

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

The Examining Authority's third written questions and requests for information (ExQ3)

Issued on 09 September 2021

Responses are due by Deadline 8: 24 September 2021

PART 3 OF 6

CC.3 Climate change and resilience

CA.3 Compulsory acquisition

Cu.3 Cumulative impact

Cg.3 Coastal Geomorphology

CI.3 Community Issues



ExQ3	Question to:	Question:
CC.3	Climate change and re	esilience
CC.3.0	The Applicant	General climate change and policy issues: The draft Overarching National Policy Statement for Energy (EN-1) was published on 6 September 2021. Part 2 of the NPS covers the government's energy and climate change strategy and Section 4.9 considers climate change adaptation. Please comment on any implications for the Project arising from Part 2 and/or in relation to resilience of the proposed development to the possible impacts of climate change and the proposed climate change adaptation measures.
CC.3.1	The Applicant	General climate change and policy issues: The Deadline 5 submission of Professor Blowers [REP5-189], in considering the overall resilience of the sea defensive systems during the operational phase, states that there seems to be a reliance on levels of sea level rise and coastal impacts that reflect a maximum scenario of 4°C. In addition, his Deadline 7 submission, highlights the question of the resilience of the nuclear island to the most severe impacts and the prospect of a low probability/high consequence risk associated with Climate Change events. (i) Please explain further the consideration that has been given to any potential risk of severe impacts associated with Climate Change that might occur in the long-term towards the end of the century and into the next. (ii) Please also comment on the Climate Change implications for the safe decommissioning of the site and radioactive waste management.
CC.3.2	The Applicant	General climate change and policy issues: The Deadline 5 submission of Bill Parker [REP5-191], states that the Applicant has not clarified how the coastline will develop in the long-term and the expected consequences for SZC and the adjacent coastline. Please provide further details to explain how the resilience of the Project would be maintained, taking account of climate change, in response to shoreline evolution and change scenarios over the anticipated site life, including the prospect of the creation of a headland on which the development would sit.
CC.3.3	The Applicant	Greenhouse gas emissions: TASC in response to ExQ CC.2.5, state that there has been very little narrowing of the disagreement between the parties in relation to the adequacy of the Applicant's evidence on the carbon impacts of the construction, decommissioning and storage phases of the proposal and the detail necessary to justify the Applicant's figures has not been provided.



ExQ3	Question to:	Question:
		Please explain and justify the absence of the details sought and why those aspects of the project which will generate a carbon footprint cannot be itemised and ascribed a figure based on known or estimated units and metrics with a view to enabling a more transparent picture of the carbon debt that SZC represents to be ascertained.
CC.3.4	The Applicant	Greenhouse gas emissions:
		Stop Sizewell C's Deadline 7 submission queries the Applicant's estimation of the carbon footprint of the build and how, after increasing almost 10% from 5.7Mt to 6.2Mt CO²(e) this would seem to have fallen some 40% to around 3.8Mt. (i) Please provide a full and detailed explanation of the change in the anticipated carbon footprint. (ii) In the event that Change Request No 19 is accepted into the Examination, please set out any change in carbon footprint as a result of the proposed water desalination plant.
CA.3	Compulsory acquisition	
CA.3.0	The Applicant	Whether adequate funding is likely to be available:
		The Applicant's Deadline 7 Written Submissions Responding to Actions Arising from Compulsory Acquisition Hearing 1 Part 1, at Section 1.10 deal with the provision of updates to the cost estimate for the Project. Whilst the ExA does not seek the provision of commercially sensitive information, it does seek to be updated in relation to any changes to the overall figure that has been provided as part of the application. (i) Please clarify the position, especially as it was indicated at the CAH Part 1 that there would be updates before the end of the planning process. (ii) If such an update is available before the end of the Examination, then please confirm that it will be submitted. (iii) Since the Applicant has indicated that this is an ongoing process please indicate whether the Applicant is at this stage aware of any information or reason to believe that the overall figure will change?
CA.3.1	The Applicant	Whether adequate funding is likely to be available:
		The Applicant's Deadline 7 Written Submissions Responding to Actions Arising from Compulsory Acquisition Hearing 1 Part 1, at Section 1.11 sets out the new Draft DCO Article 87 intended to provide security for Compulsory Acquisition costs. Please provide relevant extracts of the articles from all the other DCOs on which it is stated the drafting is based.
CA.3.2	The Applicant	Whether adequate funding is likely to be available:



ExQ3	Question to:	Question:
		The Applicant's response to ExQ CA.2.8 (iv) "Please respond to the queries raised by the Stop Sizewell C DL3 comments [REP3-133] in relation to whether the predicted cost and/or contingencies include the potential for multiple adaptive approaches to the sea defences and price rises in construction materials?", simply states that "(iv) SZC Co.'s cost estimates are being regularly updated". Please provide a full and detailed response to the question asked.
CA.3.3	The Applicant	Whether adequate funding is likely to be available:
		The Applicant's response to ExQ CA.2.6 (iii) "The Applicant relies upon its DL2 submission in relation to the DL3 response by Stop Sizewell C [REP3-133] and does not seek to rebut or clarify the quoted comment made by EDF CEO Simone Rossi to Reuters' Global Energy Transition conference. Does that comment to the effect that there is no Plan B in the event the government did not advance with the legislation for the RAB model represent the Applicant's position?", states that " As the choice of funding model is a question for Government, SZC Co. considers that the existence of a Plan B funding model is also a question for Government. However, SZC Co notes its confidence that the RAB model discussions will be successful and observes that a number of funding models have historically been applied (internationally and in the UK) to successfully bring forward other new nuclear projects". Please clarify whether that means that the answer to the question posed is "yes". If not, what are the Applicant's Plan B funding models for the scheme and are there any timing implications associated with those alternative models?
CA.3.4	The Applicant, SCC	Protective Provisions:
		The Applicant's Deadline 7 Written Submissions Responding to Actions Arising from Compulsory Acquisition Hearing 1 Part 1, Section 1.13 considers Part 1 claims under the Land Compensation Act 1973 and at Section 1.15 considers the need for protective provisions for SCC. It concludes that there is no need for further protections. (i) Please indicate whether that this is now an agreed position, including in relation to any drafting changes to Article 21 (ii) Does SCC have any outstanding concerns in relation to the Land Compensation Act 1973 or Protective Provisions sought to safeguard its interests?
Cu.3	Cumulative impact	
Cu.3.0	The Applicant, EA	Cumulative impacts of coastal processes:



ExQ3	Question to:	Question:
		The EA's post hearing submission of oral case at ISH6 [REP5-149] states that with regard to the BLF, HCDF and SCDF it cannot scrutinise cumulative impacts at this stage because of outstanding modelling – adapted HCDF design and morphodynamics of SCDF beyond 2099 – required to inform their position. The same applies to in-combination impacts with other projects such as EA1 and 2. (i) In the light of information provided by the Applicant at DL7 can a response on cumulative impacts now be provided? (ii) If not, what further information is required? (iii) The Applicant is requested to summarise and update its position in relation to cumulative impacts in the light of the latest information that has been submitted.
Cu.3.1	The Applicant	Cumulative impacts with other plans or projects:
		The EA1N and EA2 response to ExQ Cu.2.2 indicates that the parties are progressing Protective Provisions and the associated confidential side agreement to protect EA1N and EA2's interests. (i) Please indicate whether it is still anticipated that those agreed Protective Provisions will be submitted by Deadline 8 and that they will secure the mechanism for the consideration of the interface between the projects at an early stage? (ii) Please confirm that the communications protocol to be agreed between the three parties will be recorded in the SZC TRG? (iii)
Cu.3.2	The Applicant	Cumulative impacts – Suffolk Coast and Heaths AONB
		In [REP5-176] Suffolk County Council state that they consider there is a need to take a holistic approach in respect of looking at all the effects on the AONB when assessing the extent to which the proposals will undermine its statutory purpose. Please can the Applicant signpost to where such information is located within the application documentation? If such work hasn't been undertaken, please can the Applicant confirm why it is has not considered this to be necessary and if this approach is supported by any guidance or precedent?
CG.3	Coastal Geomorphology	
CG.3.0	The Applicant	Impacts on coastal processes:
		The Minsmere Sluice Operation and Impacts Review, at paragraph 1.5.26, [Appendix M to REP6-024], sets out the reasons why the Applicant does not consider that the potential accretion on the Minsmere frontage arising from the deposition of SCDF sediments would not extend to the sluice and hence would not affect the sluice's ability to discharge.



ExQ3	Question to:	Question:
		Paragraph 1.5.27, refers to the provision of further information and detail on the modelling and assessment of coastal processes and sediment transport in the application documents. However, please provide a summary of the evidence (with specific document and paragraph references) to support and explain further the assertions made in paragraph 1.5.6 (a) to (c) of the Review.
CG.3.1	The Applicant	Impacts on coastal processes:
		The Environment Agency (EA) [REP5-149] – indicates that it would welcome a provision in the draft DCO for the removal of the HCDF after decommissioning. The Applicant's position is that it is inappropriate to make provision at this point is noted. Nevertheless, please indicate if it is known at this stage whether there are likely to be any technical reasons to prevent the HCDF removal after decommissioning?
CG.3.2	ESC, EA	Impacts on coastal processes:
		The Applicant accepts [REP5-118] that recent modelling shows during and beyond decommissioning the SCDF maintained coast could become a foreland and even though it is releasing sediment, the SCDF may begin to disrupt longshore sediment transport. It states that this matter is in hand as it has the right monitoring to detect whether there has been a blockage and three mitigation methods for beach maintenance are planned to correct that. A section in the CPMMP [REP5-059] has been added to more explicitly reflect this point. Please confirm that it is agreed that the CPMMP revision achieves that objective and that the monitoring, mitigation methods and triggers set out in section 7 are satisfactory and agreed?
CG.3.3	The Applicant	Impacts on coastal processes:
		Natural England (NE) in its comments on revision 4 draft DCO/DML – 4 (2) a (v [REP5-159] highlights that the use of temporary rock construction or jack barge is not assessed in the marine ecology chapter. Please indicate (with specific references) where this been assessed in the ES?
CG.3.4	The Applicant	Impacts on coastal processes:
		The Deadline 6 submission of Nick Scarr [REP6-068], states that: "the safety of Sizewell C cannot be entrusted to an 'adaptive plan', if indispensable geomorphological receptors are not within the control of human agency". He has also provided a summary of his papers REP2-393, REP5-253 and Deadline 7 in relation to the Sizewell Dunwich banks. Please



ExQ3	Question to:	Question:
		explain: (i) How it would be possible to maintain the integrity of a depleting or restructuring offshore geomorphology including the Dunwich Bank. If that is not possible, nor intended, please set out any implications arising from that prospect and where this has been assessed? (ii) Is it agreed that the Dunwich Bank represents a key driver to Sizewell shoreline security and that the safety of Sizewell C relies unreasonably upon the continued stability and integrity of an unpredictable offshore geomorphology? (iii) How would an adaptive plan respond to the changes or loss of such features in the future? (iv) Please explain further why it is not considered necessary to model any changes or degradation of the Sizewell-Dunwich banks in the main Flood Risk and Shoreline change assessments? (v) Is it agreed that if the Dunwich bank is lost the shoreline may return to a period of acute erosion resulting in flooding of the Minsmere levels and Sizewell marsh with consequential flooding to the landward side of the platform?
CG.3.5	The Applicant, ESC	Impacts on coastal processes: ESC in its written summary of oral case at ISH6 [REP5-144] sets out under item 2(b) a list of information and details that it states are required. In addition, ESC in its 'Comments on Temporary and Permanent Coastal Defence Feature Plans [REP5-015]' [REP6-032] seeks further information, profile drawings and sections in relation to the temporary and permanent coastal defence features. ESC in its written summary of oral case at ISH6 [REP5-144] sets out under item 2(b) a list of information and details that it states are required. It is noted that the Applicant has provided some further information and plans at Deadline 7. (i) Please specify what, if any additional information sought by ESC remains outstanding and when this information will be provided. (ii) If it is not intended to provide all the information sought, please explain why?
CG.3.6	ESC	Impacts on coastal processes: ESC in its 'Comments on the CPMMP Revision 2 [REP5-059]', [REP6-032] indicates that it is still considering whether provision relating to the removal of the HCDF after decommissioning should be included in a Draft DCO Requirement as well as the CPMMP. Has ESC reached a conclusion on this and, if so, what does it seek and why?
CG.3.7	The Applicant	Impacts on coastal processes:



ExQ3	Question to:	Question:
		ESC in its 'Comments on the CPMMP Revision 2 [REP5-059]', [REP6-032] proposes various amendments to the CPMMP. Does the Applicant agree the proposed CPMMP amendments by ESC and, if not please explain why?
CG.3.8	The Applicant	Impacts on coastal processes:
		ESC in its 'Comments on the CPMMP Revision 2 [REP5-059]', [REP6-032] point 21, states that if the Applicant is adhering to the principle that monitoring extents are always defined to be substantially larger than the predicted effect e.g. scour monitor extents around structures are set to 7-11 times the scale of the predicted scour footprint, then the Thorpeness and Minsmere frontages would also be monitored. Is that agreed and, if so, please confirm the 7-11 times the scale of the footprint of the feature will be used throughout?
CG.3.9	The Applicant	Impacts on coastal processes:
		The MMO in its comments on ISH6 agenda item 4 (f) for the permanent BLF, during the construction phase, the impacts of any dredging and the barge berthing platform recommends that the outcome of the initial capital dredge is monitored. It advises that additional surveys should be undertaken to monitor this after the initial capital dredge. It also expresses the view that as there is uncertainty in the response of the outer longshore bar to the continued maintenance dredging related to the permanent BLF, there should be annual surveys for the duration of the construction phase to monitor the outer longshore bar and these additional surveys should be outlined in the CPMMP. Please can the Applicant confirm that this is agreed and that the CPMMP will be revised to reflect this?
CG.3.10	The Applicant	Impacts on coastal processes:
		The Deadline 5 submission of Bill Parker [REP5-191], states that the Applicant has yet to define its methodology for 'ground improvement' that will be a critical element in determining the resilience of the development in the long-term. Please indicate whether this methodology and details of ground improvement works been determined. If so, when will this information be submitted to the Examination? If not, how can a determination of future resilience be made in the absence of that information?
CG.3.11	The Applicant	Impacts on coastal processes:
		The Deadline 5 submission of Bill Parker [REP5-191], seeks details as to how the HCDF would be integrated with the SSSI crossing, the BLF and jetty. The Applicant has



ExQ3	Question to:	Question:
		submitted drawings at Deadline 7 relating to the permanent and temporary BLFs and SSSI crossing. Please explain in detail including by reference to any submitted plans how that would be achieved?
CG.3.12	The Applicant	Impacts on coastal processes:
		The Deadline 5 submission of Bill Parker [REP5-191], states that there needs to be a recognition that Sizewell Bay is a complex and dynamic environment. (i) Please explain how the assessment of long-term impacts have taken account of integrated system elements of the design and the potential for "emergent behaviour" from the natural environment? (ii) Should an independent expert assessment of the system elements operating in combination be carried out? (iii) If not, why is this not considered to be necessary?
CG.3.13	The Applicant	Impacts on coastal processes:
		The Deadline 7 submission of Nick Scarr highlights the fact that the adjoining Sizewell B has a 10m AOD sea defence crest height and the new proposed sea defence for Sizewell C (14.6-16.4m AOD) does not appear to cover the frontage of Sizewell B. Whilst paragraph 3.2.21 in the Applicant's 'Sustainability Statement [APP-617] is noted, please explain the apparent discrepancy and how any potential risk posed by the Sizewell B defences to either site in the long-term would be overcome and secured by the draft DCO?
CG.3.14	The Applicant, ESC, EA	Impacts on coastal processes:
		In the event that Change Request 19 is accepted by the ExA, please explain how the primary mitigation proposed to minimise impacts on coastal geomorphology and hydrodynamics from the proposed temporary desalination plant would be secured by the draft DCO? Is it agreed that Requirement 8 would be sufficient to serve that purpose and are any further drafting changes or additional Requirements or safeguards sought?
CI.3	Community Issues	
CI.3.0	The Applicant	Accommodation provision
		It is understood from the D7 submissions that there is now agreement as to financial provisions in the event that either the accommodation campus or the caravan park at the LEEIE are not delivered in time.



ExQ3	Question to:	Question:
		 (i) Are ESC now confident this would avoid adverse effects in the event that there was a shortage of accommodation and this shortage coincided with large numbers of workers at the site. (ii) Will the agreed financial remedy ensure that additional bed spaces are in place in advance of when they were required, or at least in a timely manner? (iii) In light of the recognised adverse effects of not having sufficient accommodation in a timely manner adversely affecting the more vulnerable groups in society. What reassurances can the ExA have that their interests would be properly safeguarded? (iv) If there remains disagreement or the ExA consider that this financial remedy were not sufficiently robust, do ESC have a preferred mechanism for delivery of the accommodation and a suggested wording for a requirement or other from of mechanism for securing provision of the accommodation.