to minimise impacts on the beach (refer to the **Preliminary Design and Maintenance Requirements for the Sizewell C Soft Coastal Defence Feature report**; Doc Ref. 9.12). - The enhanced, permanent BLF retains a transmissive design and includes a temporary grounding structure (concrete mattress; see **G.1.39** in **Chapter 2, Part 1**) to prevent the need for frequent dredging of a berthing pocket. - The sea defence (Hard Coastal Defence Feature; HCDF) has necessarily (due to land constraints to the west) moved seaward due to an increase in crest height so it is resilient to the most recent predictions of climate change (UK Climate Partnership 2018; UKCP18). SZC Co. is aware of concerns relating to coastal processes and the design has been optimised to limit movement of the HCDF seaward as explained in **Sizewell C Coastal Defences Design Report** (Doc Ref. 9.13). (ii) As detailed in **Volume 2, Chapter 20** (Coastal Geomorphology and Hydrodynamics) of the **ES** [APP-311], the Sizewell frontage is comparatively stable compared to neighbouring shorelines. The Soft Coastal Defence Feature (SCDF) is deliberately sacrificial and will erode with time releasing sediment into the local sediment system. When the SCDF has eroded to pre-defined levels it will be recharged ('topped up' with sediment) such that a beach is maintained between the HCDF and the sea. This will ensure that the HCDF does not interrupt the prevailing sediment transport processes. **The Coastal Processes Monitoring and Mitigation Plan (MMP)** (**Volume 3, Appendix 2.15.A** of the **ES Addendum**) [AS-237]), to be approved under Requirement (7A) of the **draft DCO** and Marine Licence Condition (17) (Doc Ref. 3.1(C)) details the methods to monitor erosion of the SCDF and defines levels at which recharge is required. Supporting information is provided in **Preliminary Design and Maintenance Requirements for the Sizewell C Soft Coastal Defence Feature report** (Doc Ref. 9.12). The **Coastal Processes MMP** includes monitoring and management actions for potential impacts of the two BLFs, the two Fish Recovery and Return outfalls, the Combined Drainage Outfall, and the main cooling water intake and outfall heads to ensure that no significant effects on coastal processes occur throughout the life of Sizewell C.

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	Response by RSPB at Deadline 3	(i) We question why the Applicant has referenced the Preliminary Design and Maintenance Requirements for the Sizewell C Soft Coastal Defence Feature Report (Doc Ref. 9.12) , as the Report contains no reference to the temporary BLF (presumably because it is scheduled for the temporary BLF to be removed before the SCDF is constructed). (ii) The Applicant's response does not cover as set out in section 6.3 of the Coastal Processes MMP that more work is to be done to define the levels at which recharge is required. As per our SoCG with the Applicant, we have highlighted that no mitigation management for the FRR and CDO has been described and they have advised that it is not needed. We question this and the response now given. Also, we do not believe that mitigation for impacts of BLFs has been accurately defined if required.
	Response by Stop Sizewell C at Deadline 3	(i) No design of structures that protrude into the nearshore can claim to have no impact on coastal processes. (ii) Renourishing the "sacrificial" beach defences cannot be said to "ensure that the HCDF does not interrupt the prevailing sediment transport processes". If the coastline either side has retreated, leaving a protruding headland, this will certainly have an effect and nourishing a headland is an exercise in futility where wave energy will always be drawn and sediment will constantly be removed from.
	Response by SZC Co. at Deadline 5	(i) The Applicant does not claim 'no impact' rather 'no significant impact'. (ii) The potential for the SCDF to remain as a headland due to recession of adjacent shores was discussed at ISH7 and a section has been added to the updated **Coastal Processes MMP**, which is submitted at Deadline 5 (Doc Ref. 6.14(A)).
CG.1.1	The Applicant	**Impacts on coastal processes** A number of IPs have expressed concern that the scheme could inhibit sediment flow or have an adverse impact on coastal processes at other locations. In the light of NPS EN-1, paragraph 5.5.11, please explain how the decision-maker could be satisfied that any impacts of the project on coastal processes would be managed to minimise adverse impacts on other parts of the coast.

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	Response by SZC Co. at Deadline 2	As described in response to question **CG.1.0**, a **Coastal Processes Monitoring and Mitigation Plan** (MMP) has been developed ensure any impacts on coastal processes will be detected and managed. See **Volume 3, Appendix 2.15.A** of the **ES Addendum** [AS-237]). The **Coastal Processes MMP** is secured by way of Requirement 7A on the **dDCO** and Condition 17 on the Marine Licence (Doc Ref. 3.1(C)). Please refer to responses to questions **CG.1.14(i)** and **CG.1.16** for further details on the impact extents for geomorphology, which are shown to be small and localised around the development. Our response to question **CG.1.3(i)** describes the conservative approach for monitoring extents to fully encompass impacts.
	Response by RSPB at Deadline 3	As per our Written Representation, we still see no evidence of how any impact detected via the monitoring proposed on the Minsmere SAC to the north of the Application site can be managed, therefore we question the Applicant's response.
	Response by SZC Co. at Deadline 5	The impacts identified (changes to wave/tidal flow of the order of 5% over ~100m of SAC frontage) are of low magnitude and duration and significant effects are not expected [APP-311]; monitoring (as set out in the CPMMP) will nevertheless identify any cumulative effects arising. The updated **CPMMP** issued at D5 (Doc Ref. 6.14(A)) states the Applicant's position that the proposed monitoring is "*suitable for establishing a basic sediment budget … in order to determine whether the maintained frontage is depriving the downdrift coast of sediment*". Effects in the short term (highly unlikely possible salient or transient cusps on foreshore) are minor impacts which would not be mitigated - this would be disproportionate as the effects represent no significant change to natural process and generate no wider impact. Over the longer term, natural recession of adjacent shorelines may result in impacts to the longshore transport system due to changes in shoreline angle at the limits of the SCDF, particularly since the focus of present erosion is just to the north of SZC, forming a sub-bay delimited by the outfalls of Minsmere sluice and SZB. However, precisely how this shoreline angle develops will be determined by the interplay between timing of any changes to the delimiting outfalls and the storm-driven release of SCDF sediment acting to slow the retreat. For example, BEEMS Technical Reports TR544 [REP3-048] and TR545 [REP3-032] illustrate a natural feedback damping erosion as the SCDF

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		increases sediment transport onto the Minsmere SAC beach, which increases with an increase in shoreline angle. Secondary mitigation measures are set out in Section 7.5 of the CPMMP with examples of how these would prevent localised interruptions to longshore transport from propagating any effects alongshore. Section 8 of the **CPMMP** (Doc Ref. 6.14(A)) describes monitoring of vegetated drift lines. In addition, Section 7.5.5 provides the reasons why no impact on supra-tidal vegetated drift lines adjacent to SZC is expected (principally being that no erosion is caused and there is no alteration to processes associated with the supra-tidal areas). It may not be possible or desirable to directly mitigate any observed loss of vegetated drift lines, as RSPB submissions make clear that these are ephemeral and so loss even for several years may be only temporary and entirely natural, unless it were shown that natural beach processes (longshore and cross-shore dynamics) were changed AND that any detected change was a consequence of SZC. As stated in the CPMMP, the Applicant considers that the proposed monitoring is sufficient to identify impacts on sediment transport emanating from the maintained frontage and that the proposed mitigation is adequate to address this.
CG.1.2	The Applicant, EA, Natural England, ESC	**Impacts on coastal processes** The EA [RR–0373] in relation to the residual uncertainty associated with predicting future changes to the geomorphology of the greater Sizewell Bay, as well as to key driving processes such as sea level rise and wave climate, considers this to be mitigated by SZC's commitment to continued engagement with the Marine Technical Forum of regulators as part of the Monitoring and Mitigation Plan (MMP): (i) Please confirm that the MMP and proposed means of enforcement would provide sufficient security in that respect, particularly in relation to the agreement and funding of specialists to closely monitor the evolution of the coastline and agree and implement the most appropriate measures to manage any unforeseen impacts. (ii) Please indicate when it is anticipated that the detailed design process for the Hard Coastal Defence Feature (HCDF) will take place and how that process would be appropriately appraised and approved? (iii) Are there any draft DCO changes that would be required to exercise sufficient control over that process?

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	Response by SZC Co. at Deadline 2	(i) As stated in the **CG.1.1** response, the **Coastal Processes MMP** is secured as a DCO Requirement 7A and a Marine Licence Condition 17A (Doc Ref. 3.1(C)), so failure to comply with it is enforceable by the ESC and MMO. The operation and funding of the Marine Technical Forum (MTF) is secured by the **Deed of Obligation** (see Schedule 11, Paragraph 10) (Doc Ref. 8.17(C)). (ii) The proposed detailed design of the HCDF is complete and the details are provided in **Sizewell C Coastal Defences Design Report** (Doc Ref. 9.13). Final design will be subject to approval by ESC in consultation with MMO by way of Requirement 12B on the **draft DCO** (Doc Ref. 3.1(C)). (iii) The latest version of the draft DCO (Doc Ref. 3.1(C)) includes Requirement 12B for ESC to approve the detailed design of the HCDF before works can commence. No other changes to the draft DCO are considered necessary.
	Response by East Suffolk Council at Deadline 2	(i) ESC do not regard engagement with the MTF to be mitigation in itself. ESC considers the CPMMP process has potential to provide sufficient security to ESC in relation to effective management of the impacts of the development including detection of and responses to future changes to the geomorphology of the greater Sizewell Bay. ESC is generally content with progress made with plan development. ESC is sceptical about the long-term sustainability of the SCDF, in particular if reliant on maintenance only – i.e. demanding secondary mitigation. A concern is that the Applicant/Cefas insist that the HCDF will not become exposed because it will always be protected by the managed SCDF. This assumption could, by implication, limit the scope of monitoring and mitigation that might otherwise be planned for. Enforcement of obligations linked to the management of the impacts caused by the development will be by DCO Requirement and Marine Licence condition. Discussions are underway with the Applicant on the detailed content of both the Coastal Processes MMP and DCO Requirements. These are not yet agreed. Please refer to the SoCG for an up-to-date position summary. (ii) A HCDF detailed engineering report is due for submission at Deadline 2 (2nd June). ESC will comment as soon as practicable once the submission has been reviewed. ESC has agreed with the Applicant that there will be a DCO requirement (provisionally 12B) under which ESC will review and approve the HCDF design in consultation with other MTF partners. The wording of the Requirement is not yet agreed.

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		(iii) Yes. ESC and the Applicant are in negotiation over DCO Requirement amendments on a number of issues, including the Coastal Processes MMP process and the approval of design of structures, that have potential to affect coastal processes including the HCDF. Wording in Requirement 7A in the latest published DCO [AS297] is not agreed by ESC.
	Response by Environment Agency at Deadline 2	The Monitoring and Mitigation Plan should be developed in consultation with the Marine Technical Forum, of which the Environment Agency is a part. Requirements could secure the process of agreeing the monitoring and mitigation plan; the removal of the Hard and Soft Coastal Defences; and the funding necessary for monitoring, mitigation and decommissioning.
	Response by Natural England at Deadline 2	Natural England considers that the Applicant are best placed to answer this question. If necessary, we will provide comment on any responses at Deadline 3.
	Response by SZC Co. at Deadline 3	SZC Co notes the position of ESC relating to the scope of monitoring and mitigation given the assumption that the SCDF will always be in place. While SZC Co is confident of the sustainability of the SCDF, the ES and ES addendum both refer to tertiary mitigation (by-passing) should the SCDF not be sustainable. SZC Co is of the view that the monitoring and mitigation proposed are not biased by the assumption put forward but, in any case, the Coastal Processes Monitoring and Mitigation Plan is still being drafted and agreed in consultation with ESC and the final version must be approved by ESC.
	Response by RSPB at Deadline 3	(i) We note that Schedule 11 of the Draft Deed of Obligation explains in item 10: 'MARINE TECHNICAL FORUM 10.1 The Marine Technical Forum shall operate in accordance with the Marine Technical Forum Terms of Reference unless otherwise agreed by the members of the Marine Technical Forum.' We question whether the governance and operating procedures of the Marine Technical Forum are clearly understood at this stage.

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		As per our Written Representation we do not agree that the Applicant has defined methods to implement the most appropriate measures to manage any unforeseen impacts, especially with regard to the Minsmere SAC to the north of the Application site. (ii) As per our accompanying submission for Deadline 3 in response to the Sizewell C Coastal Defences Design Report (Doc Ref. 9.13) we do not agree that the proposed detailed design for the HCDF features, particularly the Northern Mound, could be described as complete.
	Response by SZC Co. at Deadline 5	(i) Terms of Reference (ToRs) for the MTF were agreed in 2015 and will be updated as required. Existing ToRs will be appended to the next version of the DoO. The RSPB has already attended the MTF operating under these ToRs several times. Please refer to the answer at CG.1.1 regarding mitigation of impacts on the Minsmere SAC. (ii) The Applicant continues to refine the design of the sea defences to minimise impacts. Further design of the HCDF has pared back the sea defence at the permanent BLF/Northern Mound such that it aligns with the main length of the HCDF; pared back the main length of the HCDF by 5 m; and reduced the need for temporary (sheet piled) sea defences at the permanent BLF. This information is provided at Deadline 5 (Doc Ref. 2.5(A)).
CG.1.3	The Applicant, ESC	**Impacts on coastal processes** The East Suffolk Council [RR-0342] indicates that the draft MMP prepared by SZC Co. is currently under consultation with key stakeholders in parallel with the DCO process. There are several points of contention between ESC and SZC Co. In relation to the identified points of contention between ESC and SZC: (i) Is it agreed that a precautionary principle should be applied to assumptions on potential future critical requirements including Impact Assessments, incomplete designs, and the extent of the area to be monitored? (ii) If not, why not? (iii) If so, please suggest how this should be secured through the DCO, including any amended drafting for the draft DCO or other associated documentation? (iv) Please comment further on the project plan and budget and the assumptions to be made as regards the period that the MMP will remain active explaining any points of

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		difference. (v) Please specify the means, in the event of a transfer by SZC Co. of its interest in the site to a new owner, whereby it is suggested that the new owner would be bound by covenant or other legal mechanism to adopt responsibility including costs for maintaining the MMP process setting out any drafting changes to the DCO documentation that would be required to achieve that. (vi) Please comment further on the proposal for an independent body to monitor the MMP, and to direct SZC Co. mitigation and compensation requirements. (vii) Please provide an update on the Council's consultation with MMO as regards the delivery of the MMP.
	Response by SZC Co. at Deadline 2	(i) SZC Co. agrees, and is of the view that it has followed the precautionary approach. (see SoCG; Ref. 9.10.12) The extents set out in the **Coastal Processes MMP** (**Volume 3, Appendix 2.15.A** of the **ES Addendum** [AS-237]) are always larger than the predicted impacts, to allow for uncertainty. An example is the permanent BLF piles with proposed monitoring extents 7-11 times larger than the predicted scour impact. The difference in spatial extent between the predicted impacts and monitored area will be included in Table 1 in the next version of the **Coastal Processes MMP** (to be submitted to the ExA at Deadline 4 [as set out in Examining Authority's Rule 8(3) letter [PD-027] Deadline 4 is now Deadline 5]). If the impact footprint exceeds the monitored area, the spatial extent will be adjusted accordingly. That is, the **Coastal Processes MMP** will take an adaptive approach to monitoring. (ii) n/a (iii) Preparation and compliance with the **Coastal Processes MMP** is a requirement on the DCO (Requirement 7A) and a Condition on the Marine Licence (Condition 17); see the latest version of the **draft DCO** (Doc Ref. 3.1(C)). The **Coastal Processes MMP** is specifically maintained as a 'live' document that will require review and update as required to reflect prevailing conditions or perceived impacts at the time. (iv) The implementation of the **Coastal Processes MMP** is intended to start at the start of construction and remain in place until the end of decommissioning (see **CG.1.5** response for details). **Section 9** of the **Coastal Processes MMP** (**Volume 3, Appendix 2.15.A** of the **ES Addendum**) [AS-237] sets out the considerations of the Cessation

ExQ1	Question to:	Question:
		Report. SZC Co. is committed through the DCO and DML to implement the measures identified in the CPMMP and has included that in the evolving project cost estimate. (v) SZC Co's approach to ensuring that the land is bound by the obligations in the **Draft Deed of Obligation** (Doc Ref. 8.17(C)), including those relating to the MTF, is set out in Section 2 of the **Draft Deed of Obligation Explanatory Memorandum** (Doc Ref. 8.20(B)). Article 9 of the latest **draft DCO** (Doc Ref 3.1(C)) provides that where the benefit of the DCO is transferred to another party, that party would be '*subject to the same restrictions, liabilities and obligations (including the SZC development consent obligation and any other development consent obligations within the meaning of section 106 of the 1990 Act (Planning obligations)) as would apply under this Order if those benefits or rights were exercised by the undertaker'.* No other changes to the **draft DCO** are considered necessary. (vi) SZC Co. does not support the suggestion of an independent body to monitor the Coastal Processes MMP and to direct SZC Co. mitigation and compensation requirements. The Coastal Processes MMP is secured as a DCO Requirement and a Marine Licence Condition which are ultimately enforceable only by the ESC and MMO, respectively. The Coastal Processes MMP will be reviewed by the Marine Technical Forum (MTF) which is secured and funded through the **Draft Deed of Obligation** (Doc Ref. 8.17(C)). SZC Co feels this is the appropriate mechanism for management of the Coastal Processes MMP as the MTF brings together all relevant agencies and expertise. (vii) No response from SZC Co. is required.
	Response by East Suffolk Council at Deadline 2	(i) and (ii) It is ESC's view that a precautionary principle must be applied by the Applicant and that the Applicant's approach to date has not demonstrated this to ESC's full satisfaction. The Applicant will not accept the possibility that the HCDF toe could be exposed in a prolonged freak weather event. Whilst ESC agrees this is unlikely, there needs to be a plan in place should it occur. The Applicant's position is that their assessment and application of potential worst-case scenarios in the May 2020 ES is sufficiently robust [APP-311]. ESC considers that the Applicant has used a thorough and comprehensive evidenced based approach in forecasting future shoreline change conditions and the potential impacts that may arise from the development assessed within those constraints. However,

ExQ1	Question to:	Question:
		in the view of ESC, the time scale involved, to 2140 at least, goes beyond the range within which those techniques can be relied upon to identify outcomes that are potentially worst case. ESC considers that more extreme potential coastal change scenarios are possible and should be considered at the design stage. ESC considers that Climate Change impacts may alter significantly and therefore Climate Change response policy will evolve over the development life. The future risk of the development being required to manage what is currently beyond reasonable prediction must be considered. Examples of potential significant future impacts are that (1) the SCDF may become unsustainable during the station life leading to the HCDF becoming exposed and (2) the HCDF foundations may be undermined requiring adaption (seaward advance of 18m) before 2140. The Applicant should consider an approach consistent with that applied in other recent major coastal management projects in England which have been required to take a long-term view (i.e., Thames Estuary 2100 Plan). These have taken the adaptation pathways approach to managing existing defences and considered how they will 'adapt' their approach as time progresses and things change. In contrast, the Applicant is proposing to build a coastal defence in a location known to be dynamic and prone to the effects of sea-level rise and climate change, however, have only put forward a single mitigating action should the current coastal change and erosion forecast worsen. There is no 'range' of options proposed should an unforeseen acceleration in coastal change occur, compounding the likely impacts generated through moving the defence seaward. (iii) ESC and the Applicant's positions are not yet aligned on this matter but may become so. The Applicant's reports covering HCDF and SCDF design and resilience that are currently (12/5/21) under draft, may lead to common ground on this. ESC could have protection in this matter by virtue of the proposed Requirements drafted by ESC giving ESC power to approve: the HCDF and SCDF design, ongoing maintenance actions on a 5-year cycle and actions specified in the Coastal Processes MMP. These proposed Requirements are not yet agreed by the Applicant. ESC requires the Coastal Processes MMP to remain active whilst the HCDF exists unless / until a future study that recommends cessation of monitoring and mitigation, potentially with other compensation measures, is agreed by ESC plus other MTF members, or their successors. (iv)ESC defer to the Applicant to respond.

ExQ1	Question to:	Question:
		(vi)It is not clear to ESC who has suggested an independent body, ESC is not aware of the proposal in question. The subject would require further discussion within the ESC group, with the Applicant and ultimately through MTF. The aim of ESC is for elected community representatives to be involved in the decision-making process to continue the principle established by the Suffolk Coast Forum – https://www.coasteast.org.uk/wider-work ESC's current thinking is that where ESC is the Approval and Enforcement Authority for actions – typically in the management of structures (H and SCDF), and mitigation, above MHWS – ESC would seek to ratify decisions with the Community body after consultation with the MTF. ESC intends to consult with other MTF members on the design and application of this process. This has not yet happened. An independent body may unacceptably attempt to take some of that due process away from ESC which would not be acceptable. (vii)ESC considers it preferable for one organisation to lead on management and approval of the Coastal Processes MMP and would prefer for that to be ESC – in consultation with other MTF members. It is agreed with MMO that ESC and MMO would act as the Approval and Enforcement body for works landward and seaward of the MHWS line respectively.
	Response by SZC Co. at Deadline 3	(i) and (ii) TR544 (*Preliminary Design and Maintenance Requirements for the Sizewell C Coastal Defence Feature*) as supplied at Deadline 2 [REP2-115] and to be updated for Deadline 3 provides modelling work to demonstrate the sustainability of the SCDF. TR544 considers extreme events and identifies that replenishment of SCDF in 'pockets' along the frontage is more likely than wholesale recharge of the SCDF at any one time. The CPMMP will be a living document and subject to regular updates to incorporate latest predictions of events and impact and monitor and mitigate appropriately. (iii) CPMMP is a DCO Requirement and Marine Licence Condition and will remain in place throughout operation and decommissioning. A Cessation Plan forms part of the CPMMP. (iv) to (vii) no further comment required. Where agreement has not yet been reached between the parties on provisions within the CPMMP, they remain under discussion and further updates to the CPMMP will be provided in due course
	Response by RSPB at Deadline 3	(i) As per our Written Representation, we cannot agree that the Applicant has applied a precautionary approach in relation to the Minsmere frontage, as there is no route agreed

ExQ1	Question to:	Question:
		or proposed mitigation should the monitoring detect an unexpected impact even within the area identified, let alone if that area is expanded. We support East Suffolk Council's response to this question (vi) We note that Schedule 11 of the Draft Deed of Obligation explains in item 10: 'MARINE TECHNICAL FORUM 10.1 The Marine Technical Forum shall operate in accordance with the Marine Technical Forum Terms of Reference unless otherwise agreed by the members of the Marine Technical Forum.' We question whether the governance and operating procedures of the Marine Technical Forum are clearly understood at this stage. We therefore remain concerned about the Applicant's approach to this element of the project.
	Response by SZC Co. at Deadline 5	(i) Please refer to the answer provided at CG.1.1. (vi)Please refer to the answer provided at CG.1.2.
CG.1.5	The Applicant	**Impacts on coastal processes** The **Alde and Ore Association [RR-1206] also raise issues in relation to the MMP. Please respond to those specific matters of concern including the duration and level of monitoring and funding proposed to be available pursuant to that plan.**
	Response by SZC Co. at Deadline 2	The **Coastal Processes MMP** (**Volume 3, Appendix 2.15.A** of the **ES Addendum** [AS-237]) is scheduled to run until the end of decommissioning. Ten years beforehand (potentially around 2130), a final assessment will be made based on the actual coastal setting, conservation designations, marine and coastal processes and function of the HCDF (if it is to be left in place after decommissioning) at that time. This assessment would be included in the Cessation Report (a future component of SZC Co's monitoring and mitigation) and would be based upon decades of coastal change data, which is needed to identify and assess any residual effects and, if required, make assessments for compensation (see **Section 9** of the **Coastal Processes MMP** (**Volume 3, Appendix 2.15.A** of the **ES Addendum** [AS-237])). These assessments are timed for the end of SZC Co's operational life and return of the site to the relevant decommissioning body. Responses regarding impact extents can be found in questions **CG.1.14 (i)** and **CG.1.16**. The cost of complying with the MMP will depend on the results of monitoring. SZC Co. is committed through the DCO and DML to implement the measures identified in in the

ExQ1	Question to:	Question:
		CPMMP and has included that in the evolving project cost estimate. The MMP will remain in force throughout the construction and operation of Sizewell C.
	Response by Stop Sizewell C at Deadline 3	Here, it is acknowledged that the end of decommissioning will be about 2140 – some considerable time later than is considered in the expert geomorphological assessment.
	Response by SZC Co. at Deadline 5	The duration of the HCDF and the SCDF beyond the operational life of Sizewell C and likely shoreline evolution was discussed at ISH6. Please refer to the SZC Co.'s **Written Summaries of Oral Submissions made at ISH6: Coastal Geomorphology (14 July 2021)** (Doc Ref. 9.46).
CG.1.14	The Applicant	**Impacts on coastal processes** The MMO [RR-0744] states that the risk that the wave climate at Sizewell reverts to the pre-1925 case could significantly alter the sediment supply and coastline behaviour and the lack of assessment of changes to the offshore wave climate to a north east domination is a gap in the analysis. In addition, for the nearshore climate, the Applicant assumes that the bank system is stable. (i) Please comment on the criticisms made and provide further justification for the assumptions set out in the ES Volume 2, Chapter 20 [APP-311], including the extent of the study area for coastal geomorphology set out in paragraph 20.3.9 and the assumptions and limitations referred to in paragraphs 20.3.21 and 20.3.29. (ii) In relation to paragraph 20.4.6, as pointed out by the MMO, why has the impact of the "*19th Century*" wave climate resuming not been assessed? (iii) Please provide further justification for the assumption that the present wave regime and hence little costal change and impact will continue.
	Response by SZC Co. at Deadline 2	(i) The Zone of Influence (ZoI) was based on the active sediment cell in the area, aligns with the Shoreline Management Plan (SMP)[1] zonation and was agreed with the MTF (via the EIA Scoping Report**; see Volume 1 Chapter 6** of the **ES** (APP-168)). SZC Co. agrees with the MMO that low longshore transport rates alone do '*not imply automatically that there cannot be any impact of SZC outside of the sub cell'* – the low longshore transport

[1] SCDC (2010) First Review of Shoreline Management Plan Sub cell 3c. Available at: http://www.suffolksmp2.org.uk/publicdocuments/finalsmp2/Section%201%20-%20Introduction.pdf

ExQ1	Question to:	Question:
		rate is one of several reasons why the ZoI was based on the whole Greater Sizewell Bay sediment cell and is appropriate to the coastal geomorphology assessment. Detectable impacts are localised (see response to **CG.1.16**). No sediment is removed from the system and any minor disruptions to sediment transport would be rebalanced over tens to hundreds of metres – substantially less than the distance to the sediment cell boundary. Therefore, SZC Co. considers that the evidence base does not support a pathway to detectable impact for Sizewell C activities on geomorphic receptors at or beyond Thorpeness, which is the nearest cell boundary and along the present net southward longshore transport pathway. <u>Sizewell – Dunwich Bank</u> The behaviour stability of Sizewell – Dunwich Bank is described in paragraphs 20.4.13 – 20.4.15 of **Volume 2, Chapter 20** of the **ES** [APP-311]) and Section 2.3.1 of **Appendix 20A** of **Volume 2** of the **ES** [APP-312]. Its very large mass (c. 6.5 million m^3) means that change is relatively slow and generally observed on decadal timescales. Dunwich Bank (in the north) is historically dynamic, changing its elevation, position and extent over the decades, a process which continues today. In contrast, Sizewell Bank (in the south) has been positionally stable across the historical c. 150-year-long record, with relatively minor fluctuations in crest elevation. That stability is linked to the persistent deflection of the tidal streams by the erosion resistant Coralline Crag seaward of Thorpeness. This has implications for nearshore wave climate. Inshore (of the bank) wave climate is primarily a function of offshore wave climate, which is predicted to remain similar or weaken in energy terms (Section 2.4.2 **Appendix 20A** of **Volume 2** of the **ES** [APP-312]). The bank's most significant influence on inshore waves occurs during infrequent extreme wave heights with return intervals of 1:10 years or longer (significant wave heights > 4.5 – 5 m). Under such conditions, waves break and dissipate energy extensively along the seaward flank of the bank, capping energy levels inshore. Wave breaking is determined by the ratio of water depth (h) to wave height (H_b), where H_b / h = 0.78. Typical H_b for waves breaking over feature crests are: • Sizewell Bank (h = 5-7m), H_b = 3.9-4.5m, • Dunwich Bank (h = 7-8m), H_b = 5.5-6.2m

ExQ1	Question to:	Question:
		This suggests that wave breaking on the Dunwich bank is very rare because the maximum significant wave height recorded in the last 13 years, 2.5 months is 4.72 m (i.e. the more mobile section of the bank does not significantly affect inshore wave climate). Thus, despite recent lowering and reduction in the extent of Dunwich Bank, historical erosion of Dunwich Cliffs is not recurring – but, if it were to do so under net southerly transport, potential sediment supply to the Sizewell C frontage would increase, which could reduce demand for beach management mitigation. Sand supply to Sizewell Bank is expected to remain similar or to rise, as a result of regional cliff erosion. Given its positional stability, the bank's large mass suggests that if any unexpected changes do occur, they are likely to be some decades away during the Sizewell C operation or decommissioning phases. During these phases the marine elements of the development would be: cooling water intakes and outfalls, two FRR outfalls and the permanent BLF piles, all of which have very minor impacts that are lessened by sea level rise. Although there would be no change in the assessment status for these structures, a substantially increased wave climate may increase the required frequency for beach management to mitigate for potential HCDF exposure. However, waves also break on the longshore bars, in shallower water closer to shore – • inner bar (h = 1-2m), H_b = 0.8-1.6m, • outer bar (h = 2.5-3.5m), H_b = 2-2.7m In comparison to the bank, the longshore bars initiate wave breaking and energy dissipation on a much more regular basis. The bars are likely, therefore, to continue to function under future wave climates as they do in the present, and so the action of waves on the upper beach and shoreline will most likely be largely similar to the present. <u>Assumptions and limitations</u> The approach to assessment has been to use worst-case assumptions where there are uncertainties, for example in designs of some marine elements. If designs move out of the assessed envelope, re-assessment is required. For example, the design adjustments to the HCDF and the permanent BLF, and the inclusion of the second temporary BLF, have been reassessed in the **Volume 1, Chapter 2** of the **ES Addendum** [AS-181] as a result of design changes.

ExQ1	Question to:	Question:
		(ii) Consideration of wave climate reversion to the erosive Dunwich and accretional Sizewell pre-1925 phase associated with a strongly north-east (NE) dominant wave climate The inferred historical NE wave climate has been considered (paragraph 20.14.3 of **Volume 2, Chapter 20** of the **ES** [APP-311]) and reviewed / discussed with the MMO at a meeting with SZC Co. on Monday 19 October 2020. UKCP18 climate change evidence indicates a similar or lower energy wave climate for Sizewell, particularly for the more severe RCP8.5 predictions (Section 2.4.2 of **Appendix 20A** of **Volume 2** of the **ES** [APP-312]); i.e., there are no climate change metrics to suggest a return to the former wave climate or otherwise. However, this historical case was not specifically assessed as part of the baseline in the EIA because it does not substantively differ from the worst-case baseline for impacts from Sizewell C - this case is already characterised by net southward longshore transport within the Greater Sizewell Bay (GSB), and the potential for variable rates of change under the net-southward transport condition has been recognised in **Appendix 20A** of **Volume 2** of the **ES** [APP-312]. Variation of a NE-dominated climate does not substantively alter the worst-case impact of the HCDF potentially acting as a blockage to longshore transport, or the required mitigation being maintenance of the transport pathway. Further, the primary effect of a more NE dominated climate would be increased sediment supply into the GSB which could contribute to a reduction in, or elimination of, the need to mitigate for disruption to longshore transport by HCDF exposure. The inferred historical NE climate was associated, pre-1925, with severe erosion at Dunwich and increased sediment supply and accretion at Sizewell. Under these conditions the probability of a marine impact from Sizewell C would decline relative to the present and move further away from a worst-case scenario. (iii) Assumption that the present wave regime, and hence little coastal change and impact, will continue. The effect of climate change on wave climate is described in the response to (ii) above – wave energy levels are likely to remain similar to present or decrease. Regarding coastal change, the Sizewell frontage has a long history of accretion (1836 – 1883) and stability (low net rates of change; 1883 - present). Whilst shorter-term fluctuations can be expected, and the broader pattern is expected to change during Sizewell C's life (due to sea level rise), the impacts of marine structures would remain

ExQ1	Question to:	Question:
		small in extent and magnitude (there are no drivers to change this), and would lessen with time, owing to deeper water and reduced bed shear stress. As the Sizewell C frontage would be maintained and have a large volume SCDF, changes in nearshore wave climate are not expected to expose the HCDF. Although changes in the wave climate are not expected to expose the HCDF, they are likely to affect beach maintenance and SCDF recharge frequency over the station life (see Preliminary Design and Maintenance Requirements for the Sizewell C Soft Coastal Defence Feature report; Doc Ref. 9.12).
	Response by Mr Nick Scarr at Deadline 3	Response to the above from EDF's own studies pre-DCO in BEEMS documents obtained under FoI and accredited academic study: <u>Response 1</u> Academic and empirical research of the Institute of Oceanographic Sciences that shows the Sizewell Dunwich banks provide storm protection to the Sizewell shoreline: The work of Tucker and Carr using Waverider buoys installed in the 1970s (and later work by BEEMS, and EDF, including modelling) shows that any incident wave approaching the Sizewell-Dunwich banks from offshore, if higher than a critical value, is forced to break on the offshore banks thereby reducing its height to that value before it hits the Sizewell coastline. This critical value of wave height is 2.12m to 2.52m depending on tidal depth. This feature of the Sizewell-Dunwich bank complex is of primary importance to the inshore wave climate and protection of the Sizewell foreshore. This is acknowledged in the DCO: Coastal Geomorphology and Hydrodynamics, Appendix 20A. op cit., Page 27. Tucker and Carr's work is also acknowledged in BEEMS TR319, page 27. <u>Response 2</u> EDF states there is strong erosion at Dunwich: • "***The last 2 to 3 decades of strong erosion at Dunwich were not, however, matched by ongoing accretion in the south."*** BEEMS TR223 Table 12, shows a net erosion of the shoreline at Sizewell C foreshore since 1993. BEEMS TR223 Shoreline variability and accretion / erosion trends in Sizewell Bay Edition 3: Updated with 2011 – 2018 data. Page 119. See also Table 12 on Page 115.

ExQ1	Question to:	Question:
		EDF states the effects of shoreline erosion of the Minsmere frontage in BEEMS: *"Very extreme tide plus surge conditions, or tide plus surge plus waves, are not necessary to cause significant erosion and flooding of low-lying areas.* ***Studies to the north [the South Minsmere Levels] and south of Sizewell have shown that even moderate storms, with estimated return periods of 1 in 5 to 1 in 10 years, have caused significant flooding*** *as a result of breaching of shingle ridges, narrow dunes and earth embankments (e.g. Pye & Blott, 2006, 2009). The outer defence at the northern end of the Minsmere frontage was breached, and the inner defence partially overtopped, during moderate storms in 2006 and 2007.* ***These events also caused significant dune erosion between Sizewell B and Minsmere Sluice but*** *had relatively little effect on the beach and dunes in front of the 'A' and 'B' power stations.* ***The main reason for this long-shore variation in storm susceptibility appears to be the morphology of the Sizewell-Dunwich Bank.*** *Waves from the NNE are refracted across the northern end of Dunwich Bank and focused towards the shore at the northern end of the Minsmere frontage. Refracted north-easterly waves also pass through the saddle between Dunwich Bank and Sizewell Bank.* ***The size, depth and position of this 'saddle' [in the Dunwich bank] is therefore of critical importance with regard to the risk of erosion and flooding between the proposed Sizewell 'C' site and Minsmere Sluice.****"* TR139, Edition 2: A Consideration of "Extreme Events" at Sizewell, Suffolk, With Particular Reference to Coastal Morphological Change and Extreme Water Levels, Page 5 EDF's own work and accredited academic work shows that the Sizewell-Dunwich banks reduce the inshore wave climate to a much greater degree than EDF is stating above and protect the Sizewell shoreline: EDF's pre-DCO statements found in its own reports: *"The [Sizewell-Dunwich] bank represents a natural wave break preventing larger waves from propagating inshore and thus reducing erosion rates along this shoreline.* ***As a result, the Bank forms an integral component of the shore defence and provides stability for the Sizewell coastal system****". 'Sizewell C proposed Nuclear Development, Sizewell C EIA Scoping Report, April 2014, Planning Inspectorate Ref: EN010012, Page, 150.*

ExQ1	Question to:	Question:
		BEEMS TR139, obtained under FOI, confirms the reliance on the Sizewell-Dunwich banks for foreshore stability: "***Although the Sizewell shoreline has been relatively stable during the past 150 years, a return to erosion could occur if there is an overall reduction in the size or crest height of the Sizewell-Dunwich Bank****, an increase in the size of the 'saddle' between the high crestal areas towards the two ends of the Bank, a significant increase in sea level (> 0.5 m), or a significant increase in the frequency, strength and duration of northerly and northeasterly winds."* TR139, Edition 2: A Consideration of "Extreme Events" at Sizewell, Suffolk, With Particular Reference to Coastal Morphological Change and Extreme Water Levels, Page 3. Cefas's BEEMS technical report TR500 states that, should Dunwich bank remain the same, then it: "*…would therefore be expected to continue to provide protection from high-energy storm waves across the majority of the GSB.*" [GSB = Greater Sizewell Bay] BEEMS Technical Report TR500 Sizewell-Dunwich Bank Morphology and Variability, Page 11 *".. a reduction in the size of this feature…[would reduce its effect in attenuating waves thereby increasing] the magnitude of extreme events on the shoreline and increase the risk of erosion*". Mott Mac., op. cit., page 57. BEEMS report TR058, confirms that sea level rise will also compromises the wave attenuation properties of the banks: "*In a scenario of rising sea level combined with a reducing volume and/or sediment supply at the bank, the resultant increase in water depth over the bank crest (i.e., sea level rising and/or bank elevation lowering) will have a more significant effect on inshore wave climate and shoreline response."* BEEMS Technical Report Series 2009 no. 058, Sizewell: Morphology of coastal sandbanks and impact to adjacent shorelines. Page 46. ***"…the Dunwich Bank has no inherited stabilising hard geology (i.e., no headland or underpinning crag). [The Sizewell bank has a headland but also limited crag].***

ExQ1	Question to:	Question:
		DCO: Geomorphology Appendix 20A, op cit., Page 135 of 167 ***"If the lowering and reduction in Dunwich Banks northern extent continued, the extent of shoreline exposed to higher wave energy from the northeast sector would be expected to expand to the south accordingly." [i.e. affect Sizewell C].*** BEEMS, Cefas Technical Report TR500 Sizewell-Dunwich Bank Morphology and Variability, Page 59. The current limit to the protection of the Sizewell-Dunwich banks northward of the Sizewell A and B stations is noted below. Sizewell C, as well as being built further seaward, will be facing this northerly low-lying flood land (Sizewell A and B being slightly better protected): *"…the area north of Sizewell Power Station is still experiencing periodic storm erosion. This may be related to changes in the nearshore and offshore morphology, including the development of a gap between the crests of the Sizewell and Dunwich Banks through which waves are able to penetrate".* Op cit., PYE, K. and BLOTT, page 464. <u>Response 3</u> EDF is making an unsupportable assumption to sediment transport – in the DCO and above EDF claims: The Easton-Benacre cliffs are "***likely to remain unprotected***" and therefore "***cliff exposure will rise with rising sea levels. The likely consequence is a rise in, or maintenance of, sediment supply [to Sizewell and] will slow rates of shoreline retreat and potentially increase accretion rates where it occurs, and over a long period of time it could counter shoreline retreat***." BEEMS TR311 2.4.3.1. DCO: Geomorphology Appendix 20A, op cit., Page 52 of 167 The effect of sea level rise on Easton-Benacre cliff erosion will not only apparently protect the Sizewell shoreline but ***"will result in slow growth of the Sizewell – Dunwich Bank. A growing bank that keeps pace with sea level rise will deliver similar patterns of inshore waves and shoreline change to those presently experienced."*** BEEMS TR311 2.4.3.1. DCO: Geomorphology Appendix 20A, op cit., Page 135 of 167

ExQ1	Question to:	Question:
		These suppositions of the benefit of sea level rise resulting in the convenient relocation of sediment supply from Easton-Benacre cliffs to the Sizewell shoreline and the Dunwich bank are, in my opinion, unsupportable. Any assumption that eroded sediment will settle in pre-determined places, or even anywhere onshore, has little or no validity: EDF states in BEEMS TR223 obtained under FoI, for instance: • "***The last 2 to 3 decades of strong erosion at Dunwich were not, however, matched by ongoing accretion in the south."*** BEEMS TR223 Table 12, shows a net erosion of the shoreline at Sizewell C foreshore since 1993. BEEMS TR223 Shoreline variability and accretion / erosion trends in Sizewell Bay Edition 3: Updated with 2011 – 2018 data. Page 119. See also Table 12 on Page 115. <u>Response 4</u> I consider the nearshore longshore bars to be geomorphologically insignificant minor shoreline features that lack the qualities for serious consideration as receptors providing long term stability and wave attenuation to the Sizewell coastline. I am supported in this by the following statement from EDF itself, as stated earlier: "*The inner and outer longshore bars are smaller and shallower and are consequently relatively mobile features that would change their positions relatively quickly*…" DCO: Coastal Geomorphology and Hydrodynamics Appendix 20A. op. cit., P.135 Refer to REP3-119 for document entitled *'Sizewell C – Coastal morphology, climate change and the effectiveness of EDF's Flood Risk and Shoreline Change assessments.'*
	Response by Stop Sizewell C at Deadline 3	The spatial extent of the area of interest for the timescale involved (to the end of decommissioning and beyond) must surely be larger than the Greater Sizewell Bay. How, for example, did the Sizewell coast prograde for almost a century after 1826 without additional sediment input from outside the delineated cell? We also reject the simple assumption that increased erosion will lead to an increased sediment supply to the beach - historically, sediment has accumulated on the banks. The maintenance of the sea defences at Sizewell C will likely create a headland that would not otherwise persist - this will certainly have an impact on shoreline planform into the future.

ExQ1	Question to:	Question:
	Response by SZC Co at Deadline 5	The **CPMMP** (Doc Ref. 6.14(A)) addresses impacts from Sizewell C to the environment, and not the reverse, hence it is tailored to the scale of outward impacts, not the external forcing. It is an adaptive plan and will remain a live document throughout the operational and decommissioning period, allowing for the recognition of possible expansion or contraction of effects due to the localised impacts over time.
CG.1.16	The Applicant	**Impacts on coastal processes** The Alde and Ore **Association [RR-1206] expresses concern that the ES fails to** justify the assertion that the Great Sizewell Bay is a self-contained unit and changes there will have no impact on the longshore coastal evolution which has resulting in the uniquely long shingle spit of Orfordness, which itself created the Alde and Ore Estuary. Likewise, **Walberswick Parish Council [RR-1257]** submits that EDF have not justified the assertion that coastal effects to the south will not extend beyond the coralline crag to the north of Thorpeness. Given the scope of the ES assessment how can the ExA be satisfied that the proposed change at Sizewell would not adversely these natural processes further to the south?
	Response by SZC Co at Deadline 2	<u>The Greater Sizewell Bay and why geomorphic impacts are local to Sizewell and do not reach as far as, or beyond, Thorpeness.</u> There is no evidence to support detectable geomorphic impacts of Sizewell C at, or beyond, Thorpeness. There are two primary reasons for this: • the impacts to geomorphic receptors have very small extents and no sediment would be removed from the system, which means that the activities can only cause a localised disturbance. • The net sediment transport rates are very low, which means that if an impact were able to persist and migrate (very unlikely) it would travel slowly and could be mitigated. The following provides additional background: 1. Sizewell C's marine structures and activities are transmissive to sediment transport, meaning that they would not create a downstream deficit of sediment and would only cause small, localised disturbances since: a. BLF piles would be slender, circular and well-spaced (i.e. very transmissive). b. Nearshore outfalls are small and located seaward of the main transport corridor for sand (longshore bars).

ExQ1	Question to:	Question:
		c. Plough and/or injection dredging methods to be used in the nearshore move sand short distances, retaining it within the system (i.e. no sediment losses) On the sub-aerial beach (above low tide), the SCDF would be maintained to avoid HCDF exposure and the disruption to longshore transport that would result. The SCDF provides a large reservoir of shingle (primarily pebble sized with 4-64mm diameter) designed to release sediment into the coastal system and thereby avoid or minimise disruption to longshore shingle transport and the potential for downdrift beach erosion. Any sediment lost from the SCDF (during erosive storms) would be expected to deposit at Sizewell C and on adjacent beaches (immediately north and south of Sizewell C), potentially reducing erosion rates there. 2. Secondary (additional) mitigation methods would also be used, if necessary, i.e. beach recharge, recycling or bypassing (**Section 7.5.1 Appendix 20A** of **Volume 2** of the **ES** [APP-312]) to maintain sediment supply across the Sizewell C frontage. 3. Net longshore transport is very slow along the Sizewell frontage, as shown by the Shoreline Management Plan[2], the scientific literature (Halcrow, 2001; Black and Veatch, 2005), sediment transport modelling and studies tracing beach pebbles during storms (**Section 2.3.4** of **Appendix 20A** of **Volume 2** of the **ES** [APP-312]). This means that any unmitigated geomorphic impacts at Sizewell C would spread slowly and would not be detectable far (10s – 100s of metres) from the impact source because no sediment is removed from the system. For example, scour around Sizewell C marine structures has extents of < 10 m around nearshore structures and < 20 m at the offshore intakes and outfalls (Sections 4.2.2.1.1, 4.3.2.1 and 4.4.2 of **Appendix 20A** of **Volume 2** of the **ES** [APP-312]). 4. Thorpeness is beyond the southern end of the sediment cell; there is limited transport southward across the ness. This is evidenced by the Shoreline Management Plan[3], longshore transport modelling and measurements of pebble movement during storms (Section 2.3.4 of **Appendix 20A** of **Volume 2** of the **ES** [APP-312]).

[2] SCDC (2010) First Review of Shoreline Management Plan Sub cell 3c. Available at: http://www.suffolksmp2.org.uk/publicdocuments/finalsmp2/Section%201%20-%20Introduction.pdf

[3] SCDC (2010) First Review of Shoreline Management Plan Sub cell 3c. Available at: http://www.suffolksmp2.org.uk/publicdocuments/finalsmp2/Section%201%20-%20Introduction.pdf

ExQ1	Question to:	Question:
		5. Sandy sediments move primarily along the subtidal longshore bars, more quickly than the shingle is transported along the beach, because it is smaller (more easily moved) and continuously exposed to wave and tidal currents. The southerly net sand transport is disrupted at the subtidal Coralline Crag ridges extending to the NE of Thorpeness. These erosion-resistant ridges have persisted in the same position since the earliest bathymetric surveys (1868). Several forms of evidence (numerical modelling, bedform analysis and sediment trends) show that the ridges funnel sand offshore and onto the Sizewell – Dunwich Bank, and not (to any large degree) around the ness (Section 2.3.1 of **Appendix 20A** of **Volume 2** of the **ES** [APP-312]). Hence it also marks the boundary of the sediment cells in terms of sand. In summary, there is no pathway for Sizewell C geomorphic impacts to reach Thorpeness during the construction phase or whilst the SCDF is maintained during the operation and decommissioning phases. Furthermore, as a result of the SCDF, the Sizewell C development would add sediment to the coastal system and not remove it, thereby avoiding down-drift impacts to sediment supply.
	Response by Stop Sizewell C at Deadline 3	It cannot be said that "geomorphic impacts at Sizewell C would spread slowly and would not be detectable far (10s – 100s of metres) from the impact source". There is no evidence to support this; on the contrary, studies elsewhere demonstrate the 10-100 km range of impacts alongshore from the original perturbation. Thorpeness as a cell boundary is most likely "leaky" in that sediment can enter and leave the system. It is not a fixed boundary. Future geomorphic change will also alter its effectiveness as a cell boundary.
	Response by SZC Co at Deadline 5	The geographical extent of potential impacts from Sizewell C on adjacent shores and further afield, and the manifestation of those potential impacts, was discussed in ISH6. Please refer to the SZC Co.'s **Written Summaries of Oral Submissions made at ISH6: Coastal Geomorphology (14 July 2021)** (Doc Ref. 9.46).
CG.1.18	The Applicant	**Impacts on coastal processes** East Suffolk Internal Drainage Board [RR-0345] expresses concern that the identified changes to long-term sediment flow off the Coast because of the HCDF would be likely to lead to accretion to the north of the development. (i) Please comment as regards the potential impact that this could cause to future discharge to the sea from the gravitational drainage system at Minsmere;

ExQ1	Question to:	Question:
		(ii) Please summarise the mitigation proposed and comment on whether this matter has been sufficiently considered.
	Response by SZC Co. at Deadline 2	(i) The East Suffolk Internal Drainage Board indicate concerns regarding accretion at the Minsmere Sluice, which is approximately 1.6 km north of Sizewell C. The potential accretion (or a reduction in erosion rates) on the southern Minsmere frontage (within a few hundred metres of Sizewell C) arising from deposition SCDF sediments would not extend to the sluice. Therefore, it would not affect the sluice's ability to discharge, for the following reasons: (a) SCDF beach shingle (proposed mitigation) would, in net terms, drift slowly to the south, not to the north. Some shingle may accumulate immediately to the north of Sizewell C, but not as far as the sluice (longshore transport calculations and tracer studies indicate that detectable volumes of SCDF shingle are not likely to be encountered more than a few hundred metres north of Sizewell C). Therefore, there would be no impact at the Minsmere Sluice outfall. (b) Any SCDF sediments that are transported north of Sizewell C would most likely be deposited and retained in areas where the shoreline has already receded to a more westerly position than the SCDF (tens to a few hundred metres north of Sizewell C). This would tend to trap shingle and prevent further northward transport for as long as the more westerly shoreline position persisted. (c) The sluice's outfall pipe will continue to disrupt natural shingle transport for as long as it is present, which can be seen as an alternating accumulation of sediment on either side of the sluice determined by storm direction. Sizewell C's activities will have no bearing on that process. ii) n/a (see response to **CG.1.18 (i)** above).
	Response by East Suffolk Internal Drainage Board at Deadline 3	ESIDB acknowledges and accepts the applicant's explanation.
	Response by Stop Sizewell C at Deadline 3	The timescale of these measurements is insufficient to conclude that "there would be no impact at the Minsmere Sluice outfall"

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 5	No further comment from SZC Co.
CG.1.19	The Applicant	**Impacts on coastal processes** National Trust [RR-0877] in relation to coastal geomorphology and long-term change, expresses concern that there are potential/possible impacts of the proposal on their site during the lifetime of the development that have not been fully explored as part of a holistic and integrated assessment. The Trust submits that the Applicant should be required to define and monitor this change for the lifetime of the development and to include the north of the application site, specifically Dunwich Heath and Beach. (iii) Please respond to the specific concerns of National Trust on this topic; Please explain further and set out the proposals for mitigation/compensation for adverse impacts resulting from the project upon Dunwich Heath and Beach that might arise through coastal change.
	Response by SZC Co. at Deadline 2	The National Trust's specific concerns are addressed below: Potential impacts of the proposal on Dunwich Heath and Beach. The Applicant has taken a holistic and integrated approach to assessing the potential implications of the proposal on the coastal geomorphology extending over the lifetime of the development. This has involved state of the art modelling of coastal hydrodynamics and sediment transport, collection and interpretation of fine-scale coastal monitoring over many decades to derive an environmental baseline addressing the drivers of change in the short and long-term (**Volume 2, Appendix 20A** of the **ES** [APP-312]), and impact assessment of each element of the development using the same tools (**Volume 2, Chapter 20** of the **ES** [APP-311]), covering the Zone of Influence (ZoI) defined as the Greater Sizewell Bay, including Dunwich Heath and Beach, overseen at all stages by a wide ranging Marine Technical Forum (including representatives from Marine Management Organisation, Environment Agency, Natural England & East Suffolk Council) and with the cooperation of expert panels from multiple organisations. The conclusions from the evidence gathered demonstrate that the impacts of the proposed development do not extend to Dunwich Heath and Beach. Furthermore, the evidence in **Volume 2, Appendix 20A** of the **ES** [APP-312] demonstrated that there was no known pathway for impacts from the proposed development to interact with or affect cliff processes at Dunwich.

ExQ1	Question to:	Question:
		Impacts at Dunwich The ZoI is limited to the extent over which any aspect of the development can have a direct and measurable impact on coastal geomorphology (Section 3.1 of **Volume 2, Chapter 20** of the **ES** [APP-311]), Section 3.1). Furthermore, as outlined in the responses to **CG1.14, CG.1.16** and Section 4 of **Volume 2, Chapter 20** of the **ES** [APP-311], there is no link between natural geomorphic changes observed at Sizewell C and those observed to the north of Minsmere sluice outfall - the patterns of behaviour at each location are not correlated. The changes on one stretch of coastline therefore do not reflect, and cannot be predicted from, the other section. Extreme events The geomorphology assessments typically consider events with a return interval for peak wave height of 1:20 years, as these events are rare, severe and likely to occur a few times during the station's life. This is because larger, more infrequent events interact with the Sizewell-Dunwich Bank and produce similar inshore wave heights – the bank is effectively a cap on inshore energy for very extreme conditions. It is worth noting that the UKCP18 predictions for the Sizewell area show a similar or decreasing wave climate. Extreme conditions (1:1000 – 1:10,000 year return interval) events are considered in the **Flood Risk Assessment** [AS-018, AS-157]. Such events would cause natural widespread damage to the Minsmere shingle ridge and severe erosion of the region's cliffs, including the Dunwich Cliffs. Under such conditions, the SCDF would release large quantities of sediment, some of which would be transported to adjacent foreshores, where they would reduce natural erosion rates. However, as stated above, there is no mechanism for impacts originating at Sizewell C to affect erosion at the Dunwich Cliffs. Uncertainty The National Trust's Relevant Representation refers to non-specific '*uncertainty about the assumptions supporting the baseline assessment of large scale/long term/accelerated coastal change*'. However, the assumptions were themselves based on extensive assessment of the long-term uncertainties in relevant environmental processes. Factors considered included – beach volume changes, potential for breaching of the Minsmere barrier (based on existing sediment volumes), changes to longshore transport rates, changes to sediment supply (regional-scale changes in the amounts of sand derived from natural cliff erosion elsewhere, including Minsmere cliffs, Dunwich, Walberswick, and potentially areas to the south of Sizewell), changes in future storm surge climatology,

ExQ1	Question to:	Question:
		changes to the inshore wave climate (due to changes in the Sizewell bank), and sensitivity to the rate of sea level rise. The assessment of uncertainty in each parameter, (assuming the 'worst case' changes in each according to present available evidence) indicated with a high degree of certainty that the HCDF could be exposed by shoreline change in the period between 2053-2087 (assuming the SCDF is not maintained). This assessment therefore prompted the design of mitigation, in the form of the SCDF, to counter the worst-case outcome. Furthermore, SZC Co. has committed to maintaining the SCDF over the station life in order to avoid exposure of the HCDF. The uncertainty assessment also determined that confidence in future projections rapidly declines beyond the same timescale (2053-2087), because each factor becomes too unpredictable. Section 7.7.1 and Table 27 of APP-312 discuss this 'post-mitigation' future uncertainty and present plausible long-term scenarios. The most significant feature of long-term change is likely to be loss of the Minsmere sluice outfall – this, rather than Sizewell C, is likely to be the major factor in long-term change at both Sizewell and Dunwich. (ii) There are no plans for mitigation or compensation which are specific to Dunwich Heath and Beach from Sizewell C as no plausible impact on them has been identified.
	Response by Stop Sizewell C at Deadline 3	The fact that "The changes on one stretch of coastline … do not reflect, and cannot be predicted from, the other section" does NOT mean they are unrelated.
	Response by SZC Co. at Deadline 5	The Applicant has used the "source-pathway-receptor" approach. The ZoI is limited to the extent over which any aspect of the development can have a direct and measurable impact on coastal geomorphology.
CG.1.20	The Applicant	**Impacts on coastal processes** Stop **Sizewell C (Theberton & Eastbridge Action Group) [RR-1162]** sets out its various concerns in relation to the effect of the Sizewell C Project on coastal processes and flood risk. Please respond specifically to the concerns raised including the current absence of a submitted plan for the HCDF structure; the MMP; and the assertion that coastal effects to the south will not extend beyond the coralline crag to the north of Thorpeness.

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 2	HCDF Design At the time of the DCO submission the detailed design of the HCDF was not available; only the basic design was available. This is not unusual and does not prevent the assessment of either its role in flood protection or its potential impacts on the environment because the key parameters that define those assessments *are* known. The design of the HCDF has continued and been refined (for example Change 9 in **Volume 1**, **Chapter 2** of the **ES Addendum** [AS-181]). A document providing the illustrative detailed design, including plans and drawings, has been submitted at Deadline 2 (**Sizewell C Coastal Defences Design Report** (Doc Ref. 9.13)). MMP The latest draft of the Coastal Processes MMP (**Volume 3, Appendix 2.15.A** of the **ES Addendum** [AS-237]) was submitted at the Application Change Request in January 2021 and is available for review by all interested parties. The final version must be approved by ESC and MMO prior to works commencing. Details of the Marine Technical Forum are provided in the **draft Deed of Obligation** (Doc Ref. 8.17(C)). Coastal effects to the south Coastal effects to the south will not extend beyond the coralline crag to the north of Thorpeness. Refer to CG.1.14(i) and CG.1.16.
	Response by Stop Sizewell C at Deadline 3	See above CG.1.19 - it cannot be stated with certainty that there will be no impact south of Thorpeness.
	Response by SZC Co. at Deadline 5	The geographical extent of potential impacts from Sizewell C on adjacent shores, including potential impacts as far as Thorpeness, was discussed in ISH6. Please refer to the SZC Co.'s **Written Summaries of Oral Submissions made at ISH6: Coastal Geomorphology (14 July 2021)** (Doc Ref. 9.46).
CG.1.21	The Applicant	**Impacts on coastal processes** Suffolk Coast Acting for Resilience [RR-1171] raise the issue of coastal erosion outside the narrow Sizewell Bay and the assumption that nothing will change south of the Great Sizewell Bay. Please respond specifically to the concerns raised in respect of:

ExQ1	Question to:	Question:
		(i) the availability of long-term funds for coastal defence works, including for Aldeburgh to at least Shingle Street. (ii) Whether the latest information on climate change, sea level rise and coastal evolution has been taken into account and, if not, why not and how that affects the soundness of any assessments.
	Response by SZC Co. at Deadline 3	(i) Monitoring and mitigation is not required for Aldeburgh to Shingle Street because the evidence shows there is no pathway to impact at these locations (see responses to **CG.1.14 (i)** and **CG.1.16**). Coastal erosion beyond Sizewell Bay is a regional scale process driven by large-scale geophysical, hydrodynamic and climatic forcing. The processes affected by Sizewell C are shown to be small scale and local as detailed in responses to **CG.1.14** and **CG.1.16**. Therefore, funding is not required for the works suggested. However, in the broader sense, the cost of complying with the **Coastal Processes MMP** [AS-237] will depend on the results of monitoring. SZC Co. is committed through the DCO and DML to implement the measures identified in in the CPMMP and has included that in the evolving project cost estimate. The MMP will remain in force throughout the construction and operation of Sizewell C. (ii) The latest climate change estimates for coastal change have been used in assessments (UKCP18; APP-312, Section 2.4). Predictions for climate-related storm, wind, and wave changes applied in APP-312 are up to date and based on UKCP18. Work regarding the associated uncertainty is addressed in the response to **CG.1.19 (i)**. The future shoreline assessment described in **CG.1.19 (i)** considered the possible timescales for accelerated change because, for example, the response of the shoreline to sea level rise is not a direct and predictable retreat[4]. Variation in rates of climate change result in changes to the timing, but not the nature, of required HCDF mitigation. The underlying processes of coastal change requiring mitigation (to maintain a sediment transport pathway across the Sizewell C frontage) also remain the same, and are addressed in the **Coastal Processes MMP** [AS-237].

[4] J. A. G. Cooper, G. Masselink, G. Coco, A. D. Short, B. Castelle, K. Rogers, E. Anthony, A. N. Green, J. T. Kelley, O. H. Pilkey & D. W. T. Jackson (2020) Sandy beaches can survive sea-level rise. *Nature Climate Change* volume 10, pages 993–995

ExQ1	Question to:	Question:
	Response by East Suffolk Council at Deadline 3	ESC has a similar concern to SCAR i.e the Potential Impact and Baseline Monitoring zone should be increased to the south. However, we agree with the Applicant that there are currently no grounds to extend Monitoring and Mitigation to Aldeburgh. However, ESC do consider the monitoring zone to be insufficient and are discussing with the Applicant the possibility of a `Precautionary' position to be taken until results confirm that there is no impact at Thorpeness.
	Response by SZC Co. at Deadline 5	The geographical extent of potential impacts from Sizewell C on adjacent shores and further afield, and the manifestation of those potential impacts, was discussed in ISH6. Please refer to the SZC Co.'s **Written Summaries of Oral Submissions made at ISH6: Coastal Geomorphology (14 July 2021)** (Doc Ref. 9.46). The Applicant welcomes ESC's position in relation to potential impacts at Aldeburgh.
CG.1.23	The Applicant	**Impacts on coastal processes** NE [RR-0478] makes specific comments on the Coastal Geomorphology and Hydrodynamics report within the application, and sets out additional information or evidence that it requires or which needs clarification including how the various beach measures would avoid an adverse effect and maintain condition of SAC foreshore annuals vegetation communities; the extent to which the measures would also reduce the risk to SAC/SPA habitats in Minsmere Valley behind the barrier beach; the impact of the coastal defence measures on the dune County Wildlife Site and how the loss of most of the site would be mitigated or offset within the footprint of the HCDF and SCDF; how the coast protection of the development site would enhance the wider coastal natural environment, including its form, function, and ability of coastal habitats to contribute to climate change resilience and nature recovery, as part of the Government's 25 Year Environment Plan. Please comment on the points raised by NE and provide the additional information/clarity sought.
	Response by SZC Co. at Deadline 2	This answer is presented in four parts to reflect the structure of the question: (i) Natural England (NE)'s [RR-0878] specific comments are: *"....but there is less explanation of how the various beach measures will avoid an adverse effect and maintain condition of SAC foreshore annuals vegetation communities. It is important this is clarified, particularly where future beach management measures might require manual intervention (for example, vehicle movements on the beach) which in turn*

ExQ1	Question to:	Question:
		could adversely affect the feature by hindering colonising plants. This is important as manual beach management schemes elsewhere often involve lorry movements directly on beaches, which is disturbing to flora and fauna". Firstly, it is important to note that no part of the Sizewell C development will cause a direct adverse effect on the vegetated shingle – the only link from Sizewell C to shingle communities are natural coastal processes. Adverse effects will occur due to natural reduction in beach volumes already taking place. The annual vegetation communities are maintained by the natural beach volume and form; so, by supporting these (as agreed by NE) via natural processes, the measures (additional sediment supply to the southern Minsmere frontage from the SCDF) will support the potential re-establishment of those communities. The 'various beach measures' referred to by Natural England are those set out in paragraph 20.14.24 of **Appendix 20A** of **Volume 2** of the **ES** [APP-312] (i.e. beach recycling, sediment bypassing and beach recharge). However, more importantly in regards to the issue raised by NE is that these measures, and the means by which they will be delivered, will be provided in the **Coastal Processes MMP** (**Volume 3, Appendix 2.15.A** of the **ES Addendum** [AS-237]. The latest draft of the Coastal Processes MMP was submitted at the Application Change Request in January 2021, although the detailed methodology for the various mitigation measures has yet to be confirmed. Before works can begin, the **Coastal Processes MMP** requires approval under DCO Requirement 7A and Marine Licence 17 (Doc Ref. 3.1(C)) and that approval process will require consultation with NE. SZC Co is working with NE (and other MTF members) to progress the **Coastal Processes MMP,** and will need to demonstrate that methods will not adversely affect the feature. Nonetheless, as noted in paragraph 20.14.25 of **Appendix 20A** of **Volume 2** of the **ES** [APP-312], none of the possible mitigation approaches would involve direct placement of sediment on the supra-tidal beach within European sites. It is, therefore, reasonable at this time to assume that direct effects on qualifying features can be avoided and that approval of the **Coastal Processes MMP** can secure management and control measures necessary such that direct effects on the SAC that could negatively affect condition (e.g. through vehicle movements) are avoided. (ii) NE identifies a risk of future saltwater overtopping or breaching. The major factor in overtopping risk is increasing sea level (relative to the beach height) (see Section 2.1 of

ExQ1	Question to:	Question:
		Appendix 20A, Volume 2 of the **ES** [APP-312] wherein it is stated throughout that overtopping is likely to increase naturally in frequency north of Minsmere Sluice (and to become more likely south of the sluice). Reduction in the beach and shingle ridge height would have the same effect – but no element of the Sizewell C construction involves physically reducing the existing height of the beach (indeed it is proposed to increase the beach level along the SCDF). The SCDF is also likely to add volume to the adjacent beach, due to the localised longshore transport of shingle released from the SCDF during SE storms, increasing (but by no possible route reducing) the resistance of the adjacent shorelines to breaching. (iii) The area of the Sizewell Beaches CWS which will be lost to temporary landtake is 6.95ha, which represented by 18% of the total (38.83ha), so it is incorrect to characterise this as the loss of most of the site. However, the area within the order limits will be entirely removed during the establishment of the new defences with habitats re-established over the top of the defences once these are in place, as explained in the ES at paragraph 14.4.16 of **Volume 2, Chapter 14** [AS-033], using similar approaches to those which were successfully used for the establishment of similar habitats on the Sizewell B frontage. The area of replacement vegetated beach habitats will be 5.09 ha of coastal sand dunes and 3.95 ha of coastal vegetated shingle (see Main Development Site Biodiversity Net Gain Report, as updated), which is marginally greater than the area of the CWS subject to landtake. **Volume 2, Chapter 14** of the **ES** [AS-033] identifies a significant adverse effect associated with the impacts to the CWS because of the loss, albeit initially temporary, of 18% of habitat which is considered of national importance and the effect of habitat reinstatement in context with future sea level rise, which is likely to be more susceptible to erosion. Further information can be found in **Preliminary Design and Maintenance Requirements for the Sizewell C Soft Coastal Defence Feature report** (Doc Ref. 9.12). (iv) Firstly, the proposed development would prevent eventual exposure and entrainment into the coastal environment of the unnatural materials of the Bent Hills (which is made ground created when Sizewell B was constructed). Apart from that, the methods proposed would not directly alter any coastal process and changes in shoreline form would be driven by natural processes alone. Adding sediment to the shoreline (from the SCDF) increases resilience as climate change (sea level rise) is likely to increase shoreline recession. The potential benefit of the SCDF is to preserve the present shoreline form longer than would otherwise be the case, by supplying a greater volume of protective shingle material to the

ExQ1	Question to:	Question:
		shoreline and delaying the inevitable loss of the dunes at Minsmere south and subsequent increase in saline intrusion, potential breaching, and shoreline retreat. The SCDF provides a maintained supra-tidal reservoir of shingle designed to release sediment into the coastal system, prevent HCDF exposure, and thereby avoid or minimise disruption to longshore shingle transport and the potential downdrift beach erosion. It uses a "working with nature" approach where the release of sediment into the coastal system, and its distribution, are determined by natural coastal processes (erosion by waves). It would supply additional shingle to the Sizewell C frontage and the neighbouring coast (including the southern Minsmere frontage) during erosive storms. Erosion rates would also be reduced to the south of Sizewell C, across the Sizewell B frontage.
	Response by RSPB at Deadline 3	(i) As per our Written Representation, we do not agree that there is no risk to the vegetated shingle. We also have provided research papers in our Written Representations submitted at Deadline 2 that question and show that the vegetated shingle communities have not been lost, as is consistently repeated by the Applicant, so it is incorrect to assert that they will be potentially re-established. The Applicant's response and the Preliminary Design and Maintenance Requirements for SZC SCDF Report submitted at Deadline 2: section 9.12 does indicate its conclusion that the beach will be protected by provision of coarse grain shingle, but it is still not apparent how this will mimic natural processes in the absence of the proposed development and how it will interact with the supratidal shingle and sand. The research papers provided in our Written Representation and our comments on comments on the Preliminary Design and Maintenance Requirements for SZC SCDF Report submitted at D2 shown how dynamic this shoreline is and how the communities fluctuate. It is not clear why the stability that the Applicant's management practice will introduce will definitely benefit these dynamic communities. We remain concerned that the means by which this will be delivered through the Coastal Processes Monitoring and Mitigation will not be agreed until later in the process and we do not believe this is satisfactory for such an important element of the Application. As per our Written Representation we remain concerned of the potential of indirect effects (e.g. improved stability of the beach adversely affecting the dynamic environments of supratidal shingle that support the most valuable flora and invertebrate assemblages of

ExQ1	Question to:	Question:
		the protected sites. The monitoring programme seeks to monitor this, but we cannot see any evidence of a viable mitigation strategy should an impact be identified. In addition our view is that a higher level of detail is required in the DCO to secure monitoring and mitigation (should it be possible to mitigate) proposed and provide confidence to the ExA that methods to ensure the protection of the SAC are possible and secured. Currently we believe there is too much uncertainty with the current approach. (iii) Given that the order limits extend to the entire frontage of the proposed development site well below mean low water (MLW) and out to sea, we would welcome clarification of the intention to entirely remove the area within the Application order limits as proposed by the Applicant in their response to the ExA question. The retention of the beach is featured in much of the Application so we had assumed the entirety of the area would not be removed as part of the construction phases. We do not believe that the area proposed for replacement beach habitats can be restored and therefore question whether this can be guaranteed to contribute to the Biodiversity Net Gain contribution. We are also concerned at the huge reduction in total biodiversity unit value of sparsely vegetated coastal habitats (-94%) as detailed in our Written Representations, submitted at Deadline 2. Reference to the Preliminary Design and Maintenance Requirements for the Sizewell C Soft Coastal Defence Feature report (Doc Ref. 9.12). Section 2.1, page 14 says 'Over time, the erosion rates there may be lessened, supratidal shingle may accumulate and annual vegetated drift line species may colonise (as observed at Sizewell B). Section 2.2 page 16 states facilitating potential re-colonisation of the supratidal habitat within the county wildlife site.' Therefore, we believe that the further information does not provides the evidence required. Nor provides the clarification requested by the ExA as to how the various beach measures would avoid an adverse effect and maintain condition of the SAC, how measures would reduce the risk to SAC/SPA habitats in Minsmere Valley and how the loss of most of the site would be mitigated or offset within the footprint of the HCDF and SCDF.
	Response by SZC Co. at Deadline 5	The RSPB state that the 'stability' delivered by the Coastal Processes Monitoring and Mitigation Plan will adversely *'affecting the dynamic environments of supratidal shingle that support the most valuable flora and invertebrate assemblages of the protected sites.'* In relation to the habitats on the Sizewell C frontage, the RSPB overlooks the ongoing and

ExQ1	Question to:	Question:
		variable erosion of the soft coastal defence feature and the subsequent re-establishment works, all of the which will mimic natural processes and favour annual species which establish in response to periodic substrate disturbance in these habitats. The soft coastal defence feature will also protect the more consolidated shingle vegetation communities, which are landward of the supratidal shingle. The habitats will be monitored as defined in the TEMMP. The **CPMMP** (Doc Ref. 6.14(A)) approach will ensure there are no adverse effects on adjacent sites including the SAC (please also refer to the responses under CG.1.1). The RSPB state that the *'retention of the beach is featured in much of the Application so we had assumed the entirety of the area would not be removed as part of the construction phases'.* It is clear in the application that the approach to the coastal defences is one of removal and reinstatement of the surface layers and the vegetation. The RSPB has been present at a large number of meetings where this approach has been discussed, including discussions on the engineering design of the coastal defences, the **CPMMP** (Doc Ref. 6.14(A)) and the monitoring for re-establishment of the vegetation communities. In the next iteration of the SoCG we will include a list of meetings, including those at which the approach to the coastal defences have been discussed with the RSPB. The RSPB's points in respect of Biodiversity Net Gain are not supported by a full assessment which has been shared with either the applicant or the Examination. The applicant's assessment is provided in the **SZC Co. Comments on Submissions from Earlier Deadlines (Deadlines 2-4)** Response to RSPB and SWT on BNG (Doc Ref. 9.54).
CG.1.24	The Applicant	**Impacts on coastal processes** The Environmental Statement Addendum – Non-Technical Summary [AS-179], Section 2.3 k) considers coastal geomorphology and hydrodynamics explains that the updated assessment considered the effects associated with the construction and operation of the enhanced permanent breach landing facility, the new temporary beach landing facility, the temporary discharge outfall and the change to the sea defence design and concludes that with mitigation in place all effects on coastal processes associated with the changes are

ExQ1	Question to:	Question:
		assessed as not significant. (i) Please identify any specific mitigation and/or changes to the Coastal Processes and Monitoring and Mitigation Plan that have been required as a result of these changes. (ii) In relation to the assessed new significant benefit associated with the changes, please explain in detail the basis for that conclusion.
	Response by SZC Co. at Deadline 2	(i) Although no significant adverse effects were identified by the assessments presented in **Volume 1, Chapter 2** of the **ES Addendum** [AS-181], paragraphs 2.15.85 – 2.15.87 do identify a precautionary mitigation option for the barge grounding pocket during the operational phase, which would be needed for 3 – 4 weeks every 5 – 10 years. This arises because the design change to a longer permanent BLF requires a grounding pocket that would extend further into the outer longshore bar. Paragraph 2.15.87 proposes mitigation to manually infill the grounding pocket if it has not infilled naturally moving into the winter season. This action may not be needed, if the bar is further offshore (i.e. the grounding pocket makes a smaller incision into the bar) or if the activity occurs earlier in the summer – both allow natural infilling to restore the bed levels. The next version of the **Coastal Processes MMP** to be submitted to the ExA at Deadline 4 will be updated to include a trigger for precautionary grounding pocket mitigation if natural infilling is identified to be insufficient ahead of the winter season. Since the pocket is generated by plough dredge, if conditions have not promoted natural infilling, the mitigation would largely consist of moving dredged sediments back into the pocket. ii) The significant benefit referred to is associated with changes to the soft coastal sea defence design, in particular the supply of a large volume of additional sediment to the coast from the SCDF over the 85 year operation and decommissioning phases (**Volume 1, Chapter 2** of the **ES Addendum** [AS-181] Section 2.3k). Provision of the SCDF sediment into the coastal system would reduce erosion rates at the high value Sizewell C, Sizewell B and south Minsmere frontages (as described in **CG.1.23 (iv)**). On the south Minsmere frontage (up to a few hundred metres north of Sizewell C), natural transport and deposition of SCDF sediments would increase beach volume and thereby slow the rate of retreat of the shingle barrier, preventing or reducing overtopping, and seawater ingress to the Minsmere south levels. The increased volume may evolve into supra-tidal deposits and lead to re-establishment of the annual vegetated drift lines habitat, which was destroyed

ExQ1	Question to:	Question:
		by natural coastal erosion in 2010-2011 (**Volume 2, Appendix 20A** of the **ES** [APP-312]).
	Response by RSPB at Deadline 3	As per our Written Representation and associated Deadline 3 submission on Preliminary Design and Maintenance Requirements for SZC SCDF the assertion that annual vegetated drift lines habitat can be re-established is questionable as it has been present since 2011 and, as per our comments on the Preliminary Design and Maintenance Requirements for SZC SCDF report we have concerns over the likelihood of the evolution of supra-tidal deposits capable of supporting this vegetation assemblage.
	Response by SZC Co. at Deadline 5	No further comment from SZC Co. required beyond that provided above under CG.1.23.
CG.1.25	The Applicant, MMO	**Impacts on coastal processes** The draft Coastal Processes Monitoring and Mitigation Plan [AS-237] Table 1, summarises the SZC components that are considered to require coastal geomorphology monitoring, along with the proposed method and rationale. (i) Please indicate whether any other components should be monitored? (ii) Please provide further justification for an explanation of the frequency and spatial extent of the monitoring proposed in this table for the relevant components.
	Response by SZC Co. at Deadline 2	(i) Monitoring during the development's lifetime is proposed in the **Coastal Processes MMP** [AS-237] as noted by the ExA. The MMP is comprehensive and employs a suite of state of the art and applied monitoring techniques and methodology. Furthermore, the monitoring programme is designed to be flexible and adaptive and can be extended (both in terms of spatial extent and duration) if impacts are observed to grow beyond the monitoring zone, as stated in the response to **CG.1.3**. All appropriate marine Sizewell C components are monitored for impacts to coastal geomorphology receptors over the lifetime of the development, as set out in the **Coastal Processes MMP** (see response to **CG.1.19**). The MMO has previously mentioned a potential need to monitor for changes in sediment size in dredged nearshore areas. SZC Co. considers that this is unnecessary for the following reasons:

ExQ1	Question to:	Question:
		• Coarsening of the substrate is not likely as the sediments are all sand-sized. • Given the particle size range, any coarsening to the substrate that did occur would be very subtle and difficult to detect from natural background variability. As the dredged areas would be very small and changes in sediment size would very subtle, the effects on geomorphology would be difficult to detect both at and beyond the dredging site. (ii) Please refer to **CG.1.3 (i)** for justification of the extent and scale of proposed monitoring and the rationale for adopting an adaptive monitoring cycle. The frequency of monitoring varies for each component – see Sections 3.3, 4.3 & 5.3 of **Volume 3, Appendix 2.15.A** of the **ES Addendum** [AS-237] – and has been determined considering the impact magnitude and effect, as well as the expected evolution with time of the feature and the impact (rate of change and whether an equilibrium impact is reached). (1) Equilibrium impacts. Some impacts will reach a dynamic equilibrium within a few months and not require ongoing targeted monitoring, such as scour around structures. The approach follows a standard pre- and post-construction survey schedule, with additional post-construction surveys according to the potential for natural changes in geomorphology (e.g. nearshore outfalls just seaward of the outer bar). Background monitoring is also used throughout the operation and decommissioning phases. Allowance will also be be made for the possibility of modifications to sampling design or survey frequency in response to unanticipated manmade or natural influences as part of an adapted monitoring programme. (2) Monitoring frequency for SCDF mitigation. This monitoring will be based on continuous sampling remote sensing data and scheduled field surveys (see **Section 6.2** of **Volume 3, Appendix 2.15.A** of the **ES Addendum**) [AS-237]), which can typically provide reliable results on a weekly timescale. This is required as storms may arrive at high frequency and so a rapid mitigation response will be needed to maintain the standard of protection. A conservative early warning trigger will be set for remote sensing data that, if triggered, would result in an ad hoc confirmatory field survey for verification. If the volumetric trigger for mitigation has been met, mitigation (most likely beach recharge) would be applied.

ExQ1	Question to:	Question:
		All nearshore components will also be covered by continuous sampling remote sensing methods.
	Response by the MMO at Deadline 2	The MMO notes that this question is for the Applicant. However, the MMO provides the following comments: (i) it has been agreed that bed sediment size monitoring is not needed in relation to coastal processes. The question related to the risk of change to bed substrate type for ecological receptors which should be considered elsewhere. (ii) The proposed monitoring strategy is, in general, appropriate as a basis for developing detailed plans in due course. We do however recommend additional Multibeam echosounder (MBES) surveys in the area around the permanent BLF dredged area following the completion of the dredge (It is recommended that additional multi beam surveying is undertaken in the 6 month period following the first establishment of the BLF dredged area to a) confirm the low sedimentation rate in the dredged area and b) confirm the early response of the outer longshore bar to the dredged area. The findings of these surveys will address the uncertainties and allow a better definition of future maintenance dredging requirement). This is recommended to cover the risk of underprediction of infill rates in the dredged area and the potential for effect on the outer longshore bar. Please see the SOCG for our updated comments on the Coastal Processes Monitoring and Mitigation Plan. We would like to further highlight the Environment Agency, Natural England and East Suffolk Council as interested parties on the Coastal Processes Monitoring and Mitigation Plan.
	Response by SZC Co. at Deadline 3	SZC Co notes the MMO's position relating to monitoring of the nearshore bars and will discuss this further with the MMO (and MTF) in consultation of the Coastal Processes MMP.
	Response by RSPB at Deadline 3	The crucial issue (that the Applicant does acknowledges) for us is that the CPMMP may have to be extended but there is only reference to monitoring requirements and not mitigation. As mentioned above as far as we can see there does not appear to be a viable mitigation strategy for the SAC interest north of the Application site despite acknowledging in response to CG1.24 'On the south Minsmere frontage (up to a few hundred metres north of Sizewell C), natural transport and deposition of SCDF sediments

ExQ1	Question to:	Question:
		would increase beach volume and thereby slow the rate of retreat of the shingle barrier, preventing or reducing overtopping, and seawater ingress to the Minsmere south levels.' The Applicant appears not to have demonstrated that by increasing beach volumes with coarser grain material in the SCDF this will benefit the SAC feature and what they will do to address this if monitoring shows it not to be the case
	Response by SZC Co. at Deadline 5	Please refer to the answer at CG.1.1 regarding mitigation of impacts on the Minsmere SAC.
Chapter 11 - CA.1. Compulsory acquisition		
CA.1.3	The Applicant	**The scope and purpose of the Compulsory Acquisition Powers sought** The SoR [APP-062], paragraph 5.5.8, states that Article 25 would authorise SZC Co. to enter onto any land within the Order Limits or which may be affected by the authorised development (whether or not that land is within the Order Limits) to undertake various survey and investigative works, including trial holes. Article 25(2) provides for a 14 day notice period to be given to the owner/occupier of the land. Please provide justification for a 14 day notice period and consider whether this is unreasonably short and should be extended to 28 days?
	Response by SZC Co. at Deadline 2	Article 25 authorises the Undertaker to enter onto any land within the Order limits or which may be affected by the authorised development to undertake various survey and investigative works. Except in cases of emergency, the Undertaker must give no less than 14 days' notice of its intention to exercise its powers under this article. The 14-day period is intended to strike an appropriate balance between giving the owner/occupier a reasonable degree of advance notice of entry on the one hand, and the need to ensure that necessary surveys and investigations are carried out as soon as reasonably practicable on the other. That latter consideration is not simply a matter of avoiding unnecessary delay to the works overall, importantly it also affects the speed with which steps are taken to address the impacts that arise from the authorised development, insofar as these are ascertained using the Article 25 powers. The avoidance of undue delay in both respects is a significant public interest consideration, helping to ensure prompt action is taken where possible to address adverse environmental effects as and when they occur.

ExQ1	Question to:	Question:
		There is a parallel with the equivalent notice period under Article 24 (Protective works to buildings). Article 24(3) provides the Undertaker with a right to enter and survey a building for the purpose of determining how the functions under Article 24 are to be exercised. Before exercising that right, Article 24(5) requires the Undertaker to give not less than 14 days' notice (save in an emergency). The 14-day notice periods in each case are the same as those provided for in the Southampton to London Pipeline DCO[5] (Articles 19 and 20), the Riverside Energy Park DCO[6] (Articles 19 and 20), the Silvertown Tunnel DCO[7] (Articles 15 and 16), the Thames Tideway Tunnel DCO[8] and the Wylfa dDCO[9] as amended by the ExA (Articles 23 and 24). SZC Co. is not aware of any relevant circumstances that would justify a longer notice period in this case, or would mean that the notice period considered appropriate in those other cases ought to be regarded as unreasonably short here. Nor is SZC Co. aware of any particular circumstances in this case that would justify doubling the notice period to 28 days.
	Response by East Suffolk Council at Deadline 3	ESC maintains its previous position that 28 days is a more appropriate timeframe.
	Response by SZC Co. at Deadline 5	No further comment.
CA.1.25	The Applicant	**Whether adequate funding is likely to be available** In the light of the CA Guidance, paragraph 18, what evidence is there to demonstrate that adequate funding is likely to be available to enable the compulsory acquisition within the statutory period following any DCO being made?

[5] Southampton to London Pipeline Development Consent Order (SI 2020 No. 1099)

[6] Riverside Energy Park Order (SI 2020 No. 419)

[7] The Silvertown Tunnel Order 2018 (SI 2018 No. 574)

[8] Thames Water Utilities Limited (Thames Tideway Tunnel) Order (SI 2014 No. 2384)

[9] Examining Authority's Report of Findings and Conclusions for the Wylfa Newydd Nuclear Power Station dated 23 July 2019. Available at: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010007/EN010007-003948-Recommendation%20Report%20-%20English.pdf

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 2	As explained in further detail in the response to **Question CA.1.26** below, sufficient information has been provided through the **Funding Statement** [APP-066], **Funding Statement Addendum** [AS-011], **Second Funding Statement Addendum** [AS-150] and the further information provided through these responses to the Examining Authority's questions to demonstrate that adequate funding is likely to be available within the statutory period following any DCO being made. For details of the evidence relied upon by SZC Co., please see the responses to **Questions CA.1.24, CA.1.27** and **CA.1.32** in this chapter in particular regarding: • The Government's confirmation of the importance of new nuclear plant for the UK's future energy strategy (for example in the Ten Point Plan and Energy White Paper) • The status of Sizewell C relative to potential alternative UK new nuclear projects: Sizewell C is further progressed than other 'large' new nuclear projects; benefits from being a follow on project (to Hinkley Point C); future new technologies (such as Small Modular Reactors and Advanced Modular Reactors) will not be ready to start construction until a number of years after Sizewell C has started construction. Sizewell C is therefore well placed to help meet the Government's objective to bring forward new nuclear projects • The good progress that has been made in the ongoing discussions with the Government on the development of a RAB funding model and the positive engagement that continues to be had with third party investors to secure the financing required for the project The proven ability of RAB funding models to attract financing for large infrastructure projects in other sectors (energy networks, water networks, airports, telecoms etc – please see the response to CA. 1.37 for more details)
	Response by Stop Sizewell C at Deadline 3	CA.1.25 talks of "good progress that has been made" but there is no evidence to support this definition of progress as "good". On 23 June EDF CEO Simone Rossi said to Reuters' Global Energy Transition conference, that the legislation underpinning the new financing scheme was needed this autumn. "I would say this is an essential prerequisite for the project to be enabled because the project needs to be timely delivered and this legislation is now really, really essential." Asked if his company had a Plan B in the event the government did not advance with the legislation, he said: "We do not really. I have to say that would be for the UK government to consider."

ExQ1	Question to:	Question:
		https://www.reuters.com/business/energy/reuters-events-edf-calls-uk-produce-sizewell-funding-legisl ation-2021-06-23/
	Response by SZC Co. at Deadline 5	SZC Co.'s response at Deadline 2 remains valid.
CA.1.26	The Applicant	**Whether adequate funding is likely to be available** The Planning Statement [APP-590], paragraphs 7.3.3-7.3.10, considers financial and technical viability and makes reference to ENS-1 paragraph 4.1, and concludes that based on the Funding Statement the decision maker can be satisfied of the projects viability and that there is a reasonable prospect of the requisite funds for the acquisition becoming available. Please confirm that it is agreed that: (i) This presupposes that the decision-maker is satisfied based on the information provided in the application, that the financial viability and technical feasibility of the proposal has been properly assessed by the applicant? (ii) If the decision-maker is not satisfied from the information provided that the applicant has properly assessed the financial viability of the project, then remains a matter of relevance for the decision-maker?
	Response by SZC Co. at Deadline 2	(i) The **Planning Statement** [APP-590] addresses the Government's planning policy as set out in the NPS on the extent to which the decision-maker needs to consider issues of financial viability in examining applications for energy NSIPs. Paragraph 4.1.9 of NPS EN-1 contains a very clear statement of the Government's approach, which is that this is a matter for the individual applicant to judge within the market framework and taking account of Government interventions. The task of the decision-maker, therefore, is not to reach its own view on financial viability having regard to those factors, but rather to form a judgment, based on the information provided in the application, as to whether "*the financial viability and technical feasibility of the proposal has been properly assessed by the applicant*". That is not the same – and is plainly not intended to be the same – as forming a judgment on whether the development is in fact financially viable. The Government has put in place processes and interventions which will ultimately determine the financial viability of individual energy NSIPs (of all types) and it is not the role of the

ExQ1	Question to:	Question:
		examination process to seek to anticipate how those will operate in respect of each proposed development. Provided that the decision-maker is satisfied that financial viability has been properly assessed by the applicant "*it is unlikely to be of relevance to … decision making*". As the **Planning Statement** [APP-590] explains, SZC Co. has undertaken careful analysis to satisfy itself of the viability of the Sizewell C Project, and sufficient information has been provided through the **Funding Statement** [APP-066], **Funding Statement Addendum** [AS-011], **Second Funding Statement Addendum** [AS-150] and the further information provided through these responses to the Examining Authority's questions to demonstrate that this issue has been properly assessed. In addition, these documents also demonstrate that adequate funding is likely to be available to enable the compulsory acquisition within the statutory period following the order being made, in accordance with paragraph 18 of the 'Planning Act 2008 Guidance related to procedures for the compulsory acquisition of land' dated September 2013. The information further demonstrates that if the Secretary of State were to grant the compulsory acquisition request, the Sizewell C Project is likely to be undertaken and not prevented due to difficulties in sourcing and securing the necessary funding, in accordance with paragraph 26 of the 'Planning Act 2008: Application form guidance' dated June 2013. Paragraph 7.3.10 of the **Planning Statement** [APP-590] concludes that the information provided means that the decision-maker can be satisfied in relation to the issue of viability. As that formulation acknowledges, it is of course ultimately for the decision-maker to reach a judgment as to whether they are satisfied that the financial viability of the proposal has been properly assessed by the applicant. (ii) The inability of an applicant to demonstrate that it has properly assessed the financial viability of a project would be a matter that was important and relevant to the Secretary of State's decision. However, as explained above, it is considered that SZC Co. has sufficiently demonstrated this.
	Response by Stop Sizewell C at Deadline 3	CA.1.26 attempts to deflect questions on the financial viability of the project. Given the expected role of consumers and/or taxpayer funds in supporting the project if the RAB model is to be used, and that the government would only approve it if it "passed" value for money assessments, it would seem reasonable for PINS to take an interest in the financial viability.

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 5	SZC Co.'s explanation at Deadline 2 remains valid.
CA.1.27	The Applicant	**Whether adequate funding is likely to be available** Please summarise the evidence relied upon to support the conclusion that there is a reasonable prospect that the scheme, if granted consent, would actually be taken forward and in what time period?
	Response by SZC Co. at Deadline 2	**Volume 1, Chapter 2** of the **ES** [APP-173] explains the likely timescales and phasing for the project and Plate 2.1 provides an indicative phasing schedule. The evidence relied upon by SZC Co. in reaching the conclusion that there is a reasonable prospect that the scheme, if granted consent, would actually be taken forward within the anticipated timescales is as follows: 1) Investor engagement: As explained in the response to **Question CA.1.32** in this chapter, there is a long list of investor contacts with whom there has been positive engagement and the majority of the investors spoken to have expressed an interest in the project; acknowledged the benefits of new nuclear for UK energy policy and other social and environmental benefits; and indicated a willingness to engage in further and regular correspondence, with a view to potentially participating in the financing of the project. It is anticipated that once development of the funding model with the Government has further progressed, the level of engagement with investors, lenders, credit rating agencies and other financing institutions will increase. 2) Progress on funding model: Discussions are ongoing between SZC Co. and the Government regarding the design of a funding model which would enable SZC Co. to secure the financing that is required for the project, including the use of the RAB funding model for new nuclear projects. Please see the response to **Question CA.1.24** in this chapter with regard to the progress that has been made in these discussions. 3) Urgent national need for new nuclear: The need to bring forward new nuclear projects in the UK has been emphasised in recent Government announcements in November and December 2020 (including the 'Ten Point Plan' and Energy White Paper). Sizewell C is the most advanced new nuclear project in the UK (aside from Hinkley Point C), and in the unique position of being a follow-on UK new nuclear project (providing construction cost efficiencies and risk reductions). It is well placed to help meet the Government's ambitions

ExQ1	Question to:	Question:
		for new nuclear development in the UK. The clear importance of new nuclear to achieve the Government's energy and carbon targets, together with the stated Government aim in the Energy White Paper (at pages 16 and 48) to bring at least one large-scale nuclear project to the point of Final Investment Decision by the end of the Parliament, should generate significant confidence that an appropriate funding model can be agreed to secure the financing requirements that would enable Sizewell C to proceed. 4) Hinkley Point C: EDF Energy has a proven track record in taking forward a similar project, the Hinkley Point C new nuclear power station which is under construction, once development consent and compulsory acquisition powers were granted. Although EDF Energy will become a minority shareholder in Sizewell C once construction starts, it will provide important support to Sizewell C through supply chain contracts; access to nuclear skills and expertise from EDF Energy; information and resource from Hinkley Point C. 5) Existing substantial financial commitment: EDF Energy Holdings Limited and General Nuclear International Limited have made (and continue to make) a substantial financial commitment to develop the Sizewell C Project. They would not commit to an undertaking of this scale if they were not confident that the project would proceed if granted consent and if they were not committed to preparing the project to be able to secure finance and enter construction in a timely manner. Reflecting these factors, EDF Energy Holdings Limited and General Nuclear International Limited are strongly incentivised and focused on ensuring that the project will proceed.
	Response by Stop Sizewell C at Deadline 3	CA.1.27 Timescales. EDF's Annual Report and the updated Implementation Plan submitted by the Applicant at Deadline 2 REP2-044 presumes a Final Investment Decision in mid 2022, but Sizewell C's Safety, Licencing and Assurance Director, Mike Lavelle told a meeting of the Whitehall Group on 27 May that this could be early 2023 (see link via https://www.culandsoc.com/news/whitehall-group-on-line-discussion-hydrogen-production-possibiliti es-and-pilots-being-considered-for-sizewell-c/ - the comments are made at around 4 minutes), and the Government's commitment is for an FID by the end of the the parliament (potentially December 2024).
	Response by SZC Co. at Deadline 5	SZC Co.'s explanation at Deadline 2 remains valid.

ExQ1	Question to:	Question:
CA.1.28	The Applicant	**Whether adequate funding is likely to be available** The Funding Statement [APP-066], paragraph 3.2.1, indicates that the current cost estimate for the project is circa £20 billion. That figure includes design, land acquisition, and physical construction. The Second Funding Statement Addendum [AS-150], paragraph 3.3.6, indicates that the overall estimated cost of the project remains the same as presented in the Funding Statement [APP-066]. Please explain, in the event that the changes to the application are accepted, how that has been calculated to have no impact upon the overall cost estimate?
	Response by SZC Co. at Deadline 2	The response below has been separated into two sections. The first part is intended to provide an overarching description of the interaction between the estimate of the project's cost and the ability of the project to secure adequate funding and the second part provides a direct response to the question asked. *Interaction of the cost estimate and the ability of the project to secure adequate funding* For a number of reasons, the Sizewell C cost estimate will undergo a series of updates between now and FID. The factors giving rise to these changes could result in relatively limited increases or decreases to the cost estimate and include (but are not limited to): ongoing negotiations with the supply chain (including on pricing of contracts); development of engineering scope and site studies to provide a more detailed understanding of the work required at Sizewell C; and confirmation of schedule. These changes to the cost estimate will not have a substantial impact on the outturn cost of electricity produced by Sizewell C. The scope for such changes in the cost estimate is acknowledged, understood and inevitable for an infrastructure project at this stage in its lifecycle. In other words, some or all of the factors described above would be likely to apply to any infrastructure project with more than a year to the start of construction. In a number of respects, Sizewell C has important features which serve to provide a greater level of confidence in its costs today and at FID relative to other large infrastructure projects. These benefits are due to Sizewell C being a follow on project to Hinkley Point C and include: • Significant parts of the engineering design at Sizewell C will be replicated from Hinkley Point C providing a greater level of engineering detail/maturity than is

ExQ1	Question to:	Question:
		typically possible at 'one-off' projects (projects that are not direct follow-ons to a preceding project); • Key parts of the supply chain will be re-used at Sizewell C providing greater visibility on costs (other infrastructure projects might have greater uncertainty on their supply chain providers at an equivalent stage); and • Costs and schedule estimates can be informed/checked with a direct comparison with Hinkley Point C (rather than relying on benchmarks of similar projects). Those factors provide confidence that the changes that will be made as the detail of the Sizewell C cost estimate are finalised are likely to be relatively limited in the context of the project's overall cost estimate. Moreover, the remaining process for finalising the Sizewell C cost estimate is not determinative of the project's ability to secure adequate funding and financing. Under the RAB model, updates in the cost estimate will be reflected in the funding model arrangements. In simple terms, this means the project's anticipated revenue stream (the funding from consumers) will adjust to reflect changes in the cost estimate before FID. In turn, this adjustment to the funding stream means that changes to the cost estimate between now and FID would not be expected to impact the ability of the project to secure the financing that will be required to meet the updated cost estimate and enable the project to proceed. In summary: • For a number of reasons, the Sizewell C cost estimate will change between now and FID • The process to finalise the detail of the Sizewell C cost estimate is acknowledged and inevitable for a large infrastructure project at this stage in its lifecycle • Under the funding and financing arrangements being developed for Sizewell C, future changes to the cost estimate are not expected to impair the ability of the project to 'secure adequate funding' *Direct response to Question CA. 1.28* The statement from the **Second Funding Statement Addendum** [AS-150] (paragraph 3.3.6) was not intended to imply that the changes to the application had no impact on the anticipated cost of building the project.

ExQ1	Question to:	Question:
		Rather the 'cost estimate' as referred to is the assessed cost of building the project at a point in time, based on a defined set of data. The cost estimate for the project is updated on a periodic basis through a formal process. In between updates to the cost estimate, all factors and changes which could impact the cost estimate are recorded and logged to be incorporated in the cost estimate during the update process, for example changes in scope, the ongoing negotiations with the supply chain and the progress in the definition of the project delivery model. This is considered the most efficient and effective way to manage the various data which underpins the cost estimate. Consistent with SZC Co.'s internal process described above, the cost estimate will be updated to incorporate the expected costs of the accepted changes to the Application, as well as all other factors and changes that may impact the cost estimate since the previous update was carried out. Expected costs associated with those changes to the Application which are of greatest significance in terms of cost have been quantified and total c£80m. Whilst the cost implications of the remaining changes are currently being assessed, these are expected to be relatively minor in the context of the project's overall cost. The process described above ensures that the cost estimate is as robust and comprehensive as possible at each stage. At the point of FID in particular, a robust and comprehensive cost estimate will be necessary in order to secure the financing from third parties that the project requires to proceed.
	Response by Stop Sizewell C at Deadline 3	CA.1.28 and CA.1.29. These answers suggest the Applicant is very aware that the cost will increase. We question whether the predicted cost and/or contingencies include the potential for multiple adaptive approaches to the sea defence. We are also aware of significant price rises in construction materials, for example steel has increased 20%.
	Response by SZC Co. at Deadline 5	SZC Co.'s response at Deadline 2 remains valid.
CA.1.30	The Applicant	**Whether adequate funding is likely to be available** The Energy White Paper in relation to nuclear (page 48) expects a 30% reduction in the cost of nuclear new build projects by 2030. Whilst noting that timeline, how does that correspond with the Applicant's own anticipation of costs for the Sizewell C project compared to Hinkley Point C?

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 2	The 30% nuclear new build cost reduction in the Energy White Paper is sourced from the Nuclear Sector Deal, which was published by the Government in June 2018[10]. This refers to the targeted reduction in the cost to consumers for nuclear power relative to the Hinkley Point C Strike Price of £92.50/MWh (£2012) (see page 3 of the Nuclear Sector Deal: Nuclear New Build Cost Reduction report published in September 2020[11]). This would imply a price of electricity at Sizewell C of around £60/MWh. The cost of electricity produced by a nuclear plant comprises operating costs, construction costs and financing costs. As described in the Nuclear Sector Deal: Nuclear New Build Cost Reduction report (above), financing costs were around two-thirds of the Hinkley Point C Strike Price. Reducing financing costs therefore provides a significant opportunity to reduce the ultimate cost of nuclear to consumers from Sizewell C and achieve the 30% cost reduction target referred to. As described in the response to CA.1.24 above, discussions on the funding model with the Government are currently focused on agreeing a RAB model to finance Sizewell C. If a RAB model is applied, and the cost of financing for Sizewell C is in the range of other infrastructure assets financed under a RAB model, then the cost of financing will be substantially lower for Sizewell C than for Hinkley Point C. The combination of anticipated construction cost reductions and financing cost reductions are expected to result in Sizewell C meeting or exceeding the cost reduction target.
	Response by Stop Sizewell C at Deadline 3	CA.1.30, CA.1.33 and CA.1.37 Our Deadline 2 submission REP2-449 examines whether Sizewell C can achieve reductions in cost, leading to a reduction in the price of electricity, and concludes that this is not possible.
	Response by SZC Co. at Deadline 5	SZC Co. response at Deadline 2 remains valid.

[10] HM Government's Nuclear Sector Deal published in June 2018. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/720405/Final_Version_BEIS_Nuclear_SD.PDF

[11] Nuclear Sector Deal: Nuclear New Build Cost Reduction report published in September 2020. Available at: https://www.niauk.org/wp-content/uploads/2020/09/New-Build-Cost-Reduction-Sector-Deal-Working-Group.pdf#:~:text=The%20Nuclear%20Sector%20Deal%2C%20published%20in%20June%202018%2C,Sector%20Deal%2C%20the%20New%20Build%20Cost%20Reduction%20Working

ExQ1	Question to:	Question:
CA.1.32	The Applicant	**Whether adequate funding is likely to be available** The Second Funding Statement Addendum [AS-150], paragraph 3.3.6, indicates that the Applicant continues to have positive engagement with potential third party investors: (i) Please explain further what is meant by 'positive engagement'; (ii) whether any formal agreement or commitment to invest from third parties, subject to the necessary approvals being obtained, has been achieved; (iii) Why the development of the RAB funding model would be supportive of the project securing its financing requirements?
	Response by SZC Co. at Deadline 2	(i) Engagement with potential investors has taken various forms and has been ongoing since 2018/19. The engagement has included meetings to introduce and discuss the project; meetings to discuss the environmental and social impacts of nuclear generically and Sizewell C specifically; site visits to Hinkley Point C and Sizewell B; appearing at investor conferences; and a number of events/talks organised by SZC Co. SZC Co. appointed a financial advisor (Rothschild and Co) in late 2019 and they have also been undertaking investor engagement on behalf of SZC Co. Through this engagement, SZC Co. has built up a long list of investor contacts who would like to be kept informed about progress of the project and the funding model discussions with the Government, with a view to potentially participating in the financing process when it begins. A number of additional potential investors have been identified and will be brought into the engagement. It is anticipated that once development of the funding model with the Government has further progressed, the level of engagement with investors, lenders, credit rating agencies and other financing institutions will increase. The engagement has been positive in the sense that the majority of the investors spoken to have expressed an interest in the project; acknowledged the benefits of new nuclear for UK energy policy and other social and environmental benefits; and indicated a willingness to engage in further and regular correspondence, with a view to potentially participating in the financing of the project. (ii) Formal agreement to invest would not be expected to occur until FID and has not yet been reached with any third parties.

ExQ1	Question to:	Question:
		(iii) The RAB model has a proven track record for attracting infrastructure investors. In the UK electricity, gas, water, telecoms and airports are all to some extent funded under a RAB model (for example it can be shown that the value of assets funded under a RAB model in the UK today is around £180bn). Key features of the RAB model that attract investors are that it is a funding model that provides a predictable revenue stream with low volatility returns and that it is capable of achieving a strong investment grade credit rating. The design of RAB funding models provides a number of features which give rise to this investment profile, including (but not limited to): risk protections for investors; revenue allowances specifically calculated to allow investors to recover appropriate costs; an allowed return on investment that is commensurate with the cost of finance facing the investors; and a general duty on the regulator to allow companies to finance their activities. There is also a track record for RAB models enabling the financing of greenfield construction projects. The most relevant comparator is the Thames Tideway Tunnel, which secured its financing requirement at a low cost of capital. In December 2020, the Government published its response to the comments it received in the 2019 public consultation on a RAB model for new nuclear. The Government stated that: *"Having assessed the consultation responses, including the broad agreement from industry and those members of the public who were not in-principle opposed to nuclear to our proposals, we believe that a RAB in line with the high-level design principles set out in the consultation remains a credible basis for financing large-scale nuclear projects."*
	Response by Stop Sizewell C at Deadline 3	Our Deadline 2 submission REP2-449 reports that three of the UK's largest infrastructure investors, Aviva, Legal & General, Prudential have indicated they have no plans to invest in Sizewell C. We believe more will follow as the ESG challenges become clear.
	Response by SZC Co. at Deadline 5	Sizewell C considers that the project itself and nuclear as a technology has a number of important ESG strengths. These are likely to be beneficial for attracting investors to the project.
CA.1.34	The Applicant	**Whether adequate funding is likely to be available** The Second Funding Statement Addendum [AS-150], paragraph 3.3.5, refers to the publication of a summary of the responses to the Government's RAB consultation which indicate that a RAB model remains credible for funding large-scale nuclear projects. The

ExQ1	Question to:	Question:
		Energy White Paper reiterates that position and indicates that it will continue to explore this, alongside a range of financing options with developers. Whilst examining the potential role of Government finance during construction, that is subject to there being clear value for money for consumers and taxpayers. Given that hurdle, explain why the Applicant remains confident that the required funding will be achieved?
	Response by SZC Co. at Deadline 2	While the criteria of the Government's value for money assessments have not been publicly announced, SZC Co. is confident that there is a strong value for money case for the project. The value for money assessment is likely to be completed shortly before FID for Sizewell C, so that the assessment can reflect up to date information at the point the project is sanctioned by Government (including for example, the details of the funding model and the expected power price of SZC). As FID is not anticipated to occur until after the DCO grant, the value for money assessment is likely to conclude sometime after the end of the DCO examination. This reflects the fact that the judgment as to whether the project provides value for money is separate from the decision on whether the project is acceptable under the Planning Act 2008. It would therefore be both impractical and inappropriate for the Secretary of State to seek to pre-judge that issue when determining the DCO application. The importance of new nuclear for the UK's energy future is clearly established in national policy, as explained in detail in the **Planning Statement** [APP-590]. It is also demonstrated by a number of evidence points, including: • Modelling analysis of the future energy system consistently shows the importance of 'firm' (non-weather dependent) forms of low carbon electricity. New nuclear is the most proven/established technology that provides firm low-carbon power. • Recent Government publications (discussed in the response to CA.1.27 above) and the accompanying Modelling 2050: Electricity Systems Analysis published in December 2020[12] have clearly demonstrated the Government's view that new nuclear is an important component of the UK's energy policy.

[12] Department for Business, Energy & Industrial Strategy, Modelling 2050: Electricity System Analysis dated December 2020. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/943714/Modelling-2050-Electricity-System-Analysis.pdf

ExQ1	Question to:	Question:
		• Sizewell C is the most advanced new nuclear project in the UK today (aside from Hinkley Point C) and the only new nuclear project which is a follow-on to a preceding UK project using the same technology (Hinkley Point C). With the benefits of the replication of Hinkley Point C, Sizewell C will achieve substantial reductions in construction cost and risk, which in turn provides a number of value for money benefits: • First, there is a direct benefit of construction cost savings – which provides a reduction in costs to consumers. • Second, the lower risk profile improves the value for money impacts of implementing a funding model (such as the RAB model) which shares risks between investors and consumers / taxpayers. As a result, SZC Co. considers it will be possible to design a funding model which attracts finance at a low cost of capital, while providing value for money for consumers and taxpayers. • In combination, this is anticipated to allow Sizewell C to proceed at a cost which reduces electricity system costs (and therefore consumer bills). The project also offers a number of other important social and environmental benefits which enhance the value for money case. These include: • high levels of economic activity across the UK; • valuable skills and training for the workforce including a large number of apprenticeships; • strategic value to the UK of an enhanced UK nuclear supply chain which will be of benefit to subsequent new nuclear projects (including new technologies); • the potential to use low-carbon heat from Sizewell C for applications including hydrogen production, capturing carbon emissions (direct air capture); • low land use relative to other low carbon technologies; and • creation of a positive environmental impact in the local area giving rise to an overall bio-diversity net gain. The ability of Sizewell C to provide value for money will benefit from anticipated reductions in construction and financing costs which in turn are expected to enable Sizewell C to produce electricity at a price which reduces consumer bills. In addition, the

ExQ1	Question to:	Question:
		important wider social and environmental benefits described above further enhance the proposition offered by Sizewell C. These strengths and the fact that Sizewell C is the most advanced new nuclear project in the UK (aside from Hinkley Point C) mean it is well placed to meet the Government's aim to bring forward one new large nuclear plant this parliament and help fulfil the UK's need for new nuclear more generally. In combination, the fundamental strengths of Sizewell C and the UK's need for new nuclear projects to come forward in the short to medium term provide confidence that the value for money test will be met and a funding model will be developed that enables Sizewell C to raise the finance it requires to proceed.
	Response by Stop Sizewell C at Deadline 3	It is of concern that the Value for Money criteria have not been published and we are calling for greater transparency from BEIS on this. We respectfully suggest that the Examining Authority do likewise. In relation to the Applicant's reference to "need" see also Energy Systems Catapult's new report referenced below [*refer to REP3-133*].
	Response by SZC Co. at Deadline 5	Details of the Value for Money criteria and their potential publication are matters for the UK Government.
CA.1.65	The Applicant	**Adequacy of any Protective Provisions set out in the dDCO and the need for any other Protective Provisions to safeguard relevant interests** The relevant representation of East Suffolk Internal Drainage Board [RR-0345] welcomes the consideration of the benefits of including a protective provision for drainage and flood risk authorities (including Internal Drainage Boards) within the draft DCO. Please provide an update on progress and indicate whether such protective provisions have been agreed. If not, please set out any areas of disagreement?
	Response by SZC Co. at Deadline 2	These matters are considered in the **Statement of Common Ground between SZC Co. and East Suffolk Internal Drainage Board** (Doc Ref. 9.10.3).
	Response by East Suffolk Internal Drainage Board at Deadline 3	It has not yet been agreed but discussions are expected to continue shortly.

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 5	No further comments.
CA.1.67	The Applicant	**Adequacy of any Protective Provisions set out in the dDCO and the need for any other Protective Provisions to safeguard relevant interests** The relevant representation of Suffolk County Council [RR-1174], seeks Protective Provisions for its role as the Local Highway Authority in order for it to continue to discharge its duties under the Highways Act (1980) within those parts of the public highway included within the Order Land. The Council also proposes that Protective Provisions should be considered for other topic areas, such as its Lead Local Flood Authority and statutory archaeological roles. Please respond and indicate whether any such protective provisions are being negotiated and/or have been agreed?
	Response by SZC Co. at Deadline 2	SZC Co. considers that the Article 21 process provides sufficient protection to SCC in their role as Highway Authority. SZC Co. will continue to work with SCC to ensure they are comfortable. Please see the response to **Question DCO.1.30** in **Chapter 14** (**Part 4**) of this report which explains the Article 21 process.
	Response by Suffolk County Council at Deadline 3	SCC notes the view of the Applicant on the matter of Protective Provisions but considers that there is not the necessary certainty yet provided for the protection of the Council as Local Highway Authority (LHA) through this process. Unless these matters can be resolved through the Article 21 process and / or other agreements before the completion of the Examination, then SCC would prefer the clarity of a set of Protective Provisions to be inserted as a Schedule to the DCO. SCC notes that protective provisions have been provided for the LHA in other DCOs. In order to aid the process of taking this forward, SCC is drafting text for such Provisions and will share this with the Applicant shortly with the aim of reaching agreement on the matter. Further progress on this will be reported at Deadline 4.
	Response by SZC Co. at Deadline 5	SZC Co. continues to work closely with SCC to ensure that the DCO provisions as a whole adequately secure the highway works.
Chapter 12 - CI.1 Community Issues		
CI.1.0	The Applicant ESC	**Accommodation Strategy**

ExQ1	Question to:	Question:
		Within the Accommodation Strategy [APP 613] para 5.4.10 – reference is made to the layout being shared with ESC. (i) Please provide a copy of the layout and indicate the facilities that are to be included. (ii) Please provide an update of the latest position on the delivery, operation and management of the site and how these components would be secured through the DCO
	Response by SZC Co. at Deadline 2	<u>Response to (i)</u> A copy of the LEEIE caravan park layout is provided in **Figure 2.9** of the written responses. Each pitch will be provided with electricity and the site will provide separate toilet and shower facilities. Spacing of pitches and the ratio of toilets / showers required are in line with ESC advised standards. A foul treatment plant is proposed to address concerns about local capacity raised during consultation. The amenity building is expected to include laundry facilities and a vending machine for snacks. No bar or restaurant is proposed as lessons learnt from external caravan site owners at Hinkley Point C indicate that workers bringing caravans do not tend to use on-site bars and restaurants. In addition, the facilities of Leiston are close by and workers' use of these will deliver local economic benefits. The site will include 24/7 security and a vehicle inspection cabin would be provided to support this. (ii) In terms of securing mechanisms, for the LEEIE caravan park, Work No. 1A(ee) has been added to the latest **draft Development Consent Order** (DCO) (Doc Ref. 3.1(C)) which reads: '*serviced pitches for up to 400 caravans and 400 temporary car parking spaces'*. The delivery of the caravan park and timings are set out in the **Draft Deed of Obligation** (Doc Ref. 8.17(C)), with reference to the implementation plan. This reads: '*3.2.1 Unless otherwise agreed with the Accommodation Working Group, SZC Co shall use reasonable endeavours to deliver the LEEIE Caravan Park in accordance with the Implementation Plan'.* The **Implementation Plan** (Doc Ref. 8.4I(A)) indicates that the LEEIE caravan park is planned to open at the end of year 1 of construction.

ExQ1	Question to:	Question:
		It is proposed that the caravan park be operated and managed by an experienced accommodation operator and since submission of the Application for development consent, SZC Co. has been meeting with a number of local site operators to gauge interest in this opportunity. In terms of operation, the LEEIE caravan park will be open to Sizewell C workers only with no families or pets (including dogs) permitted. A 24/7 security presence will be maintained to manage entry to the site, keep residents safe and ensure that high standards of worker behaviour are maintained, in line with the Worker Code of Conduct that all Sizewell C workers will be required to sign (see section 4.5 Part A and section 1.2 Part B **Code of Construction Practice** (Doc Ref. 8.11(B)) and appendix to the **Community Safety Management Plan** for HPC example [APP-636]). Workers will be able to access the site 24/7 to accommodate all shift patterns and direct bussing will be provided to the main development site from the park and ride site at LEEIE. This will be secured through the **Construction Worker Travel Plan** (Doc Ref. 8.8(A)) (see response to **CI.1.1** below).
	Response by East Suffolk Council at Deadline 2	The Applicant will provide a response to (i) and (ii).
	Response by SZC Co. at Deadline 3	No further comments to add to SZC Co. response for Deadline 2.
	Response by East Suffolk Council at Deadline 3	ESC is keen to promote opening of the LEEIE caravan park as early in the construction programme as practicable.
	Response by SZC Co. at Deadline 5	SZC Co. welcomes the response from ESC that it is now "*keen to promote opening of the LEEIE caravan park as early in the construction programme as practicable*", rather than prior to any commencement of construction, and is continuing to discuss the practicalities with ESC to reach agreement. In practice, utilities diversions and site access works are necessary before the caravan park can be laid out.
CI.1.6	The Applicant	**Accommodation Strategy** (i) What confidence can the ExA have that the accommodation campus and proposed caravan site would be optimally occupied during construction? (ii) How would this be achieved?

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 2	Response to (i) Evidence from Sizewell B and Hinkley Point C provides confidence that the project accommodation will be well occupied: • As set out in **Volume 2, Chapter 9, paragraph 9.7.117** (Socio-economics), of the **ES** [APP-195]), Sizewell B provided a successful 900-room on-site campus during construction and was regularly at capacity with an average waiting list of over 100 workers. • **Paragraph 9.7.118** [APP-195] notes that at Hinkley Point, the on-site campus is particularly sought after by contractors and that caravan accommodation is popular with the civils workers who have formed the majority of the workforce to date. HPC campus occupancy data from January to April 2021 demonstrates that on the busiest days of the week, the Hinkley Point Campus is very close to full capacity (94% average on Mondays, 99% average on Tuesdays, 98% average on Wednesdays, 89% average on Thursdays). **Appendix 12A** of this Chapter shows a letter in support of the Hinkley campuses from Bylor, the Tier 1 main civils work contractor. • The most recent workforce survey for Hinkley Point C[13] indicated that 11% of the NHB workforce were staying in caravan accommodation, while 29% were staying on one of the campuses. Response to (ii) SZC Co. will not be able to mandate where workers live. However, it will encourage workers to choose the campus and LEEIE caravan park by providing facilities that workers will want to use, in an optimal location and at a price they are willing to pay. The response to question **Cl.1.2** sets out ways in which SZC Co. will endeavour to make the campus an attractive and welcoming accommodation choice to workers, with additional detail in **Appendix A** of the **Design and Access Statement** [APP-587]. The response to question **Cl.1.0** provides details of LEEIE caravan park and notes that this will provide fewer on-site facilities, building on lessons learned from external caravan site owners at Hinkley Point C that workers bringing caravans do not tend to use on-site bars and restaurants, and that low pricing is key.

[13] Socio-Economic Advisory Group (sedgemoor.gov.uk)

ExQ1	Question to:	Question:
		Lessons have also been learnt from Hinkley Point C and have been/will be applied to Sizewell C to encourage optimal occupancy. **Sections 5.1** and **5.2** of the **Accommodation Strategy** [APP-613] set out some of these. In addition, since the DCO submission, discussions have taken place with HPC Tier 1 contractors to understand further lessons learnt. These include: • Location of accommodation campus and LEEIE caravan park – the reduction in travel time through using these on-site facilities should be seen as a key benefit and make them attractive for workers to use. • Less flexible bus services – at Sizewell C, buses will not collect from as many offsite locations as they did at Hinkley Point C. This should encourage workers to utilise the well-connected facilities of the campus and caravan park (which will have bus services straight to working areas on site). • Early delivery of project accommodation – SZC Co. is proposing to have the LEEIE caravan park site ready within 12 months of construction commencing and will open the campus in a phased manner to make rooms available earlier than would be the case if it was built through to completion prior to first occupation (see the **Draft Deed of Obligation** (Doc Ref. 8.17(C)). • Promotion of the caravan park and campus through contractors prior to induction and through the use of the Accommodation Management System which is secured through the **Draft Deed of Obligation** (Doc Ref. 8.17(C)). • Providing more flexible booking options, such as: allowing block-bookings, long-term bookings, and flexibility of weekend use (leaving belongings when returning home). • Provision of laundry facilities and areas where workers can prepare their own snacks e.g. with microwaves and toasters. • Pricing - the terms of the contract [to be entered into] with the operators of the campus and caravan park will not preclude the Sizewell C Project from being able to change pricing/terms to drive occupancy up should this be needed. Ongoing monitoring by the Sizewell C site operations team to ensure uptake and demand for both campus and caravan park is visible so that actions may be taken to drive greater utilisation should this be necessary. The Draft Deed of Obligation (Doc Ref. 8.17(C)) provides that the Accommodation Coordinator appointed by SZC Co. throughout

ExQ1	Question to:	Question:
		construction shall be responsible for monitoring the utilisation of the campus and caravan park.
	Response by Stop Sizewell C at Deadline 3	CI.1.6. states that EDF cannot mandate where workers live but expresses confidence the campus would be well used. The Guardian reported in August 2019 of the Hinkley C campus that a worker said: "You can find cheaper accommodation elsewhere," And you have more freedom to come and go without being monitored." https://www.theguardian.com/uk-news/2019/aug/14/hinkley-negative-life-site-shadow-bridgwater
	Response by SZC Co. at Deadline 5	Campus accommodation is proving popular at Hinkley Point C, and was also popular during the construction of Sizewell B, as set out in the response by SZC Co. at Deadline 2, response to (i) above. SZC Co. is incentivised to ensure best use of its investment in the campus and recognises the benefits for the Project of having construction workers so close to the site. However, not all workers will want to live on the campus, some will prefer to stay in the caravan park or in local tourist or private rented accommodation; others may want to buy property, particularly if they are bringing families and staying long term. That is why the **Accommodation Strategy** [APP-613] seeks a balanced approach. Paragraphs 1.1.5 - 1.1.6 explain: *"1.1.5 In response to the requirement for a large NHB workforce, SZC Co. has developed a balanced Accommodation Strategy. This strategy makes use of existing local accommodation where possible, in order to deliver local economic benefits, but also seeks to avoid impacts on the local accommodation market by providing temporary project accommodation in the form of a single, 2,400 bed accommodation campus on the main development site and a caravan park with up to 400 pitches (with an estimated occupancy of 1.5 workers per caravan) on the land east of Eastlands Industrial Estate in Leiston (LEEIE). 1.1.6 SZC Co. is also proposing to establish a Housing Fund to support the local housing market during the construction phase by boosting and improving the efficiency of existing supply, providing resilience, and supporting the delivery and management of tourist accommodation."*
CI.1.11	The Applicant, ESC, SCC	**Leiston** The Town Council express concern that the mitigation for impacts from a large influx of predominantly male workers has not been fully addressed, with the only specific mitigation proposed the sports facilities at the Academy.

ExQ1	Question to:	Question:
		The concerns in respect of the potential community impacts are much broader than just the effects on sports provision. Please respond to these concerns and explain how the ES has considered the broader community effects of a large influx of largely male workers and what mitigation would be secured to address these community effects.
	Response by SZC Co. at Deadline 2	Leiston-cum-Sizewell Town Council's representation [RR-0679] states: "*Personnel movement into and out of the town to access services, leisure and businesses will put a lot of pressure on the amenity of local residents – particularly with housing, access to footpaths and social cohesion - it will also make huge changes to the current socio-economic activity. The effect on residents needs to be acknowledged and mitigated for*", and "*The provision of sports facilities is welcome. Sport is not the only cultural or recreational activity in the town however and further mitigation in this area is requested. Especially as, during construction, the provided sports facilities, which are there for SZC workforce, would not be as readily accessible as maybe wished by residents. LTC has a positive and wide ranging mitigation proposal to offset this for both residents and workers families which would need SZC Co. support. It will be important to ensure robust community cohesion during the inevitable upheaval this project brings and it is intended to provide an oasis for families where this can be achieved at the Waterloo Centre*". SZC Co. recognises Leiston will experience temporary and permanent change as a result of the Sizewell C Project and has designed a package of mitigation measures which will proportionately focus on Leiston's residents, workers and businesses, including generating a range of legacy benefits for Leiston's future advantage. **Volume 2, Chapter 9** (Socio-Economics) of the **ES** [APP-195] provides an assessment of the likely significant effects on public services and community facilities (paragraphs 9.7.159 to 9.7.210); crime, anti-social behaviour and policing (paragraphs 9.7.211 to 9.7.230); and community cohesion and integration (paragraphs 9.7.241 to 9.7.246) during the construction of the Sizewell C Project. **Volume 2, Chapter 9** (Socio-Economics) of the **ES** [APP-195] provides an assessment of the likely significant effects on public services (paragraphs 9.7.280 to 9.7.281); and community cohesion and integration (paragraphs 9.7.282 to 9.7.284) during the operation of the Sizewell C Project.

ExQ1	Question to:	Question:
		Volume 2, Chapter 9 (Socio-Economics) of the **ES** [APP-195] provides the mitigation proposed for the significant impacts of the Sizewell C Project. A wide range of embedded and additional mitigation is proposed to support the community during the construction and operation of the Sizewell C Project, including in relation to an increase in non-home based workers. The programme of mitigation includes: • A temporary accommodation campus for construction workers, including facilities such as a gym, restaurant, bar and informal recreation activities, and welfare, contributing to reducing potential effects on public safety and emergency services (paragraphs 9.6.6 to 9.6.7); • A temporary caravan park for construction workers, designed to contribute to reducing potential effects on public safety and emergency services (paragraphs 9.6.8 and 9.6.9); • Permanent off-site sports facilities, in the form of a 3G pitch and two multi-use games areas at Alde Valley School in Leiston, providing facilities to respond to the likely rise in demand from the workforce as well as investment in facilities to make a positive contribution to integration and the experience of the workforce and local community. Measures would be built into the design to reduce safeguarding risks, such as physical and temporal segregation of use by workers and the community, and the school (paragraphs 9.6.12 to 9.6.15); • The **Code of Construction Practice (CoCP)** (Doc Ref 8.11(B)) will include a strategy for communication, community and stakeholder engagement, and community liaison activities, to address issues relating to community cohesion and integration that may arise from members of the public (paragraph 9.6.36); • A Worker Code of Conduct, Appendix 1.A.1 of the **Community Safety Management Plan** [APP-636], will be put in place to set required standards on behaviour both on and off-site, and includes the use of security vetting for potential workers (paragraphs 9.6.37 to 9.6.40); • Transport measures related to road safety include a **Traffic Incident Management Plan** (Doc Ref. 8.6(A)), **Construction Traffic Management Plan** (Doc Ref. 8.7(A)), and the **Construction Worker Travel Plan** (Doc Ref. 8.8(A)). These will be secured through an obligation in the **Deed of Obligation** (Doc Ref. 8.17(C)). These implementation strategies would contribute to a reduction in significance of potential

ExQ1	Question to:	Question:
		effects on emergency services, which rely on local roads to respond to incidents (paragraphs 9.6.41 to 9.6.42); • Localised effects on the accommodation market, as a result of the influx of non-home based workers, will be managed by the **Accommodation Strategy** [APP-613] which contains measures to specifically target hard to reach and vulnerable groups that may experience difficulties accessing or retaining housing as a result of the Sizewell C Project's effects on the lower end of the private rented sector. The Housing Fund, secured through the **Draft Deed of Obligation** (Doc Ref. 8.17(C)), would be capable of delivering additional capacity and providing resilience in the build up to peak demand and during the peak, and may have the potential to leave a lasting legacy in terms of improvements to the existing housing stock (paragraphs 9.8.15 to 9.8.22); • To help manage the distribution of workers and avoid or reduce potential adverse effects on accommodation capacity in local areas in a responsive way, SZC Co. would work with partners to deliver and implement an Accommodation Management System, secured through the **Deed of Obligation** (Doc Ref. 8.17(C)) (paragraph 9.8.23 to 9.8.24); • An information management and database/portal would hold and manage information about the local accommodation market which can be used to provide contractors and workers with a means of finding the most suitable accommodation and location. • In addition, information would be provided to prospective or existing landlords that could help ensure they are providing accommodation that meets safety and quality standards. This would help to avoid the risk of landlords being unaware of rules and regulations that apply to letting property, or new providers entering the market with accommodation of an unacceptably low standard (paragraphs 9.8.25 to 9.8.31); • The Public Services Resilience Fund will be drawn on to expand education provision in locations with limited capacity where the net additional effect of the workforce exceeds education capacity. The Fund would be secured through **Deed of Obligation** (Doc Ref. 8.17(C)) (paragraphs 9.8.32 to 9.8.36); • The Public Services Resilience Fund would additionally be made available to respond to any residual effects of the Sizewell C Project on the provision of social services, alongside measures set out in the **Accommodation Strategy** (including the Housing

ExQ1	Question to:	Question:
		Fund), the **Community Safety Management Plan**, and the Accommodation Management System (paragraphs 9.8.37 to 9.8.41); • The **Community Safety Management Plan** [APP-635] has been developed in collaboration with the Councils, emergency services and health stakeholders and includes appropriate means of monitoring and mitigating potential impacts relating to community safety, community cohesion, and the provision of policing, fire and rescue services (paragraphs 9.8.46 to 9.8.57); and • The Sizewell C Community Fund will be made available to fund schemes, measures and projects to help mitigate intangible, residual in-combination effects on local communities as a result of combined environmental effects, both perceived and real. The Community Fund will be secured through the **Deed of Obligation** (Doc Ref. 8.17(C)) (paragraphs 9.8.65 to 9.8.69). The **Deed of Obligation** (Doc Ref. 8.17(C)) will secure a number of these mitigation measures. Many of the measures, including the Public Services Contingency Fund and Housing Fund will be managed by a combination of East Suffolk Council, Suffolk County Council and/or other public service providers who will retain the statutory powers to direct resources in the most appropriate way. SZC Co. has undertaken extensive engagement with stakeholders across a wide range of issues and matters. The **Draft Deed of Obligation** (Doc Ref. 8.17(C)) provides the latest position generated through joint working, notably for reference: • Schedule 14 (paragraph 2.5) states that a ringfenced sum from the Sizewell C Community Fund will be applied solely for projects within the ward of Leiston, and "*in particular Leiston-cum-Sizewell*". The Sizewell C Community Fund will be used to mitigate intangible and residual impacts of the Sizewell C Project on communities via grants for schemes, measures and projects which promote economic, social and environmental well-being and improvements to quality of life. This may include cultural or recreational activities tied to these principles. • Schedule 7 sets out the employment, skills, education and supply chain measures that will be delivered, including the Sizewell C Employment Outreach Initiatives which will focus on hard-to-reach groups and communities within Suffolk experiencing relative deprivation, and the Sizewell C Bursary Scheme which is aimed at supporting the removal of barriers to employment for local people, particularly in areas of relative deprivation. Together these mitigation measures aim to address

ExQ1	Question to:	Question:
		social mobility in areas immediately close to the Sizewell C Project, notably in Leiston. • Schedule 8 sets out the localised heritage interventions that include payments towards the enhancement of heritage sites at Leiston Abbey. • Schedule 16 explains the Leiston Improvement Scheme for transport improvements which include walking, cycling and public realm interventions to enhance the built environment and sustainable accessibility in the area, including along Main Street, High Street, Cross Street, Sizewell Road, Valley Road, and near Leiston Library. The Leiston Transport Contribution will help pay for this work and the Leiston Working Group will oversee the Scheme. • Schedule 15 sets out details of the Tourism Fund, which is intended to mitigate potential impacts on tourism from the Sizewell C Project, and will be implemented to support areas where the benefits will be most greatly felt.
	Response by East Suffolk Council at Deadline 2	A number of these concerns will be addressed through the Community Safety theme of the Section 106 agreement which covers: (a) community safety initiatives with the aim of reducing crime and disorder and anti-social behaviour; (b) safeguarding initiatives; (c) initiatives that promote community cohesion and wellbeing; (d) community health/wellbeing (including mental and sexual health) services and initiatives; (e) initiatives with the aim of protecting vulnerable people against violence (e.g. gang violence), domestic abuse, and exploitation (e.g. trafficking, prostitution and modern slavery); (f) initiatives with the aim of raising awareness of and promoting the safe use of drugs and alcohol; and (g) initiatives with the aim of promoting road safety. There will also be the opportunity for specific projects led by the voluntary sector and community organisations to be funded through the Community Fund. Through the S.106 mitigation measures, ESC also recognises the impact and issues that will be created through an influx of 5,900 NHB workers into East Suffolk and surrounding

ExQ1	Question to:	Question:
		areas, with a particular impact on the Leiston community, where the local population will increase by 48% during the peak construction period, which will radically change the demographic of this town particularly and other towns and surrounding areas across East Suffolk. The East Suffolk CSP is proposing a number of mitigating measures to address the risk effects of the projected influx of NHB workers and provide support to the workers and local community to diffuse the potential tension in the area including – bolstering local Voluntary Community Social Enterprise groups to provide activities and support. Re-introducing successful schemes including pubwatch, Nightsafe and Town pastor schemes and bolstering existing schemes to promote responsible drinking, reduce risks and fears experienced by communities and to support vulnerable people in terms of the night-time economy. Training will be provided to local communities including publicans in conflict management. Raising awareness provides necessary information in relation to the likely risks and effects and mitigating actions and measures to enable communities to stay safe. Provision of information packs and support to arriving workers to enable them to settle within the local community. Provision community events and activities to facilitate community cohesion and alleviate any potential tension between the Sizewell C workers and the local community. It is essential that the CSP mitigation measures and support to be provided through the CSP is secured through the s.106 support to recruit the Community Liaisons officers to work on behalf of the CSP to work closely with local communities to encourage reporting of impacts and issues, provide support and make referrals to local agencies to take the necessary action to promote community cohesion across local communities through a range of planned and proposed measures and actions. Regular monitoring of issues and impacts and working with local communities will ensure the appropriate reporting of issues and the appropriate action and address through the CSP and relevant partner or agency. Further detail in Chapter 28 of the LIR [REP1-045].
	Response by Suffolk County Council at Deadline 2	From a Community Safety perspective, SCC is concerned that there is a risk that a large influx of predominantly male workers could impact a number of crime types, including criminal exploitation, gangs, county lines, domestic abuse, sexual violence, and hate crime. SCC expects to participate in mitigation through use of Public Sector Resilience Fund and/or Community Fund. We would use this to enhance our existing work

ExQ1	Question to:	Question:
		programmes to ensure that more support services/awareness raising, and training are available from years 1 to 12 of the Sizewell C project.
	Response by SZC Co. at Deadline 3	No further comments to add to SZC Co.'s response for Deadline 2 – please refer also to SZC Co's responses within the **Comments on the Councils' Local Impact Report** (Chapters 27 and 28) (Doc Ref. 9.29).
	Response by Suffolk Constabulary at Deadline 3	i. Suffolk Constabulary acknowledges that whilst sports and such recreational facilities will address some of the needs of the SZC workforce, other forms of recreation and social activity will be sought within the Night-time Economy (NTE). Taking account of the predicted higher risk demographic profile of the NHB workforce and as effective management of the NTE does require substantial policing engagement, this will increase the net additional policing demands resulting from the Sizewell C (SZC) project. Through recent discussions with the Applicant and Avon & Somerset Police (regarding the management of community safety at Hinkley Point C (HPC)) it is now clear that the proposed 'security vetting' relates only to ensuring compliance with nuclear site licensing and the suitability of personnel to undertake specific roles on the SZC site, rather than considering the potential for adverse community safety impacts from the workforce population, including crime risks, on off-site communities. Whilst the proposed security vetting is a welcome step, it needs to be understood that the level of vetting proposed may not itself preclude prospective workers with previous criminal convictions or otherwise posing potential community safety risks from becoming employed at SZC. It is also not possible for the Applicant to enforce a higher standard of security vetting, e.g. one which could ensure those with previous criminal convictions are not employed, as vetting requirements must be proportionate for the security and safety needs of individual roles. This limits the effectiveness of the Applicant's proposed vetting to materially act as a community safety mitigation measure. For the reasons detailed within Part 2 of Suffolk Constabulary's Written Representation (REP2-168), whilst the Applicant's Worker Code of Conduct is

ExQ1	Question to:	Question:
		welcomed, this does not provide a robust means to either prevent or monitor criminality, disorderly behaviour or antisocial behaviour. Suffolk Constabulary will be unable to use the Code of Conduct to ascertain whether suspects or arrested persons are either directly or indirectly associated with SZC. Whilst reference to the Public Services Resilience Fund is welcomed, associated governance structures need to be robust and transparent whilst the ability to access funding in a timely manner in order to deploy effective mitigation 'on the ground' in response to community safety incidents will be essential. The Deed of Obligation document (S106) must include robust provisions to ensure adequate and effective mitigation and monitoring, including in relation to changes in workforce levels and community safety impacts as well as in relation to the adequacy and effectiveness of deployed mitigation. ii. Suffolk Constabulary works closely with East Suffolk Council (ESC) and other key partners to address community safety, crime prevention and policing issues in an integrated, efficient and effective manner. The Constabulary notes that the Local Impact Report submitted by ESC (REP1-045) identifies a wide range of likely community safety impacts and succinctly defines the organisations and associated roles required to effectively manage and mitigate impacts from substantial demographic change during the SZC construction period. Suffolk Constabulary's main role in addressing community safety impacts will be focused on crime deterrence, emergency response (including multi-agency coordination role), enforcement (including investigations) and community reassurance. This is distinct from prevention, awareness raising and wider incident response roles of nonemergency services. Suffolk Constabulary and ESC there have distinct but complimentary mitigation requirements to address the net additional community safety impacts arising from the SZC project. Suffolk Constabulary supports the view that a dedicated team of Community Liaison Officers will be required (alongside other proposed mitigation) to help minimise potential community tensions and to ensure that mitigation provided through public and emergency services functions efficiently and effectively.

ExQ1	Question to:	Question:
	Response by RSPB and SWT at Deadline 3	We are grateful to the Examining Authority for asking CI.1.11 - *Leiston The Town Council express concern that the mitigation for impacts from a large influx of predominantly male workers has not been fully addressed, with the only specific mitigation proposed the sports facilities at the Academy. The concerns in respect of the potential community impacts are much broader than just the effects on sports provision. Please respond to these concerns and explain how the ES has considered the broader community effects of a large influx of largely male workers and what mitigation would be secured to address these community effects.* And are not sure the Applicant's response in relation to the Scheduled Monument at the First Leiston Abbey Site, "*Schedule 8 sets out the localised heritage interventions that include payments towards the enhancement of heritage sites at Leiston Abbey*." Is sufficient to address our concerns about the increase in visitors to this site and we request further details of the Applicant's proposed enhancement and mitigation in and around this site.
	Response by SZC Co. at Deadline 5	**Response to Suffolk Constabulary** SZC Co. notes Suffolk Constabulary's comments and will address these through ongoing discussions on the strategic relationship protocol and the measures to be secured in the Deed of Obligation. **In terms of the risk profile** - as set out in SZC Co's **Deadline 3 Submission 9.28 - Comments on Written Representations to Written Representations** [REP3-042], **Chapter 16**, SZC Co recognises that the assessment in **Volume 2, Chapter 9** of the **ES** [APP-195] (**paragraph 9.7.218**) applies Suffolk-wide rates of crime per head of population to the workforce. It notes that these are higher than the rates of crime identified per 1,000 workers at Hinkley Point C, as reported by ASC to the Socio-economic Advisory Group, which is based on the demographic and economic characteristics of the workforce, and the mitigation applied to them (such as the Worker Code of Conduct) – all factors which will be the same at Sizewell C.

ExQ1	Question to:	Question:
		The assessment is therefore based on higher crime rates than those which take account of the demographics of the NHB workforce. As set out at Section (b) of SZC Co's **Deadline 3 Submission 9.28 - Comments on Written Representations to Written Representations** [REP3-042], **Chapter 16**, SZC Co has significant concerns about the very limited demographic adjustment that Suffolk Constabulary applies (age and gender only) in its model **In terms of security vetting** – • SZC Co. will adopt the same enhanced Personnel Security Regime as Hinkley Point C, in which proportionate and effective personnel security arrangements adequately balance security arrangements, with the requirements for an efficient construction site and associated sites and offices. • It will comprise a suite of proportionate pre-employment and post-employment (Aftercare) controls, which seek to mitigate the insider threat, assure workforce trustworthiness and provide assurance to the project on pre-employment checks. • All workers who require regular unescorted access to Sizewell C will be subject to industry pre-employment checks. This meets Nuclear Site Licence (NSL) requirements set out by the Office for Nuclear Regulation (ONR) and also helps mitigate potential community safety risks. • Pre-employment checks are used to select the best person for the job and negative factors that could influence this decision include, for example theft, assault, drug misuse and fraud. • If during the application and pre/post-employment process, there are issues in respect of the individual's honesty, integrity and values, the Sizewell C Project may choose not to process an application and/or decline site access. • In addition, caveats may be imposed on access. These may be by ONR(CNS) and the Central Vetting Service (CVS) under current signing guidelines, as well as developed by SZC Co. for use on the Sizewell C Project. Examples of the latter might include no commencement of work without prior assessment by OH; additional line management supervision/reports; no lone working; enhanced drug and alcohol testing regime; additional criminal record checks; financial checks/interview. **In terms of the Worker Code of Conduct** –

ExQ1	Question to:	Question:
		• SZC Co will secure the Worker Code of Conduct through the Deed of Obligation and will provide an update regarding this in its submission of the **Draft Deed of Obligation** (Doc Ref. 8.17(E)) at Deadline 5. • All workers will be required to comply with and sign the Sizewell C Project Worker Code of Conduct; which will set out the standards of behaviour expected of workers and their employers at work and in the community. • The Worker Code of Conduct will confer responsibility on everybody conducting business on behalf of the Sizewell C Project to embody project values and demonstrate high ethical standards. • The Code would be reinforced through Project leadership behaviours and communication mechanisms. A confidential reporting line "Safecall" would be made available for all workers for the confidential reporting of concerns. • Breach of the code of conduct may lead to disciplinary action including removal from the Sizewell C Project. **In terms of the Public Services Resilience Fund and Governance** - SZC Co welcomes the statements from the Constabulary that the Public Services Resilience Fund is an important, multi-disciplinary mitigation measure focused on prevention rather than response – SZC Co consider it important, as set out within the **Draft Deed of Obligation** (Doc Ref. 8.17(E)) – that Suffolk Constabulary play a core role in the Community Safety Working Group in order to enable effective multi-agency insight and work planning as each member of the group will offer distinct but complementary services relating to community safety. **<u>Response to RSPB and SWT</u>** SZC Co. understands that concerns relating to an increase in visitors is an ecological issue rather than one pertaining to the heritage asset (this has certainly not been raised with SZC Co. to date). In terms of proposed measures relating to Leiston Abbey, discussions are underway with the RSPB Reserves Archaeologist on the specific measures to be funded and these are likely to include improved interpretation and information, including to help visitors understand the link between the first and second Leiston Abbey sites.

ExQ1	Question to:	Question:
CI.1.12	The Applicant	**Effect of the proposed development on the local population** In light of the concerns expressed by the CCG [RR-0500] and the Suffolk Constabulary [RR 1140] amongst others please comment on whether you still regard the assumptions of impacts on the local community as conservative and fully assess the likely impacts. In responding please address the following: (i) Whether the increased workforce could be supported by existing GPs (ii)Whether the effect on housing availability has been underestimated; (iii) The potential for adverse effects on health workers capacity to do their work due to impacts on journey times; (iv) Whether the equalities assessment adequately assesses effects on vulnerable groups; (v) Whether the mitigation for noise, dust, and impact on travel times has fully addressed health impacts; and (vi) Whether there has been a full assessment of the impacts on care homes and their residents.
	Response by SZC Co. at Deadline 2	Response to (i) The health needs of the NHB workforce have been internalised through occupational health care provision and therefore the increased workforce will not need to be supported by existing GPs. The scope of the occupational health provision is set out in **Volume 2, Appendix 28A** of the **ES** [APP-347] - this will replicate the provision that has proven so effective at Hinkley Point C, with minimal impact to local capacity due to the availability of GP, nursing and pharmacy services onsite. This provision is open to the entire workforce, thereby also offering health screening and care to HB staff, constituting complementary local health care. In addition, a residual referral rate has been assessed for the non-home-based workforce, and a residual healthcare contribution is proposed. This will include an amount for NHB workers' families. This is a conservative approach as those workers bringing families are likely to move into housing which other families vacate (i.e. offsetting existing residents and presenting little net health care demand or cost). Both the occupational health service (Sizewell Health) and the residual healthcare contribution will be secured in the **Deed of Obligation, Schedule 6** (latest draft Doc Ref. 8.17(C)). On the above basis, the potential impact upon local health care capacity has been addressed.

ExQ1	Question to:	Question:
		Response to (ii) (ii) The Relevant Representations referenced here raise the following concerns in terms of the effect related to housing: • Concerns related to increased local housing turnover and the potential impact that this has on healthcare provision (i.e. unstable population creating GP registrations, but also healthcare infrastructure demands beyond this). • Concerns about the net additionality of NHB worker households and the effect of that assumption in determining healthcare requirements. The assessment of effects on housing availability has not been underestimated. The assessment has four main components each with conservatism built in in order to assess likely significant effects and plan for mitigation that would be comprehensive and robust: • Project assumptions about the scale, distribution and accommodation sectors used by the NHB workforce as described in appendices to **Volume 2, Chapter 9** (Socio-economics) of the **ES** [APP-196] reflect an assessment case workforce that is weighted towards NHB workers. **Volume 2, Chapter 9** (Socio-economics) of the **ES** [APP-195] uses a conservative assessment case for assumptions about HB and NHB workers - this is to ensure mitigation for the NHB component is sufficiently robust. Some of the additional workforce (resulting from changing assumptions about the scale of workforce required as presented through Stage 2 and Stage 3 consultation) may be HB but the **ES** [APP-195] has taken a 'worst case' position with regards to knock-on effects on socio-economic factors. • The baseline set out within **Volume 2, Chapter 9** (Socio-economics) of the **ES** [APP-195] sets out a conservative assumption about the overall quantum of stock in the PRS and the tourist accommodation sectors – using data that most likely has since been updated to show an increase the supply of accommodation. • The assessment of effects set out within **Volume 2, Chapter 9** (Socio-economics) of the **ES** [APP-195] includes a number of conservative assumptions, including a focus on effects in the lower 30th percentiles of the PRS, and assumptions that discount availability and affordability of some tourist accommodation. It also assumes 100% additionality for the PRS – when in fact some homes would be already occupied by existing households.

ExQ1	Question to:	Question:
		• The approach to mitigation – set out within **Volume 2, Chapter 9** (Socio-economics) of the **ES** [APP-195] and the **Accommodation Strategy** [APP-613] includes planning for uncertainty, flexible and responsive governance, and a Housing Fund that is able to fully mitigate the anticipated additional demand for PRS accommodation. Response to (iii) Potential changes in transport nature, flow and journey time, and the impacts these may have on local communities have been a key consideration in the design of the Sizewell C Project and associated development. The core assessment is contained within **Volume 2, Chapter 10** (Transport) of the **ES** [APP-198] which addresses potential community severance, access and accessibility (including driver delay), and pedestrian fear and intimidation. Risk of accident and injury is set out within **Volume 2, Chapter 28** (Health and Wellbeing) of the **ES** [APP-346]. In relation to the potential delay to community health workers traveling to and attending patients at home, the potential delay during construction is minimal, measured in seconds per trip, and would not impact upon capacity, resourcing or programming of community care. Once operational, the new and enhanced transport infrastructure will remain, affording longstanding benefits to community care delivery, including improved road safety. Response to (iv) The **Equality Statement** [APP-158] is not formally the assessment of equality effects required under Section 149 of the Equality Act 2010, as the Public Sector Equality Duty cannot be delegated to the Applicant. Therefore, it provides information to assist the Examining Authority in carrying out their duty. The full range of potential equality effects relating to protected characteristics, including vulnerable groups, is properly identified in the statement, and summarised in **Table 1.1** [APP-158]. Response to (v) SZC Co. considers that the mitigation for noise, dust, and impact on travel times has fully addressed health impacts. Air quality has been assessed in terms of compliance with threshold objectives protective of health within the air quality assessment, and further investigated within **Volume 2, Chapter 28** (Health and Wellbeing) of the **ES** [APP-346]. Emission concentration and

ExQ1	Question to:	Question:
		exposure remain orders of magnitude lower than is required to quantify any measurable adverse community health outcome. On this basis, further health mitigation is not required, and monitoring remains focussed on environmental precursors to health outcome (facilitating intervention). The same is the case with noise, where the primary focus of the assessment was to minimise the magnitude and exposure to noise at a level that would again preclude any manifest health outcome. Mitigation follows the same premise, the **Noise Mitigation Scheme** (Doc Ref. 6.3 11H(A)), is geared to prevent any material risk to public health. No further mitigation is proposed for travel times, where the residual impact is measured in seconds and will not constitute a material impact on community care capacity, resources or programming. Response to (vi) The assessment of care homes and their residents is integrated into the relevant ES topic areas, including transport, noise and health and wellbeing, with signposting provided in the **Equality Statement** [APP-158], as part of the consideration of age as a protected characteristic (see Table A1.7 for a list of care homes). Care homes are treated as receptors of greatest sensitivity to traffic flow in the transport assessment, along with schools, colleges, playgrounds, accident clusters, urban/residential roads without footways that are used by pedestrians, and so - where applicable - will have been taken into account in the proposed approach to mitigation e.g. proposed highway improvements. The noise assessment identifies residual significant effects during the construction phase on Leiston Old Abbey Residential Home which is located close to the main development site. This is receptor 15 in **Volume 2, Chapter 11** (Noise and Vibration) of the **ES** [APP-202]. This is likely to be addressed through an acoustic barrier around its northern boundary. Norwood House is assessed as receptor 4 for the Sizewell link road - see **Volume 6, Chapter 4** (Noise and Vibration) of the **ES** [APP-451]. No significant adverse noise effects are predicted, although there will be a significant increase in traffic noise on the B1122 close to property in the early years before the construction of the Sizewell link road. **Volume 2, Chapter 28** (Health and Wellbeing) of the **ES** [APP-346] has applied a consistently precautionary approach where every resident is considered highly sensitive to

ExQ1	Question to:	Question:
		every health pathway. In this context, the assessment is working on the basis that every resident is sensitive to changes in noise, and means any impact other than minor would be considered significant. This thereby addresses the relative sensitivity to noise for a wide age demographic (children in schools through to senior residents at home and in care homes).
	Response by Ian Galloway at Deadline 3	In its response the Applicant avows "The health needs of the NHB workforce have been internalised through occupational health care provision and therefore the increased workforce will not need to be supported by existing GPs." However, with all NHS dentistry now having closed in Leiston and residents having to travel up to 30 miles for dental treatment, is the Applicant still confident that a SZC Health care provision will be capable of coping?
	Response by Suffolk Constabulary at Deadline 3	Suffolk Constabulary notes that whilst the Applicant's Community Impact Report (APP-156) identifies existing deprivation in Leiston this is not factored into the assessment of population dynamic or associated community safety impacts within Chapter 9 - Socioeconomics of the Applicant's ES, Equality Statement (APP-158) or Community Safety Management Plan (APP-635). Leiston, together with other pockets within the Eastern Command Area and Halesworth Local Policing Command (LPC), has long been recognised as an area faced with multiple deprivation and has specific policing needs above that of other more affluent areas of the county. Halesworth LPC therefore includes a dedicated Leiston Safer Neighbourhood Team (SNT), although effective local policing also relies on area based and county-wide policing resources.
	Response by Stop Sizewell C at Deadline 3	CI.1.12 the Applicant's response relates to the provision of medical support onsite. Given the Accommodation campus would only open in Year 3, how would this be provided in the Early Years? We find it implausible that there is expected to be no significant adverse noise effects on Norwood House given three years of substantially increased traffic during the early years. We further find it implausible that delays to health workers' journey times would be "measured in seconds per trip".
	Response by SZC Co. at Deadline 5	Response to Ian Galloway: Dentistry provision is not incorporated into the occupational health service at Sizewell C (nor was it at Hinkley Point C). This is because non-home-based workers would retain and return to their own dentist for all non-essential work. For emergency work, they could either return home or book an emergency appointment with local providers but this would have to be paid for as a private appointment so availability would be market and capacity

ExQ1	Question to:	Question:
		driven. Should there not be any availability locally, the workers would have to travel home for treatment. If anyone moves to the area permanently, they would have to find an NHS dentist with space or join a waiting list and pay privately in the meantime so this should not create any capacity issues. Response to Suffolk Constabulary: The assessment at **Volume 2, Chapter 9** of the **ES** [APP-195] uses baseline crime rates for the Leiston Neighbourhood Area to assess the significance of effects, and therefore does consider the sensitivity of Leiston and the rural community in its conclusions. It should be noted that it will be within the control of Suffolk Constabulary how to direct the resources that will be agreed through the Deed of Obligation to most effectively address their concerns related to differential experiences of crime and non-crime incidents in different areas. SZC Co. has also included such flexibility and responsiveness in the direction of complementary mitigation such as the Public Services Resilience Fund and the Community Fund. Response to Stop Sizewell C: Sizewell Health will not be located on the accommodation campus but within one of the buildings in the temporary construction area. This will allow all workers to access the service during their working hours and for the service to be open from the start of construction. This will be secured in the **Draft Deed of Obligation**, Schedule 6 (Doc Ref. 8.17(E)) which states: *"2.1 SZC Co shall establish Sizewell Health on or before Commencement."* Norwood House: no further response - positions is as set out in the Response by SZC Co. at Deadline 2 above. Journey times: the issue of journey time modelling was addressed in the Issue Specific Hearings on 7/8 July 2021. Please see Written Submissions arising from Issue Specific Hearing 2/3 (Doc Ref. 9.42 and 9.43).

ExQ1	Question to:	Question:
CI.1.14	The Applicant, Suffolk Constabulary	**Community Safety** The Suffolk Constabulary [RR-1140] express concern that important community safety and policing impacts raised during the pre-application consultation stage have yet to be addressed. Please advise what progress has been made between the parties in this regard.
	Response by SZC Co. at Deadline 2	SZC Co. has worked with Suffolk Constabulary during the pre-application phase, and since submission of the DCO to fully assess the likely significant effects of the Sizewell C Project based on information available. A key concern of Suffolk Constabulary was the potential for non-crime incidents (as well as recorded crime) to result in additional demand for police resourcing. At **paragraph 9.7.229** of **Volume 2, Chapter 9** (Socio-Economics) of the **ES** [APP-195] it is noted that '*SZC Co. recognises through engagement with Suffolk Constabulary, that recorded crimes (the metric used in this assessment) are only one contributor towards police resourcing, and that information on response to non-reported incidents and dealing with crimes not categorised by the Home Office definitions can lead to greater demand for police resourcing'.* Following submission of the DCO, Suffolk Constabulary provided SZC Co. with information not previously in the public domain relating to non-crime incidents, and SZC Co. sourced non-crime (and reported crime) rates from HPC – this information was submitted in **Volume 1, Chapter 2, section 2.4** of the **ES Addendum** [AS-181]. SZC Co. has provided funding to Suffolk Constabulary to model potential crime and non-crime impacts in order to agree mitigation to be secured through the **Deed of Obligation** (latest draft Doc Ref. 8.17(C)). There are currently significant differences between SZC Co. and Suffolk Constabulary in the interpretation of the model, including the use of selected demographic characteristics, their weight and the evidential basis of additional demand as a result, especially when evidence from actual recorded crimes and incidents from Hinkley Point C is considered, but work is ongoing to address them.
	Response by Suffolk Constabulary at Deadline 2	The Constabulary's concerns regarding the approach adopted by the Applicant are detailed in full within the Constabulary's Written Representation, which comprises: • Part 1 – Summary • Part 2 – Policing Impact Assessment (PIA)

ExQ1	Question to:	Question:
		• Part 3 – Collated comments regarding the assessment and acceptability of community safety impacts as predicted by the Applicant in the published SZC DCO application. In November 2020, prior to the ES Addendum being submitted, the Constabulary advised the Applicant that whilst the inclusion of additional baseline data would be welcome in terms of helping to contextualise the assessment, in isolation this alone would not rectify identified deficiencies within the published impact assessment. To help address the Constabulary's concerns, which have been previously shared with the Applicant, the Applicant included additional baseline data regarding the constabulary's workload within Section 2.4 – Socio-economics of the submitted ES Addendum (AS-181). However, the Applicant's actual assessment of likely effects on crime and policing, including EIA conclusions and proposed approach to mitigation, remains unchanged from the limited and narrow assessment provided in Chapter 9 – Socio-economics (paragraphs 9.7.216 – 9.7.320) of the submitted ES (APP-195). The Constabulary's major concerns therefore remain unresolved, as indicated in the Statement of Common Ground (SOCG) between the Constabulary and the Applicant submitted at Deadline 2. The Constabulary considers that there are significant gaps in the Applicant's assessment of likely significant effects on community safety and policing, discussed further within the Constabulary's Written Representation Part 3 - collated comments on submitted SZC DCO application.
	Response by SZC Co. at Deadline 3	SZC Co notes that the response from Suffolk Constabulary refers to issues raised in their Written Representation [REP2-168] – please refer to SZC Co.'s responses within **Comments on Written Representations** (Doc Ref. 9.28).
	Response by Suffolk Constabulary at Deadline 3	Following dialogue with Suffolk Constabulary, the Applicant included additional baseline data regarding the Constabulary's workload within Section 2.4 – Socio-economics of the SZC ES Addendum (AS-181). However, the actual impact assessment of likely effects on crime and policing and the approach to mitigation remains unchanged. The Constabulary advised the Applicant in November 2020 that whilst the inclusion of additional baseline data would be welcome in terms of helping to contextualise the assessment, in isolation this alone would not rectify identified deficiencies within their published impact assessment. The use of policing data collated by the HPC SEAG to predict community safety and policing impacts from SZC is not accepted by the Constabulary owing to known weaknesses with the HPC SEAG data (including under-reporting) and as the introduction

ExQ1	Question to:	Question:
		of a workforce population in one demographic, socio-economic and geographical situation cannot be predicted to generate the same community safety impacts in an entirely different situation, even if the same workers were involved. The Constabulary is therefore concerned regarding the over reliance by the Applicant upon the perceived experience of the construction of HPC project (within the Avon and Somerset Police area) to seek to predict community safety and policing impacts from the SZC project in Suffolk. Please refer to Part 2 of the Constabulary's Written Representation (REP2- 168) for further details regarding why it is inappropriate and unreliable to utilise HPC SEAG data to predict policing impacts from SZC in Suffolk.
	Response by Stop Sizewell C at Deadline 3	The "significant differences" between the Applicant and Suffolk constabulary on the impacts of crime and non-crime incidents is concerning.
	Response by SZC Co. at Deadline 5	SZC Co notes that the response from Suffolk Constabulary refers to issues raised in their Written Representation [REP2-168] – please refer to SZC Co.'s response within **Comments on Written Representations** [REP3-042].
CI.1.15	The Applicant, Suffolk Constabulary	**Community Safety** In light of the concerns raised by the Suffolk Constabulary in respect of what they describe as the narrowness of the assessment please advise what you have done to address this criticism, and what could be put in place to respond to these concerns. Please advise how you consider any appropriate mitigation could be delivered through the DCO in order to achieve a satisfactory level of community safety.
	Response by SZC Co. at Deadline 2	Please see response to question **CI.1.14**. Community safety mitigation measures are set out in the **Community Safety Management** [APP-635]. **Table 5.1** [APP-635] sets out project mitigation measures contributing to community safety. These will be secured through a combination of measures as follows: • Security - Nuclear Site Licence and **CoCP** (Doc Ref 8.11(B)) (in turn secured by requirement (Project Wide 2: Code of Construction Practice. • On site fire and rescue capability - **CoCP.** • Emergency co-ordinator - **CoCP**. • Occupational Health Service – **Deed of Obligation** (Schedule 6) (Doc Ref. 8.17(C)).

ExQ1	Question to:	Question:
		• Security vetting - Nuclear Site Licence. • Drug and alcohol testing - Nuclear Site Licence and through Occupational Health Service. • Provision of accommodation campus and caravan site - **Implementation Plan** (Doc Ref. 8.4I(A)), secured through the Deed of Obligation. • Sports and recreation facilities - on-site will be as for campus, off-site **Deed of Obligation**, Schedule 10. • Accommodation Strategy – **Deed of Obligation**, Schedule 3. • Transport mitigation measures - **Implementation Plan** and **Deed of Obligation**, Schedule 16. • Employment, Skills and Training Strategy – **Deed of Obligation**, Schedule 7. Financial contributions to support community stakeholders will be secured in the **Deed of Obligation** (Doc Ref. 8.17(C)). This includes contributions to the emergency services (**Schedule 4**) and the Councils under the Public Services Resilience Fund (**Schedule 5**), which also provides for multi-agency use to allow cross working with health stakeholders and the emergency services. The **Deed of Obligation** also establishes the Community Safety Working Group which will work together over the construction phase of the project (**Schedule 4**).
	Response by Suffolk Constabulary at Deadline 2	To help address identified assessment gaps it was agreed between the Applicant and the Constabulary that the Constabulary, as the subject matter experts for policing, should undertake an independent assessment of likely community safety and associated policing resourcing impacts. The resulting PIA utilised projected SZC workforce and traffic data provided by the Applicant. Drafts of this PIA were shared with the Applicant in August 2020 and November 2020 for review and to facilitate discussions around the preparation of an initial SOCG (as submitted at Examination Deadline 2). All feedback received from the Applicant was carefully considered and informed several refinements to the PIA, as described in Appendix A of Part 2 of the Constabulary's Written Representation. The Constabulary requires adequate, appropriate and effective mitigation, including resource funding, and associated monitoring to be secured within the terms of the DCO and associated Section 106 Agreement between the Applicant and relevant local planning

ExQ1	Question to:	Question:
		authorities prior to the determination of the application for the SZC project. In particular, mitigation needs to include adequate financial contribution to ensure that additional police resource is available during the entire construction phase and that such resources are responsive to a fluctuating workforce to help ensure the avoidance of likely significant adverse community safety impacts and any other unacceptable community safety risks, including in relation to local policing and roads policing. The cost of providing adequate additional police resourcing to help mitigate community safety impacts from the SZC project should not be borne by existing taxpayers in Suffolk. Existing police funding mechanisms (Council tax and Home Office grant calculated on a per capita resident basis using ONS data) will not capture much of the required Non-Home Based (NHB) SZC workforce, meaning that without adequate additional funding being provided by the Applicant., policing services for this component of the workforce would not be funded.
	Response by SZC Co. at Deadline 3	SZC Co notes that the response from Suffolk Constabulary refers to issues raised in their Written Representation [REP2-168] – please refer to SZC Co.'s responses within **Comments on Written Representations** (Doc Ref. 9.28).
	Response by Suffolk Constabulary at Deadline 3	It is noted and welcomed that the Applicant's response confirms that funding to support the emergency services will be made available through the Deed of Obligation. However, beyond the principle of funding being provided through a legal mechanism, to date the Applicant has not agreed the quantum or structure of additional resources (thus associated funding level) required within Suffolk Constabulary to mitigate the adverse impacts of SZC. Further, whilst reference to the Public Services Resilience Fund is welcomed, associated governance structures need to be robust and transparent whilst the ability to access funding in a timely manner in order to deploy effective mitigation 'on the ground' in response to community safety incidents will be essential. The Deed of Obligation document (S106) must include robust provisions to ensure adequate and effective mitigation and monitoring, including in relation to changes in workforce levels and community safety impacts as well as in relation to the adequacy and effectiveness of deployed mitigation. Through recent discussions with the Applicant and Avon & Somerset Police (regarding the management of community safety at HPC) it is now clear that the proposed 'security vetting' relates only to ensuring compliance with nuclear site licencing and the suitability of personnel to undertake specific roles on the SZC site, rather than considering the

ExQ1	Question to:	Question:
		potential for adverse community safety impacts from the workforce population, including crime risks, on offsite communities. Whilst the proposed security vetting is a welcome step, it needs to be understood that the level of vetting proposed may not itself preclude prospective workers with previous criminal convictions or otherwise posing potential community safety risks from becoming employed at SZC. It is also not possible for the Applicant to enforce a higher standard of security vetting, e.g. one which could ensure those with previous criminal convictions are not employed, as vetting requirements must be proportionate for the security and safety needs of individual roles. This limits the effectiveness of the Applicant's proposed vetting to materially act as a community safety mitigation measure.
	Response by SZC Co. at Deadline 5	Please refer to SZC Co's Deadline 5 Response to CI.1.11 above.
CI.1.16	The Applicant Suffolk Constabulary	**Community Safety** (i) Please advise on the progress in developing the assessment of likely community safety impacts and policing impacts following the more detailed assessment of transport, staffing and demographic data. (ii) Is it intended to provide a copy of this assessment into the Examination? (iii) Is this assessment now agreed?
	Response by SZC Co. at Deadline 2	(i) The additional data has not changed SZC Co.'s assessment of likely community safety impacts. As set out in response to question **CI.1.14**, data from Hinkley Point C on non-crime incidents has informed this position. Also as set out in response to question **CI.1.14**, Sizewell C has funded Suffolk Constabulary to model potential crime and non-crime incidents relating to Sizewell C that would require mitigation. Suffolk Constabulary has shared the results with Sizewell C and SZC Co. is working to reach agreement on the interpretation of the results and the resultant resources that Suffolk Constabulary would require. At present SZC Co. believes the model is substantially over-estimating potential impacts when compared to observed impacts at Hinkley Point C. (ii) **Volume 1, Chapter 2, section 2.4** of the **ES Addendum** [AS-181] provided an updated assessment by SZC Co.

ExQ1	Question to:	Question:
		It is not currently proposed to provide a copy of the Suffolk Constabulary assessment into the examination as this is a collaborative process which has involved a number of exchanges of written information and discussions, rather than one single document. However, the outcome of this will be detailed in the **Deed of Obligation** (Doc Ref. 8.17(C)). (iii) The assessment is not yet agreed for the reasons set out in question **CI.1.4** and **(i)** above. Discussions are ongoing.
	Response by Suffolk Constabulary at Deadline 2	To help address identified assessment gaps it was agreed between the Applicant and the Constabulary that the Constabulary, as the subject matter experts for policing, should undertake an independent assessment of likely community safety and associated policing resourcing impacts. However, at this stage the parties have not been able to agree on the approach to modelling likely community safety impacts (crime and non-crime incidents) and associated policing demands attributable to the SZC project and associated workforce. In consequence the level of additional police resourcing required to help mitigate likely community safety impacts has also not been agreed. The PIA prepared by the Constabulary has therefore necessarily been submitted in full (rather than only summary conclusions being drawn from it) to the ExA as Part 2 of the Constabulary's Written Representation in order to evidence the Constabulary's strong views regarding: • Community safety and policing impacts likely to arise from the SZC project • Why the Applicant's reliance upon data collated for the Hinkley Point C project to attempt to predict policing impacts from SZC in Suffolk is flawed; • The need for a bespoke mitigation for the SZC project in Suffolk and why it is inappropriate to replicate mitigation proposals from the Hinkley Point C project as the Applicant has proposed; and, • The need for effective mitigation and monitoring to be secured through the terms of any DCO granted and associated Section 106 Agreement for the SZC project. This mitigation solution must be adequate and appropriate for the SZC project in Suffolk

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 3	SZC Co notes that the response from Suffolk Constabulary refers to issues raised in their Written Representation [REP2-168] – please refer to SZC Co.'s responses within **Comments on Written Representations** (Doc Ref. 9.28).
	Response by Suffolk Constabulary at Deadline 3	Suffolk Constabulary's Relevant Representation (RR-1140) confirmed that it had been agreed between the Applicant and the Constabulary that the Constabulary, as the subject matter experts for policing, should undertake an independent assessment of likely community safety and associated policing resourcing impacts. The Relevant Representation (RR-1140) also advised of the Constabulary's intention to submit this assessment of likely community safety and associated policing resourcing impacts as one part of Suffolk Constabulary's Written Representation (REP2- 168); which has duly been undertaken. Suffolk Constabulary advised the Applicant in November 2020 that whilst the inclusion of additional baseline data within Section 2.4 – Socio-economics of the SZC ES Addendum (AS-181) would be welcome in terms of helping to contextualise the assessment of likely community safety impacts, in isolation this alone would not rectify identified deficiencies within their published impact assessment.
	Response by SZC Co. at Deadline 5	SZC Co. is grateful for the work undertaken by Suffolk Constabulary in developing its assessment of community safety effects that influence police resourcing. However, as set out in SZC Co.'s response within **Comments on Written Representations** [REP3-042], there are differences between the parties in determining the scale of some elements – though noting that the parties are continuing to discuss these differences and are agreed on some aspects (such as the scale of non-crime incidents anticipated).
Chapter 13 - Cu.1 Cumulative impact		
Cu.1.0	The Applicant	**Cumulative assessment in EIA and HRA 'in-combination' assessment** Natural England (NE) [RR-0878] does not consider that a suitably robust assessment has been undertaken within the HRA of impacts from different aspects of the project, or of 'in combination' impacts between other projects which may impact on the same internationally designated sites and features. In particular, the cabling for East Anglia ONE North (EA1N) and East Anglia TWO (EA2) would come ashore and be routed through this part of the AONB close to the Sizewell C construction site. (i) Please provide an update on the latest position in relation to discussions with NE on this topic and indicate any

ExQ1	Question to:	Question:
		outstanding points of disagreement for this element of the HRA process; (ii) Please provide an update on the part of the Sizewell project's nine to twelve years construction phase that would be likely to coincide with the EA1 North and EA2 cable route's construction?
	Response by SZC Co. at Deadline 2	(i) SZC Co. disagrees with Natural England's position. In relation to the combined impacts from different aspects of the project, to supplement the assessment reported in the **Shadow HRA Report** [APP-145 to APP-149], further assessment of potential effects from the Sizewell C Project was reported in **Appendix 1A** to the **Shadow HRA Report Addendum** [AS-174]. That assessment provides supplementary analysis of the effects on qualifying features of each European site that could arise due to interaction between the various effect pathways (screening categories) listed in **Table 5.1** of the **Shadow HRA Report** [APP-145]. These effects are referred to as '*inter-pathway effects*' in **Appendix 1A** to the **Shadow HRA Report Addendum** [AS-174]. A draft version of this supplementary assessment was shared with Natural England (and East Suffolk Council, the Royal Society for the Protection of Birds, Marine Management Organisation, the Environment Agency, Suffolk Wildlife Trust and Suffolk County Council) in advance of a meeting held on 24 November 2020. With respect to in-combination effects with other plans and projects, **Appendix C** to the **Shadow HRA Report** [APP-145 to APP-149] lists those plans and projects considered in the Shadow HRA process, which includes the East Anglia ONE North (EA1N) and East Anglia TWO (EA2) projects. In addition to the above matter, with regard to in-combination effects with other plans and projects, Natural England [RR-0878] specifically advised the preparation of a Site Integrity Plan (SIP) for the Southern North Sea Special Area of Conservation (SAC). A SIP was provided as **Appendix 9A** to the **Shadow HRA Report Addendum** [AS-178]. Since the **Shadow HRA Report** [APP-145 to APP-149] was prepared, East Anglia ONE North, East Anglia TWO and East Anglia THREE have been combined to form the East Anglia HUB. The SIP (**Appendix 9A** to the **Shadow HRA Report Addendum** [AS-178] includes assessment of in-combination effects with the East Anglia HUB, reflecting the new construction programmes (see below).

ExQ1	Question to:	Question:
		(ii) As set out within **Appendix 13A** of this chapter, the new construction programmes, as detailed on the new 'East Anglia Hub'[14] website[15], state that offshore construction of all three schemes will commence in 2023, on shore works will commence in 2024 and all three schemes will be operational by 2026. Information provided by Scottish Power Renewables states that construction is likely to be sequential, with parallel construction being the worst-case scenario. An updated construction programme for the Sizewell C Project is provided within the **Implementation Plan** (Doc Ref. 8.4I(A)) submitted at Deadline 2. The anticipated peak early year of construction remains 2023 and peak year of construction at the main development site is in 2028, with Sizewell C due to become fully operational by 2034, as set out in the ES.
	Response by Scottish Power Renewables at Deadline 3	(i) To clarify the statement "Since the Shadow HRA Report [APP-145 to APP-149] was prepared, East Anglia ONE North, East Anglia TWO and East Anglia THREE have been combined to form the East Anglia HUB", the combining of the projects relates to the procurement process in order to achieve the most efficient procurement and delivery of the East Anglia ONE North, East Anglia TWO and East Anglia THREE projects. The East Anglia ONE North, East Anglia TWO and East Anglia THREE projects however remain separate projects proposed by separate legal entities. See (ii) for further commentary on SZC's response. (ii) East Anglia ONE North Limited and East Anglia TWO Limited note that there is no preference for sequential or parallel delivery of the East Anglia ONE North and East Anglia TWO projects. The East Anglia ONE North and East Anglia TWO DCO Applications have assessed both construction scenarios and DCO consent is sought to allow for both construction scenarios. It is noted that East Anglia ONE North Limited and East Anglia TWO Limited have made a commitment that should both projects be consented and proceed on a sequential basis, that the ducting for the second (later) project will be laid in parallel with the first project. East Anglia ONE North Limited and East Anglia TWO Limited also highlight the Outline SPA Crossing Method Statement that was submitted to the East

[14] East Anglia Hub is the name for the collective East Anglia THREE, East Anglia TWO and East Anglia ONE North offshore windfarm schemes.

[15] The Energy Technology Institutes' Nuclear Cost Drivers report published on 3 September 2020. Available at: https://www.eti.co.uk/library/the-eti-nuclear-cost-drivers-project-summary-report

ExQ1	Question to:	Question:
		Anglia ONE North and East Anglia TWO examinations as this presents further detail (including seasonal restrictions) on the onshore cable route works within the SPA. Also see the response to ExQ1 PART 3 OF 6 Cu.1.9 (i) below.
	Response by SZC Co. at Deadline 5	No further comments.
Cu.1.3	The Applicant, ESC, SCC	**Cumulative effects with other plans, projects and programmes** ES Volume 10 Project-wide, Cumulative and Transboundary Effects, Chapter 4, Table 4.16 [APP-578], identifies those effects that have been found to be greater in-combination with the non-Sizewell C schemes than for the proposed development alone. For transport, this includes the A12 at Little Glemham and Marlesford. (i) Please explain further how the proposed mitigation would operate in practice and how this would satisfactorily overcome the anticipated cumulative moderate adverse effect on fear and intimidation; (ii) Please indicate whether there are any other steps which could be taken in mitigation of this adverse effect?
	Response by SZC Co. at Deadline 2	(i) The **Draft Deed of Obligation** (Doc Ref. 8.17(C)) identifies that SZC Co. will provide a Marlesford and Little Glemham Improvement Contribution to be used by Suffolk County Council for the design and implementation of local improvements to mitigate Sizewell C impacts. Potential improvements in Marlesford and Little Glemham have been discussed with Suffolk County Council and the Parish Council. They include measures to reduce vehicle speeds (e.g. a new 30mph speed limit through Marlesford and extension of the existing 40mph speed limit, traffic calming, gateway features, new and wider footways and pedestrian crossings). Combined these measures would mitigate the forecast environmental impacts. (ii) See response to question **TT.1.22** within **Part 6** for description of further monitoring and control measures, and a separate contingency fund, proposed to mitigate potential impacts on the A12.
	Response by East Suffolk Council at Deadline 2	This question is highway related so ESC defers to SCC as local highway authority to respond. ESC would like it noted that any mitigation measures proposed such as

ExQ1	Question to:	Question:
		additional crossing facilities would need to be assessed from a noise and air quality perspective to ensure one adverse effect is not replaced by another.
	Response by Suffolk County Council at Deadline 2	(i) SCC considers that mitigation is required at this location in a Sizewell C project only scenario and therefore for all cumulative scenarios as well. For this cumulative scenario, it is understood that the Applicant proposes through communication with EA1N and EA2 projects and the TRG, that if the worst-case Environmental Impacts were predicted to occur then the need for mitigation would be triggered, which would then be delivered. There are a number of potential issues with this approach, the first being that through the EA1N and EA2 examination mitigation at these locations has been agreed between the Applicant and Councils (although no decision has been made on the DCO) to sufficiently mitigate the proportional impact at this location of the EA1N and EA2 proposals. The mitigation proposed is considered proportionate to the scale of EA1N and EA2's impact both in terms of peak impact and the length of impact and is not considered proportionate to Sizewell C's impact. SPR have committed to providing this mitigation which can be viewed at Annex 5 of the Construction Traffic Management Plan, found here: https://infrastructure.planninginspectorate.gov.uk/wpcontent/ipc/uploads/projects/EN010077/EN010077-004832-8.9%20EA1N%20Outline%20Construction%20Traffic%20Management%20Plan.pdf). Another issue is that there is no assessment of the exact point mitigation is required; it is only suggested that it is required for a peak scenario, but there would be a threshold prior to the absolute peak that the assessment method used by the Applicant would determine a need for mitigation, and this also requires a level of professional judgement. Given the length of time it can take to book road space and undertake roadworks (including the availability of contractors) it may take several months following identification of the need for mitigation for that mitigation to be delivered. The mitigation itself will have an impact on traffic using the A12 as it is likely that some form of traffic management will be required, which if traffic volumes are high require working outside normal working hours in turn with consequential impacts such as noise on local residents. On that basis, the TRG would then need to determine whether SZC HGV movements needed to be controlled or the extent to which a short-term impact would be considered tolerable on the basis that mitigation was planned to be delivered in the near future, or even if the impact of delivering the mitigation outweighs its own impact; this would also need to be considered in the context of the delivery of EA1N and EA2 mitigation. That being said, the Applicant is

ExQ1	Question to:	Question:
		currently working on a strategy for mitigating their impacts at this location, which would address the issue as they would be mitigating their proportional impact, which SCC considers necessary. (ii) Mitigation could be provided in the form of controls on HGV numbers or alternatively footway widening, footway extensions and a crossing facility. SCC considers that mitigation is required at this location in all scenarios and believe that mitigation should be delivered very early in the programme to avoid disruption on a haul route for both this Project and the EA1N and EA2 projects, and to minimise disruption on a strategic corridor.
	Response by SZC Co. at Deadline 3	The draft **Deed of Obligation** (Doc. Ref. 8.17(D)) identifies a Marlesford and Little Glemham Improvement Contribution to be used by Suffolk County Council (SCC) for the design and implementation of local improvements to mitigate Sizewell C impacts. Discussions are ongoing with Suffolk County Council, East Suffolk Council and the parish councils, with a view to agreeing the proposed scheme. Triggers are not proposed for the mitigation. In addition to the proposed Marlesford and Little Glemham Improvement Contribution, demand management measures are included in the **Construction Traffic Management Plan** (**CTMP**) [REP2-054], **Construction Worker Travel Plan** (**CWTP**) [REP2-055], which are to be secured through the **Draft Deed of Obligation** (Doc Ref. 8.17(D)).
	Response by Marlesford Parish Council at Deadline 3	The Applicant restates its comments from AR.1.25 above and MPC's position is as stated in its comments on that question. SCC, in their answer to this question considers that mitigation is required at this location in a "Sizewell C project only" scenario and therefore for all cumulative scenarios as well. SCC goes on to note that there is no commitment as to when (prior to peak) the mitigation works in Marlesford and Little Glemham would be carried out. MPC agrees with SCC when it says, "SCC considers that mitigation is required at this location in all scenarios and believe that mitigation should be delivered very early in the programme to avoid disruption on a haul route for both this Project and the EA1N and EA2 projects, and to minimise disruption on a strategic corridor." MPC also agrees with ESC on their comment against this question, "that any mitigation measures proposed such as additional crossing facilities, would need to be assessed from a noise and air quality perspective to ensure one adverse effect is not replaced by another." This is an important consideration for both Marlesford and Little Glemham and begs the question that if adverse effects are likely to be created by mitigation measures, would the best answer not be to bypass both villages as envisaged by SCC's SEGWay proposals?

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 5	No further response from SZC Co. proposed.
Cu.1.6	The Applicant	**Cumulative effects with other plans, projects and programmes** ES Volume 10 Project-wide, Cumulative and Transboundary Effects [APP-578], Chapter 4, paragraphs 4.21.35 to 4.21.38, in relation to cumulative quality of life and wellbeing effects associated with general stress and anxiety, recognises that due to their scale, larger projects may generate stress and anxiety. However, it concludes that on the basis that each individual development would inherently manage stress and anxiety associated with the planning application process, the cumulative health and wellbeing effects would remain minor adverse and not significant. (i) Please explain further how such stress and anxiety would be inherently managed rather than exacerbated by the planning process? (ii) Please provide further evidence and reasoning to support the conclusion reached that the cumulative effect would not be significant?
	Response by SZC Co. at Deadline 2	(i) Potential community stress and anxiety is a feature of both tangible changes in environmental, social and economic circumstance; and perceived risk. The planning process is inherently designed to protect the environment and health, and as such explores, addresses and assesses all credible activities with the potential to impact upon such, including the underlying features for general stress and anxiety. Measures proposed by SZC Co. to mitigate impacts on health and wellbeing, including stress and anxiety, are summarised within **Volume 2, Chapter 28** of the **ES**, **Section 28.5** [APP-346]. Furthermore, the engagement process is geared towards exploring community priorities, needs and concerns, and forms the basis to tailoring and refining an application to local circumstance, but is also the process to respond to unfounded concerns that may lead to undue stress and anxiety. SZC Co. will maintain a robust system for communication and community engagement throughout the construction period as set out within the **Code of Construction Practice** (Doc Ref. 8.11(B)). As explained in paragraph 4.21.37 of **Volume 10, Chapter 4** of the **ES** [APP-578], the planning process is therefore inherently geared to investigate, assess and address both tangible and perceived hazards with the potential to result in community stress and anxiety.

ExQ1	Question to:	Question:
		The regulatory planning process also means that each of the cumulative projects listed in **Volume 10, Chapter 4** of the **ES** [APP-578] will undertake the same process and will investigate, assess and address all tangible environmental, social and economic parameters, and also include its own cumulative assessment, considering any overlapping risk. On this basis, the regulatory planning process does not seek to exacerbate stress and anxiety, quite the contrary. Providing instead a regimented and comprehensive approach that ensures all projects consider and address all environmental, social and economic changes that underlie general community stress and anxiety. (ii) Paragraphs 4.21.35 to 4.21.38 in **Volume 10, Chapter 4** of the **ES** [APP-578] are in reference to general stress and anxiety from the planning process, and conclude no significant cumulative environmental, social or economic impact with regards to stress and anxiety. The reasoning for this is further explained under response for (i) above. In the absence of any significant cumulative impact, only risk perception and general disruption remain, which can only be addressed through ongoing meaningful engagement, which is the case for Sizewell C, and all the major infrastructure projects considered within the cumulative impact assessment. On this basis, each of the projects identified within the cumulative impact assessment will follow the regulatory planning process, will investigate, assess and address all tangible environmental, social and economic parameters, will include engagement, and subject to consent, will have appropriate monitoring and ongoing engagement to manage residual community concerns and risk perceptions that underlie stress and anxiety.
	Response by Stop Sizewell C at Deadline 3	We find the Applicant's response here dismissive and patronising, describing how "unfounded" concerns may add to stress and anxiety. We consider that the local communities are well informed and their concerns well founded. In relation to the Applicant's statement about "a robust system for communication", as described in our oral submissions, EDF paused the Community Forum prior to submitting its DCO application, despite online options being available.
	Response by SZC Co. at Deadline 5	SZC Co.'s response at Deadline 2 remains valid.

ExQ1	Question to:	Question:
Cu.1.7	The Applicant, EA1N	**Cumulative effects with other plans, projects and programmes** EA1N [RR-0340] indicates that its representatives have engaged proactively with Sizewell C representatives to better understand the scope and impact of the proposed Sizewell C Project and its potential cumulative and in-combination effects, in particular on transport related matters. Please confirm that such discussions are ongoing and indicate whether any further information is available at this stage in relation to potential cumulative and in-combination effects of the projects with particular regard to transport- related matters.
	Response by SZC Co. at Deadline 2	SZC Co. continue to engage with Scottish Power Renewables (SPR) to ensure coordination between East Anglia One North (EA1N) and East Anglia Two (EA2) and Sizewell C Project. See response to **TT.1.62** within **Part 6** which describes recent discussions between SZC Co. and SPR in relation to consistency between traffic models. A technical note (refer to **Appendix 24B**) has been produced summarising the differences in the SPR Preliminary Environmental Information Report (PEIR) and ES traffic inputs. A **Statement of Common Ground** (SoCG) has also been developed between SZC Co. and SPR (Doc Ref. 9.10.28), setting out a commitment to engage in relation to coordination of highway mitigation proposals and programmes (see response to **TT.1.63** in **Part 6** for further information).
	Response by Scottish Power Renewables at Deadline 2	The Statement of Common Ground with NNB Generation Company (SZC) Limited V2, SZC-501 (East Anglia TWO examination reference REP8-112[16]) confirms: "The Applicants and SZC will engage regularly with each other during design and construction of their respective projects so that any interface between the projects can be considered at an early stage, recognising it is in the interests of the Applicants and SZC as well as the wider community that all projects be coordinated as far as reasonably practicable"

[16] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010078/EN010078-004551-ExA.SoCG-18.D8.V2%20EA1N&EA2%20Statement%20of%20Common%20Ground%20with%20NNB%20Generation%20Company%20(SZC)%20Limited.pdf

ExQ1	Question to:	Question:
		EA1N&EA2 Sizewell C Cumulative Impact Assessment Note (Traffic and Transport) - Version 02 (East Anglia TWO examination reference REP6-043[17]) sets out the cumulative interactions between the East Anglia ONE North, East Anglia TWO and Sizewell C projects. East Anglia ONE North Limited and East Anglia TWO Limited are currently engaging with SZC to support the interpretation of the data contained in this submission (see response to **TT.1.62**).
	Response by SZC Co. at Deadline 3	No further comments to add to SZC Co. response for Deadline 2.
	Response by Scottish Power Renewables at Deadline 3	East Anglia ONE North Limited and East Anglia TWO Limited's transport consultants (Royal Haskoning DHV) have engaged with SZC Co. transport consultants (WSP) to clarify the traffic data that informed the former's DCO application. Royal HaskoningDHV have reviewed Appendix 24B Technical Note 1 Comparison of Scottish Power Renewables Development Traffic Assumptions (REP2-050) and can confirm the traffic data presented is a correct disaggregation of the traffic demand presented in the East Anglia ONE North and East Anglia TWO DCO applications. Discussions on traffic distribution remain ongoing with SZC Co. Contrary to that stated within Technical Note 1, Royal HaskoningDHV have not commented on or agreed the significance of the changes in East Anglia ONE North and East Anglia TWO traffic from PEIR to DCO application (and the influence on the SZC Transport Model) as it is considered this is a matter for SZC Co. and the relevant authorities to determine.
	Response by SZC Co. at Deadline 5	SZC Co. welcomes SPR's confirmation that the traffic data presented in **Appendix 24B Technical Note 1 Comparison of Scottish Power Renewables Development Traffic Assumptions** [REP2-112] is a correct disaggregation of the traffic demand presented in the East Anglia ONE North and East Anglia TWO DCO applications. SZC Co. continues to engage with SPR to ensure the cumulative scenarios in the assessment of both projects are as consistent as is practically possible. SZC Co. will report to the ExA on any material change to the assessment that results in these discussions.

[17] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010078/EN010078-004009-ExA.AS-6.D6.V2%20EA1N&EA2%20Sizewell%20C%20Cumulative%20Impact%20Assessment%20Note%20(Traffic%20and%20Transport).pdf

ExQ1	Question to:	Question:
		SPR is correct that is a matter for SCC as local highway authority and not SPR to determine whether the changes in East Anglia ONE North and East Anglia TWO traffic from PEIR to DCO application would have a material effect on the traffic modelling or not. SCC's response to TT.1.62 confirmed that the differences in flows are *"very minor and highly unlikely to have a material impact on any conclusions."*
Cu.1.8	The Applicant, EA1N, EA2	**Cumulative effects with other plans, projects and programmes** EA1N [RR-0340] and EA2 [RR-0341] explain that the Order limits for the EA1N Project and the Sizewell C Project overlap in three areas of the public highway, namely: Sizewell Gap (close to the Junction of Sizewell Gap/King George's Avenue); the junction of A12/A1094 (Friday Street); and the junction of A1094/A1069 (Snape Road). (i) Please indicate whether any progress has been made in relation to opportunities for co-ordinating works in these areas and how this would be secured by the DCO(s). (ii) If not, what are the perceived obstacles to any such co-ordination? (iii) Explain the way in which the various works for these schemes in these locations could conflict? (iv) Explain how it is proposed that the necessary access for the EA1 North and EA TWO Projects would be maintained?
	Response by SZC Co. at Deadline 2	i, ii, iii) See response to **TT.1.63** in **Part 6** which discusses the coordination of highway mitigation proposed by SZC Co. and SPR for EA1N and EA2. A commitment to regular engagement during design and construction phases is set out in the **SoCG** between SZC Co. and SPR (Doc Ref. 9.10.28). SZC Co. propose to establish clear communications protocols between all three parties, which will be defined in the terms of reference of the Transport Review Group (TRG). iv) The SPR EA1N and EA2 Works interact with Sizewell Gap at Work Nos. 10, 11 and 15. The EA1N and EA2 draft DCO (Schedule 9) sets out the purpose for which temporary possession may be taken at these Works (e.g. construction and carrying out of authorised project, vegetation clearance, access for carrying out the project). The **SoCG** between SZC Co. and SPR (Doc Ref. 9.10.28) notes that these works do not materially conflict with the construction of the Sizewell C Project. The **draft DCO** (Doc Ref. 3.1(C)) includes protective provisions which adequately protect SZC Co.'s interests with regard to interactions on Sizewell Gap.

ExQ1	Question to:	Question:
	Response by Scottish Power Renewables at Deadline 2	(i) The overlap in Order limits referred to relate to onshore matters. A further overlap occurs offshore. The EA2 and EA1N draft DCOs include protective provision in favour of SZC which requires East Anglia ONE North Limited and East Anglia TWO Limited to consult with SZC Co. in the formulation of the proposed method of working and timing of execution of works, to the extent that it relates to such overlapping Order Limits. The Applicants seek reciprocal Protective Provisions within the SZC dDCO. A separate side agreement may also be required with SZC (depending on the final wording of the Protective Provisions) to address commercially confidential matters such as indemnity levels. Discussions on this matter are at an early stage between SZC and East Anglia ONE North Limited and East Anglia TWO Limited and are continuing. (ii) see response to (i) (iii) Works at Sizewell Gap and the junction of A1094/A1069 (Snape Road) may conflict in terms of SZC and East Anglia ONE North Limited and East Anglia TWO Limited seeking to undertake works at these junctions at the same time, and potentially seeking to undertake similar works. The protective Provisions referred to in (i) above are intended to ensure early engagement between the parties prevents such conflicts. Interaction at the junction of A12/A1094 (Friday Street) are more significant, with SZC proposing the construction of a roundabout and East Anglia ONE North Limited and East Anglia TWO Limited proposing construction of traffic signals at the same junction to mitigate different magnitudes of impacts resultant from the respective projects. However, the protective Provisions referred in (i) above are intended to ensure early engagement between the parties to prevent any conflict and allow for the effective planning of highway works at this junction (iv) Accesses will be maintained by the Applicants until their removal in order to ensure their safe use throughout the construction period. This will involve management of vegetation along the visibility splays, maintenance of signage; and maintenance of the access surface (including any tarmac joint with the highway) as required. As facilitated by the Protective Provisions with the East Anglia ONE North/East Anglia TWO /SZC DCOs, East Anglia TWO Limited, East Anglia ONE North Limited and SZC Co. must liaise during construction to ensure respective rights of access are not compromised. In practice, where potential conflict arises, it is in the interest of all parties to work together to resolve the potential conflict.

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 3	No further comments to add to SZC Co. response for Deadline 2.
	Response by Scottish Power Renewables at Deadline 3	East Anglia ONE North Limited and East Anglia TWO Limited are not a member of SZC Co's Transport Review Group and cannot comment on its scope or function. Notwithstanding this, East Anglia ONE North Limited and East Anglia TWO Limited have ongoing engagement with SZC Co. in relation to the respective parties' DCO applications. Deadline 2 Submission - 9.10.28 Initial Statement of Common Ground - East Anglia One North and Two - Revision 1.0 (REP2-092) contains the following 'in principle' agreement: The Applicant and EA1/EA1N recognise that all projects involve works at Friday Street, Sizewell Gap and Snape Road and will engage regularly with each other during design and construction of their respective projects so that any interface between the projects can be considered at an early stage, recognising it is in the interests of the Applicant and EA1/EA1N as well as the wider community that works at Work No. 35 [A1094/A1069] be coordinated as far as reasonably practicable. East Anglia ONE North Limited and East Anglia TWO Limited are seeking protective provisions and side agreement with SZC Co. to ensure the protection of East Anglia ONE North Limited and East Anglia TWO Limited's interests as a result of the Sizewell C Project.
	Response by SZC Co. at Deadline 5	No further comments to add to SZC Co. response for Deadline 2.
Cu.1.9	The Applicant, EA1N, EA2	**Cumulative effects with other plans, projects and programmes** ES Volume 10 Project-wide, Cumulative and Transboundary Effects [APP-578], Chapter 4, paragraph 4.4.13, indicates that the construction of EA1N and EA2 could overlap with the construction of the Sizewell C Project. Paragraph 4.14, states that the 'concurrent build' traffic flows have been used, derived from the preliminary environmental information for the EA2 development. (i) Please indicate whether any further information is available at this stage as to the likely timing and duration of the overlap should all these projects be approved. (ii) Please comment on the reliability of the ES assessment given that it has utilised preliminary environmental information and indicate whether this has now been superseded?

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 2	(i) As set out within **Appendix 13A** of this chapter, the new construction programmes for EA1N, EA2 and EA3, as detailed on the new 'East Anglia Hub'[18] website[19], state that offshore construction of all three schemes will commence in 2023, on shore works will commence in 2024 and all three schemes will be operational by 2026. Information provided by SPR states that construction is likely to be sequential, with parallel construction being the worst-case scenario. An updated construction programme for the Sizewell C Project is provided within the **Implementation Plan** (Doc Ref. 8.4I(A)) submitted at Deadline 2. The anticipated peak early year of construction remains 2023 and peak year of construction at the main development site is in 2028, with Sizewell C due to become fully operational by 2034, as set out in the ES. As explained within **Volume 10, Chapter 4** of the **ES** [APP-578], the peak SPR construction traffic flows were considered as part of the peak early year (2023) assessment of Sizewell C construction within the ES. Furthermore, although the proposed timeline for concurrent construction shows the SPR schemes to be completed before the Sizewell C peak construction phase, if the construction programme were to be delayed the concurrent build could still be underway by Sizewell C peak construction phase, therefore the SPR 'concurrent build' traffic flows were also assessed in the Sizewell C 2028 peak construction 'cumulative' scenario. The SPR schemes would be completed by the Sizewell C operational stage. This remains robust and valid. (ii) See response to question **TT.1.62** within **Part 6** which describes recent engagement between SZC Co. and SPR to check on the validity of the SZC Co. assessment using the latest traffic flows from the EA1N and EA2 Environmental Statements. A note has been produced to summarise the differences in the SPR PEIR and ES traffic inputs (refer to **Appendix 24B**). The flow differences are small. The conclusion of that review is that there would be no material impact on the SZC Co. environmental assessment, if the updated SPR flows were used. It is also noted that due to the proposed timings and location of the onshore elements of EA3, it is not considered that this would have cumulative transport

[18] East Anglia Hub is the name for the collective East Anglia THREE, East Anglia TWO and East Anglia ONE North offshore windfarm schemes.

[19] Scottish Power Renewables. The East Anglia Hub. [Online] Available from: https://www.scottishpowerrenewables.com/pages/east_anglia_hub.aspx

ExQ1	Question to:	Question:
		impacts in combination with the Sizewell C Project and, therefore, the assessment presented within the ES remains robust and valid.
	Response by Scottish Power Renewables at Deadline 2	i) The EA1N&EA2 Sizewell C Cumulative Impact Assessment Note (Traffic and Transport) - Version 02 (East Anglia TWO examination reference REP6-043[20]) sets out the cumulative interactions between the East Anglia ONE North, East Anglia TWO and Sizewell C projects. The note considers a worst case that peak construction phase for the East Anglia ONE North and East Anglia TWO Projects could overlap with the 'early years' construction for SZC in 2023 and also the peak construction for SZC in 2028. ii) East Anglia ONE North Limited and East Anglia TWO Limited have been provided with the modelling data used by the Sizewell C project to assess the potential for cumulative impacts with the EA1N and EA2 projects. East Anglia ONE North Limited and East Anglia TWO Limited will review this information and revert.
	Response by SZC Co. at Deadline 3	No further comments to add to SZC Co. response for Deadline 2.
	Response by Scottish Power Renewables at Deadline 3	(i) The temporal overlap of traffic demand between East Anglia ONE North and East Anglia TWO and Sizewell C is clarified in Deadline 6 Submission - ExA.AS-6.D6.V2 EA1N&EA2 Sizewell C Cumulative Impact Assessment Note (Traffic and Transport) - Version 02 (EA2/EA1N REP6-043) of the East Anglia ONE North and East Anglia TWO examination). The note examines SZC Transport Assessment Addendum (AS-266) and identifies the following worst case cumulative impact assessment (CIA) scenarios: • CIA Scenario A –SZC early years construction traffic + East Anglia ONE North and East Anglia TWO peak construction traffic, assuming a 2023 reference year; and • CIA Scenario B – SZC peak construction traffic (main development sites) + East Anglia ONE North and East Anglia TWO peak construction traffic, assuming a 2028 reference year. (ii) Please refer to comments on responses to ExQ1 PART 3 OF 6 Cu.1.7.

[20] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010078/EN010078-004009-ExA.AS-6.D6.V2%20EA1N&EA2%20Sizewell%20C%20Cumulative%20Impact%20Assessment%20Note%20(Traffic%20and%20Transport).pdf

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 5	No further comments to add to SZC Co. response for Deadline 2.
Cu.1.11	The Applicant, EA1N, EA2, SCC	**Cumulative effects with other plans, projects and programmes** ES Volume 10 Project-wide, Cumulative and Transboundary Effects, Chapter 4 Assessment of Cumulative Effects with Other Plans, Projects and Programmes [APP-578], paragraph 4.4.53, explains that the cumulative assessment for Sizewell C with EA1N and EA2 is based on certain worst case assumptions. Please indicate whether those assumptions are agreed between all parties and that they comprise a complete list of potential 'worst case' factors?
	Response by SZC Co. at Deadline 2	See response to question **TT.1.62** within **Part 6** which describes recent engagement between SZC Co. and SPR to check on the validity of the SZC Co. assessment using the latest traffic flows from the EA1N and EA2 Environmental Statements. A note has been produced to summarise the differences in the SPR PEIR and ES traffic inputs (refer to **Appendix 24B**). The flow differences are small. The conclusion of that review is that there would be no material impact on the SZC Co. environmental assessment, if the updated SPR flows were used. Furthermore, SPR flows were previously accounted for within the 2023 early years peak assessment year. With the revised programme for East Anglia Hub, the 2023 assessment year remains correct.
	Response by Scottish Power Renewables at Deadline 2	The EA1N&EA2 Sizewell C Cumulative Impact Assessment Note (Traffic and Transport) - Version 02 (East Anglia TWO examination reference REP6-043[21]) sets out the worst case cumulative transport metrics that have been utilised to inform the East Anglia ONE North and East Anglia TWO DCO applications.

[21] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010078/EN010078-004009-ExA.AS-6.D6.V2%20EA1N&EA2%20Sizewell%20C%20Cumulative%20Impact%20Assessment%20Note%20(Traffic%20and%20Transport).pdf

ExQ1	Question to:	Question:
		Deadline 8 Submission - East Anglia ONE North and East Anglia TWO Statement of Common Ground with East Suffolk Council and Suffolk County Council - Version 04, LA10.10 (REP8-114[22]) confirms: "The approach to assessing cumulative impacts with SZC is acceptable."
	Response by Suffolk County Council for Deadline 2	With regards to the assessment of EA1N and EA2, the assumptions are agreed and considered to be acceptable by the Council. For clarity, the Applicant has recently submitted an updated technical note to the Council (see TT.1.62) highlighting that there are some minor differences between the EA1N and EA2 flows assessed in their DCOs and in the Sizewell C DCO; however, these are considered to be minor and highly unlikely to materially impact any conclusions. The assessment here relates to the cumulative impact for the implementation of EA1N, EA2 and SZC. It does not take into account the possible construction of other energy projects in the vicinity.
	Response by SZC Co. at Deadline 3	No further comments to add to SZC Co. response for Deadline 2.
	Response by Scottish Power Renewables at Deadline 3	Please refer to comments on responses to ExQ1 PART 3 OF 6 Cu.1.7 and ExQ1 PART 3 OF 6 Cu.1.9.
	Response by SZC Co. at Deadline 5	No further comments to add to SZC Co's. response for Deadline 2.
Cu.1.13	The Applicant, EA1N	**Cumulative effects with other plans, projects and programmes** EA1N [RR-0340] in relation to offshore matters notes that whilst the Sizewell C Project's Work Nos. 2B, 2D and 2F fall outside the EA1N Order limits, there remains an overlap in the Order limits. The company expresses concern that it must not be hindered from undertaking the necessary works for the EA1N Project as a result of the Sizewell C Project

[22] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010077/EN010077-004595-ExA.SoCG-2.D8.V4%20EA1N&EA2%20Statement%20of%20Common%20Ground%20with%20East%20Suffolk%20Council%20and%20Suffolk%20County%20Council.pdf

ExQ1	Question to:	Question:
		works at these locations. Please indicate the form of assurance sought in this respect and whether this has been provided to the satisfaction of EA1N?
	Response by SZC Co. at Deadline 2	The EA2/EA1N Order limits are located 152m from Work No. 2F and an indicative 500m working width area is required between the EA2/EA1N Projects Order limits and the location of offshore export cables. There is a minimum indicative separation distance of 652m between the Sizewell C cooling water intakes at Work Nos.2B, 2D and 2F. and the nearest potential location of the EA2/EA1N offshore export cables. The construction, operation and decommissioning of the EA2/EA1N projects and the Sizewell C project can be undertaken without unreasonable hinderance. EA2, EA1N and SZC Co. will keep each other informed as to the precise siting of their respective infrastructure during detailed design and will work to ensure that the EA2 and EA1N and the Sizewell C infrastructure can be constructed, operated and decommissioned without unreasonable hinderance. A **Statement of Common Ground** (SoCG) for the EA2/EA1N Projects (Doc Ref. 9.10.28) has been developed on that basis.
	Response by Scottish Power Renewables at Deadline 2	East Anglia ONE North Limited and East Anglia TWO Limited are seeking Protective Provisions within the SZC dDCO in a reciprocal arrangement to those agreed within the East Anglia ONE North and East Anglia TWO draft DCOs. A separate side agreement may also be required with SZC (depending on the final wording of the Protective Provisions) to address commercially confidential matters such as indemnity levels. Discussions on this matter are at an early stage with SZC and East Anglia ONE North Limited and East Anglia TWO Limited and are continuing.
	Response by SZC Co. at Deadline 3	No further comments to add to SZC Co. response for Deadline 2.
	Response by Scottish Power Renewables at Deadline 3	The draft DCOs for East Anglia ONE North and East Anglia TWO include protective provisions in favour of SZC and the parties are currently negotiating a side agreement on this matter also. East Anglia ONE North Limited and East Anglia TWO Limited are seeking protective provisions for their benefit to be included within the SZC DCO and also require a side agreement to be entered into during the SZC examination in order to protect their interests.

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 5	No further comments to add to SZC Co.'s response for Deadline 2.
Cu.1.18	The Applicant, ESC	**Cumulative effects with other plans, projects and programmes** ESC [RR-0342] accepts that the primary issues arising in the cumulative assessment are predominantly managed with the proposed transport strategy. However, one element that continues to raise concern is the A12 west of Woodbridge and the A12/A1094 junction to Aldeburgh pre: Two Village Bypass construction. (i) The Council is requested to explain further its stated intention to work with the Highway Authority to understand how capacity here can be increased and indicate the prospects of that objective being achieved? (ii) Please provide further explanation as to the anticipated timetable for the provision of the Two Village bypass and the scope for the Friday Street roundabout element of the Two Village Bypass to be brought online as soon as possible during the Sizewell C construction.
	Response by SZC Co. at Deadline 2	i) No response from SZC Co. required. ii) There has been further work on the anticipated construction sequence for the two village bypass, which has been validated against the indicative **Implementation Plan** (Doc Ref. 8.4I(A)). The two village bypass will be delivered in the early years of the Sizewell C Project, with the delivery of the A12/A1094 (Friday Street) roundabout prioritised, as shown on the **Implementation Plan** (Doc Ref. 8.4I(A)). The delivery of the Sizewell C Project in line with the Implementation Plan is secured through Schedule 9 of the **Draft Deed of Obligation** (Doc Ref. 8.17(C)). The anticipated construction sequence would include: **1) Preparatory Works** Preparatory works include the provision of mitigation measures for the following items: • archaeology; • ecology; • environment; • utility investigation.

ExQ1	Question to:	Question:
		All preparatory works will be undertaken in compliance with the required permits and consents. Once completed, the preparatory works will facilitate the commencement of construction of the two village bypass. **2) Construction works** **2.1) Friday Street Roundabout** Construction of the Friday Street roundabout will be prioritised early in the construction of the two village bypass. The construction of the Friday Street roundabout will involve substantial works off-line with no disruption to the existing A12 and A1094 road networks. This work will then be followed by a Phased Traffic Management Plan to facilitate the connection of the proposed two village bypass with the existing A12 and A1094. The Friday Street roundabout will be completed and operational early in the construction phase. **2.2) Two Village Bypass** Construction on the remaining areas of the two village bypass will involve the following activities: • temporary contractor compounds; • utility diversions/protections; • earthworks; • drainage; • fencing & safety barriers; • road construction & surfacing; • River Alde overbridge; • Foxburrow non-motorised users overbridge; • pavements, kerbs & footways; • road lighting; • connections to existing road networks; • landscaping. The construction of the two village bypass will be in accordance with the indicative **Implementation Plan** (Doc Ref. 8.4I(A)).

ExQ1	Question to:	Question:
	Response by East Suffolk Council at Deadline 2	(i) ESC works closely with SCC as local highway authority and in particular with regards to SCC's Major Road Network consultation that it recently undertook consulting on improvements to the A12 between the A14 junction at 'Seven Hills' and the A1152 at Woods Lane. The outcome of that consultation and the next stages will be revealed by SCC in due course. ESC would welcome the enhancements to the A12 proposed in the MRN bid as these would address some known highway constraints that need to be addressed in order to enable the delivery of planned growth in the Local Plans. ESC's clear focus is to prioritise the Two Village Bypass in order to address impacts the proposal is likely to have on the Stratford St Andrew AQMA. (ii) ESC would prefer to see the provision of the Friday Street element of the Two Village Bypass prioritised in the Applicant's Implementation Plan and we will continue to work with SCC as local highway authority and the Applicant to achieve this in an appropriate timetable.
	Response by SZC Co. at Deadline 3	(i) Refer to SZC Co. response to Chapter 15 of the Local Impact Report [REP1-045] with regards to SZC Co. position on the impact of Sizewell C on the A12 corridor between Seven Hills and A1152. (ii) As set out in the **Implementation Plan** [REP2-044], the proposed Friday Street roundabout element of the two village bypass has been prioritised by SZC Co.
	Response by FERN at Deadline 3	The effect on homes/businesses along the TVB will be very difficult to live through with the noise of diggers/long hours/dust/cutting off footpaths, and intolerable living circumstances in dwellings and gardens. If the ExA is prepared to consider approving this alignment there must be more mitigation and proper consideration given to the people that live along EDF's route i.e. noise attenuation fencing at the start of construction and beyond, bunds, considerate working hours. This has been covered in FERN's WR Deadline 2 Mitigation.
	Response by Woodbridge Town Council at Deadline 3	ESC's response to this question is not very specific. It does mention that the improvements to the A12 are at an early consultation stage - and in concurring with that, WTC re-iterates that it will be several years before these improvements are in place. If construction starts before the improvements are finished, with HGVs trying to get through the roadworks, the congestion and adverse impact to the local economy will be enormous. The congestion on the A12 would displace unmanageable amounts of traffic onto the

ExQ1	Question to:	Question:
		B1438 through Woodbridge and Melton. We point out that to make matters worse, the section to be dualled is on a considerable incline (uphill in the laden, North-bound direction) meaning that HGVs will be slow to pull away and will give off even more emissions, particulates and noise than on the flat; and will cause frustration to other drivers stuck behind them as they toil up the hill, leading to increased risk of accident.
	Response by SZC Co. at Deadline 5	SZC Co.'s response at Deadline 2 and Deadline 3 remains valid. SZC Co.'s has responded to FERN's comment on mitigation in **SZC Co.'s Comments on Written Representations** [REP3-042] (page 77).
Cu.1.22	The Applicant	**Cumulative effects with other plans, projects and programmes** SCC [RR-1174] considers that the full cumulative impacts of the existing and potential future projects in the East Suffolk area have not been adequately assessed. (i) Please indicate whether any further information has come to light on the schemes considered by the ES and other schemes coming forward since the time of the assessment including offshore wind projects, inter-connector cables across the North Sea and the interconnector project to Kent; (ii) Please summarise the proposals for the delivery of traffic mitigation schemes and explain how that could be achieved in practice without disrupting traffic from other projects including use of the A12/B1122 and A12/A1094/B1069 transport corridors by East Anglia ONE North and East Anglia TWO traffic; (iii) Please explain how cumulative impacts which are not currently proposed to be mitigated due to the length of time they are expected to occur and their deemed likelihood of occurring would be monitored, identified and then mitigated should they in fact occur?
	Response by SZC Co. at Deadline 2	(i) The Applicant has reviewed the list of cumulative schemes considered within the ES against the cumulative schemes listed within the **Joint Local Impact Report** [REP1-044], and has concluded that no additional schemes would need further assessment. **Table 1.1** of **Appendix 13A** provides a summary of the changes to the status of energy Nationally Significant Infrastructure Project (NSIPs) in close proximity to the Sizewell C Project and identifies any new information that has been made available. This has been

ExQ1	Question to:	Question:
		prepared using the information made publicly available at the time of writing. **Appendix 13A** provides an updated assessment based on the identified new information and concludes that the changes to the nearby energy NSIPs would result in no new or different significant effects than those reported in **Volume 10, Chapter 4** of the **ES** [APP-578] or in **Volume 1, Chapter 10** of the **ES Addendum** [AS-189]. It is noted that the SCD1 and SCD2 Interconnectors are at an early stage with very little information available in relation to the proposals (no public consultation or EIA Scoping reports have been completed to date). Therefore, due to lack of information, it has not been possible to provide a cumulative assessment with SCD1 and SCD2 at this stage. It is noted that these projects would be required to complete their own cumulative assessments with other infrastructure projects as part of the planning process. (ii) For the construction of the Sizewell C Project the delivery of highway mitigation schemes will be undertaken in two distinct phases: • Design Phase • Construction Phase Both phases will be developed to reduce disruption during construction and to provide the required access to other developments surrounding Sizewell C. The preliminary design stage has taken cognisance of the potential disruption to road users during the construction phase. Design considerations taken during the preliminary design stage include: • Optimising the alignment of proposed roundabouts and junctions so that most of the new construction can be undertaken outside the footprint of the existing highway network. • Considering pavement design so that pavement overlays can be undertaken on sections of the proposed tie-in works with the existing highway in lieu of full depth road construction. • Identification of reduced speed limits in the vicinity of construction works. These design considerations provide the following benefits to the existing road users: • Reduced construction duration on live road networks where much of the works are undertaken off-line.

ExQ1	Question to:	Question:
		• Reduced interface duration with existing road users during tie-in works between proposed and existing road networks. The construction phase will require detailed consultation with Suffolk County Council in the development and approval of Traffic Management Plans for all interventions on the existing highway network. SZC Co. has held initial discussions with Suffolk County Council on proposed traffic management arrangement to be implemented during construction. The following traffic management principles have been broadly agreed with Suffolk County Council: • Proposed roundabouts and junctions will be prioritised and constructed early in the construction programme subject to construction access dates. • All highway interventions will be developed, approved and programmed in consultation with Suffolk County Council prior to commencement of working on the existing road network. • A12 and B1122 interventions such as tie-in works will be undertaken during off-peak travel times (night time or weekends). • All Interventions on the existing highway network will always aim to maintain one way traffic flow under traffic light signal traffic management arrangement. Where necessary, road closures will be planned and coordinated with Suffolk County Council with alternative diversion routes communicated with road users and other impacted stakeholders. • Use the new roundabouts for site access following their construction. • Access to and from the A1094 to the A12 to be maintained during construction of Friday street roundabout. As with the design phase, the aim of the construction phase traffic management principles is to reduce the impact on existing road users and continue to provide access for other projects. (iii) SZC Co. proposes to manage Sizewell C construction traffic through the implementation of a **Construction Traffic Management Plan** (Doc Ref. 8.7(A)) and **Construction Worker Travel Plan** (Doc Ref. 8.8(A)), which would be monitored on a quarterly basis throughout the construction phase and reviewed through a Transport Review Group (TRG). The TRG would include representatives from SZC Co., the local

ExQ1	Question to:	Question:
		authorities and Highways England. A Transport Contingency Fund is to be established by SZC Co. through the **Deed of Obligation** (Doc Ref. 8.17(C)) and made available to the TRG in the event that further mitigation or corrective actions are required. SZC Co. proposes to monitor the cumulative effects of Sizewell C with Scottish Power Renewables of East Anglia 1 North (EA1N) and East Anglia 2 (EA2) during the construction phase and, if any significant effects arise, could utilise the Transport Contingency Fund to implement additional measures to manage/reduce Sizewell C effects. SZC Co. would support a proportionate approach to funding of any mitigation measures in the event that significant cumulative transport effects arise through the monitoring process.
	Response by Scottish Power Renewables at Deadline 3	Please refer to comments on responses to ExQ1 PART 3 OF 6 Cu.1.8. It should be noted that through discussions with SCC, East Anglia ONE North Limited and East Anglia TWO Limited have agreed to deliver specific mitigation measures proportionate to their contribution to significant cumulative transport effects and this has been secured under the East Anglia ONE North and East Anglia TWO DCOs.
	Response by Suffolk County Council at Deadline 3	(i) There is the likelihood that there will be consultation on the Nautilus and maybe Eurolink projects during the duration of the Sizewell C Examination and that these will need to be taken into account when they are published. (ii) Discussion regarding the traffic management necessary to deliver the associated works is at an early stage but general principles have been agreed with the Applicant. Specifically: •Proposed roundabouts and junctions will be prioritised and constructed early in the construction programme subject to construction access dates. •All highway interventions will be developed, approved and programmed in consultation with Suffolk County Council prior to commencement of working on the existing road network. •A12 and B1122 interventions such as tie-in works will be undertaken during offpeak travel times (night time or weekends). •All Interventions on the existing highway network will always aim to maintain one way traffic flow under traffic light signal traffic management arrangement. Where necessary, road closures will be planned and coordinated with Suffolk County Council with alternative diversion routes communicated with road users and other

ExQ1	Question to:	Question:
		impacted stakeholders. Temporary traffic signal will create some delays and the LHA may place limitations on their use during peak hours. •Use the new roundabouts for site access following their construction. •Access to and from the A1094 to the A12 to be maintained during construction of Friday street roundabout. This may require temporary carriageway due to the constraints of the site. SCC has accepted that concurrent construction of separate sites is acceptable to deliver the associated developments as early as practical provided that an overall minimisation of disruption to road users can be demonstrated. SCC notes that in the Implementation Plan V2.0 (REP2-044) the A12/B11222 Yoxford Roundabout is not planned to start until 6 months after FID. Earlier delivery of this element is critical to the project as it's construction will effect all HGV traffic to Sizewell C. While the applicant has stated that this can be built offline the constrained nature of the site, drainage design and significant areas of tie in to existing highway will make this challenging. (iii) The Applicant's response only deals with cumulative impact of traffic, despite the question being broader. The Examining Authority may wish to consider whether it wishes to have any clarification on other matters.
	Response by SZC Co. at Deadline 5	The **Implementation Plan** [REP2-044] shows the delivery of the Yoxford roundabout by Q2 Year 2. This is based on detailed work on the proposed phasing and programme of the associated development sites that has been undertaken since the DCO submission. SZC Co. will continue to liaise with SCC and ESC with regards to the timing of delivery of the Yoxford roundabout as part of the ongoing engagement.
Cu.1.23	The Applicant	**Cumulative effects with other plans, projects and programmes** SCC [RR-1174] in respect of the cumulative ecological impact, submits that it is not clear why the construction of the EA1 North and EA2 have been scoped out of the assessment of cumulative impacts, particularly in respect of Natura 2000 sites, when the cable corridor passes relatively close to the Sizewell C project. Please provide further details and reasoning to justify the scoping out of that matter from the cumulative impact assessment.

ExQ1	Question to:	Question:
	Response by SZC Co. at Deadline 2	**Volume 10, Chapter 4** of the **ES** [APP-578] considered the potential for cumulative ecological effects to arise with the offshore components of EA1N and EA2 along with EA3, however, concluded that there would not be a potential for the onshore components of these schemes to result in cumulative ecological effects when considered in combination with the Sizewell C Project. The Applicant presented additional information on the cumulative ecological effects with the onshore components in **Volume 3, Appendix 10.4.C** of the **ES Addendum** [AS-201]. It considered the potential for cumulative effects with EA1N, EA2 and EA3 on the following receptor groups during construction: • Designated sites; • Farmland birds; and • Bats. The updated assessment concluded that construction and operation of the onshore elements of the three offshore windfarms, would not change the conclusions of the operational cumulative ecological effects and would remain as described within **Volume 10, Chapter 4** of the **ES** [APP-578]. In addition to this, **Appendix 13A** considers any recent changes that have been made to the nearby energy Nationally Significant Infrastructure Projects (NSIPs), scoped in to the cumulative effects assessment in **Volume 10** of the **ES** [APP-572 to APP-582]. In relation to the three offshore wind farms, the new information related to the construction programme only which would not change the conclusions of cumulative ecological effects assessment described within **Volume 10, Chapter 4** of the **ES** [APP-578].
	Response by Scottish Power Renewables at Deadline 3	For clarity, East Anglia THREE makes landfall at Bawdsey, approximately 26km from Sizewell Beach and is not relevant to any onshore ecological cumulative effects with SZC. The EIAs for East Anglia ONE North and East Anglia TWO consider SZC within the onshore ecology assessment Chapter 22 - Onshore Ecology (EA2/EA1N APP-070) based upon SZC pre-application information. There were no significant impacts, largely a reflection of the lack of spatial overlap or proximity of the respective development footprints. Following the submission of the SZC DCO application, the assessments were reviewed by East Anglia ONE North Ltd and East Anglia TWO Ltd. Given that there were no changes to the order limits of SZC no updates to the submitted assessments were deemed necessary

ExQ1	Question to:	Question:
	Response by Suffolk County Council at Deadline 3	If there is an overlap in the construction periods of EA1N and EA2 (and in particular the cable corridor) with that of SZC, then there is likely to be some cumulative impact on, in particular, farmland birds. This will be difficult to mitigate other than by the provision of skylark plots elsewhere.
	Response by SZC Co. at Deadline 5	As identified within the cumulative effects assessment presented within the ES Addendum [AS-189], during early years construction the effect on farmland birds is considered to be moderate adverse (significant) reducing to minor adverse (not significant) during peak construction and operation. The former arable areas on the main development site which we have transformed to rough grassland already support high densities of skylarks and at the project-wide level, despite the loss of some arable areas associated with the associated development sites, it is considered the Sizewell C Project will secure a net gain in the population of skylarks. More widely and in relation to the farmland bird assemblage as a whole, we will consider the potential to introduce a mitigation approach to address the early years impacts to farmland birds, at the project-wide level. We will provide an update on an approach at Deadline 7.
Cu.1.25	The Applicant, SCC	**Cumulative effects with other plans, projects and programmes** SCC [RR-1174] considers that the cumulative pressure on the local housing stock may increase impacts in East Suffolk and may push workers to look further afield creating pressures on adjacent authorities such as Ipswich and Mid Suffolk. (i) Please respond to the criticism that appropriate monitoring and mitigation measures need to be put in place for all affected areas, to ensure housing impacts are managed and mitigated. (ii) Should anything else be included in the accommodation strategy and other measures related to housing in addition to those measures already set out in the Mitigation Route Map?
	Response by SZC Co. at Deadline 2	Response to (i) The cumulative effect on demand for accommodation is considered in **Volume 10, Chapter 4**, **paragraphs 4.3.64-4.3.66** (Project-wide, Cumulative and Transboundary Effects) of the **ES** [APP-578].

ExQ1	Question to:	Question:
		It is not clear from information provided by other projects in the public domain that there would be a substantial demand for accommodation from their NHB workforce, particularly in the areas around Sizewell C's main development site where accommodation effects from the Sizewell C Project are likely to be greatest. From review of offshore wind projects, it appears that there are significant differences in the demand for accommodation both in terms of the sector of accommodation being sought (most demand would be for tourist sector accommodation rather than PRS or owner occupied accommodation); and peak demand would occur well before the peak of Sizewell C's demand. SZC Co. notes that this conclusion has also been reached by SPR in its further consideration of cumulative accommodation effects related to East Anglia ONE North and East Anglia TWO with Sizewell C. As such, the cumulative effects on local housing stock are considered to be greatest as a result of the effect of the Sizewell C Project's peak NHB construction workforce. As set out in **Volume 2, Chapter 9** (Socio-economics) of the **ES** [APP-195], those effects are likely to be negligible at the wider scale with localised significant adverse effects likely to be concentrated in areas of east Suffolk very close to the main development site, prior to mitigation. SZC Co. has developed a detailed set of measures including a Housing Fund capable of delivering in the region of 1,200 bedspaces by the peak of the Sizewell C Project's workforce profile (i.e. as many private rented bedspaces as are predicted to be sought by NHB workers at peak), alongside an Accommodation Management System and measures to support the tourist accommodation sector and the resilience of statutory housing services for ESC. Proposed measures are detailed in the **Accommodation Strategy** [APP-613] and the **Draft Deed of Obligation**, **Schedule 3** (Doc Ref. 8.17(C)). Effects and the effectiveness of mitigation will be monitored through an Accommodation Working Group including monitoring of workforce size, location and accommodation sector, and measures of stress on the housing market, and governed so that the Housing Fund is largely within the ability of ESC to direct to mitigate for potential effects. Proposed measures are detailed in the **Accommodation Strategy** [APP-613] and the **Draft Deed of Obligation** (Doc Ref. 8.17(C)). As such, it is not considered that the residual effect of the Sizewell C Project would push workers to look further afield creating pressures on adjacent authorities. Effects are not

ExQ1	Question to:	Question:
		likely to be significant at a wider scale, and are anticipated to be fully mitigated, and supported by a responsive governance system to monitor effects. SZC Co. notes that Suffolk County Council recognise that (**paragraph 161** [RR-1174]): *"Pressure on existing housing stock in east Suffolk [is] proposed to be mitigated by a Housing Fund"; and "Non-Sizewell C projects may have similar or alternative means to address impacts on housing stock"*. Response to (ii) For the reasons set out above, it is therefore not considered that anything else should be included in the accommodation strategy and other measures related to housing, in addition to those measures already set out in the **Mitigation Route Map** (Doc Ref. 8.12(B)).
	Response by Suffolk County Council at Deadline 2	SCC has concerns that the large influx of SZC workers could push some local housing needs onto adjacent housing authorities. SCC has a particular service responsibility for specialist and supporting housing customers. By way of background, the Ipswich Strategic Planning Area (ISPA) which includes SCC as a partner organisation – Ipswich Borough Council (IBC), the former Suffolk Coastal District Council (SCDC, now ESC), Babergh District Council (BDC) & Mid Suffolk District Council (MSDC) jointly commissioned the production of a Strategic Housing Market Assessment (SHMA) in 2016. The SHMA concluded that the areas covered by IBC, the former SCDC, and BDC and MSDC represents one Housing Market Area (the Ipswich Housing Market Area) (IHMA) based upon the functional relationships between the areas such as being relatively self-contained in terms of travel to work areas. Lowestoft is separately covered in the Waveney HMA. The IMHA confirms that for strategic planning purposes the housing market area is wider than ESC.
	Response by SZC Co. at Deadline 3	SZC Co recognises the scale and remit of the IHMA as the functional geography for planning for housing demand. SZC Co's assessment of effects is considered at the level of housing service provision, and taking into account the propensity for NHB workers seeking accommodation to look within 60 minutes of the Main Development Site, and predominantly in the local area (Leiston and surrounding wards), resulting in a negligible effect at wider scales. See SZC Co's response to CU.1.25 [REP2-100] which sets out the proposed approach to mitigation, and approach to cumulative NHB worker assumptions for other projects.

ExQ1	Question to:	Question:
		Please also refer to Chapter 29 of SZC Co's response within **Comments on Councils' Local Impact Report** (Doc Ref. 9.29).
	Response by Suffolk County Council at Deadline 3	The southern part of the East Suffolk District is closely linked to the geography of Ipswich and they are defined as being within the same Housing Market Area. Therefore, any pressures on the East Suffolk area from the SZC project alone or in combination with other projects may be reflected in Ipswich, albeit at a more reduced level given the distance decay impacts. Furthermore, it is anticipated that a proportion of the workforce will be resident in Ipswich. The same issues apply though to a lesser extent in Mid Suffolk District. In due course, it may be determined that there is no significant impact occurring in these areas but there should be provision for the Accommodation Working Group to include these areas in the monitoring suggested by the Applicant and for remedial action, if necessary.
	Response by SZC Co. at Deadline 5	SZC Co. has undertaken an assessment of likely significant effects on accommodation markets and has concluded that likely significant effects on accommodation are not anticipated in Ipswich or Mid Suffolk. There is no limit on the ability to monitor the location of the NHB workforce – all workers participating in the Workforce Survey will be asked where they are living, and from where they moved, in order to ascertain the location of potential effects.
Cu.1.42	The Applicant, ESC	**Cumulative effects with other plans etc [APP-578]** Para 4.8.33 – bats – this conclusion of no significant effect relies on an explicit assumption. How likely is that assumption to hold good?
	Response by SZC Co. at Deadline 2	Paragraph 4.8.33 of **Volume 10, Chapter 4** of the **ES** [APP-578] states that '*Assuming the appropriate mitigation measures are implemented across all developments, and landscape design begins to sufficiently establish, minor adverse cumulative effects are anticipated which are considered* ***not significant'****.* Within this statement, reference to all developments is to those identified within paragraph 4.8.21. The implementation of mitigation measures referenced within the planning applications of the cumulative schemes would be enforced by East Suffolk Council through planning conditions and the Section 106 agreements of these schemes.

ExQ1	Question to:	Question:
		In addition, all bats in the UK are protected under Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora (the European Council (EC) 'Habitats Directive') through their inclusion in Annex IV (animal and plant species of community interest in need of strict protection), as transposed into the UK legislation by the Conservation of Habitats and Species Regulations 2017. Therefore, where relevant protected species licensing requirements will apply and will be enforced by Natural England. For compliance with legislation, it is envisaged that all of the cumulative schemes would also apply at least the following tertiary mitigation in addition to any specific mitigation identified within their application documents: - tool-box talks to be provided to contractors; - minimising vegetation clearance, particularly around site margins; and - undertaking pre works checks and surveys. Given the enforcement of the mitigation requirements by East Suffolk Council and any relevant licensing and legislative requirements, it is considered to be a reasonable assumption that the appropriate mitigation measures will be implemented across all developments, and landscape designs will sufficiently establish.
	Response by East Suffolk Council at Deadline 2	The assumption of a Minor Adverse, Not Significant cumulative impact made in paragraph 4.8.33 [APP-578] relies on the success of a number of bat mitigation measures which ESC are concerned are either inadequate or do not currently have sufficient certainty of success (please see the LIR [REP1-045] 'bats' section for our further comments on these). The ES for the Main Development Site is also predicting a Moderate Adverse, Significant construction phase impact on the barbastelle bat population from the project alone as a result of fragmentation effects, despite the proposed mitigation measures. Given these uncertainties we are concerned that cumulative impacts on some bat Important Ecological Features (IEF), particularly in association with the Main Development Site (bat species are divided into a number of separate IEFs for the Main Development Site), during this construction phase may be greater than presented in paragraph 4.8.33.
	Response by SZC Co. at Deadline 3	SZC Co. response to the concerns raised by ESC is provided within Chapter 8 of **Comments on Councils' Local Impact Report** (Doc Ref. 9.29).

ExQ1	Question to:	Question:
	Response by RSPB at Deadline 3	We stressed the need to consider cumulative and in-combination effects in our Written Representations submitted at Deadline 2. Table 10.1 of the Updated Bat Impact Assessment outlines primary and secondary mitigation, does not propose any secondary mitigation, and concludes significant residual effect of habitat fragmentation on barbastelle in the construction phase of the main development site. We dispute the effectiveness of the proposed mitigation in our Written Representations submitted at Deadline 2. The 'cumulative' [in-combination] assessment in paragraph 4.8.33 of APP-578 considers 'bats' whereas it should consider effects on individual bat species. Assessment of cumulative effects incombination with other projects would surely also conclude significant residual effect of habitat fragmentation on barbastelle in the construction phase.
	Response by SZC Co. at Deadline 5	SZC Co. has prepared a response to this point within **SZC Co. Comments on Submissions from Earlier Deadlines (Deadlines 2-4)** (Doc Ref. 9.54).