ExQ3	Question to:	Question:	ESC Response
G.3 General and cross-topic questions			
G3.0	The Applicant	Policy approach: The draft Overarching National Policy Statement for Energy (EN-1) was published on 6 September 2021. In addition, the associated 'Planning for New Energy Infrastructure Draft National Policy Statements for energy infrastructure' consultation document was published which includes comments in relation to EN-6. Please provide an update in the light of these recent publications setting out any perceived implications for the application of policy to the Sizewell C Project and the need for new electricity generating infrastructure of the type of proposed.	
G3.1	The Applicant, ESC, SCC	Policy approach: Please confirm your view as to the correct policy approach in this case to development within the AONB in the light of relevant NPS, NPPF and Local Plan policies relating to major development in such locations?	As set out in section 7 of the LIR [REP1-045], the NPS EN-6 and Appendix EN-6 Volume II highlight the effects of a nuclear power station in general, and at Sizewell specifically, on landscape character and visual impacts on the AONB. ESC considers that the development would have a significant adverse impact on the statutory purpose of the designation, both during construction and operation. The Applicant's Planning Statement updated at Deadline 2 [REP2-043] provided a review of relevant changes and developments in policy and law since the application was originally submitted in May 2020. ESC agrees with the Planning Statement update that the adopted version of policy SCLP3.4 of the Suffolk Coastal Local Plan does not contain any new matters to those already identified and addressed in the originally submitted Planning Statement [APP-590]. The updated Planning Statement also refers to Policy SCLP10.4 which sets out policy in relation to landscape character and is therefore relevant to

			development that may impact on the AONB. The final policy reflects and is in accordance with the NPPF and NPS. ESC concurs with the Applicant's assertion that the alterations to the policy following examination do not have a significant impact on the DCO application. The original Planning Statement refers to EN-1 which provides that consent may be granted for development in the AONB in exceptional circumstances, where the development is demonstrated to be in the public interest and having regard to a) the need for the development, including in terms of national considerations, and the impact of consenting or not consenting it upon the local authority; b) the costs of, and scope for, developing elsewhere outside the designated area or meeting the need for it in some other way, taking account of the policy on alternatives and c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated. That policy is reflected in paragraph 177 of the NPPF (2021). Paragraph 176 of the NPPF provides that great weight should be given to conserving and enhancing landscape and scenic beauty in AONBs. ESC accepts that the Applicant has used the correct policy approach to the assessment of development within the AONB. ESC submitted at D7 as part of our written summary of case for ISH9 [REP7-113]: **'(a) The relative weight to be afforded to Local Plan and NPS policies.** Section 105 obliges the Secretary of State to take any Local Impact Report into account, any prescribed matters and any other matters he considers important and relevant. Both the relevant NPSs and the Local Plan are considered to be important and relevant to the determination of this Application. In ESC's response to ExA first written question G.1.16 we stated that "*Policy SP13 referred to at paragraph 3.10.8 of the Planning Statement is from the now replaced Suffolk Coastal Local Plan 2013 and is not emerging*

			policy [APP-590]. Policy SCLP3.4 relating to Proposals for Major Energy Infrastructure Proposals is now adopted policy and does set out matters against which the Council considers major infrastructure proposals should be considered. ESC agrees that these matters are included within the NPSs. Both the Local Plan and NPSs have a role in this process but ESC considers that the NPS, in particular EN-6, has been written solely for nuclear power station proposals whereas SCLP3.4 refers to all major energy infrastructure. ESC therefore agrees that one should look first to the NPSs which should prevail in the event of any conflict with the Local Plan." We continue to be of the opinion that the NPSs should prevail in the event of any conflict with the Local Plan, albeit the Local Plan will remain an important and relevant consideration.
Ag.3 Agriculture and soils			
Ag.3.0	The Applicant	Permanent and Temporary Loss of Agricultural Land The content of Appendix E 'ALC Land Take Summary Table' [REP6-24] is noted. However, the response by Natural England to FWQ Ag.2.2 at Deadline 7 contends that data inconsistencies remain within Table 17.6 of [APP-277]. Please provide a response.	
Ag.3.1	The Applicant	Outline Soil Management Plan (oSMP) The response by Natural England to FWQ Ag.2.2 at Deadline 7 details several required amendments to the oSMP. Please consider each amendment and confirm whether changes to the oSMP are required. Where not considered necessary, please provide a detailed justification.	
AQ.3 Air Quality			
AQ.3.0	The Applicant	Clarification Following the submission responding to actions at ISH4 Socio economic and community issues Para 1.3.12 refers to a number of receptors, and says the results are presented in [AS-127]. Please	

		advise which plans show the locations of each of the receptors identified. SX18 does not appear to be present, but please advise for each.	
AQ.3.1	The Applicant, ESC	Monitoring and Reporting of Results Concern was expressed throughout the ISH on Air Quality on future monitoring of air quality in respect of PM10, PM2.5, and NOx. (i) Has a monitoring and reporting regime now been agreed? (ii) Please confirm where this is secured within the DCO documentation. (iii) Please advise how, the public will be kept appraised of the findings of the ongoing monitoring	**(i) Has a monitoring and reporting regime now been agreed?** A monitoring and reporting regime for $PM_{2.5}$, PM_{10} and NO_2 has now been agreed between the Applicant and ESC. The Applicant has committed to identify and install NO_2 diffusion tubes and to identify appropriate monitoring locations and fund PM_{10} and $PM_{2.5}$ monitoring as part of the DoO / DMMP, this is a commitment within the CoCP [REP7-037] at paragraph 4.2.1 and Table 4.2. The air quality monitoring results will be reported to ESC on a monthly basis. Contractors will be notified when alert levels are triggered. Alert levels are when air pollutants exceed a threshold indicative of potential air quality objective exceedances. ESC agrees with the PM_{10} alert levels in the CoCP [REP7-037]. However, ESC is not in agreement with the proposed dust deposition alert level and has requested that it is amended to 0.2g/m^2/per day, as per the Institute for Air Quality Management's Guidance on Monitoring in the Vicinity of Demolition and Construction sites. The Applicant responded positively to this request during ISH7, and ESC awaits this amendment in the next iteration of the CoCP. Each month ESC will review monthly NO_2, PM_{10}, $PM_{2.5}$ and dust deposition monitoring undertaken by the Applicant to establish if there have been any exceedances and whether corrective actions agreed in the CoCP , oDMP and DMMP have been implemented to mitigate impacts. **(ii) Confirm where this is secured within the DCO documentation?** The commitment to air quality reporting and monitoring, and to the production of the DMMP are contained in the CoCP [REP7-037]. The CoCP is secured through requirement 2 in the DCO [REP7-007]. However, ESC considers that it is necessary to amend paragraph 4.1.3 of the CoCP to

			make it clear that the DMMP must be approved before works commence, in line with the equivalent wording for the Noise Monitoring and Management Plan at paragraph 3.1.3 of the CoCP. The Applicant has indicated that this revision will be made in the next iteration of the CoCP. **(iii) How will the public be kept appraised of the findings of ongoing monitoring?** The impact of the proposed development as identified in diffusion tube measurements carried out by ESC will continue to be reported in ESC's annual status reports. ESC is satisfied with the proposed monthly reporting of air quality monitoring results by the Applicant to ESC. Discussions have not yet started between ESC and the Applicant regarding how this information will be communicated more widely. ESC suggests that the Applicant should produce a publicly available monthly report detailing air quality monitoring with a comparison against air quality objectives and targets. This should use the same data shared as part of the monthly reporting to ESC and should be produced within a specified timetable following monthly reports to ESC, for example, within 1 week of the monthly reports to ESC. This could be secured as part of the DMMP.
AQ.3.2	Applicant, ESC, EA	Medium Combustion Plant Directive and Non Mobile Machinery - Clarification There are a series of generators that would be used through construction and operation which are covered by different regimes of control. (i) Can each party confirm the position in respect of how the different elements are controlled so that there is a clear understanding of who	**(i) Can each party confirm the position in respect of how the different elements are controlled? How in combination effects of the plant is controlled?** ESC considers that the authoritative response to this question should be provided by the EA.

		controls what (EA – Medium combustion Plant?) (ESC- Non Mobile Machinery up to 560Kw) and if agreed how the in combination effects of the different plant is controlled to an appropriate level. (ii) If it is not agreed, please explain what the differences are. (iii) Will plant above 560Kw be covered by controls under the Medium Combustion Plant Directive? Or through an EA permit? (iv) Please clarify what is the EA permitting threshold.	ESC's understanding is that plant individually or aggregated with a thermal input >1MWth will be regulated and controlled by the Environment Agency. If the plant is below this threshold, it should meet minimum NRMM standards agreed between the Applicant and ESC in the CoCP [REP7-037] (in summary, a minimum of Stage-IV plant with 15% annual permitted exemptions). Should the NRMM standards set out in the CoCP apply, in-combination impacts will be mitigated through the controls agreed between ESC and the Applicant in the CoCP. These controls include the use of electrically powered plant at the earliest possible stage, the minimum emission standards referred to above, avoiding locations close to sensitive receptors, and ongoing monitoring during construction operations. For plant regulated by the EA, control of in-combination impacts will be a matter for the EA. ESC expects that regulated plant will need to demonstrate no significant air quality impact in an air emissions risk assessment which takes account of in combination effects of different plant. **(ii) If it isn't agreed how in combination effects will be controlled, please explain what the differences are?** ESC does not expect any disagreement on the control of in-combination effects. This is reflected in the Statement of Common Ground between the Applicant and ESC. **(iii) Will plant above 560Kw be covered by controls under the MCPD? Or through an EA permit?** ESC considers that the authoritative response to this question should be provided by the EA. ESC expects that plant at or above 560kw electrical output will be greater than the EA's 1 MWth minimum permitting requirements and would be regulated by the EA as Medium Combustion Plant.

			(iv) Please clarify what is the EA permitting threshold? ESC considers that the authoritative response to this question should be provided by the EA. ESC understands that plant either individually or aggregated that exceed a rated thermal input of 1 MWth will be regulated by the Environment Agency.
AQ.3.3	Applicant, ESC,	Ozone In the event that the latest change request were to be accepted would this have any implications for ozone? At the ISH8 on Air Quality, it was indicated that raised ozone levels in the vicinity of the site were largely related to activities from elsewhere although this is not agreed by all parties. Are their implications for raised ozone downwind of the application site irrespective of the change request?	**Are their implications for raised ozone downwind of the application site irrespective of the change request?** ESC considers that ozone is a matter for national and international control. Local-scale controls or measurements would not be effective or appropriate. This is why ozone is not specified for control under the Local Air Quality Management (LAQM) regime, whereas pollutants such as nitrogen dioxide and PM_{10} are controlled by local authorities under LAQM. This view is also supported by Defra's Air Quality Expert Group 2012 report which stated: "*The Royal Society has also reported recently on ground level ozone (Royal Society, 2008). This report draws attention to relevant policy issues and especially the necessary geographical scale for effective control of ground level ozone, which has been shown to be a hemispheric scale environmental issue. Thus, regional or country-scale control measures have limited ability to regulate ground level ozone exposures within the control regions.*" Ozone is an important air pollutant which is formed from interactions between oxides of nitrogen and volatile organic compounds in the presence of sunlight. Because of this, the proposed activities at the application site would have no more than a negligible effect on ozone levels in areas downwind of the application site. Because of the complex photochemical interactions, the overall effect of the proposed activities at the application site could be to slightly increase or slightly decrease ozone

			levels. However, ESC considers that there is no potentially significant or material increased risk to health due to ozone resulting from the proposed development, either in isolation or in combination with other pollutants ESC therefore considers that the proposed development could have a slight beneficial, slight adverse, or mixed effect on ozone levels in regions downwind of the application site. This conclusion would be irrespective of the change request, although the actual effects would be slightly different. In any case, ESC considers that the effects of the proposed development on ozone levels is not relevant to the ExA's decision. ESC has worked alongside the Applicant to implement emission controls to ensure that a high proportion of the cleanest emission standards are being adopted for all HDVs and NRMM to achieve the lowest practicable NO_x and VOC emissions.
AQ3.4	PHE, ESC	Ozone Concerns continue to be expressed by Interested Parties (Frances Crowe D7) REP7-XX as to the likely adverse health effects as a consequence of a combination of increased ozone and increased particulate matter and NOx linked to the construction of and transport for the proposed development. Can ESC and PHE confirm their position in respect of any effects of ozone either in itself or in combination with other pollutants and any risks to human health that may arise.	As set out in response to AQ3.3, ESC considers that ozone is a matter for national and international control. Local-scale controls or measurements would not be effective or appropriate. Ozone is an important air pollutant which is formed from interactions between oxides of nitrogen and volatile organic compounds in the presence of sunlight. Because of this, the proposed activities at the application site would have no more than a negligible effect on ozone levels in areas downwind of the application site. Because of the complex photochemical interactions, the overall effect of the proposed activities at the application site could be to slightly increase or slightly decrease ozone levels. However, ESC considers that there is no potentially significant or material increased risk to health due to ozone resulting from the proposed development, either in isolation or in combination with other pollutants.

			Ozone remains an important air quality pollutant for residents of East Suffolk. The closest ozone monitoring location to the application site is in Sibton, Suffolk. In 2020, 29 exceedances of the 8-hour objective of 100 µg/m^3 were reported at this site. The UK Air Quality Strategy has an objective of no more than 10 exceedances a year. Reducing emissions of the chemicals responsible for ozone formation at a national level is a key part of Defra's Clean Air Strategy 2019.[1] As regards the potential for impacts resulting from increased NO_2, PM_{10} and $PM_{2.5}$ levels due to the proposed development in combination with existing levels of ozone, these pollutants are always present in ground level air quality concentrations. There are not currently any air quality standards which should be used to evaluate the combined effect of these pollutants. The use of individual pollutant thresholds as carried out in the assessments submitted by the applicant and ESC is the metric used to establish whether air quality poses a risk to human health, and this approach is considered by ESC to be robust. [1] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf
AQ.3.5	(none given)	Monitoring of PM2.5 It would appear higher levels of PM2.5 are linked to poorer health outcomes for residents/people subject to exposure at higher levels and that this increase in risk, increases over time. (i) Is this considered to be a reasonable assumption? (ii) If so would it not be appropriate to monitor levels of PM2.5 now to understand the baseline position in advance of the commencement of	**(i) Is this [higher levels of $PM_{2.5}$ linked to poorer health outcomes] considered to be a reasonable assumption?** Yes. There is no evidence for any threshold of effect of $PM_{2.5}$. For example, a March 2021 report from Defra's Committee on the Medical Effects of Air Pollutants entitled "*Advice on health evidence relevant to setting $PM_{2.5}$ targets*"[1] stated: "*The newer evidence indicates associations of adverse effects with lower concentrations than were previously studied. The studies have not indicated a threshold of effect below which there is no harm nor a threshold below which there are decreases in relative risk.*"

		work in the event the DCO were to be granted, and to have a requirement/obligation to monitor future levels both on the main freight routes but also at and around the main construction site? (iii) If this were not undertaken can the SoS be assured that the test to protect human health during construction and subsequent operation are being met?	Consequently, any increase in $PM_{2.5}$ exposure would result in an increase in risk of health impacts. The smaller the increase in $PM_{2.5}$ levels, the smaller the risk of increased impacts. ESC considers that this risk has been adequately assessed by the applicant, and the mitigation measures proposed are expected to ensure that the proposed development will not have significant or material adverse effects on health due to increases in $PM_{2.5}$ levels. (ii) **Would it not be appropriate to monitor levels of PM2.5 now to understand the baseline position in advance of the commencement of work in the event the DCO were to be granted, and to have a requirement/obligation to monitor future levels both on the main freight routes but also at and around the main construction site?** Yes, in respect of the Main Development Site and the Applicant has undertaken to carry out PM_{10} and $PM_{2.5}$ monitoring both in advance of and during construction works at the Main Development Site, as suggested by ExA (Code of Construction Practice Section 4.2.1 and Table 4.2) [REP7-037]. As regards monitoring on the main freight routes, ESC understands that this will be limited to measurement of oxides of nitrogen and nitrogen dioxide. ESC considers that this is appropriate, in view of the expected lower impact of HDV emissions on levels of PM_{10} and $PM_{2.5}$ compared to the impact on levels of NO_2. As discussed at ISH7, construction is not typically a significant contributor to $PM_{2.5}$. Guidance produced by the Institute for Air Quality Management[3] states: "Monitoring of $PM_{2.5}$ concentrations should not normally be required (but should be reported where available) unless measurements for comparison with the air quality objectives are required. Emissions of $PM_{2.5}$ will be principally related to

			NRMM exhausts. It is recommended that $PM_{2.5}$ should not be the primary metric." **(iii) If this were not undertaken can the SoS be assured that the test to protect human health during construction and subsequent operation are being met?** ESC considers that the controls on emissions secured through the CoCP would be sufficient to provide sufficient protection of human health. An appropriate monitoring campaign will be useful and important to provide assurance that the controls as implemented are minimising and mitigating impacts in accordance with the Applicant's assessment. [2] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1002468/COMEAP_Env_Bill_PM2.5_targets_health_evidence_questions_responses.pdf [3] https://iaqm.co.uk/text/guidance/guidance_monitoring_dust_2018.pdf
Al.4 Alternatives			
Al.3.0	The Applicant	General assessment principles: Please provide an update in relation to the Applicant's consideration of alternatives in the light of the judgment in R (Save Stonehenge World Heritage Site Limited) v Secretary of State (Holgate J, 30 July 2021) with particular regard to the absence of any consideration of alternatives for the main site platform and decisions relating to the reactor design.	
Al.3.1	The Applicant	General assessment principles: The Deadline 5 submission of Bill Parker [REP5-191], states that a core issue is that the space	

		between the sea to the east and the SSSI Sizewell Marshes to the west is too narrow to accommodate this specific nuclear power station design. He questions why: “only one inappropriate design of nuclear station has been presented”. Please explain why other alternatives to the nuclear power station design and dimensions sought have not been considered and assessed?	
Al.3.2	The Applicant	General assessment principles: The Deadline 5 submission of Professor Blowers [REP5-189], in relation to the potential suitability of the site puts forward three qualifications to the Applicant’s assumption that the site is not an issue since Sizewell is one of those sites listed in the NPS. In addition, his Deadline 7 submission states that the recent report of the IPCC has a direct bearing on the development of a nuclear power station such as Sizewell C on a coastal location and is relevant to the policy on strategic siting assessment. Please respond and comment on the need to assess the suitability of the site as a whole in the light of the NPS designation and in the light of the recent report of the IPCC.	
Al3.3	The Applicant	General assessment principles: The Deadline 5 submission of Professor Blowers [REP5-189], in relation to the potential suitability of the site puts forward three qualifications to the Applicant’s assumption that the site is not an issue since Sizewell is one of those sites listed in the NPS. In addition, his Deadline 7 submission states that the recent report of the IPCC has a direct bearing on the development of a nuclear	

		power station such as Sizewell C on a coastal location and is relevant to the policy on strategic siting assessment. Please respond and comment on the need to assess the suitability of the site as a whole in the light of the NPS designation and in the light of the recent report of the IPCC.	
AR.3 Amenity and recreation			
AR.3.0	The Applicant, SCC, Local Access Forum	Suffolk Coastal Path It is expected that equestrians will have to dismount to ensure safe crossing underneath the permanent BLF, via the use of mounting blocks. (i) Do SCC regard this as a suitable solution for equestrians? (ii) How has the safety of elderly and disabled riders using such a facility been assessed? (iii) Are there details setting out the dimensions, type of block and suitability of surface both of the block and surrounding ground set out anywhere? If not how are these details to be agreed? (iv) What provision would there be for maintenance going forwards	