ExQ2	Question to:	Question	Consultee Response
CC.2.1	The Applicant, EA	General Climate Change and Policy Issues In response to ExQ1 CC.1.17 [REP2-100], the Applicant states that: "UKCP18 RCP8.5 95th percentile climate change allowance has been adopted within the assessment of flood risk, in respect of the main platform and sea defence designs, in accordance with the guidance set out in the Position Statement on the Use of UK Climate Projections 2018 (UKCP18) by GB Nuclear Industry, March 2019, which was the latest guidance at the time of the assessment".  Please confirm that that still remains the latest guidance and that the assessment does not need to be updated?	UKCP18 remains the latest climate change guidance for tidal flood risk, so the assessment does not need to be updated. The use of the RCP8.5 95th percentile is in accordance with the guidance, as described.
CC.2.11	EA	Climate Change Adaptation The Applicant in its comments on the EA response to ExQ1 CC.1.16 [REP3-046] queries whether the approximation of area quoted by the EA has been calculated based on known third party landownership, excluding areas within the EDF ENGL and BEGL ownership.  Please can the EA confirm if that is the case?	The approximation of the area of land was the entirety of the land affected by the increased depth of flooding, and did not exclude areas within the EDF, ENGL and BEGL ownership.
CC.2.12	EA	Climate Change Adaptation The Applicant in its comments on the EA response to ExQ1 CC.1.16 [REP3-046] states that a review of the change in flood depth within the third party land ownership shows that it is variable and that an increase in flood depth above 0.2m affects only approximately 15% of this area, whilst approximately 40% of this area has an increase in flood depth of less than 0.1m. In addition, there is no change in the flood extent within this third party landownership during this event.  Does the EA agree that correctly reflects the position in relation to third party land?	We agree with the assessment of the percentages of land affected by different flood depths. We do not agree that 'there is no change in the flood extent within this third party land ownership during this event'.  The SZC document 'SZC Impact on Landowners' shows plans of how the flood extents at Tank Traps in the 0.5% (1 in 200) annual probability flood event in 2090 will alter as a result of the proposed development on land in the ownership of four third party landowners. This shows that there are very small areas on the edge of the floodplain in third party landownership which were not previously at risk of flooding but would now be at risk. These are very small areas with shallow flood depths of up to 0.05m.  It would be for the Examining Authority to determine if this is significant.
CG.2.5	MMO, ESC, EA, MMO	Impacts on coastal processes  The Applicant's DL5 written submissions responding to actions arising from ISH6 Appendix A para 1.2.4 [REP5-118] refers to four additional terrestrial piles (above Mean High Water Spring) are required to support the two additional removable deck spans for the permanent BLF that are	We have no concerns with the provision of the additional piles.

		required now that the HCDF does not extend as far seaward as it did previously.  Are there any concerns relating to the provision of these additional piles?		
CG.2.6	ESC, MMO, EA, NE, RSPB, National Trust, Alde and Ore Association, Mr Bill Parker	Impacts on coastal processes  At DL5 the Applicant submitted a revised version of the CPMMP [REP5-059]. Please indicate whether there are any further concerns:  (i) as regards the wording of that draft plan including in relation to the geographical extent of the proposed monitoring, the means of monitoring and future mitigation to maintain the shingle transport corridor and mitigation triggers?  (ii) in relation to the funding of the monitoring and mitigation process by the Applicant and the duration for that to process and funding to be in place?  (iii) the means of securing and enforcing the CPMMP provisions?  (iv) whether this now satisfactorily addresses the details sought of the proposed secondary mitigation in the event that the SCDF-supported sediment pathway across the site frontage is interrupted?  (vi) whether any further changes/provisions are required to safeguard the Coralline Crag from avoidable unnatural deterioration?	(i) (ii) (iii) (iv) (vi)	The sediment sub-cell for this area stretches from the Blyth Estuary harbour training arm through to the Thorpeness sedimentary feature. A further sub-cell can be considered to occur between Minsmere sluice and outfall and the Thorpeness sedimentary feature. For the purposes of the HCDF/SCDF coastal monitoring the Minsmere sluice to Thorpeness spatial extent seems appropriate.  No comment  The Marine Management Organisation and East Suffolk Council need to be satisfied with any enforcement provisions, and we support both organisations in this matter.  We are satisfied.  The EA supports the intention outlined in Section 2 of the CPMMP v.2 to extend monitoring of the Sizewell – Dunwich Bank and nearshore bathymetry to include the Coralline Crag outcrop at Thorpeness so that any changes (whether natural or artificial) may be identified and mitigation discussed with the MTF as required.
CG.2.10	The Applicant, EA	Impacts on coastal processes  The DL5 comments of Nick Scarr on the oral submissions made at ISH6 [REP5-253,254], refers to the suggestion by the Applicant and the EA that they have modelling with 'offshore wave patterns propagated inshore'.  (i) Please provide clarification as to whether additional modelling with the Sizewell Dunwich banks removed for all Flood Risk Assessment epochs and shoreline change modelling is available and/or whether that reference was in fact to the latest beach erosion assessment work in TR545 which uses wave data from a buoy offshore of the SD banks?  (ii) If that is the case, please explain why that makes TR545 suitably precautionary including in relation to fluctuations in bank crest elevation for the duration of project?	(i) (ii)	We were referring to the work reported in BEEMS TR545. The modelling in TR545 uses wave data from the Sizewell waverider buoy which is located offshore of the Sizewell Dunwich banks, and applies this directly into the model domain inshore of the banks. It therefore discounts the influence of the banks in reducing wave height, resulting in a precautionary assessment (since wave height, period, energy etc. in the model is therefore likely to be greater than it would in reality given the controlling influence of the banks on the inshore zone across the Greater Sizewell Bay).  CPMMP proposes bathymetric surveys of Dunwich- Sizewell bank every 5 years, this appears to be an appropriate frequency. Additionally, the monitoring of various other parameters are in our view sufficient to capture the indirect impacts of changes in bank morphology such as wave height

		(iii) Please also explain how the CPMMP would, in any case, provide the mechanism to pick up fluctuations in bank topography and the consequential impacts of such a change?	and beach erosion trends, and it would then be the role of the MTF to consider this data and any implications in conjunction with the applicant.
CG.2.13	Applicant, EA	Impacts on coastal processes In relation to the EA DL5 comments on TR544 and TR545 [REP5-149]:  (i) The EA questions whether the SCDF erosion assessment adequately considers the 'worst case predicted SCDF erosion' scenario and encourages the addition of more severe scenarios in the next stage of modelling. Is it agreed that this modelling should be undertaken and, if so when will it be carried out and be available?  (ii) The EA indicates that it welcomes the chance to discuss further the SCDF geometry, in particular crest height, with the Applicant. Is this is a matter for detailed design stage that would be satisfactorily secured by the draft DCO?  (iii) The EA recommends modelling more severe scenarios beyond 2099 for the SCDF and that further work is needed to explore the potential for more extreme events to occur more frequently in the future. ESC's DL5 written summary of oral submissions at ISH6 also points out that the assessment currently covers only part of the Project's lifetime. The Applicant's DL5 written summary of oral submissions made at ISH6 [REP5-111], confirms that work is underway for the modelling of the SCDF through the decommissioning phase to 2140 and is due for submission at Deadline 7. However, please clarify the position in relation to the timing and submission of the assessment to 2099, and whether it will include the more severe scenarios and exploration of extreme events mentioned by the EA. In addition, please provide a timeline for the carrying out and submission of this work.  (iv) In relation to TR545,the EA comments on the reliance placed upon the currently bimodal wave climate. Please can the Applicant respond as regards the potential for changes to wave bimodality due to the impacts of climate change and whether this will be assessed?	<ul> <li>(i) We consider the additional modelling to be appropriate, subject to a detailed review once it is made available to us.</li> <li>(ii) We would welcome any opportunity to discuss these matters prior to finalising the design.</li> <li>(iii) Since the current modelling work extends up to 2099 only (which we understand to be a point early on in the decommissioning stage), we expect further modelling and assessment work covering the period from 2099 to the end of decommissioning in order to capture the full lifespan of the station and its associated infrastructure (including the HCDF and SCDF for as long as these are expected to be required).</li> <li>(iv) No response required from us.</li> </ul>
DCO.2.1	Applicant, Environment Agency	1.35; "The reason for the inclusion of the specific exemption is that the Applicant proposes to divert an existing main river, Middleton Watercourse, as part of the construction of the Sizewell link road. Such	We are content with the article as drafted. The applicant has not sought to disapply the Environmental Permitting Regulations relating to flood risk assessments and so works affecting main rivers are controlled by those regulations, as made clear by Art 23 (9).

		a diversion will involve interference with the bed or banks of a main river".	
		Should the article not therefore be limited to the Middleton Watercourse?	
			The document sets out the flood risk to the SSSI crossing, and demonstrates why the revised crossing design will ensure that the overtopping rates enable safe pedestrian and vehicular access across the SSSI crossing until 2140, based on the reasonably foreseeable climate change scenario.
			With the raised wall heights, the overtopping rates for the 1 in 1000 year event with reasonably foreseeable climate change events are 0.8 l/s/m in 2090 with a wave wall crest at 7.8mAOD and a rate of 1 l/s/m in 2140 with a wave wall at 8.6mAOD. This will provide safe access for both pedestrians and vehicles.
			Without the raised wave wall the crossing would be unsafe to pedestrians in the 1 in 200 event in 2140, and in the 1 in 1000 year event in 2090.
FR.2.4	Environment Agency	SSSI Crossing – Adaptive Design  Appendix J [REP5-120] This document sets out a change to the height of the future adaptive design required for the SSSI crossing from the initially proposed height of 10.5m AOD to a height of 8.6m AOD. It also provides an initial design solution.  Are you satisfied that this is an acceptable change to the adaptive design?	The report states that after 2140 the activities on the site will be related to the final non-nuclear decommissioning requirements, which would be subject to separate and subsequent planning application, which would consider the continued need or otherwise for the SSSI crossing. Therefore the crossing has been designed so that it can be adapted should access be required after 2140. However the occupation of the site in this stage would be non-essential and therefore it is likely that the access to the site would be managed through operational systems that would prevent access from any workforce prior to and during a storm event.
			The document also details how the 'External Hazards Safety Case' which supports the Nuclear Site Licence application to the Office of Nuclear Regulation has been developed. This demonstrates that the 'safe shutdown state' can be achieved 'with no reliance on 'external structures, equipment or personnel'. It states the following:
			"In the case of a 1:10,000-year design basis coastal flooding event under reasonably foreseeable climate change, this is achieved through on-site protection measures such as the site elevation, sea defences and surface water drainage system. The nuclear plant would be autonomous and therefore would operate or be placed in a safe shutdown state for a prolonged period in the event of a severe environmental event. As such the external hazards safety case makes no claim on the proposed SSSI

			crossing to be capable of being adapted (e.g. raised) in future to reduce overtopping rates in response to actual climate change."  However the report does not consider the flood risk to the SSSI crossing in the credible maximum climate change scenarios. It is not clear whether the SSSI crossing is required to provide safe access in the credible maximum flood events up to 2140, and if so whether safe access would be able to be provided based on the revised wall heights. This should be clarified.
FR.2.5	Suffolk County Council, Environment Agency, East Suffolk Internal Drainage Board	Main Development Site (MDS) – Water Management Zone (WMZ) Summary  Appendix D [REP5-120] provides details of the WMZ infiltration basins for the site.  Provide any relevant comments including any areas where the information provided needs further clarification.	The document provides the information that we require however this should not be interpreted that it therefore meets the needs of other interested parties, such as Suffolk County Council as the Lead Local Flood Authority.
FR.2.6	Environment Agency	Main Development Site FRA- Additional Hydrological Review.  Appendix I [REP5-120] this document is submitted in response to issues raised by the Environment Agency with respect to hydrology comments on the MDS FRA.  Does the submitted information address your concerns?	Yes. In the EA Written Representation in June 2021, we were concerned there were aspects of fluvial hydrology that had not been satisfactorily assessed. Following engagement with the applicant and their consultants, the Additional Hydrological Review appendix was submitted at Deadline 6. We are satisfied that this resolves our concern and that the Main Development Site Flood Risk Assessment is therefore supported by a sound evidence base.
FR.2.7	Suffolk County Council, Environment Agency	Main Development Site – Temporary Marine Outfall (TMO) The Applicant has submitted a technical note (Appendix E) [REP5-120] concerning the Temporary Marine Surface Water Outfall.  Provide any relevant comments on the justification for and operation of the TMO.	The TMO is a supplementary discharge option, if and when surface water levels reach a point that they are no longer manageable via the WMZ's. With realignment works due to the Sizewell Drain, the TMO provides a suitable alternative option to reduce potential ecological harm to the nearby watercourses and sensitive sites. The TMO will operate as described until the Combined Drainage Outfall is operational. The proposal is acceptable.  From a flood risk perspective we would have no concerns about the temporary marine outfall being used to discharge surface water on occasions, such as if it is not possible or desirable to discharge the water to the SSSI or watercourse.
FR.2.10	Suffolk County Council, Environment Agency, East	Ancillary Construction Area (ACA) (or LEEIE) Drainage Strategy Technical Note.  Appendix B [REP5-120] sets out the drainage design for the ACA.	We have no further comments.

	Suffolk Internal Drainage Board, East Suffolk Council	Provide any comments you have in relation to the strategy set out in this document.	
FR.2.11	The Applicant, Environment Agency	Sizewell Marshes SSSI - Soil Water Monitoring Suffolk Coastal Friends of the Earth during ISH7 and in their submission [REP5-271] questioned the suitability of the soil water level monitoring undertaken in the Sizewell Marshes SSSI.  Provide a response to their expressed concerns and also comment on the suitability of the assessments undertaken for the Project.	The Applicant is best placed to respond to this question.
FR.2.12	Environment Agency, East Suffolk Internal Drainage Board	Sizewell Drain Water Management Control Structure  Appendix C [REP5-120] does the submitted document provide the degree of certainty that the outline design options for the proposed control structure on the realigned Sizewell Drain, demonstrates the ability to enable fine tuning of water levels in the Sizewell Marshes SSSI, subject to the required Land Drainage Consent?	The Applicant is best placed to respond to this question.
FR.2.13	Suffolk County Council, Environment Agency	Sizewell Link Road Flood Risk Assessment Addendum Revision 2.0 [REP5-045]  Please provide comments of acceptability and coverage following the submission of this revision.	We do not have any outstanding concerns regarding the FRA for the Sizewell Link Road. There is one area of increased flood depths on land in third party land ownership, upstream of SW6 crossing. The applicant is engaged in talks with the landowner for the affected area, with the view to reaching agreement for the increased flood depths. If agreement is not reached, then the Planning Inspectorate will need to determine whether the increased flood depths are acceptable.  There are other areas of increased flood depths at SW3, SW6 and SW7, but they are within the site boundary order limits, so the applicant has stated that landowner permission is therefore not required. The Planning Inspectorate should determine whether this is the case.  The applicant has agreed to consider amending the design of the diversion channel to include a stepped marginal plant ledge into the design to ensure there is a vegetated area in the watercourse. This would be considered at the detailed design stage, and would be designed such that it would not affect the capacity of the watercourse as already modelled.
FR.2.14	Suffolk County Council, Environment Agency	Sizewell Link Road Preliminary Drainage Design Note Appendix F [REP5-120] provides an initial assessment of the drainage design for the Sizewell Link Road.	This is within the remit of Suffolk County Council, and we support their comments.

		Provide any comments you have on this note.	
FR.2.15	Suffolk County Council, Environment Agency	Two Village Bypass Preliminary Drainage Design Note  Appendix G [REP5-120] provides an initial assessment of the drainage design for the Two Village Bypass.  Provide any comments you have on this note.	This is within the remit of Suffolk County Council, and we support their comments.
FR.2.16	Suffolk County Council, Environment Agency	Yoxford Roundabout Updated Drainage Strategy Appendix H [REP5-120] provides an updated assessment of the drainage strategy for Yoxford roundabout.  Provide any comments you have on this updated strategy.	This is within the remit of Suffolk County Council, and we support their comments.
FR.2.18	The Applicant, Environment Agency, Natural England	Flooding – Landowner Consents In response to ExQ1 FR.1.14 the EA [REP2-136] raised a concern over flood risk to land. They requested that the landowners should be consulted, and their legal easements sought for increase flood depths.  Please provide an update on the progress with respect to EA guidance on thresholds and what action has been taken negotiating with relevant landowners and Natural England.	Our understanding is that the applicant is still negotiating with the landowners and Natural England.  We have asked the applicant to provide a document outlining their claims for not being able to reduce the offsite flood risk impacts further.
R.2.1	The Applicant, Environment Agency	Site Licences and Permits  (i) Please advise on the latest position in respect of the application for the site licences and permits being considered by the EA.  (ii) Are you aware of any impediment that may exist that would prevent or delay the granting of the licence or permit?  (iii) What is the current timetable that you would anticipate for the conclusions upon the license/ permit application being reached?	<ul> <li>(i) We are in the process of determining three environmental permit applications made on 27 May 2020 (a radioactive substances activity permit, a combustion activity permit and a water discharge activity permit). We consulted our statutory consultees and the public on these applications between 6 July 2020 and 2 October 2020 and will undertake a further consultation once we have reached a 'minded to' decision.</li> <li>(ii) We cannot state whether we believe there is likely to be any impediment to the granting of these permits until we have reached a 'minded to' decision for each permit, consulted with statutory consultees and the public, and considered any consultation responses that we have received. The assessment upon which we will base our decision has taken longer than expected because of the need to review the necessary information provided by the company through a number of additional requests.</li> <li>(iii) The current best estimate for reaching a 'minded to' decision on all three permits is around May 2022. We are engaging with the company to try to enable delivery of information that may allow us to arrive at a 'minded to' decision at an earlier point in</li> </ul>

additional information is required and further review necessary.  We will consult with statutory consultees and the public on the 'minded to' decision over a period of three months and we would then expect to arrive at a final decision up to four months later.	time. Timescales could be affected if there are further changes to the project proposals, or work to resolve issues, means that
would then expect to arrive at a final decision up to four months	· · · · · · · · · · · · · · · · · · ·
	would then expect to arrive at a final decision up to four months