

Copeland Borough Council
NuGeneration Moorside Project
Scoping Response on NuGeneration
Moorside EIA Scoping Report

Issue 3 | 23 July 2015

This report takes into account the particular instructions and requirements of our client.

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Executive Summary

This report sets out the response from Copeland Borough Council (CBC) to the request for a Scoping Opinion from the Secretary of State pursuant to Regulation 8(1) of the Environmental Impact Assessment Regulations for the NuGeneration Moorside project. The Council sets out a technical commentary on the methodologies proposed in the NuGeneration Scoping Report as well as the information that should be supplied in the Environmental Statement (ES) to be submitted in support of the Development Consent Order (DCO) application pursuant to the Planning Act 2008.

CBC welcomes the opportunity to review and appraise consultation material and submissions made by NuGeneration. As principal host community to the development, the Council recognises its' key role in assessing the proposals as they evolve in response to NuGeneration's multi-stage consultation process.

The Council notes that it has also provided (under separate cover) a Stage 1 Strategic Issues Consultation Response to NuGeneration in respect of Section 47 of the Planning Act. Both this Scoping Response and the Strategic Issues Consultation reference common environmental information provided in the EIA Scoping Report provided by NuGeneration.

In this executive summary, a traffic light system has been employed to summarise the key recommendations in each topic area. This assessment reflects the Council's current position based on the information provided to date, and will be subject to review as the project progresses. It is acknowledged that where significant omissions are identified, this may be addressed as further project information becomes available.

Colour	
	The content of the EIA scoping report is considered appropriate and generally lacks errors or omissions. Information is considered adequate for the purpose of EIA Scoping with the expectation of further dialogue as the project progresses.
	Insufficient project definition, or baseline information available at this stage limits the extent to which the scoping approach can be evaluated. Further dialogue required on specific areas.
	The content of the Scoping Report has significant omissions, or requires updating or reviewing to comply with recommended policy and guidance.

Ref	Topic Area	Specific Issue	Adequacy of Technical Information	Gap Analysis and Council Recommendations	Suggested action or mitigation delivery mechanism
Project Strategy and Definition					
1.1	Project Definition and Approach to Scoping	Lack of project definition for the Additional Scoping Land, and Associated Development sites. The Scoping Report contains relatively little baseline data which undermines confidence in the approach to EIA		Continued dialogue in respect of project definition and strategy. Continued dialogue in respect of scoping the approach to EIA for Additional Scoping Land and Associated Development. This will be imperative to ensure that the Council and wider stakeholders are satisfied that a robust methodology is to be employed i.e. which is commensurate with the anticipated effects arising from development proposals. The commitment from NuGeneration for on-going engagement on this is welcomed and supported by the Council.	Further engagement in advance of Stage 2 consultation. Details of project strategy for Additional Scoping Land and Associated Development to be made available to the Council as soon as possible. Wider theme or topic based discussion fora with the Council and wider stakeholders recommended.

1.2	Project Definition and Approach to Scoping	Approach to scoping out of potential topic focussed EIA needs based on proposed and high level strategic limits of deviation at scoping stage.		The Environmental Statement (ES) should encompass the worst case effects assessment ('Rochdale envelope' approach). The Council urge caution where potential EIA needs are scoped out, before the project is sufficiently defined, limits of deviation are fully defined, or defined with a large degree of flexibility at this stage. Matters should not be scoped out from the EIA unless specifically confirmed as being scoped out by the Secretary of State in the Scoping Opinion.	Further engagement in advance of Stage 2 consultation. The Council recommends that this be linked into dialogue on further project definition when this becomes available.
Technical Appraisal					
2.1	Approach to EIA	Effective and sustained consultation to date.		Informal consultation undertaken with the Council with regard to the details of the Survey and Monitoring Plans (SMPs), has supported a more robust and thorough approach to baseline data collection.	Council to be consulted on any updated SMPs and linked to survey approaches where the project is not defined at this time. Further dialogue is required to ensure effective outcomes.
2.2	Approach to EIA	Consideration of cumulative, in-		The Council notes that the Scoping Report lacks topic specific detail regarding how	Further engagement in advance of Stage 2

		combination, and inter-disciplinary effects.		<p>cumulative development would be considered. The Council notes the complexity of cumulative assessment with respect to the ongoing decommissioning programme at Sellafield.</p> <p>The Council would wish to ensure that NuGeneration will fully assess any in-combination effects and inter-disciplinary effects, particularly those that have the potential to affect community / residential amenity.</p>	<p>consultation. The Council recognises the importance of dialogue on this matter, particularly as the project becomes more defined around the Associated Development strategy.</p>
2.3	Approach to EIA	Decommissioning and Legacy effects		<p>It is acknowledged that decommissioning of the nuclear power station is scoped out of the EIA. This is consistent with the approach supported by legislation at this time. NuGeneration should clarify how it intends to address decommissioning of all other elements (such as AD) that form part of the proposed DCO. A link should be made to the prospective end (legacy) uses of sites as far as this is possible.</p>	<p>Further engagement in advance of Stage 2 consultation. Development of an AD Transition Plan which sets out the status of infrastructure once it has served its' immediate purpose in supporting NuGeneration's construction needs.</p>
2.4	Approach to EIA	Planning Strategy		<p>Further explanation is required in respect of the development planning strategy and any sequential impacts associated with</p>	<p>Ongoing engagement with the Council and wider stakeholders. It</p>

				various phases of work supported under different planning regimes i.e. DCO, Town and Country Planning, Marine Licensing, and any permitted development.	will be important that effects are fully explored and appropriate / proportionate mitigation measures agreed to address effects.
3.1	Transport	Adequacy of proposed Scoping approach to Transport assessment.		The Council considers the scope of the assessment sufficient, although further detailed is expected prior to Stage 2 consultation. In particular, the Council will need to understand the relationship of the AD sites and the transport strategy from the perspective of the construction programme. The Council also highlight the need to understand the strategy for how excavated material will be dealt with. The overall excavated volumes (subject to re-use) are potentially large and could have significant transport implications.	Further engagement in advance of Stage 2 consultation. Further definition of the transport strategy linked in to the AD strategy and in particular the movement of workers, equipment and materials. Transport of excavated materials to be addressed as part of the EIA.
4.1	Noise and vibration	Assessment methodology		The Council has identified a number of concerns around the proposed assessment methodology, including compliance with assessment methodology advocated by the Noise Policy for England and the application of BS6472 Pt1. Further work is	EIA methodology to be further developed in consultation with the Council. The Council would support engagement on this issue

				required to ensure that the impact criteria correctly interpret BS4142:2014.	in terms of wider DCO experience of noise assessment.
4.2	Noise and Vibration	Potential effects from transport movements		The Council seek clarity on the type of freight trains used for construction as to how vibration would be assessed. Receptors affected by the new rail spur should be considered, alongside those on the existing track. Quantified justification is required as to why operational phase vibration this is not assessed in the context of operational rail movement, and further definition of the number of rail movement and the management of spoil required.	Further consideration given to the assessment of vibration from operational rail movement as part of the EIA or further justification required on its exclusion.
4.3	Noise and Vibration	Potential effects and health and tranquillity		There should be a full consideration of all the receptors and resources potentially affected to properly scope the spatial scope and the methodologies. This could include places prized for tranquillity, and potential effects on health and quality of life.	To be considered as part of the EIA. To be considered as part of the EIA. The Council recognises that this would be more readily undertaken when the project is fully defined.
5.1	Air Quality and Climate	Assessment of impacts on climate		The Council would strongly encourage NuGeneration to consider carbon foot-printing for the construction stage in	To be considered as part of the EIA.

				alignment with the Copeland Local Plan and recommendations of the HM Treasury Infrastructure Carbon Review.	
5.2	Air Quality and climate	Baseline assessment		<p>It is considered that the monitoring survey is largely sufficient to establish baseline conditions. Clarification is sought on the rationale for why NO₂ monitoring is being undertaken at the SSSI rather than NO_x monitoring, and the absence of SO₂ monitoring.</p> <p>Assessment of emissions from all modes of transport including train, ship and vehicle emissions should be incorporated within an appropriate Zone Of Influence (ZoI).</p>	Further engagement in advance of Stage 2 consultation.
5.3	Air Quality and Climate	Assessment methodology		<p>The Council recommends that criteria to determine impact and significance provided in the revised EPUK/IAQM development control guidance should be used to determine affected roads as a result of the scheme (this also applies for AD sites). This will require amendment to the evaluation significance criteria proposed.</p> <p>The assessment of potential significant effects on nitrogen and acid deposition at</p>	To be considered as part of the EIA and HRA.

				ecological receptors should be given due regard under the Habitats Regulations Assessment (HRA).	
5.4	Air Quality and Climate	Assessment methodology		The air quality and climate assessment should link to the Health Impact Assessment (HIA) and transport, noise and vibration, amenity and socio- economic assessments to provide a holistic assessment of potential community and health impacts.	To be considered as part of the EIA.
5.5	Air Quality and Climate	Assessment methodology		The air quality and climate assessment should link to the Health Impact Assessment (HIA) and transport, noise and vibration, amenity and socio- economic assessments to provide a holistic assessment of potential community and health impacts.	To be considered as part of the EIA.
6.1	Radiological issues	Baseline data		The baseline data gathering and assessment proposals appear reasonable, however the detailed locations and testing suites for radiological assessment cannot be ascertained from the information provided.	Further engagement in advance of Stage 2 consultation.

<p>6.2</p>	<p>Radiological issues</p>	<p>Assessment methodology</p>		<p>The Council would anticipate the consideration of potential effects associated with dewatering and disposal of radiological contaminated groundwater within the ES.</p> <p>The radiological assessment considers human and non-human species effects via air, groundwater, soil and marine environment pathways and therefore has interfaces with several other proposed ES chapters. Further clarity is sought around the methodology associated with predicted radiation dose.</p> <p>In respect of issues relating the change in baseline for contaminated sediments there needs to be a clear understanding of the potential for marine cooling of the Moorside project to, in itself, change the baseline during construction and operations. This will need to be fully evaluated during the design of the cooling water systems intake and outfall structures and the associated marine environment modelling.</p>	<p>To be considered as part of the EIA and wider regulator engagement (alongside the Council).</p>
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7.2	Soils, Geology, Agricultural Land and Land Quality (including spoil management)	Baseline information		The Council considers the baseline adequate for the purpose of Scoping. Further baseline information should include details of superficial deposits thickness and characteristics; sandstone bedrock characteristics and faulting and excavated soils within the reactor footprint.	To be considered as part of the EIA. The Council notes limited definition in respect of geological conditions of AD sites and anticipates further dialogue on this matter.
7.3	Soils, Geology, Agricultural Land and Land Quality (including spoil management)	Assessment methodology		It is unclear to the Council whether the assessment will consider all receptors (including water, environmental, ecology receptors (as well as wider consideration of invasive species) as well as radiological contamination.	To be considered as part of the EIA.
8.1	Freshwater Environment and Flood Management	Assessment methodology		The Council would generally note that the Freshwater section of the Scoping Report is thorough and systematic although the approach to assessment of effects is presented in outline only. Detailed methodologies for assessment of potential effects have not yet been defined.	Further engagement in advance of Stage 2 consultation.

<p>8.2</p>	<p>Freshwater Environment and Flood Management</p>	<p>Flood risk assessment methodology</p>		<p>A joint probability analysis of river flow and tidal boundary conditions is recommended. The Flood Risk Assessment (FRA) should align with the ES and the material supporting dialogue with wider regulators including ONR on the Generic Design Assessment process.</p> <p>The Council notes that NuGen will need to assess and demonstrate that staff and visitors to the site will remain safe from the flooding effects (including residual effects) from a flood with a 1 in 1,000 (0.1%) annual probability.</p>	<p>To be considered as part of the EIA.</p>
<p>8.3</p>	<p>Marine and Coastal Physical Environment</p>	<p>Potential effects on designated sites</p>		<p>Low Church Moss SSSI requires particular consideration due to the potential sensitivity of this SSSI to changes to the hydrogeological regime (such as dewatering or in-ground barriers to groundwater flow).</p>	<p>To be considered as part of the EIA.</p>
<p>9.1</p>	<p>Marine and Coastal Physical Environment</p>	<p>Assessment methodology and project definition</p>		<p>Further design definition is required to establish the likely significant effects, and therefore comment on the suitability of baseline data and detailed methodologies e.g. details on where the in-take and out-</p>	<p>Further engagement in advance of Stage 2 consultation.</p>

				<p>falls will be located, type of structure present on the seabed, and location and facilities expected at the MOLF.</p> <p>The Council notes that there is limited information on dredging and disposal operations.</p>	
9.2	Marine and Coastal Physical Environment	Assessment criteria		<p>An understanding of sediment transport will underpin the marine coastal assessment. The assessment criteria need to be considered further in terms of changes to the general marine physical processes and not just focussed on designated sites. Long terms climate implications on physical processes require some consideration.</p>	<p>Further engagement in advance of Stage 2 consultation.</p>
9.3	Marine and Coastal Physical Environment	Cooling infrastructure		<p>The Council notes a considerable area of uncertainty in NuGeneration’s proposals for cooling at this time. Furthermore, the range of options create very different requirements in the marine and terrestrial environment.</p>	<p>Further engagement in advance of Stage 2 consultation as project definition is developed for the cooling options.</p>

<p>10.1</p>	<p>Landscape and Visual Impacts</p>	<p>Baseline information</p>		<p>The approach taken to capturing the baseline characteristics is judged to be adequate, subject to further refinement and further engagement as design, including the MOLF, Additional Scoping Land and AD details emerge. Due consideration should be given to the relatively proximate Local Character Areas are not included within the current ZTV.</p>	<p>Further engagement in advance of Stage 2 consultation and as the project is more thoroughly defined.</p>
<p>10.2</p>	<p>Landscape and Visual Impacts</p>	<p>Mitigation</p>		<p>The landscape chapter does not address how mitigation and replacement planting would be considered/secured. Opportunities for off-site mitigation measures such as planting may need to be explored.</p>	<p>Mitigation plans to be developed as early as possible as part of the EIA with a view to SOCG with the Council and wider stakeholders. Mitigation to be secured via DCO requirements.</p>
<p>11.1</p>	<p>Historic Environment</p>	<p>Baseline and Approach</p>		<p>The Council considers the approach taken by NuGeneration to the Scoping Report largely appropriate. The Council would encourage NuGeneration to adopt a precautionary approach to scoping and to scope matters in where development and</p>	<p>Further engagement in advance of Stage 2 consultation and commitment to adopt a precautionary approach to scoping the EIA.</p>

				<p>the nature of their effects is yet to be fully defined.</p> <p>The ZoI should be given consideration as the scope of development in AD is defined.</p>	
11.2	Biodiversity	Baseline and survey methodology		<p>The Council considers that the Biodiversity SMP and baseline has been substantively developed. Further detail is recommended in respect of Ancient Woodland, Section 41 Natural Environment and Rural Communities (NERC) mammals, polecat and harvest mouse.</p> <p>The Council requests further clarity surrounding the detail of surveys relating to terrestrial invertebrates, S41 species, badger, bats, great crested newts, reptiles, amphibious mammals, breeding bird surveys, white-clawed crayfish and aquatic macro invertebrates.</p>	<p>Council to be consulted on any updated to the SMPs and during the development of the ecology strategy for the project.</p>
11.3	Biodiversity	Habitats Regulations Assessment		<p>The programme for HRA Evidence Plan, should align appropriately with the survey programme.</p> <p>The Council seeks clarification on whether any freshwater pearl mussel downstream</p>	<p>Further engagement in advance of Stage 2 consultation.</p> <p>HRA matters to be considered in further</p>

				<p>from the SAC boundary are being considered as part of the SAC population or if such reaches will be treated as contributing habitat to the SAC. This will clearly be an important matter for inclusion / discussion with the HRA.</p> <p>A mechanism to include other new projects within the in-combination assessment that may come forward between now and the application date would be helpful.</p>	<p>dialogue with the Council and Natural England.</p>
12.1	Countryside Recreation	Assessment scope and methodology		<p>It is accepted that the methodology is currently high level, therefore details will need to be agreed regarding the scope of assessment, assessment methodology, and how mitigation will be identified and secured.</p> <p>The Council stress the importance of appropriate consideration of the future baseline (e.g. the proposed England Coastal Path). Nugeneration should consider the potential effects during construction including those on the recreational coast and bathing water standards. Potential impacts associated</p>	<p>Further engagement in advance of Stage 2 consultation.</p> <p>Ongoing consideration as part of EIA.</p>

				with the MOLF and AD sites require further consideration, along with an appropriate mitigation strategy.	
13.1	Socio-Economics and Human Population	Supply Chain and legacy benefit		<p>The Council wish to be consulted further on baseline information including the supply chain and employment. A baseline analysis should identify gaps in the supply chain and skills and inform a supply chain strategy and should be supported by a robust quantitative data.</p> <p>The Council require more detail on the precise mechanisms for NuGeneration’s commitments to the local supply chain to ensure that such measures are agreed, investment is secured and a linkage made to the long term legacy benefits arising from the project.</p>	<p>Further engagement in advance of Stage 2 consultation.</p> <p>Supply Chain Strategy to be developed to inform the DCO with underpin DCO Requirements and Obligations.</p>
13.2	Socio-Economics and Human Population	Assessment of amenity effects		<p>Further detail should be provided on how an amenity assessment will be undertaken. NuGeneration’s approach to the socioeconomics / human population sections of the ES are primary areas where cumulative environmental effects will be assessed.</p>	<p>Further engagement in advance of Stage 2 consultation.</p>

13.3	Socio-Economics and Human Population	Accommodation Strategy		An accommodation strategy should be provided, based on a robust baseline should identify displacement effects, tourism impacts and the potential for legacy benefits.	Further engagement in advance of Stage 2 consultation.
13.4	Socio-Economics and Human Population	Social and cultural infrastructure		Further detail should be provided as to potential impacts and legacy benefits for community social and cultural infrastructure provision. The demand for religious facilities currently assumes Christian provision only. Nugeneration should provide evidence to support key assumptions.	Further engagement in advance of Stage 2 consultation.
14.1	Health Impact Assessment (HIA)	Scoping of HIA.		<p>NuGeneration propose to provide an HIA and this is welcomed by the Council. However, it is unclear when this document will be provided and what the intended content is.</p> <p>Healthcare provision for workers including the potential for ‘supporting local leisure and health services’ should be linked back to the anticipated worker needs and any balance of provision which might be accessed by the community clearly</p>	Further engagement in advance of Stage 2 consultation. A draft of the approach to the HIA should be shared with the Council and wider stakeholders prior to its’ formulation.

				articulated in the HIA. Nugeneration should also consider post-construction implications of sustained infrastructure provision.	
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1 Introduction

1.1 Scope and Context of Evaluation

This technical evaluation of the Moorside Environmental Impact Assessment (EIA) Scoping Report sets out the response from Copeland Borough Council (CBC) to the request for a Scoping Opinion from the Secretary of State pursuant to Regulation 8(1) of the EIA Regulations and for the information that should be supplied in the Environmental Statement (ES) to be submitted in support of the Development Consent Order (DCO) application.

In order to provide a full account of the NuGeneration Scoping Report, this response includes a detailed review of the information and data provided within. This sets the context for additional material which would be expected by the Council within the Environmental Statement.

Due recognition has been given to the Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2012 (hereafter referred to as the EIA Regulations), The Planning Inspectorate Advice Note Seven, Preliminary Environmental Information, Screening and Scoping (PINS, 2015,) the EIA Regulations and the Department for Communities and Local Government's (DCLG's) EIA Planning Practice Guidance (DCLG, 2014).

Copeland Borough Council welcomes the opportunity to review and appraise submissions made by NuGeneration relating to their proposals for a new nuclear power plant at their Moorside site. As principal host authority to the development, the Council recognises its' key role in assessing the proposals as they evolve in response to NuGeneration's multi-stage consultation process.

2 Technical Evaluation and Response (Moorside EIA Scoping Report)

2.1 Review of the Introduction (Section 1)

This section of the Scoping Report gives a brief overview of the proposed development, the project team, and the purpose and structure of the Scoping Report. This section also outlines whether the project qualifies as a Nationally Significant Infrastructure Projects (NSIPs) under the Planning Act 2008. The section identifies that the Moorside Project will require a Development Consent Order (DCO) application and that decision-making with respect to the granting of the DCO will rest ultimately with the Secretary of State (SoS). The Council notes that the Scoping Report omits in places the correct legislative references, including the Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended). This should be appropriately addressed within the ES.

NuGeneration acknowledge the potential for the project to fall under transitional arrangements for changes made to the EIA Directive. Dependent upon the date when the new regulations come into force, NuGeneration will, where applicable, incorporate the new requirements from the Regulations within the EIA work that leads to the preparation of the Moorside ES. Copeland Borough Council welcome the commitment to consider legislative changes where required, and would wish to see emerging best practice and advice given by PINS within the published advice notes taken into consideration in preparation of the ES. NuGeneration should consider and engage the Council on the implications of any future potential changes likely to be made to the EIA Regulations and how this might affect the scheme.

It should be noted that EIA studies to date have focused upon the Initial Scoping Land within the Moorside Search Area and there is a greater level of detail provided for the Initial Scoping Land than for the Additional Scoping Land and Associated Development (AD) search areas. Further additional baseline data for the Additional Scoping Land and AD is required which would be expected within the Environmental Statement. Furthermore, details associated with potential transport proposals and infrastructure development is not available in detail at this time. Where further infrastructure design detail is required to refine the Survey and Monitoring Plans (SMPs), NuGeneration have committed on continuing engagement with the Council and key stakeholders to finalise the SMPs. Although fully formed responses regarding the baseline data collection are not possible where further project definition is required, the Council welcomes and supports the concept of continuing dialogue in this regard. The Council would wish to see further details emerge between Stage 1 and Stage 2 S47 Planning Act consultation on AD sites and a refinement of Survey and Monitoring Plans (SMPs) and EIA assessment methodologies.

Section 1.4 of the Introduction refers to the Developer and Project Team and outlines a number of organisations who are undertaking the EIA technical assessments. Table 1.1 outlines the environmental studies which will be included within the Environmental Statement. Whilst these topics are broadly welcomed it is noted that limited provision appears to have been made within the Environmental Statement for discussion on Sustainability, and health related assessments are yet to be defined in the context of HIA scoping. Given that the proposals comprise a large scale, safety-critical heavy civil engineering project with the potential for influence on sustainability and health-related matters it is expected that these matters will be addressed within the Environmental Statement accompanying the DCO. It should be noted that specialist support for the EIA technical assessment of Radiological Issues, Additional Scoping Land and Associate Development Sites has not been illustrated within Table 1.1.

There is an imbalance of baseline information between the initial scoping land and additional scoping land within the Scoping Report. It is not clear to what extent the additional scoping land will be relied on to construct the Moorside Power Station although it is currently envisaged to include areas which may be required for power station construction activities and for environmental mitigation (paragraph 1.4.2). However, it is difficult to conclude this area of additional scoping land will not be relied on to form part of the operational land, particularly the coastal foreshore areas.

Due reference is made in Section 1.5 to the required consents, licences, permits and assessments independent of the DCO. These should be specified in full within the Environmental Statement and demonstrate the relationship to environmental effects assessed within the EIA.

Section 1.7 refers to consultation undertaken to date and outlines the objectives of the consultation process. It is considered helpful for the outcome of pre-application consultation to be reflected in the Environmental Statement with a full account of representations made by consultees and the means by which these have been addressed within the Environmental Statement.

In many topic areas, the Council is encouraged to note that prior comments provided on an earlier draft of the Scoping Report have been addressed. Consultation has been undertaken with the Council and key stakeholders with regard to the details of the Survey and Monitoring Plans (SMPs) which have resulted in a largely robust and thorough approach to baseline data collection.

In addition, in relation to advice given on the PINS website (20th May 2015) (Ref: EN010047_3191421) – any consultation carried out in relation to the original EIA Regulation 6(1)(b) notification from NuGeneration and subsequent Regulation 9 list of prescribed consultation bodies may need to be checked as this was developed on the power station and did not include the AD proposed at other sites in the vicinity of the proposed development. This may mean that additional consultees may be identified which were not included in the original list of consultation bodies.

It should be noted that the consultation threshold may need to include consultees in Ireland, for instance An Taisce (The Irish National Trust). The Hinkley Point C nuclear power station development was challenged by An Taisce which was

unsuccessful at the High Court and Court of Appeal. The appeal was on the basis that the government should have consulted the Irish Government on the transboundary effects of the project but did not do so. The case centred on the meaning of 'likely' in this context, given that Ireland should have been consulted if environmental effects from the project were considered 'likely'. The claimants argued that 'likely' meant the same for the purposes of the Habitats Regulations and the Environmental Impact Assessment regulations, but the judges disagreed. While the judges accepted that the greater the environmental impacts that would occur, the less the chance of them occurring would have to be for them to require consultation, taking a 'zero risk' approach was going too far. The consultation threshold should be treated similarly to include low-probability high-impact events, but not where the probability is much smaller than the magnitude of the impact.

Further clarification is required on the need for cooling towers to support the Moorside development and the likely significant effect this could have on views from the Initial Scoping Land and more widely including the potential to give rise to a transboundary impact.

The structure of the report is outlined in paragraph 1.6.1. It is noted that Chapter 20 provides a tabular summary of potential significant effects that are not likely to be significant and that it is therefore proposed to 'scope out' of the EIA for the Moorside Project. When scoping out, NuGeneration must give sufficient information including relevant baseline information, assessment and reasoning for the determining authority to make a judgement on scoping out.

It should be noted that matters should not be scoped out unless specifically confirmed as being scoped out by the Secretary of State in the Scoping Opinion as further investigations through pre-application may prove otherwise. Whilst the Secretary of State may not agree to scope out certain topics or matters within the Scoping Opinion on the basis of the information available at the time, this does not prevent applicants from subsequently agreeing with the relevant consultees to scope matters out of the ES, where further evidence has been provided to justify this approach. The Council anticipate that this approach will be explained fully in the ES.

It will be important for the Council to understand the programme for design maturity through pre-application and how this ties into the consultation process, EIA, and the limits of deviation relied on for the purposes of environmental assessment and the DCO. The Environmental Statement submitted with the DCO should encompass the worst case effects of the project (Rochdale envelope approach). It is important the Rochdale envelope and its implications on the EIA are clearly defined, and informed by on-going dialogue with the Council. The Council urge caution where potential effects are scoped out, before the limits of deviation are fully defined, or defined with a large degree of flexibility at this stage.

Additionally the Council wish to understand which elements of design detail which will be subject to Requirement, requiring further support from the Council post consent.

2.2 Review of Description of the Development (Section 2)

Regulation 8(3) of the EIA Regulations specifies that the request for a scoping opinion should include a *plan sufficient to identify the land; a brief description of the nature and purpose of the development and possible effects on the environment; such other information or representations* which the applicant may wish to provide. Whilst it is noted that the graphical material included in appendices to the Scoping Report provide outline information in terms of geographical area of the Moorside Search Area, Initial Scoping Land and Additional Scoping Land, considerably more detail would be required in the Environmental Statement. Very limited information is provided within the Scoping Report in graphical terms with respect to the infrastructure and facilities of the AD Sites and Moorside Power Station. Furthermore, due regard should be made of the location and extent of all aspects of the proposals including the specific location of offshore works such as possible cooling water tunnels.

Reference is made to the relevant NPSs (EN-1 & EN-6) which identifies land adjacent to the existing Sellafield Complex as being potentially suitable for development of a new nuclear power station – i.e. ‘the NPS boundary for the Reactor.

The Planning Inspectorate should be drawn to Figures 1.2 – 1.5 (included in the Scoping Report) which illustrate the locations of Moorside Search Area, Initial Scoping Land, Additional Scoping Land and AD Sites. It should be clear from the outset that the Scoping Report (and therefore the Environmental Statement to follow) should adequately detail all aspects of the proposed development such that the proposed methodology for EIA can be validated. Further detail would be requested within the Environmental Statement (in graphical as well as narrative form) on:

- Detailed information on the Marine Offloading Facility (MOLF);
- Detailed information on cooling water tunnels;
- Detailed information on electricity transmission infrastructure (including substations);
- Information on options and proposals for interim waste store for high level waste for 160 years;
- Location of access roads (in conjunction with enhancements);
- Proposed locations of landscape and ecological mitigation / enhancement measures;
- Support and administration buildings;
- Park and Ride facilities;
- Freight consolidations facilities;
- Accommodation Facilities (on and offsite), including legacy uses;
- Design guidance and criteria for off-site development;

- Local labour agreement;
- Leisure strategy for workers and the host community, including physical proposals;
- Approach to obligations, requirements and community benefit;
- Visitor centre;
- Surface water and foul sewer drainage systems.

Spoil management from onshore excavations used to facilitate foundations (stated at 10 million cubic metres) (2.3.4 P24 Scoping Report) is of interest to the Council, particularly in respect of the strategy for retaining spoil for landscaping. The wider management of spoil extracted from cooling water tunnel construction (if this is not included in the above figure) is also of interest. Final siting considerations for AP1000 deployment is assumed to have a crucial bearing on the material required in excavation given the variable depth of overburden across the site. The Council is aware that this is broadly characterised by relatively shallow depth to bedrock in the northern area of the NPS boundary with greater depth to bedrock approaching the coastal zone.

Paragraph 2.3 provides information around the construction, operational and decommissioning activities of the nuclear plant and ancillary infrastructure. Given the need to store intermediate level waste on the site over potentially a 100 year timeframe due reference should be made to climate adaption and flood assessment within this period. In combination with these details being provided for the station in the Environmental Statement, a Legacy Management Programme detailing the management intentions of off-site AD should be included within the Environmental Statement, including impacts of climate change, and the issues associated with the national waste repository. It is fundamentally important for the Planning Inspectorate to understand that the interim waste proposals are long term proposals for 160 years. Communities will need to understand the degree of risk associated with the deliverability of this, and the detailed implications locally, for example, a long term high level radioactive store.

It should also be set out that the developer has no plans to accommodate new or existing waste from other sites in the UK or overseas at the Moorside site. It is purely for its own operational use.

The Scoping Report states at paragraph 2.3.14 '*Decommissioning of the AD (AD) elements which are required only for the construction phase would be included in the ES*'. It should be confirmed how it intends to address decommissioning of existing facilities which are subject to improvement and will be included in the DCO application i.e. utilities, community facilities, logistical distributions centres, ports and highways.

Although it is acknowledged that the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations (1999) [S.I. 2892] permit the decommissioning of the generating station being scoped out of the EIA, NuGeneration should clarify how it intends to address decommissioning of all other elements (such as AD) that form part of the proposed DCO.

Section 2.4 describes the AD Sites and it is recognised that four search areas for ADs have been identified and there are seven land parcels within these four search areas. The location and layout of development within the four AD search areas and the detailed land use proposals for each AD site are yet to be determined. However, it is expected that detailed information on this will be provided in the Environmental Statement.

In paragraph 2.4.2 NuGeneration notes that ‘other locations are being considered for park and ride/rail facilities, freight sequencing/consolidation and port infrastructure. Requirements for new development at these locations have not been determined’. These services / functions have a fundamental bearing on the wider ‘movement strategy’ for the project and will also influence the potential for legacy consistent with the Council’s Local Plan. The Council welcomes NuGeneration’s commitment to continued consultation on these matters and believes this is imperative in order to facilitate conjoined working and to achieve mutually acceptable outcomes for the project.

In paragraph 2.4.4, NuGeneration highlights the ‘need for infrastructure improvements to the local road and rail networks to support the construction and operation of the Moorside Project’. Furthermore, the Scoping Report states that the ‘exact nature of these improvements are currently being defined in liaison with relevant stakeholders’. The Council would wish to be involved in this dialogue and seek confirmation from NuGeneration on the anticipated scope of transport improvements linked to the AD Strategy and the points at which there will be an opportunity for dialogue. The Council notes that the resolution of such matters at Stage 2 i.e. in May to July 2016 would leave limited opportunity to genuinely influence the project prior to the anticipated DCO submission in April 2017.

NuGeneration note in paragraph 2.4.5, that the ‘location and layout of development within the four AD search areas and the detailed land use proposals for each AD site are yet to be determined’. This is a matter of some concern for the Council. The Council anticipated indicative layouts and broad functions to be included alongside Scoping. This section of the Scoping Report goes on to note that ‘detailed proposals will be developed in consultation with local planning authorities and other key stakeholders, informed by the evolving construction workforce accommodation strategy and the transport strategy’. The emphasis on consultation with Copeland and other stakeholders is welcomed although the precise means of undertaking this consultation is to be discussed and agreed. Whilst the association of AD sites with transport is understood, the Councils would also urge NuGeneration to consider spatial recommendations in the Local Plan at the centre of its’ AD Strategy. The Council notes that in respect of land use, the Local Plan identifies a need to ‘target new development to existing centres as the most sustainable locations and to support population and economic growth’ (2.1.6). This will be a key element which the Council need to have reflected in NuGeneration’s AD strategy.

Section 2.5 outlines an explanation with regards to not considering main alternative sites for the nuclear power station element of the Moorside Project within the ES. The UK Government’s Strategic Siting Assessment (SSA) has identified eight key sites for the development of new nuclear power stations, the Sellafield site is one of these sites. The selection of this site, which adjoins the

Sellafield Complex, reflects the government's preference for locating new nuclear power stations as close to existing nuclear related activities as possible to help minimise a number of potential effects and take advantage of existing infrastructure and the availability of key resources. It is welcomed that other alternatives will be considered for the proposed MOLF, AD, temporary and permanent arrangements for the placement and landforming of soils, the distribution of construction activities and land restoration proposals.

2.3 Review of Approach to EIA scoping (Section 3)

This section describes the anticipated approach to and content of the EIA Scoping.

The Scoping Report sets out the environmental topics to be addressed in the ES at Table 3.1, making reference to environmental aspects included in Schedule 4 Part 1 of the EIA Regulations and uses this to justify the technical chapters selected.

NuGeneration acknowledge the potential for the project to fall under transitional arrangements for changes made to the EIA Directive. Dependent upon the date when the new Regulations come into force, NuGeneration will, where applicable, incorporate the new requirements from the Regulations within the EIA work that leads to the preparation of the Moorside ES. Copeland Borough Council welcome the commitment to consider legislative changes where required, and would wish to see emerging best practice and advice given by PINS within the published advice notes taken into consideration in preparation of the ES. NuGeneration should consider and engage the Council on the implications of any future potential changes likely to be made to the EIA Regulations and how this might affect the scheme.

Table 3.2 identifies the potential environmental effects that can be caused by the construction, operation and decommissioning of new nuclear power stations identified in Part 5 of The Overarching National Policy Statement (NPS) for Energy (EN-1) (see pages 65 – 113) and sections 3.7-3.12 of the NPS for Nuclear Power Generation (EN-6) Volume 1 (pages 23 - 30) (Department of Energy and Climate Change 2011a and b). It is welcomed that Human Health and Wellbeing will be addressed in most chapters, most notably Noise and Vibration [Chapter 5]; Air Quality [Chapter 6]; Radiological [Chapter 7]; Visual [Chapter 12]; Socio-economics [Chapter 16]). In addition, a free-standing Health Impact Assessment will be prepared although the Council notes that there is limited information on this at this time.

Table 3.2 makes reference to the Waste Management for the project. Estimates of waste material arising and due reference to the anticipated role of a Geological Disposal Facility (GDF) as well as transportation requirements / effects should be made in a dedicated chapter of the Environmental Statement. This section of the Environmental Statement should also detail the relationship of managing 'conventional' wastes to sustainability objectives for the project.

This section of the Scoping Report details the information relating to the subject matter outlined in each technical chapter. It is acknowledged that there is limited baseline information for the Additional Scoping Land and the AD sites. However, it is expected that detailed information on this will be provided in the

Environmental Statement. In addition, once the proposed DCO application red line boundary has been confirmed, information relating to the Additional Scoping Land and AD sites (where relevant) will be fully integrated with information pertaining to the assessment of effects of the Initial Scoping Land.

Section 3.4 outlines the approach to identifying potential likely significant effects and what contributes to 'significant' which has been informed by PINS Advice Note Seven, Preliminary Environmental Information, Screening and Scoping (PINS, 2015) the EIA Regulations and the Department for Communities and Local Government's (DCLG's) EIA Planning Practice Guidance (DCLG, 2014).

It is acknowledged that the Moorside Project will evolve through an iterative process in response to scheme design changes, new environmental information and consultation. It is welcomed that opportunities will be explored to adopt good environmental practice and to prevent, reduce and where possible offset any significant adverse effects that cannot be mitigated through project design iteration. Opportunities to deliver environmental enhancements related to the project will also be identified.

Further explanation is required in respect of the development planning strategy and any sequential impacts associated with planning processes i.e. DCO, Town and Country Planning, Marine Licensing, and any permitted development.

The inclusion of cumulative projects to be assessed alongside the proposals for Moorside is welcome (in paragraph 3.3.7). The Scoping Report sets out that the cumulative assessment would be informed by those conducted for other projects of a similar nature. The Council would propose that NuGeneration identify this approach explicitly such that it can be agreed as methodologically sound. Reference is made in the Scoping Report (in paragraph 3.3.8) an approach for cumulative impact assessment 'informed by cumulative assessments for other projects of a similar nature such as the proposed new nuclear power station at Hinkley Point C, Somerset, and its related electricity transmission connection', which is welcomed. PINS Advice Note Seven set out that that this cumulative assessment methodology should be clearly set out at the stage.

The Council would particularly note the complexity of cumulative assessment with respect to the ongoing decommissioning programme at Sellafield and with reference to the emerging NDA Strategy 3. The Council will seek a high degree of clarity from NuGeneration that the proposed strategy for Moorside and effects assessment therein, has been fully considered in the light of proposals from Sellafield Ltd. In addition, the Council is encouraged to see reference to the proposed grid transmission reinforcement programme, the North West Connections Project. The precise means of considering this programme for the EIA and its' relationship to Moorside will require further dialogue with the Council.

The Scoping Report considers the likely significant effects of the main development and AD in isolation as there seems to be separate sections within the Scoping Report with no clear linkages. It should be considered if this precludes the identification of any impacts that may occur in combination i.e. would an impact previously determined not significant (or not identified) change status as a result of is cumulative effects.

For the purpose of assessing the likely significant environmental effects and impacts from schemes in cumulation with Moorside (Schedule 4 Part 2) schemes considered should be ‘reasonably foreseeable’ and have a ‘high level of certainty’. Consideration should also be given to the ‘whole project’ and not simply the main site development area in isolation.

The Council would wish to ensure that in approaching the project from the perspective of a ‘Rochdale¹’ envelope (consistent with PINs Advice Note 9) due consideration also be made of the worst case environmental case in each assessment process reconciling the range of project options with the topic under consideration. This matter is crucial in ensuring a mitigation scheme is developed commensurate with the widest extent of potential environmental effect.

It will be important for the Council to understand the programme for design maturity through pre-application and how this ties into the consultation process, EIA, and the limits of deviation they are seeking to rely on which will require further support from the Council post consent i.e. understanding the resources needed to discharge requirements.

As a minimum each of the local planning authorities should be consulted to ensure all relevant cumulative effects from the Moorside Project, AD, and other affected infrastructure upon their respective Districts is considered:

- District Councils of: Copeland, Allerdale, Barrow-in-Furness, South Lakes and Eden;
- Lake District National Park Authority;
- Cumbria County Council as Highway Authority;
- Cumbria Local Enterprise Partnership (LEP); and
- Others.

The ES should include the outcomes of the EIA Scoping process and all relevant notifications under EIA Regulation 6.

Careful consideration should be given to inter-disciplinary effects, particularly those that have the potential to affect residential amenity. The Scoping Report lacks detail on how inter-disciplinary effects will be assessed.

The Planning Inspectorate (PINs) Advice Note Seven also advises that the potential for mitigation should be considered at Scoping stage. Early consideration may be beneficial for mitigation and enhancement to facilitate implementation, for example off-site mitigation measures such as planting for landscape and visual effects where early engagement with third parties is likely to be required.

¹ R v Rochdale MBC ex parte Milne (No. 1) & R v Rochdale MBC ex parte Tew [1999] and R v Rochdale MBC ex parte Milne (No. 2) [2000]

3 Review of Environmental Impact Assessment Scope and Methodologies

This section provides a review of the baseline conditions associated with the individual technical areas and a commentary on the proposed EIA methodologies.

3.1 Transport (Section 4)

This section details the Council's response on transport matters related to the Section 4 of the Scoping Report and also the Survey and Monitoring Plan.

3.1.1 Adequacy of Baseline

At this stage, and based on the elements of the project which can be defined the geographical scope of the assessment of transport appears logical and extensive to the Council.

The Council notes that the principal Highways England network and junctions likely to be affected by proposals are addressed in the baseline. A micro-simulation model is proposed for the local highway network and this is supported.

The Council note the focus on rail is primarily on the Cumbrian Coast Railway, with comment made that connections onto the West Coast Main Line (WCML) would also be looked at as required, again this seems logical and the Council would welcome continuing dialogue in this regard.

The Council understands that the West Cumbria strategic model is proposed to be used with Cumbria County Council operating the model under the project guidance of NuGeneration.

The Council notes that NuGeneration's rail strategy may now be well advanced. However, given that rail accessibility to the south is better than the north, NuGeneration may well derive value from including the Furness Line (WCML to Cumbria Coast Railway) within the scope of evaluation. This would be a matter for discussion with the Council and subject to wider strategies including those proposed on worker accommodation.

The Council notes the intention for the micro-simulation model to extend 'just to the south' of the Initial Scoping Land. The Council would note the imperative of ensuring that the model extends sufficiently far south to assess the full predicted effects of the development.

The Council understands that the proposed micro-simulation model is intended to cover development peaks. The Council notes there is also a need to ensure that it covers worst-case network flows, including consideration of work patterns at Sellafield and other major employers and influences upon the network.

3.1.2 Adequacy of Terms of Reference

The Council notes that the Scoping Report contains a comprehensive list of legislation, policies and guidance. At this stage, the Council does not anticipate significant updates or major new additions which could amend the approach although reference should be made to Cumbria County Council - Travel Plans and the Planning Process in Cumbria: Guidance for Developers and in addition, Cumbria Local Enterprise Partnership – Cumbria Strategic Economic Plan 2014-2024.

Careful consideration should be given to the following policies from the Copeland Local Plan;

- Policy ST4 – Providing Infrastructure;
- Policy ER3 – The Support Infrastructure for the Energy Coast;
- Policy SS4 – Community and Cultural Facilities and Services;
- Policy T1 – Improving Accessibility and Transport; and
- Policy ST1 – Strategic Development Principles.

3.1.3 Commentary on Consultation Activity to Date

The Council notes that consultation activity to date has primarily been with Highways England and Cumbria County Council focussed on transport modelling and other consultation has been with port operators. A wide range of stakeholders for future consultation is provided. It would be useful to provide further detail on the likely methods and frequency of consultation with each of these bodies were provided in order to help to identify the relative importance of each of the consultees with regards to the assessment

Consultation with Network Rail and other rail stakeholders should be prioritised to ensure that a rail-first strategy is deliverable. The Council also notes that there may be an opportunity to explore shared benefits from transport interventions with Sellafield and other major employers.

3.1.4 Commentary on Proposed Studies

The methodology generally follows the IEMA guidelines, which are appropriate for this development. A mix of quantitative and subjective assessments are proposed which is appropriate to ensure that the full range of impacts are assessed. However limited mention is provided on how the EIA chapter will relate to the Transport Assessment.

The Council notes that limited mention is provided on how the Environmental Impact Assessment section on transport will relate to the Transport Assessment and further information is sought in this regard. There is also a need to ensure that there is consistency with other chapters of the Environmental Statement and ensure that any cumulative effects are adequately captured, assessed and mitigated as far as practicable.

3.1.5 Commentary on Adequacy of Key Issues Raised and Data

The Council notes that the Scoping Report covers all of the main areas for assessment, including a multi-modal approach and a mix of qualitative and quantitative assessments. However, more detail is required on the sensitivity of the trip generation forecasts to changes in the assumed parameters relating to items such as staff numbers, location of staff accommodation and freight modes. Overall need to ensure that transport strategy is compatible with the development proposals and is deliverable within the proposed timescales.

Decommissioning is not mentioned specifically in the transport section although a commitment to a future application underpinned by an Environmental Statement consistent with the Environmental Impact Assessment for Decommissioning Regulations (EIADR) is made within the Scoping Report.

The Council notes that no mention is made to any specific requirements relating to the safe transport of nuclear materials to / from the site and this should be set out with more clarity in the Environmental Statement.

The Council would highlight a need to understand the strategy for how excavated material will be dealt with (where re-use testing confirms that it must be exported). The overall excavated volumes (subject to re-use) are potentially large and could have significant transport implications.

3.1.6 Adequacy of Graphics

The Council notes that there is limited graphical material supporting the transport section of the Scoping Report or wider Stage 1 material. There is only one figure that relates to transport, showing the spatial scope of the transport assessment. Further figures to illustrate the text in key areas would be beneficial in aiding the reader. For example, plans showing the survey locations and traffic model extents should be included in (or alongside) the Environmental Statement.

3.1.7 Summary

Overall the proposed scope of assessment is exhaustive and covers all of the areas expected. In particular, the baseline conditions and consultation sections are comprehensive. Given the scale of the development, and resulting complexity of assessment, the methodology is only presented at a relatively high level. This should be developed in more detail with statutory stakeholders as soon as possible. In some instances where long lists are presented, there would be a benefit in bringing out the key points more concisely.

3.2 Noise and Vibration (Section 5)

This section provides the Council's response on noise and vibration matters. This is informed by Section 5 of the Scoping Report and also the Survey Monitoring Plan.

3.2.1 Adequacy of Baseline

The Council notes that in respect of selecting noise survey locations to assist with baseline characterisation, it is unclear (in paragraph 5.3.1) to what extent Ordnance Survey mapping supplemented by field work analysis has been used to inform the approach. The engagement with Copeland to date is welcome and it is important to refer to continuing dialogue in respect of developments granted planning permission / under construction since 2012. The Council have recently provided comment to Nugeneration regarding sites for noise and vibration monitoring in the vicinity of the existing and proposed railway line including the identification of additional sites for consideration. The need for additional traffic noise monitoring has also been identified by the Council during on-going engagement with Nugeneration, including areas such as Cleator.

It is clear that in informing the baseline position such development (particularly where this may be located in proximity to proposed transport interventions and / or development in AD locations) will be crucial in ensuring a comprehensive approach to the noise assessment.

The Scoping Report identifies (in paragraph 5.5.18) additional baseline information being required. The Council would suggest merit in gathering further data using classified counters if hourly data over 24 hours is not available for the principal freight and worker routes. The Scoping Report suggests that current data assembly is to assist with finding the extent of the road traffic noise assessment, which is suitable.

In terms of the Survey and Monitoring Plan, it is worth considering adding a location on the A595 to the south of the Sellafield entrance as it is of concern that the area to the south of Sellafield access has not been covered.

Health care facilities are not included within the identification of receptors that could be subject to likely significant effects, it is assumed that it is known that there are currently no proposed new ones.

The Council notes in the Scoping Report (5.5.2 P70 Scoping Report) that a Zone of Influence (ZOI) has been established to derive the road traffic noise baseline. Whilst this approach is welcomed, it is not clear whether the ZOI would be extended and where this might be distributed (linked into the evolving development details for AD in particular). The Council would seek clarity on whether all of the road defined in the transport area study would be subject to the 25/20 test, or whether there is a more contained area. This matter should be subject to continuing dialogue with Copeland and other key stakeholders including Cumbria County Council.

3.2.2 Adequacy of Terms of Reference

The Council has been unable to identify how National Noise Policy has been taken into account in the proposed methodology for noise and vibration assessment. The provisions are highlighted in paragraph 5.2.2 but it is unclear how this has been taken through into the methodological approach. The Council would ask for further justification on the inclusion of the Noise Act in the Scoping Report. The Scoping Report infers 5.2.3 that BS5228 Pt 1 sets noise limits. The Council's observation is more that this enables assessment of potential significance of noise levels.

Guidance BS6472 Pt1 does not present an assessment of adverse impacts from road or rail traffic, but it does present criteria for adverse comment, which are used to derive criteria for adverse impacts and consequent significant effects.

3.2.3 Commentary on Consultation Activity to Date

Wider engagement (in paragraph 5.4.2) is also acknowledged on the SMP and including Environmental Health Officers from Copeland Borough Council.

3.2.4 Commentary on Proposed Studies

In respect of the SMP, the Council notes the value of NuGeneration considering adding a location on the A595 to the south of the Sellafield entrance. It is possible that this may not have been included because of initial lack of 25/20 being identified and clarity is sought on this matter.

The Council notes in the Scoping Report (5.6.1 *P74 Scoping Report*) that in identifying receptors that could be subject to likely significant effects health care facilities are not mentioned. The Council would wish to ensure that this remains reflective of any proposals that NuGeneration themselves may bring forward to service the needs of the Moorside project.

Under 5.7.1 (*P74 Scoping Report*) and the description of potential effects requiring further assessment the Council note that for vibration prediction methodologies, methods in TR1429 should be considered where this provides methods not available in BS5228 Pt2. The Council would also seek clarity on whether the type of freight trains used for construction would differ in terms of vibration generation from those currently using the line. Otherwise the assumption that change is only due to a potential increase in numbers of trains could be inaccurate. In addition, the Council would wish to ensure due consideration of receptors affected by a new rail spur. Here, vibration predictions will be required if the line takes freight, so a vibration prediction method will also need to be employed.

Under 5.7.2 (*P75 Scoping Report*) the Council notes that under potential effects not requiring further assessment, vibration sensitive receptors during the operational phase have been scoped out. The Council would agree with scoping this out for the power station itself, but deliveries or removals by rail could give rise to effects, depending on their frequency. Unless figures are already available which demonstrate why this has been scoped out at this stage, it should be

retained and then potentially addressed in the Environmental Statement with a statement regarding the train numbers to justify why it is unlikely to give risk to a significant effect.

The Council notes in 5.8 (P78 *Scoping Report*) the statement that the “determination of significance within the noise and vibration chapter shall apply to human receptors only”. However, there is no clear consideration of the types of receptor locations and resources to be included. In particular, little or no consideration is given to quiet areas or places prized for tranquillity. The Council considers that there should be a full consideration of all the receptors and resources potentially affected to properly scope the spatial scope and the methodologies.

The Council notes that in general, a numerical approach seems to be adopted to the assessment of significance with little consideration of impacts and effects as advocated by the Noise Policy for England. Moreover, the potential effects on health and quality of life have not been explained, properly considered or factored into the assessment of the likely significant effects. In addition, there is little if no consideration of the context in which noise changes will occur and how context will be addressed within the assessment e.g. are the noise levels already unacceptably high and if so will any increase in noise be deemed to be significant, and whether there are opportunities to improve.

In respect of the Scoping Report (5.8.13 P82 *Scoping Report*) and fixed plant the Council considers that BS4142:2014 has not been properly considered or reported. In particular there is no proper consideration of the context in which the rating level minus the background sound level will occur. Neither do the impact criteria properly reflect or interpret the BS4142:2014. This matter should be addressed through dialogue with the Council.

In respect of proposals for construction rail vibration (Table 5.4 and 5.5 P81 onwards *Scoping Report*) as the criteria are in terms of Vibration Dose Value (VDV) it would be helpful to state whether the levels quoted are only for the construction trains, or whether they are for the total VDV resulting from all trains.

In respect of Table 5.5 (P82 *Scoping Report*) and construction traffic noise the Council would encourage NuGeneration to review the word “increase” as this may not be appropriate, given that some of the levels in the criteria are probably total noise (baseline plus construction). This may require further explanation below the table as it is taken forward to underpin the Environmental Statement.

The Council also notes that the operational road and rail “high” categories are not consistent in their approach to using values from the relevant noise insulation regulation for that mode, for the night-time criteria. It would be helpful to include an explanation for this below the table as it is transferred across to the methodological approach section of the Environmental Statement.

3.2.5 Commentary on Adequacy of Key Issues Raised & Data

The Council notes that at this Scoping Stage, NuGeneration is unable to provide details of the proposed development within AD sites. Furthermore, details associated with potential transport proposals and infrastructure development is not

available in detail at this time. This limits the extent to which the locations of noise monitoring and noise approach more generally can be meaningfully commented upon at this time. The Council would embrace the approach of continuing dialogue on these matters to inform the approach proposed for noise and vibration assessment in the Environmental Statement.

The Council notes some concerns in the extent to which the proposed noise assessment adequately addresses National Noise Policy, particularly as it relates to the Noise Policy Statement for England (NPSE). This policy position strongly advocates an approach driven by context which the Council would encourage NuGeneration to include as part of their emerging proposals for Moorside. The Council also notes that the application of BS4142 appears to be incorrect or at least incompletely described in the Scoping Report at this time. There are several matters in the proposed approach which the Council would welcome engaging with NuGeneration upon at this important stage where plans for AD are also being established.

3.2.6 Summary

The EIA Scoping Chapter on noise and vibration presents a thorough approach to scoping for noise and vibration.

In reviewing the Scoping Report and SMP it is clear that there has been helpful dialogue to date which has shaped NuGeneration's proposals for noise and vibration assessment. The Council is supportive of this continuing dialogue and the sharing of best practice application of National Noise Policy. A key matter for the Council is the extent to which proposals for AD will evolve and drive the assessment process for noise and vibration. As a common point across topic area included within the Scoping Report, the Council would wish to see further details emerge between Stage 1 and Stage 2 S47 Planning Act consultation on AD sites and a refinement of approaches to noise and vibration therein.

3.3 Air Quality (Section 6)

This section presents the Council's response on air quality issues this is informed by Section 16/17 of the Scoping Report and also the Survey and Monitoring Plan.

3.3.1 Adequacy of Baseline

The Council would generally comment that the overview of baseline conditions in the air quality chapter is acceptable and provides sufficient detail to determine the study area (zone of influence) of the assessment and baseline air quality conditions.

The zone of influence (ZoI) for construction dust and fine particulate emissions uses appropriate and up to date guidance published by the Institute of Air Quality management (IAQM), however it would be helpful to include a definition of both human and ecological receptors in line with the guidance.

The operational zone of influence is appropriate with regard to emissions from the plant proposed within the Moorside Search Area, however paragraph 6.5.5, with regard to the ZoI of ecological effects should sit within this section rather than under the road traffic emissions ZoI as the EA horizontal guidance note relates to plant and processes rather than traffic emissions.

The ZoI with regard to road traffic emissions is appropriate and follows DMRB guidance assessing receptors within 200m of affected roads. It is noted that the guidance published by Environmental Protection UK (EPUK)/IAQM, as mentioned in paragraph 6.5.8, contains more stringent criteria with regard to changes in traffic flows than DMRB, therefore this should be used to determine affected roads as a result of the scheme (This also applies for AD sites). The use of updated guidance by the Highways Agency with regard to vehicle emission factors (IAN 170/12) is welcomed.

The first bullet point of paragraph 6.5.9 states that "effects upon air quality at human receptor locations are considered unlikely to be discernible beyond a distance of 5km from the initial scoping land". It is assumed that this relates to operational point source emissions and whilst this is not disagreed with, it somewhat contradicts what is currently included as the ZoI for operational emissions. Further clarity is sought from NuGeneration on this matter.

It is unclear why monitoring of NO₂ is being undertaken at Sites of Special Scientific Interest (SSSIs) rather than NO_x monitoring. This is a matter for discussion with NuGeneration and may purely be a typographical error. The Council would also seek views on the potential for monitoring of SO₂ and whether this has been discussed with wider stakeholders to date.

It is noted that a data request is in progress to obtain the latest air quality monitoring data from Copeland and it is anticipated that the latest data including at least 2014 annual average data would be used in the assessment of baseline

conditions in the Environmental Statement, in addition to the scheme specific monitoring being undertaken.

3.3.2 Adequacy of Terms of Reference

The Council notes that the list of appropriate legislation is comprehensive in respect of both air quality and climate, however it is noted that the amendments to the Environmental Permitting Regulations have not been included and should be revisited for the Environmental Statement.

The list of appropriate policy is comprehensive, however there is a typo in the 4th paragraph which refers to ‘natural air quality objectives’, for the avoidance of doubt this should state ‘national air quality objectives’.

It is noted that additional policies are included within Copeland’s Local Plan which relate to air quality/amenity which are not discussed here:

- ST1 B(iv) Minimise the need to travel, support the provision of sustainable transport infrastructure and measures to encourage its use; and
- ST1 D (ii) Ensure development safeguards good levels of residential amenity and security.

In addition, Policy ST1 A in paragraph 6.2.3 should read Policy ST1 B. There should be further consideration of the relevant local policies, including those added above, from Copeland’s Local Plan

In respect of the Survey and Monitoring Plan, the appropriate guidance is referenced with regard to monitoring methodology, however it is unclear whether a co-location study is being undertaken for NO₂ diffusion tubes and clarification is sought on this matter. The Council notes that the air quality standards provided in Appendix A are incorrect as there is no NO₂ standard for the protection of vegetation, this should read NO_x and is assumed to be a typographical error.

The list of appropriate guidance is comprehensive and it is not anticipated that any further documents would be required to undertake the assessment. The revised EPUK guidance, has now been published and therefore it is anticipated this will be used going forward.

3.3.3 Commentary on Consultation Activity to Date

The comments made by Copeland on a prior Draft Scoping Report shared by NuGeneration have been addressed with the exception of the addition of the amendment to the Environmental Permitting Regulations. Dust and Particulate Matter monitoring is proposed and the implementation of this is ongoing, the Council would expect to be made aware of when these are deployed and their locations. It is noted that the Council had stated that an assessment of Carbon Monoxide (CO) emissions should not be scoped out, although it was confirmed in a subsequent meeting that CO would not be assessed and this is considered appropriate based on the justification provided for other pollutants in the scoping report.

Consultation has been undertaken with the key stakeholders with regard to the scheme specific monitoring survey including the choice and number of monitoring locations. It is considered that the monitoring survey is sufficient to establish baseline conditions and for potential use in dispersion model verification. Clarification is sought on the rationale for why NO₂ monitoring is being undertaken at SSSI and the absence of SO₂ monitoring.

NuGeneration have been proactive in consulting on the proposed air quality monitoring locations including with Copeland Borough Council, Cumbria and Natural England and are open to suggestions add additional monitoring locations to the survey if the need arises.

3.3.4 Commentary on Proposed Studies

The potential effects identified as requiring further assessment are comprehensive and it is considered that these cover all potential air quality effects arising from the development.

It is anticipated that the assessment of construction and operation phases for human health will assess NO_x emissions from vehicles which will then be converted to NO₂ concentrations for comparison with the air quality standards.

The proposed methodology for each of the activities which have the potential to generate air quality effects (as shown in Table 6.5) are appropriate. It is noted that a staged approach is proposed for the assessment emissions to atmosphere from vehicles on the road network during construction and operation, clarification is required as to whether the screening stage would be undertaken using the DMRB spreadsheet method. If so, it should be noted that the in-built emission factors are out of date and it would be anticipated that more recently published emission factors from Defra would be used in the assessment. In further dialogue with the Council, NuGeneration have clarified that dispersion modelling would likely be used rather, than the DMRB spreadsheet method for this reason.

It is considered the justification for potential effects not requiring further assessment is valid and these pollutants are highly unlikely to result in any significant effects as a result of the scheme. This list should also include carbon monoxide.

With regard to the significance evaluation methodology it is anticipated that paragraphs 6.8.1 – 6.8.8 and associated tables will now be replaced with the criteria to determine impact and significance provided in the revised EPUK/IAQM development control guidance. It is anticipated that this will be used in relation to the assessment of emissions from transport including train, ship and vehicle emissions. It is noted that paragraph 6.5.6 makes reference to revised guidance from Highways England with regard to significance of road schemes, however no further mention is made of this document. The Council considers that the EPUK/IAQM guidance document should be used as this provides a more stringent methodology for evaluating significance where pollutant concentrations are likely to comply with the air quality standards.

The use of significance criteria outlined in H1 guidance is appropriate and it is anticipated that this would be used to assess the significance of the operation of plant within Moorside Search Area.

The assessment of potential significant effects on nitrogen and acid deposition at ecological receptors is appropriate for EIA, however consideration should be given to how this is interpreted with regard to HRA.

It would be useful for the SMP to make clear whether the proposed locations shown in Table 3.1 are confirmed as the actual list of monitoring locations for the avoidance of doubt. Furthermore, the Council would note the importance of agreeing the monitoring locations near the rail line and also the particular matter monitoring locations and to record that agreement. This is important to the Council in recording agreements made with NuGeneration in an attempt to commence working on Statements of Common Ground as early as practicable.

A technical review meeting between the Council and NuGeneration was held on the 16th June. At this meeting it was indicated that some of the actions outlined in the SMP are still ongoing but are being progressed. It would be helpful for coordinates of monitoring locations to be provided to enable the Council to review locations and determine whether this is sufficient.

3.3.5 Commentary on Adequacy of Key Issues Raised & Data

The Council notes that the proposed assessment methodology is comprehensive and is appropriate for the scheme. It is important to note that the revised EPUK/IAQM guidance has now been published and it is anticipated that this will be used going forward. The revised publication includes more stringent screening criteria for when an assessment of effect is required and updated criteria for impact descriptors and significance of effect.

The potential for monitoring at residential properties near St Bees Head Railway Station was suggested by the Council, to provide baseline information with regard to the potential effects from rail emissions. NuGeneration have committed to review the situation at this location but also mentioned that monitoring was in place at similar distances from the railway line in other locations and therefore there would be representative data for properties which lie adjacent to the railway line.

It was noted at a technical review meeting with the Council and NuGeneration held on 16th June 2015 that should any improvements to the strategic highway network be required as a result of the scheme that other interim advice notes from Highways England may need to be used and regard would need to be given to the National Networks National Policy Statement (NN NPS). The NN NPS should also be considered with regard to the improvements to the rail network required during construction and operation of the scheme. It should be clarified whether changes to the rail network meet the criteria to be considered under the NN NPS.

3.3.6 Adequacy of Graphics

It would have been useful to include a graphic showing the identified human and ecological receptors in Table 6.2 and 6.4. A detailed plan of survey locations would have been welcomed. In addition, names of statutory designated sites should be labelled on Figure 14.1.

3.3.7 Summary

The Council notes that in common with other subject areas, further definition is needed in terms of the proposals for AD and the transport linking those sites and the Moorside Search Area. The Council is thus able to comment on the approach to air quality and climate assessment but would anticipate continuing dialogue in its application. The Council notes that it recommends criteria to determine impact and significance provided in the revised EPUK/IAQM development control guidance.

In the SMP it would be useful to include areas (particularly in respect of monitoring locations) of agreement with the Council and wider stakeholders to support dialogue on Statements of Common Ground.

The SMP sets out an appropriate monitoring methodology and choice of locations. The tense of the document suggests this was written prior to monitoring be undertaken therefore clarification is required as to whether all actions noted in this document have now been implemented and that proposed locations are the final locations.

On wider issues, the Council would certainly expect mitigation to be required during the construction phase, however the level of which would be determined following the assessment. It is unclear whether operational mitigation would be required, however the siting of the reactors and associated combustion plant should be undertaken having regard to human and ecological receptors.

3.4 Radiological Issues (Section 7)

This section provides the Council's response on radiology in response to Section 7 of the Scoping Report and also the Survey and Monitoring Plan.

3.4.1 Adequacy of Baseline

This Section 7 of the Scoping Report proposes the assessment of potential effects relating to radiological issues on human and non-human species. The Council notes that soil and groundwater are environmental media that are effectively pathways (as are air and marine water), rather than being considered receptors in this assessment.

The baseline presented in the Scoping Report draws on desk study sources, including material drawn from empirical data in Radioactivity in Food and Environment (RIFE) studies. Proposed sources for continuing dialogue and data on radiological issues include Sellafield Ltd, given the adjacency of the Sellafield Facility and additional investigations presented in the Survey and Monitoring Plans. It may be relevant to reference baseline data available through the Sellafield Beach particle monitoring programme. The Council notes limited discussion of known existing contamination is presented in the Scoping Report and would be useful although not essential.

The Groundwater, Soil and Surface Water SMPs present proposed additional radiological data gathering to inform the baseline. Sampling locations and testing appear reasonable, however the detailed locations and testing suites for radiological assessment cannot be ascertained from the information provided.

The Groundwater SMP does not identify any groundwater monitoring locations near the coast. Baseline groundwater quality is potentially impacted by the Sellafield facility in this area and it is important to understand baseline groundwater radiological quality.

The Scoping Report refers to the RIFE 2011 data. Although more recent data is included in RIFE 2013 and should be used. It is unclear whether the baseline has been informed through access to Sellafield Ltd.'s radiological groundwater quality data and this would be recommended.

3.4.2 Adequacy of Terms of Reference

The Council highlights the need to consider Copeland Local Plan Policy DM5 - Nuclear Sector Development at Sellafield and the LLWR at Drigg.

3.4.3 Commentary on Consultation Activity to Date

The Scoping Report identifies early engagement has been undertaken with a wide range of stakeholders and notes comments received from Copeland Borough Council, the Environment Agency, Marine Management Organisation, Allerdale Borough Council and Cumbria County Council. This continuing dialogue is crucial to informing the ongoing assessment of radiology.

The Council notes that NuGeneration released draft Survey and Monitoring Plans for comment in August 2014 to Copeland Borough Council, the Environment Agency, Marine Management Organisation, Natural England, Cumbria County Council, and Sellafield Ltd and meetings were held in 2014 to discuss the draft Survey and Monitoring Plans and Scoping Report. The Scoping Report notes the Environment Agency recommended investigation of Sellafield Tarn for radiological contamination and the Local Authorities (including Copeland) highlighted public concern relating to radioactive releases. It is not clear from the information provided in the Scoping Report nor wider Stage 1 material (provided for Section 47 Planning Act consultation), whether radiological contamination of Sellafield Tarn is proposed in the Soil Survey and Monitoring Plan.

The Scoping Report notes the EA recommended investigation of Sellafield Tarn for radiological contamination and the Local Authorities highlighted public concern relating to radioactive releases. It is not clear from the information provided whether radiological contamination of Sellafield Tarn is proposed in the Soil SMP.

The Council notes and supports ongoing engagement during the development of the Environmental Impact Assessment proposed to include the key stakeholders identified above.

3.4.4 Commentary on Proposed Studies

The Scoping Report chapter proposes the assessment of potential effects relating to radiological issues on human and non-human species. Soil and groundwater are environmental media that are effectively pathways (as are air and marine water), rather than being considered receptors in this assessment.

In relation to soil and groundwater radiological contamination effects may arise as a result of excavation of soil with pre-existing radiological contamination (e.g. marine sediments) or dewatering of groundwater with pre-existing contamination.

Radiological contaminated land assessment should be undertaken as part of the non-radiological contaminated land assessment, as described in Chapter 8.

If identified in groundwater, radiological contaminants should be considered in the numerical groundwater modelling to assess the impacts of dewatering.

The Council notes that the design of the proposed AP1000 reactor technology will incorporate passive safety and control measures designed to prevent radiological contamination of soil, surface water and groundwater during operation and the mechanisms to achieve this outcome will be proven to regulatory approval in the Generic Design Assessment process. However, it is not clear to the Council how this development basis will be described in the Environmental Statement for the scheme design. It would be useful for the safety control mechanisms as a function of AP1000 design to be described in the Environmental Statement.

The Council notes that data and design / operational information and assessments will be required for the Environmental Permit application and Safety Case that will also be needed for the Environmental Statement. The Council has assumed that the Environmental Impact Assessment Environmental Permit application and

Safety Case will be progressed in parallel (accepting their point of application may be different within the overall programme). Confirmation would be sought on this matter.

3.4.5 Commentary on Adequacy of Key Issues Raised & Data

The potential effects identified as requiring further assessment do not include effects associated with dewatering and disposal of radiological contaminated groundwater. The Council would anticipate the inclusion of this matter within the Environmental Statement. In addition, and as noted above, the relationship of the GDA process and design development of AP1000 should be reflected within the Environmental Statement, particularly in respect of technology enhancements for passive safety and containment.

3.4.6 Adequacy of Graphics

There are no figures present within the Scoping Report showing the extent of radiological issues.

3.4.7 Summary

The Council notes that in reviewing the Scoping Report and the Survey and Monitoring Plan the radiological assessment considers human and non-human species effects via air, groundwater, soil and marine environment pathways and therefore has interfaces with several other proposed Environmental Statement chapters. This must be properly signposted in the Environmental Statement to ensure there are no gaps in assessments and there is coherence. Nugeneration should ensure that a robust Health Impact Assessment (HIA) is supported by the information in the Radiology assessment.

The Council notes the common base of information and alignment between the Environmental Statement production, the programme for the Environmental Permit applications and Safety Case and design information informing GDA. There are strong opportunities to tie regulatory bodies and the Council together on this matter and a common basis of data exchange would be valuable.

3.5 Soils, Geology, Agricultural Land, and Land Quality (Section 8)

This section provides the Council's response on soils, geology, agricultural land and land quality in response to Section 8 of the Scoping Report and also the Survey and Monitoring Plan.

3.5.1 Adequacy of Baseline

In general, the Council notes that the description of the baseline conditions in respect of soils and geology is considered adequate. Descriptions of solid geology, drift deposits and made ground are provided and comments are made on the thickness of strata to assist with an understanding of materials likely to be generated through excavations. A summary of the land use history is provided and significant features are shown on Figure 8.2 accompanying Section 8.

The area under consideration in the Scoping Report and SMP requires clarification. It is apparent that the Additional Scoping Land areas have been added to the scheme more recently and have been subject to less assessment to date.

The Scoping Report includes a summary of the land use history of the Initial Scoping Land and is adequate for the purposes of the Scoping Report. However a detailed review of site history, related to historical maps and other historical information, for the entire Moorside site area (Initial Scoping Land plus Additional Scoping Land) and AD sites is required to identify potential contamination.

The Council would note that further information anticipated to assist with characterising the Moorside Search Area includes;

- Superficial deposits thickness and characteristics,
- sandstone bedrock characteristics and faulting,
- characteristics (geotechnical and chemical) of soils within the 'nuclear islands' that will require excavation, to inform assessment of suitability for re-use or disposal. Para 2.3.4 indicates these soils may be 'in excess of 10Mm³',
- characteristics of tunnel and MOLF spoil and marine sediments that will require excavation, to inform assessment of suitability for re-use or disposal,
- characteristics of material deposited at Sellafield Tarn relating to its potential as a contaminant source; Sellafield Tarn should be clearly identified on figure because it is difficult to establish whether Sellafield Tarn is within the Initial Scoping Land (e.g. 8.5.33 and Fig 3.1 SMP differ),

- characteristics (geotechnical and chemical) at AD sites to inform contamination risk assessment, excavation requirements and material re-use potential; and
- the Additional Scoping Land and areas of Initial Scoping Land outside the central area (see below).

The Scoping Report identifies the Additional Scoping Land as outside the current scope, but also identifies this land as within the 'Moorside Search Area' and indicates it may be included in the future. The programme and approach to integrating the Additional Scoping Land should be provided to ensure all areas have been adequately assessed in the ES.

It is not clear where baseline radiological soil contamination will be presented in the ES, and the how it will be incorporated across possibly the Soils or Radiological assessments.

The Soils and Geology SMP is proposed to further inform the baseline although the programme in the SMP Summary of Activities section is out of date and needs updating against current progress.

The Soils and Geology SMP presents proposed additional ground investigation to inform the baseline and assessment of effects. Progress of the ground investigation is unknown, from the programme provided the bores should have been installed by April 2015 and monitoring commenced in May 2015.

It is welcomed that the proposals for investigation in the Initial Scoping Land include a site walkover, geophysical survey and intrusive investigation. Initial Scoping Land ground investigation is focused on central area to the east of the disused railway line where the construction of the Moorside Power Station is stated as likely to take place. No site layout plans are provided to support this.

The Scoping Report notes the area of study was extended into the 'AB Land' to south of main investigation area. The Additional Scoping Land is not included in the Soils and Geology SMP scope. The SMP largely considers the AB Land separately from the Initial Scoping Land and the investigation scopes appear to have been designed separately. The ES should consider the entire site area subdivided on the basis of proposed site layout, with integrated assessments rather than separated into distinct geographical designations.

In particular, the rationale for the number, position, depth and design of site investigation locations is not provided providing the Council with limited understanding of the approach justification and intention. Further details would be welcome on this matter. At this stage however (and based on available information) the proposed coverage appears reasonable to the Council and gives good coverage across the centre of the site (Initial Scoping Land plus AB Land).

Monthly monitoring of groundwater levels and ground gas is proposed over a 12 month period. It has been noted that ground gas monitoring may stop after three rounds if no risk is identified. This is a reasonable approach and the Council consider this appropriate.

A comprehensive chemical analysis suite for soil testing is proposed which includes radiological contaminants, WAC testing and ordnance related chemical substances. However, the Council notes that investigation does not include all of the Initial Scoping Land or Additional Scoping Land and it is understood that this land may be required during the construction process and the strategy/programme for further assessment thus needs to be determined.

A separate unexploded ordnance (UXO) desk study is proposed for the Sellafield Tarn area. This is a reasonable approach and supported by the Council considering the historical information relating to Sellafield Tarn (which identifies this need).

Ground investigation is not proposed for the AD sites. The SMP notes this will be undertaken once the footprint and uses of the AD sites has been identified.

A desk based review of soil survey data and agricultural land classification is proposed once the footprint of the proposed development has been finalised, augmented by additional field data if required. This is a reasonable approach.

3.5.2 Adequacy of Terms of Reference

The Council is encouraged that a comprehensive list of national and local policy and guidance is set out in the Scoping Report which will be considered during the study. A full reference list of source data used is provided and referred to in the text and this is welcomed by the Council. Further consideration should be given to Policy ENV5 – Protecting and Enhancing the Borough’s Landscapes, set out in the Copeland Local Plan.

3.5.3 Commentary on Consultation Activity to Date

The Council notes that early engagement has been undertaken with relevant stakeholders and comments relevant to the EIA Scoping. The Council is encouraged that NuGeneration has engaged on the draft Survey and Monitoring Plans in August 2014 to the Environment Agency, Natural England, Copeland Borough Council and Sellafield Ltd and meetings were held in 2014 to discuss the draft SMPs and Scoping Report available in draft form at that time.

The Council welcomes and supports NuGeneration’s ongoing engagement to include the above stakeholders in addition to Public Health England. This will be of importance as further details in respect of AD in particular are made available.

3.5.4 Commentary on Proposed Studies

The Council notes the proposals for intrusive investigation, survey and monitoring works to collect additional data. This will include long term monthly ground gas and groundwater level monitoring, geophysics survey, intrusive borehole investigation and soil sampling.

An UXO survey will be undertaken in the vicinity of Sellafield Tarn. This is a reasonable approach and supported by the Council.

The Council notes that there would be value in NuGeneration obtaining the Sellafield Contaminated Land Study (for Sellafield Ltd) if this information is not already available. In particular, there would be value in reviewing the Sellafield Contaminated Land & Groundwater Management Project and the Next Steps for the Land Quality Programme Report (and the conceptual model therein).

The Council notes that the strategy for the assessment of the Additional Scoping Land appears to be poorly defined at present and continuing dialogue is sought on this matter (prior to the execution of surveys

Materials management during construction, arising from excavations within nuclear Initial Scoping Land, MOLF and tunnel spoil, will be a major issue at the site and the potential for re-use, including definition of geotechnical and chemical reuse criteria, must be considered. This will require development of the geological understanding and the design of subsurface aspects of the Moorside development.

In Section 9 of the Scoping Report a numerical groundwater model is proposed to assess effects. This will rely on the geological understanding that will be developed using data collected from the desk study and intrusive investigation.

Paragraph 8.7.5 of the Scoping Report notes the operational effect caused by 'release to ground of substances stored, used and handled on site'. It is unclear where this effect is to be assessed.

The approach and programme to securing Environmental Permits is not presented fully within this section of the Scoping Report but it is noted that permitting will require demonstration of Best Available Techniques (BAT) (8.7.8 P151 Scoping Report). The Council note that the Environmental Permit (including Radiological Substances Regulation) requires BAT demonstration and pollution prevention measures in the permit.

The Council notes that NuGeneration indicate that matters associated with radioactive waste management are not set out in full in this section of the Scoping Report although wider references are made in the Radiology section of the Scoping Report and cross referencing within the Environmental Statement is recommended. The Council notes (Section 7 Scoping Report) that soil does not seem to have been identified as a specific receptor for radiological effects. It is unclear to the Council how radiological contamination of soil is to be assessed.

Within the Scoping Report (8.8.4 P156 Scoping Report) NuGeneration confirm that the soils chapter of the Environmental Statement is intended to only consider human health and built structures in the land quality assessment. The Contaminated Land risk assessments will be included in an appendix. It is unclear to the Council whether these will consider all receptors (including water, environmental, ecology receptors (as well as wider consideration of invasive species)) as well as radiological contamination. Confirmation is sought in this regard.

3.5.5 Commentary on Adequacy of Key Issues Raised & Data

The Council considers that the identified receptors and exposure pathways are adequate and the list of key potential issues which require further assessment appears to be complete. Furthermore, the Council views the proposed assessment methodologies for key issues are provided.

As noted above, the Council would value continuing dialogue in respect of materials management within the site and in particular the proposed approach for NuGeneration in materials assessment for re-use and potential transport implications for any export. In addition, continuing discussion on proposals for management of radioactive waste streams would be welcome, particularly as proposals for radioactive waste management on site become more developed.

It would be useful for the Council to have more details on NuGeneration's assessment of potential risks associated with ground instability as a result of groundwater dewatering. Wider discussions, including technical material supporting the development of Safety Case would be helpful to understand the broader technical context.

3.5.6 Adequacy of Graphics

Graphical material included in the Scoping Report is fairly limited. The Council notes some uncertainty in respect of the graphical material supporting the soils and geology section. For example, in respect of Figure 8.2 at least one feature is identified in the Additional Scoping Land, but the accompanying text suggests that the Additional Scoping Land is outside the scope. Clarification of what is shown is required. In addition, the Survey and Monitoring Plan in Figure 3.1 would benefit from further explanation. The Council has reviewed this material and it does not appear that this is wholly consistent with Table 3.1 in respect of the inclusion of the AB land. Clarification would be welcome on this matter. The Council notes that in respect of the Survey and Monitoring Plan Figure 3.2, it is presumed that this should be associated with the Groundwater Survey and Monitoring Plan. Clarification would be welcome as to whether the Sellafeld Tarn is within or outside the Initial Scoping Land.

3.5.6.1 Summary

The Council notes a good level of information in the Soils, Geology, Agricultural Land and Land Quality section of the Scoping Report, cross referenced with the SMP. The Council would welcome continuing dialogue on a number of matters including the availability of site investigation data to underpin the interpretation and strategy for materials use on site. The Council would seek confirmation on how far the investigation will be pursued for the purposes of informing the Environmental Statement. Further information would be welcome on the relationship and conclusions drawn from material for the Environmental Statement in the context of Environmental Permitting. The Council notes the importance of monitoring and reporting on progress against the Survey and Monitoring Programme (in this case in respect of the ground investigation

programme). It would be helpful to note the agreement of monitoring locations for example and the Council would welcome further dialogue on this.

For the ES the entire area must be assessed to a consistent and appropriate level for the proposed scheme. At present the central Initial Scoping Land appears to be the focus of attention, with some assessment also of the AB land. Outer areas of Initial Scoping Land and all the Additional Scoping Land and AD sites have not been examined.

The scheme design is presented in outline only and must be sufficiently developed to inform the ES. An important area of scheme design of interest for this Chapter are management of material arising from excavation (including nuclear Initial Scoping Land, MOLF, marine outfall, tunnelling).

3.6 Freshwater Environment and Flood Management (Section 9)

The Council has set out below the response on Freshwater Environment and Flood Management in respect of Section 9 of the Scoping Report and also the Survey and Monitoring Plan. This makes provision for a discussion in respect of both groundwater and surface water issues and assets.

3.6.1 Adequacy of Baseline

In respect of surface water, the Council notes that key features appear to have been identified by NuGeneration and the 3km Zone of Influence (ZOI) is appropriate in this case, provided the studies consider all related wider surface water catchment issues with potential to affect the flood risk and hydrological regime within the site over its lifetime.

The Council notes that the flood risk baseline appears to be based on existing Environment Agency Flood mapping only. Environment Agency guidance suggests that for nuclear sites operators should demonstrate, through a flood and coastal erosion risk assessment, that the site can be managed for nuclear safety during a 1 in 10,000 (0.01%) year annual probability flood, over its full lifetime, taking account of climate change. This being critical national infrastructure, the UK Climate Impacts Programme (UKCIP09) scenarios for sea level rise will need to consider the H++ scenario and careful consideration will need to be given to longer-term impacts beyond the epochs for which estimates are available. A joint probability analysis of peak river flows and tidal boundary conditions will be required in order to define the fluvial flood risk baseline.

The study will also need to assess and demonstrate that staff and visitors to the site will remain safe from the flooding effects (including residual effects) from a flood with a 1 in 1,000 (0.1%) annual probability and ensure operations are unaffected by a 1 in 200 (0.5%) annual probability flood (from all sources). Disruption of access and egress to the site from workers' home bases, caused by flooding of roads for example, will also need to be considered. Whilst an FRA will be prepared separately, this should align with the EIA/ES.

Rainfall baseline should make full use of local historic gauged data, including records from the Sellafeld gauge.

Monthly recordings of a full suite of pollutants over a single year will provide essential data for the WFD baseline, but 'first flush' effects may not be identified if sampling is at set intervals. It may be worthwhile doing water quality sampling immediately following storm events, to help establish the nature of existing 'first flush' impacts, which may be significant, and have potential to be very significant during and post construction unless properly mitigated.

Whilst the site will be almost wholly re-modelled as part of the proposals, the existing patterns of runoff from the site should be established to inform the site drainage strategy, which should aim to mimic existing drainage patterns where

possible, particularly with regard to: a) the catchment area draining to and out for the Calder catchment/Sellafield site to avoid flood risk impacts and b) the area draining to Church Moss SSSI, to prevent changes in hydrological regime. This information may also inform the design of a sustainable drainage strategy for the site that protects all the WFD waterbodies in the area from the effects of pollutants within site run-off (particularly within 'first flush' events caused by storms occurring after extended dry periods), as well as hydromorphological impacts potentially caused by creating new 'point' discharges.

Little information on the hydromorphology of the River Ehen is provided. An assessment of its long term morphological development and sensitivity to disruption may be required, if any infrastructure is to be placed in proximity to the river. The river's hydromorphological sensitivity to disruption will need to be established if any temporary works within the floodplain are proposed. Opportunities to improve the physical state of this river should also ideally be identified where possible.

The Council would encourage NuGeneration to set out a consideration of 1 in 10,000 year fluvial, tidal and surface water/pluvial flood risks at the site for the nuclear safety case on this site and at Sellafield. In addition to the Environment Agency flood outlines, mapping is also required for 1 in 200 year and 1 in 100 year plus climate change scenarios (including UK Climate Impacts Programme H++ scenario). A joint probability analysis of river flow and tidal boundary conditions is required. Mapping should include assessment of the impacts of infrastructure failure, bridge collapse or blockage. The Council would also note the importance of scoping out consideration of Category C dams in the river catchments that would be at potential risk of failing if a 1 in 10,000 year fluvial flood occurred. The Council notes that Category C dams only have to be capable of safely passing a 1 in 1,000 year flood (Category D 150 year).

The baseline should include characterisation of extreme storm rainfall over the site using local gauged data, as well as wider datasets, in collaboration with the Meteorological Office will be important to define the pluvial flood hazard. Runoff event based water quality sampling should also be considered.

Improved characterisation of the site topography using LiDAR data to establish existing runoff patterns and sub-catchments to inform the sustainable drainage strategy for the site is considered necessary by the Council.

Hydromorphological characterisation of the River Ehen using fluvial audit techniques should also be considered, depending on the nature of any temporary or permanent proposals with potential to affect this river and its floodplain (and also to identify enhancement opportunities).

In respect of groundwater, the Council considers the description of baseline groundwater conditions in the Scoping Report adequate for scoping and to underpin Stage 1. However, the council notes further baseline characterisation is required and is proposed in the Groundwater Survey and Monitoring Plan.

The Scoping Report (Section 8 Soils *Scoping Report*) includes a summary of the land use history of the Initial Scoping Land and that also informs the groundwater contamination aspects of the Scoping Report. However, a detailed review of site

history, related to historical maps and other historical information, for the entire Moorside site area (Initial Scoping Land plus Additional Scoping Land) and Associated Development sites is required to identify potential contamination.

The main areas requiring further assessment (desk study and intrusive investigation) to characterise groundwater baseline include the following:

- Superficial deposits thickness and characteristics;
- Sandstone bedrock characteristics and faulting;
- Groundwater quality in the central and southern Initial Scoping Land (particularly in relation to dewatering and contamination arising from wider prior site uses (including Sellafield Facility));
- Other sources of groundwater contamination including Sellafield Tarn;
- Low Church Moss Site of Special Scientific Interest (SSSI) potentially a groundwater dependent terrestrial ecosystem;
- River Ehen buried channel location and depth;
- Groundwater flow (levels and gradients) across the area, including interaction with surface water and coast;
- Additional Scoping Land area and Associated Development sites.

The Scoping Report identifies the Additional Scoping Land areas as outside the current scope, but also identifies this land as within the 'Moorside Search Area' and indicates it may be included in the future. The programme and approach to integrating the Additional Scoping Land should be provided to ensure all areas have been adequately assessed in the Environmental Statement.

The Council notes that it is not clear from the Scoping Report where baseline radiological groundwater contamination will be presented in the Environmental Statement. It is possible that this subject matter will need to be approached in both the Freshwater and Radiological sections of the Environmental Statement.

The Groundwater Survey and Monitoring Plan is proposed to further inform the baseline (and the Council includes observations on this below) although the programme in the Survey and Monitoring Plan Summary of Activities section is out of date and needs updating against current progress.

The Groundwater Survey and Monitoring Plan presents proposed additional ground investigation and groundwater monitoring to inform the baseline and assessment of effects. The Council notes that the Initial Scoping Land ground investigation is focused on the central area to the east of the disused railway line where the construction of the Moorside Power Station is stated as likely to take place. No site layout plans are provided to support this position and the Council would welcome continuing engagement on the details of deployment as this is developed.

Low Church Moss SSSI requires particular assessment due to the potential sensitivity of this SSSI to changes to the hydrogeological regime (such as

dewatering or in-ground barriers to groundwater flow). The surface water and groundwater monitoring design for this SSSI should be integrated.

The Groundwater Survey and Monitoring Plan does not identify any groundwater monitoring locations near the coastal zone. Baseline groundwater quality is potentially influenced by the Sellafield facility in this area and it is important to understand baseline quality and groundwater-coastal interactions.

The Council notes that the area under consideration is extended in February 2015 to include 'AB Land' to the south of the main investigation area. The site investigation locations for the AB Land (BHH-Pz series of bores) are not shown on the figures in the Groundwater Survey and Monitoring Plan (Figure 3.1 and 3.2), but are shown on the Soil Survey and Monitoring Plan figures.

The Council notes that the Additional Scoping Land is not included in the Groundwater Survey and Monitoring Plan scope.

The Council notes that the Environmental Statement should consider the entire site area subdivided on the basis of the proposed site layout, with integrated assessments. The Council would wish to stress the importance of coherently considering the Initial Scoping Land, Additional Scoping Land and AB Land rather than as discrete components.

In respect of characterising baseline from the perspective of groundwater, the Council is unable to understand the rationale for the number, position, depth and design of investigation locations based on scoping material. However, the Council notes that the proposed monitoring locations give reasonable coverage across the centre of the Initial Scoping Land. The proposed investigation is described as the first phase of intrusive investigation and notes there will be the opportunity for further intrusive investigation at a later date.

The current progress of the site investigation is uncertain. The Council notes that the Scoping Report infers that the programme provided for the intrusive investigation should have been completed by April 2015 and monitoring commenced in May 2015. The Council would note the importance of maintaining an accurate reflection of progress in the investigation programme (and data captured therein).

Monthly monitoring of groundwater levels and groundwater quality is proposed over a 12 month period. This is considered to be adequate by the Council and should be appropriately targeted based on desk study information.

The Council notes that pump tests, packer tests and falling/rising head tests are proposed to determine aquifer hydraulic properties. Considering the possible difficulties associated with disposal of potentially radiological contaminated water the Council notes that these should be focussed on areas that may require dewatering.

The Council notes that the proposed scope of the investigation does not include all of the Initial Scoping Land, although this land may be required during the construction process and the need for further assessment to inform the Environmental Impact Assessment should be determined.

The Council would note the value of NuGeneration obtaining the Sellafield groundwater quality and level data and conceptual and numerical groundwater model if this is not already obtained.

3.6.2 Adequacy of Terms of Reference

In respect of surface water, the Council notes that the Flood Risk Assessment and Water Framework Directive Assessments should address many of the key issues which the Council would anticipate. A key recommendation is to ensure alignment of these assessments with the wider Environmental Impact Assessment.

NuGeneration should also ensure design addresses staff safety, site access and egress. The Council consider that the need to assess the impact of flooding on site accessibility from workers' home bases should require consideration of a wider area than 3km.

The Council notes that the area under consideration in the Scoping Report and SMP requires clarification. It is apparent that the Additional Scoping Land has been added to the scheme more recently and have been subject to less assessment to date.

It is noted that the Northern Ireland guidance on incorporating the Water Framework Directive into EIAs will be adopted, in the absence of formal guidance on this issue in England. This should be formalised with Natural England and the Environment Agency. The Environment Agency has internal guidance on Water Framework Directive assessment.

The Council notes that a comprehensive list of national and local policy and guidance which will be considered during the study is provided. Careful consideration should be given to the following policies set out in the Copeland Local Plan;

- Policy ENV1 – Flood Risk and Risk Management
- Policy ST1 – Strategic Development Principles
- Policy DM24 – Development Proposals and Flood Risk.

3.6.3 Commentary on Consultation Activity to Date

The Council has welcomed NuGeneration's engagement to date and notes that the Scoping Report refers to wider discussions with the Environment Agency, Natural England, the Lake District National Park Authority, and Cumbria County Council as Lead Local Flood Authority. Furthermore, the Council notes that the draft Survey and Monitoring Plans were issued for comment in August 2014 to the above plus Sellafield Ltd and meetings were held in 2014 to discuss the draft Plans and Scoping Report at that time. Cumbria County Council, as Lead Local Flood Authority, is a key flood risk consultee and will need to be closely involved with agreeing the scope of the flood risk assessment, as will Copeland Borough Council, as Local Planning Authority and a Category 1 responder under the Civils Contingency Act.

3.6.4 Commentary on Proposed Studies

In respect of surface water, NuGeneration should ensure that site investigation will provide all necessary data for assessment and design of sustainable drainage systems. Sustainable drainage systems, both during and after construction will be absolutely key to mitigating water quality impacts on surface and groundwaters. The Council would welcome continuing dialogue on this matter.

The Council notes that the Scoping Report states that detailed methodologies for assessment of potential effects have not yet been defined. It follows that the Council will seek certainty on how methodologies will be defined and for there to be active consultation on the approach prior to implementation.

Materials management during construction and defining material chemical suitability for re-use will be related to groundwater protection. If leachable contaminants are present re-use criteria should be risk-based. This will require development of the geological understanding as well as site design.

The potential impacts of dewatering and disposal of abstracted water must be assessed, both in terms of impact on the groundwater flow regime and contaminant transport. The Council would seek confirmation on this matter.

The impact on the groundwater flow regime of construction of in-ground barriers to groundwater flow should be assessed. The Council notes that numerical modelling is proposed as a technique to assess these aspects however no details are provided. Numerical modelling is potentially a very useful tool and is supported for this assessment, however modelling of the hydrogeology of the complex superficial deposits, vertical gradients, bedrock faults and so forth will be demanding. The council would welcome continuing discussion on this matter.

The potential groundwater quality impact during operation is identified as a possible effect. No proposed method for assessing these effects is presented and the Council would anticipate this being undertaken. Furthermore, the Council would wish to ensure that the scheme design seeks prevention of groundwater pollution and this should be presented in the Environmental Statement.

The approach and programme to securing Environmental Permits (requiring Best Available Techniques (BAT) demonstration) is not presented in this section. Cross referral is encouraged in the Environmental Statement (particularly where common sources of data are proposed).

The Council notes that groundwater is not identified as a receptor for operational radiological effects in Section 7 of the Scoping Report. The Council is unclear whether the potential radiological impact on groundwater is set out in full within Section 9.

The Council notes that the scope of the baseline and effects assessment of Associated Development sites has not been defined. The Council seeks clarity on whether Associated Development sites E, F and G are within the South Egremont Groundwater Scheme.

3.6.5 Commentary on Adequacy of Key Issues Raised & Data

The Council notes that in general terms, potential effects identified as requiring further assessment are considered adequate (subject to commentary above). Detailed methodologies for the assessment of the key issues are still to be defined and are to be scoped as further baseline data and scheme design information becomes available. It is important that Council is given an opportunity to comment on this continuing scoping process as it evolves.

According to the programme in the Groundwater SMP, the intrusive investigation should be complete with monitoring ongoing. However, no investigation data is provided. The Council would seek confirmation that there will be further consultation on the revised baseline considering the additional investigation and monitoring data before Environmental Statement completion.

It is not clear to the Council at this time how far scheme design (such as dewatering, in ground barriers, pollution prevention measures) will be developed for the Environmental Statement, so it is not possible to assess the adequacy of the assessment in full. The Council recommends continuing dialogue on this matter.

Information and assessments will be required for the Environmental Permit application that will also be needed for the Environmental Statement. The Environmental Impact Assessment and Environmental Permit application should ideally be progressed in parallel (albeit with submissions at different points in the future). The Council would welcome further dialogue on this matter.

The Council notes that graphical material included in the Scoping Report is fairly limited for this section and would be a welcome addition for the Environmental Statement. The Council notes that there is no indication of 1 in 10,000 1 in 200 year and 1 in 100 year flood extents (all sources), and which should be defined in the Environmental Statement. It would be helpful to see a figure showing delineation of sub-catchments within the site and existing site drainage patterns, which need defining to inform the site drainage strategy

As a further specific matter, the Council has identified that the Survey and Monitoring Plan Investigation Plan does not show the bores proposed for the AB Land. Furthermore, Figure 3.2 in the Soil SMP 'Proposed Groundwater and Gas Monitoring Locations' should be included in the Groundwater SMP. The Low Church Moss SSSI investigation proposals should be presented on a separate figure to aid clarity.

3.6.6 Adequacy of Graphics

The Council notes that graphical material included in the Scoping Report is fairly limited for this section and would be a welcome addition for the Environmental Statement. The Council notes that there is no indication of 1 in 10,000 1 in 200 year and 1 in 100 year flood extents (all sources), and which should be defined in the Environmental Statement. It would be helpful to see a figure showing delineation of sub-catchments within the site and existing site drainage patterns, which need defining to inform the site drainage strategy.

Figure 3.2 in the Soil SMP 'Proposed Groundwater and Gas Monitoring Locations' should be included in the Groundwater SMP.

The Low Church Moss SSSI investigation proposals should be presented on a separate figure.

3.6.7 Summary

Noting the areas for further discussion above, the Council would generally note that the Freshwater section of the Scoping Report is thorough and systematic although the approach to assessment of effects is presented in outline only. A key issue for the Council include that the entire area must be assessed to a consistent and appropriate level for the proposed scheme. At present, the central Initial Scoping Land appears to be the focus of attention. The Groundwater Survey and Monitoring Plan does not consider the AB Land (but the Soil Survey and Monitoring Plan does). Outer areas of the Initial Scoping Land and all the AB Land, Additional Scoping Land and Associated Development sites have not been examined.

The Council notes that the scheme design is presented in outline only. Clearly, this must be sufficiently developed to inform the Environmental Statement effectively. Important areas of scheme design of interest for this Freshwater section include dewatering and associated water disposal, in ground barrier design, material re-use proposals and pollution prevention measures.

The Council highlights that the methodologies for assessment of effects have not been defined in any detail. The assessment of effects of temporary or permanent works in the vicinity of existing Water Framework Directive waterbodies, or of any changes in the distribution of surface water flows, will potentially require more detailed assessments to be made of the waterbodies existing hydromorphological features possibly using fluvial audit techniques. Opportunities to improve the morphology of the River Ehen locally, should audit identify local pressures, should ideally be identified and implemented as part of the scheme if at all possible to align with Water Framework Directive drivers. Continuing dialogue will be sought on how and when detailed methodologies be defined alongside an opportunity to comment on the proposed approaches.

3.7 Marine and Coastal Physical Environment (Section 10)

The following section provides the Council's response to the Scoping Report and Survey and Monitoring Plan in respect of the Marine and Coastal Physical Environment. In order to ensure completeness, both Section 10 and 14 on Physical Marine Processes and Biodiversity (Marine) area addressed in this response

3.7.1 Adequacy of Baseline (Physical Marine Processes)

The Council notes that the survey work being undertaken along with the existing information in the area should provide an adequate baseline for the building of the physical processes models (temperature, sediment, water movement). The Council would note its' desire to monitor the development of the models (through periodic briefings) especially in terms of grid size and how capable the models are of predicting change and at what scales. The Council notes the importance of ensuring that the impacts of climate change will be built into the modelling. This point is particularly important as there is limited detail on the detailed design proposals e.g. for cooling tunnels, MOLF and so on at this time. The Council would wish to ensure that models are capable of picking up both near-field (small) and far-field potential impacts.

At this time, the Council would note a concern over the apparent lack of interaction between the receptors. As a specific point, the Council would wish to ensure that the proposed surveys are sufficient to allow post construction monitoring, both near-field and far-field. It is unclear from the Stage 1 material how and when these surveys will be planned. The Council would welcome further dialogue on this matter.

The Council would recommend consideration of Acoustic Ground Discrimination System (AGDS) on the seabed survey however as the survey has commenced it may be too late to incorporate this method. The application of AGDS would give roughness and smoothness information for the seabed. The council notes that it would be useful to understand the results of the geophysical survey prior to the benthic survey being commissioned as the geophysical survey should be used to inform where habitats are likely and therefore inform the benthic survey. The Council would note the importance of considering the impacts of changes to temperature, sediment movement etc. on biodiversity and link back to what information is required.

3.7.2 Adequacy of Terms of Reference (Physical Marine Processes)

The Council would generally note a good degree of confidence in the techniques and terms of reference proposed for the Physical Marine Processes survey and modelling. In respect of 10.6.8 (P218 *Scoping Report*) the Council would recommend a more detailed representation of the pathways and using this to steer

the links between the sections of the Environmental Statement as they are prepared. The Council would highlight the value of providing a roadmap between what questions the models will need to answer and to what degree of sensitivity. This will assist in terms of gaining an understanding of the approach and presentation of results in the Environmental Statement.

The Council notes the importance of responding to predicted impacts of climate change over the next 60 years and how this will be managed in the modelling process (so there will be a degree of change and there is a need to put any further anthropogenic change into context). It is unclear how this will be achieved to the Council at this time. Equally, it would be helpful to understand how the baseline will describe the natural variation if surveys are only proposed to cover one year. The Council would wish to understand NuGeneration's more far reaching survey strategy to cover a number of years.

Consideration should be given to the following policies Policy ENV2 – Coastal Management and Policy ST1 – Strategic Development Principles set out in the Copeland Local Plan.

3.7.3 Commentary on Consultation Activity to Date (Physical Marine Processes)

The Council would welcome dialogue with NuGeneration on wider engagement reflecting the potential for transboundary effects associated with the project. As an example, the Council are unclear on whether Scottish Natural Heritage and the Scottish Environment Protection Agency. The Council would welcome NuGeneration setting out the transboundary consultation programme/strategy.

3.7.4 Commentary on Proposed Studies (Physical Marine Processes)

The council would generally note that there is comprehensive information on the proposed baseline studies. However, there is little information provided on what studies will be used / undertaken to help undertake the impact assessment in terms of evidence collection or any previous studies which can be referenced. The Council would recommend that detailed consideration is given to this now so that there is evidence available to support the assessment when the time comes.

The Council would also recommend further effort is placed into considering how the impact assessment will be completed for the Environmental Statement. Where there is insufficient evidence to support conclusions the Council would wish to see whether any studies could be undertaken now noting that these studies go beyond Physical Processes and are much more about how changes in physical process influence other receptors.

3.7.5 Commentary on Adequacy of Key Issues Raised & Data (Physical Marine Processes)

The Council notes that there is limited detail about what impacts will be modelled at this time. This is primarily due to the uncertainty regarding the potential

physical footprint and location of the outfall / intake for cooling water infrastructure and MOLF. The Council would anticipate continuing dialogue on this matter.

In respect of Table 10.2 addressing Assessment Criteria (P225 Scoping Report) the Council notes that the assessment criteria need to be considered further in terms of changes to the general marine physical processes and not just focussed on designated sites.

3.7.6 Adequacy of Graphics (Physical Marine Processes)

The Council notes that minimal graphical material on Physical Processes is presented within the Stage 1 material. The Council would expect to see a summary of techniques, and results from all surveys in documents in May 2016 including where surveys could not be achieved (either due to weather or other conditions encountered).

As a wider issue, the Council would wish to ensure that survey results and models will be available in time to input into and influence the production of the other sections of the Environmental Statement. Surveys will need to be undertaken over winter months and it is unclear how NuGeneration anticipates this being tied in with production of material for May 2016.

3.7.7 Summary (Marine Physical Processes)

There is limited detail about how impacts on physical effects (changes in sediment, temperature etc. will be related to the impact on the biological and human environment). The Council would encourage NuGeneration to assemble both a far reaching baseline as well as ensuring enough detailed evidence to support Environmental Impact Assessment conclusions.

The detail surrounding what / where and how the marine infrastructure will be built is limited at this time reflecting the Strategic Issues stage of consultation. Without further clarity on the plans it is thus difficult to provide commentary although the Council is committed to continuing dialogue in this regard. In particular, details on where the in-take and out-falls will be located and the type of structure present on the seabed alongside a better description of the location and facilities expected at the Marine Offloading Facility would aid the planning for surveys. The Council notes that there is limited information on dredging and disposal operations.

3.7.8 Adequacy of Baseline (Marine Biodiversity)

This section has principally been informed through reference to Section 14 of the Scoping Report. The Council is pleased to note that for seabird surveys boat based surveys and aerial surveys have been undertaken. However, the Council notes that whilst NuGeneration has proposed a one year programme of sea surveys whilst engagement with Natural England has indicated a requirement for two years. From the Council's perspective, there would likely be more value associated with gaining an understanding of why and how seabirds are using the area. As such, the

Council would recommend engagement on a programme of a tagging / monitoring programme to look at connectivity with colonies / Special Protection Areas (SPAs).

In respect of Marine Mammals, the Council would note that at sea visual surveys are generally not particularly effective and it may be more appropriate to consider acoustic surveys.

In terms of the Benthic Survey programme this seems appropriate and adequate to the Council although it would be useful for the Council to review results of geophysical surveys to ensure all potential habitats sampled. The provision of the drop down video should provide an adequate description of the marine environment.

The Council would encourage consideration of the Offshore Vulnerability Index for Seabirds (a measure of how sensitive seabirds are to oil pollution) and would welcome further dialogue on this matter.

In general terms, the Council would note that with respect to marine species survey, it is crucially important to understand trends in the area, rather than a snapshot baseline. For example, the surveys should attempt to characterise whether a particular species of seabird numbers been trending up or down, have more marine mammals been seen in the area in the last five years than the five before. Since the Council understands that the operation of the reactors is likely to be some 60 years or more, a key issues is the ability to consider the impact over that time, this is especially important for any changes to prey species (benthos/fish) which may then impact upon the food chain (birds and marine mammals). With this timeframe in mind, it would be useful to see further references to the National Marine Plan and likely developments over the next 60 years in the baseline section.

3.7.9 Adequacy of Terms of Reference (Marine Biodiversity)

In terms of Marine Biodiversity, the Council would generally note that the terms of reference and approaches proposed are sound and logical. However, without understanding the planned offshore works better it is difficult to assess if the proposed ZoI are adequate. The Council recognises that this design development process will evolve over time and the Council would welcome continuing dialogue on the ZoI as further information becomes available.

As with Physical Processes it is useful to consider impacts of natural and climate change and how these will impact upon species and habitats in the future. It would be useful to put anthropogenic impacts in context (i.e. a large storm event may cause more change to the marine environment than depositing dredge material).

3.7.10 Commentary on Consultation Activity to Date (Marine Biodiversity)

As with Physical Processes, the Council would welcome dialogue with NuGeneration on transboundary effects associated with the project. The Council notes that Scottish Natural Heritage and the Scottish Environment Protection

Agency will no doubt wish to set out consultation responses on transboundary effects. The Council also notes the value in engagement with the Whale and Dolphin Conservation group (<http://uk.whales.org/>).

3.7.11 Commentary on Proposed Studies (Marine Biodiversity)

As with the Council's comments on physical processes, there should be a consideration of how the impact assessment will be delivered for Marine Biodiversity. In particular, this should address the nature of temperature change impacts on the benthic environment, then fish, then birds then marine mammals. Overall, this should drive a consideration therefore of whether temperature change significant such that there is a clear and logical association between evidence and assessment of significance.

3.7.12 Commentary on Adequacy of Key Issues Raised & Data (Marine Biodiversity)

The council is concerned that the increase risk of spills (either chemical or oil spills) from increased marine traffic is being overlooked and would encourage NuGeneration to detail this element in full. In addition, the Council would wish NuGeneration to ensure there is adequate mitigation in place for this (especially bunding for rivers etc.)

At this time, the potential impacts of noise during construction and operation do not appear to fully planned for in the survey / modelling programme. The Council notes that there may need to be modelling of underwater noise to better understand potential impacts on fish and marine mammals.

The Council would seek further information on marine growth and how this will be cleaned/managed on sub-sea structures. In addition, the Council would wish to understand what provision is made to safeguard marine mammals (seals) in respect of the cooling water intake structures. Furthermore, it would be useful to understand how jelly fish blooms will be managed.

The Council notes that minimal graphical material is presented in the Scoping Report and wider Stage 1 consultation supporting Marine Biodiversity. The Council would welcome the provision of maps of distribution of species and connectivity to any protected sites in the Environmental Statement.

Generally, the Council notes that with the current programme, it is quite early in the process to judge data. The Council would thus welcome a further consideration of data quality once data collection is complete and, depending on the results, further surveys may be required at that time.

3.7.13 Adequacy of Graphics (Marine Biodiversity)

The Council notes that minimal graphical material is presented in the Scoping Report and wider Stage 1 consultation supporting Marine Biodiversity. The Council would welcome the provision of maps of distribution of species and connectivity to any protected sites in the Environmental Statement.

3.7.14 Summary (Marine Biodiversity)

As a particular matter, the Council would stress the importance of ensuring that the timelines for impact assessment across multiple subject areas (topics) allows for a coherent consideration of impacts and thus a robust Environmental Impact Assessment. This is particularly important in respect of Marine Biodiversity.

In terms of monitoring, the Council notes that part of the role of baseline surveys in the marine environment will be to provide a baseline for any future monitoring surveys. As there is limited information on what will be built and discharged it is difficult to plan for far-field monitoring at this time. However, the baseline surveys should not prevent this happening and the Council would welcome more detail on future monitoring plans and details on control areas and monitoring of natural change versus anthropogenic change.

The Council notes the importance of NuGeneration's consideration of transboundary impacts, in particular impacts on Isle of Man and Irish seas. In addition, the Council would encourage a full consideration of Cumulative Marine Impacts further from other industries and offshore developments including the designation of Special Areas of Conservation (SAC), Special Protection Areas (SPA), Marine Conservation Zones (MCZ) and other Marine Planning Areas (MPAs). The Council would also encourage NuGeneration to consider the associated impacts of these designations on other industries including impacts on Commercial Fisheries from either changes in quotas or limitations on fishing ground / gear from designation of sites.

In respect of Commercial Fisheries the Council would encourage NuGeneration to consider the cumulative impact of shipping increasing in the area, especially how this may affect the static gear fishermen (gill nets and pots). Furthermore, the Council would seek clarity on whether an exclusions zone will be sought surrounding the intake / outfall areas and whether there are likely to be risks from these structures in respect of fishing and other marine traffic. The Council would suggest criteria be used to describe 'value and sensitivity' and this should include importance of changes to the seabed on commercial fish species.

As a separate and more general point, the Council would wish to ensure that NuGeneration ensure that Marine Surveys consider Historic Environment and making best use of survey data (13.5.7 Scoping Report) to minimise risk of grabs impacts on wrecks and so forth.

3.8 Landscape (Section 11)

This section provides the Council's response on landscape and visual matters related to Section 11 of the Scoping Report and also the Survey and Monitoring Plan.

3.8.1 Adequacy of Baseline

The Council notes that in general terms, the approach taken on landscape to capturing the baseline characteristics associated with the Initial Scoping Land is judged to be adequate. The ZTV and definition of study areas is helpful, but as acknowledged by NuGeneration, these need further refinement with more accurate data and more detailed design information when this becomes available. It is difficult to offer useful comments on the baseline for the AD sites, MOLF and the Additional Scoping Land, due to the inadequacy of information provided to date. In particular the potential seascape effects and methodology for assessment require further development in order for the Council to provide useful commentary.

At this stage, particularly as a consequence of the full extent and nature of the development requiring further definition, the relatively proximate Local Character Areas are not included within the current ZTV. However, the Council notes that these are likely to be in the refined ZTVs especially when the AD sites are included. Due consideration should thus be given to:

- LCT 2a-Dunes and Beaches (Coastal Margins);
- LCT 5a-Ridge and Valley (Lowland);
- LCT 5d-Urban Fringe (Lowland); and
- Lake District Area of Distinctive Character 37 - Bleng and Irt Valleys.
- Urban Areas requiring their own Townscape Character Assessment.

It will be critical to capture somewhere in the Environmental Statement an assessment of the effects on the overall in-combination effects of the Moorside development, the MOLF, the AD sites and all associated transport and electricity infrastructure on the landscape character of the local and wider landscape to include national and regional character areas as well as the Local Character Areas.

The ZTV and study areas will need refining through further more accurate modelling of the terrain and further detailed understanding of the proposed development and AD.

As well as being based on OS terrain 5 data, the ZTV model should also include larger blocks of screening vegetation and built form, both easily obtainable at no cost from OS Opendata, 'Vectormap District'.

The Council notes and welcomes that NuGeneration's commitment to further baseline and assessment work in respect of;

- Condition of Landscape elements;

- a detailed site specific assessment of the character of the site, but this should include all sites such as the AD sites, MOLF and additional scoping land once defined);
- detailed baseline for the Landscapes of County Importance;
- an increase understanding of tranquillity;
- Seascape character baseline and assessment ; and
- an understanding of the night-time lighting baseline on the character of the detailed study area.

The above matters are crucial in informing a wider understanding of the nature and distribution of the effects upon landscape resource.

3.8.2 Adequacy of Terms of Reference

The high level of legislation and policy review is appropriate for the scoping stage. However, the Council notes an absence of review of the Lake District National Park Authority (LDNPA) policy and guidance and this should be provided and inform the evolving design.

Careful consideration should be given to the following policies set out in the Copeland Local Plan;

- Policy ER3 – The Support Infrastructure for the Energy Coast;
- Policy SS5 – Provision and Access to Open Space and Green Infrastructure;
- Policy ENV5 – Protecting and Enhancing the Borough’s Landscapes;
- Policy ST1 – Strategic Development Principles;
- Policy DM26 – Landscaping; and
- Policy DM10 – Achieving Quality of Place.

3.8.3 Commentary on Consultation Activity to Date

High level consultation on landscape issues has taken place with Natural England, LDNPA, Cumbria County Council, and Copeland and Allerdale Borough Councils. This is an appropriate list of consultees to date.

Opportunities for off-site mitigation measures such as planting may need to be explored. If off-site measures are to be proposed, consultation with third party landowners on the potential effects on their land should be commenced as early as possible.

Due to the project programme and inherent complexity the information presented at this stage, particularly in respect of the AD sites, MOLF and associated transport and electrical infrastructure is not adequately resolved to scope the required assessment. This means fully informed responses at this stage are not possible and will necessitate ongoing consultation as the proposed design, layout and assessment scope evolves ahead of the next round of formal consultation next year.

3.8.4 Commentary on Proposed Studies

In general terms, the Council notes that the methodology proposed for the assessment of effects on landscape character appears adequate. The scale to which the landscape baseline has been resolved is appropriately fine, i.e. looking at site specific character within and immediately around the development site(s), and based on local level character assessments in the wider landscape. The effects assessment needs to be carried out at this level, providing an assessment of the potential effects on the character of each locally distinct feature or area rather than amalgamating or grouping those that are similar.

Similar but subtly different methodologies may need to be provided for seascape and night-time character assessments.

The landscape chapter does not address how mitigation and replacement planting would be considered/secured and how this would be taken into account in residual effects. The Planning Inspectorate (PINs) Advice Note Seven states that this should be included.

The Council notes that the chapter does not cover how cumulative development would be considered. PINS Advice Note Seven states that this should be included.

3.8.5 Commentary on Adequacy of Key Issues Raised & Data

The Council notes that the landscape chapter adequately identifies the potential for the most significant effects and the requirement for further work. This commitment to further work and a phased consultation programme therein is seen as highly important to the Council as the design evolves to Stage 2. In particular, the Council's ability to meaningfully comment on the landscape issues associated with development proposals in AD sites is limited by the lack of design development for those sites.

3.8.6 Adequacy of Graphics

Figures appear to be adequate for this stage.

3.8.7 Summary

Several landscape receptors have been scoped out of the assessment without consideration of aspects of the wider development, which have not yet been resolved such as AD sites. The Council would anticipate further justification of scoping out these elements in the context of the evolving design.

The consultation to date is adequate, but further consultation is necessary on the scope of assessment of the wider development and on additional baseline information. This is needed before the next formal stage of consultation.

Further work on opportunities for on and off site mitigation and replacement planting is required and a full consideration of the scope of cumulative effects assessment is required.

3.9 Visual (Section 12)

This section provides the Council's response on landscape and visual matters related to Section 12 of the Scoping Report and also the Survey and Monitoring Plan.

3.9.1 Adequacy of Baseline

As with the landscape scoping chapter, the Council notes that the general approach to the Baseline associated with the Initial Scoping Land is adequate. The ZTV and definition of study areas is helpful, but as identified by NuGeneration in the documentation, both need refining with more accurate data and more detailed design information as this becomes available.

It is difficult for the Council to comment meaningfully on the baseline for the AD sites, MOLF and the Additional Scoping Land, due to the limited information provided to date. The Council encourages NuGeneration to engage in continual dialogue on this matter.

In paragraphs 12.6.1 and 12.7.3, Public Rights of Way (PRoW) and individual or small groups of residences beyond 3km of the Initial Scoping Land (with the exception of those PRoW within the LDNP) have been excluded from further assessment. This is justified by a likely reduced magnitude of change to these receptors (last paragraph of 21.7.3). This is confusing as the magnitude of change is not dependent on the nature of the receptor. Residents and PRoW users are categorised as highly sensitive receptors (Table 12.1), just as users of nationally and regionally designated routes and visitors to specified viewpoints are, and accordingly should be represented throughout the Study Area where the potential for significant effects exists. It is of course important that the visual assessment is kept proportionate, but it is considered that highly sensitive visual receptors beyond 3 km but within 22km, should not be excluded outright. Perhaps the number of these receptors beyond 3km could be reduced by using viewpoints that represent a number of PRoWs or residences in an area. One aspect that might reduce the scope for significant effects on receptors such as individual residents or PRoW users might be their lower susceptibility to change as a result of reduced 'frequency' as described at paragraph 12.6.5.

The ZTV and study areas will need refining through further more accurate modelling of the terrain and further detailed understanding of the proposed development and ADs.

As well as being based on OS terrain 5 data, the ZTV model should also include larger blocks of screening vegetation and built form, both easily obtainable at no cost from OS Opendata, 'Vectormap District'.

It is noted and welcomed by the Council that NuGeneration have identified the need for further baseline and assessment work in respect of:

- Distribution of visual receptors;
- Existing screening and nature of visual connection;

- An understanding of the night-time lighting baseline on the character of the detailed study area;
- Inclusion of seaward visual receptors such as ships and leisure craft;
- Increased understanding of the future visual baseline at Sellafield; and
- Additional detailed PRow information.

These matters are deemed crucial in terms of enhancing the robustness of the approach to visual assessment.

3.9.2 Adequacy of Terms of Reference

As with landscape, the Council considers the high level of legislation and policy review is appropriate for the EIA scoping stage.

3.9.3 Commentary on Consultation Activity to Date

The Council notes that high level consultation on visual issues has taken place with Natural England, LDNPA, the County Council, and Copeland and Allerdale Borough Councils. This is an appropriate group of consultees reflecting the scope of the project to date.

Opportunities for off-site mitigation measures such as planting may need to be explored. If off-site measures are to be proposed, consultation with third party landowners on the potential effects on their land should be commenced as early as possible.

Due to the project programme and inherent complexity the information presented at this stage, particularly in respect of the AD sites, MOLF and associated transport and electrical infrastructure is not adequately resolved to scope the required assessment. This means fully informed responses at this stage are not possible and will necessitate ongoing consultation as the proposed design, layout and assessment scope evolves ahead of the next round of formal consultation next year.

3.9.4 Commentary on Proposed Studies

The methodology proposed for the assessment of effects on views appears adequate. Similar but subtly different methodologies may need to be provided for night-time visual assessments and the Council would welcome dialogue with NuGeneration on this matter.

The chapter does not cover how mitigation and replacement planting would be considered/secured and how this would be taken into account in residual effects. PINS Advice Note Seven states that this should be included.

The chapter does not cover how cumulative development would be considered. PINS Advice Note Seven states that this should be included.

It will be critical to capture somewhere in the Environmental Statement an assessment of the effects on the overall in-combination effects of the Moorside development, the Marine Offloading Facility, the AD sites and all associated transport and electricity infrastructure on visual amenity.

3.9.5 Commentary on Adequacy of Key Issues Raised & Data

The Council considers that the visual scoping chapter of the Scoping Report adequately pick up the potential for the most significant effects and the requirement for further work.

It is recognised that due to the large scale of the study area it is hard to present information on adequately detailed maps. One way of refining this might be to focus in on more detailed (1 to 25,000) maps of areas around the development sites as well as having a broad scale map for outlying viewpoints. All receptors should be shown as graphic layers on appropriate scale maps (such as PRoW individual and quantified groups of dwellings, Open Access Land, and other designations should be highlighted.

The council would seek further information from NuGeneration on the amount of photomontage information and other forms of visualisation that will be provided and their timing relative to the overall programme of formal consultation. In particular, the Council would wish to understand whether all winter and summer views will be subject to a photomontage or just a selection. Furthermore, it would be useful to understand whether views that are not proposed for a photomontage will nonetheless be annotated to provide reference information for the assessment.

3.9.6 Adequacy of Graphics

It is recognised that due to the large scale of the study area it is hard to present information on adequately detailed maps. One way of refining this might be to focus in on more detailed (1 to 25,000 scale) maps of areas around the development sites as well as having a broad scale map for outlying viewpoints. All receptors should be shown as graphic layers on appropriate scale maps such as PRoW individual and quantified groups of dwellings, Open Access Land, and other designations should be highlighted.

3.9.7 Summary

Whilst there is much material in the Scoping Report to give the Council confidence on visual matters, there are a number of issues which will require resolution.

The selection of viewpoints appears to be based only on the main (Moorside Search Area) development. Others that will be important for the AD and other sites have been scoped out of the assessment and further justification is sought for this approach. It is clear that proposed development within the AD sites has the potential to influence visual amenity, potentially on a long term basis (subject to legacy proposals) and this should be clearly articulated.

The consultation to date appears adequate, but further consultation is necessary on the scope of assessment of the wider development and on additional baseline information as identified in the chapter. This is needed before the next formal stage of consultation.

The exclusion of some residential and PRow receptors beyond 3km from the Initial Scoping Land should be revisited.

Further work on opportunities for on and off site mitigation and replacement planting is required and in addition full consideration of the scope of cumulative effects assessment is required.

3.10 Historic Environment (Section 13)

This section provides the Council's response on historic environment matters related to Section 13 of the Scoping Report and also the Survey and Monitoring Plan.

3.10.1 Adequacy of Baseline

The Council considers the baseline to be comprehensive for scoping stage, and utilises data from the expected sources. It is noted that the Archives Monuments Information England (AMIE) is now the Historic England Archive.

The Zone of Influence (ZoI) selected for describing baseline conditions is considered to be appropriate for the scale of development. However it is stated that the ZoI for non-designated assets will extend no more than 1km from the boundary of the initial scoping land; for the majority of non-designated assets this would be appropriate, however where there is potential for significant effects, such as where assets are intervisible with others in the wider historic landscape, these assets should be identified and examined on a case by case basis as to whether a significant effect may occur. This may require photomontages to be produced to inform the assessment, in co-ordination with the LVIA.

3.10.2 Adequacy of Terms of Reference

Although the Council would generally note that the approach to historic environment is acceptable, it would have been useful to have more detail on the terms of reference in the Scoping Report.

In particular, Policy ENV4 – Heritage Assets and Policy DM27 – Built Heritage and Archaeology policies of the Copeland Local Plan should be taken into careful consideration.

3.10.3 Adequacy of Engagement with Consultees

The Council notes that from the perspective of historic environment, consultees have been periodically consulted about the proposed project since at least 2012, and while details of the discussions are not provided, this level of consultation is as expected for a development of this scale and potential complexity.

Paragraph 13.4.3 states that consultation regarding archaeological fieldwork will mostly be by means of telephone and email; we would encourage a programme of face-to-face discussions with consultees regarding proposed surveys as this provides a more effective means of discussing and agreeing the scope of work, and may shorten the consultation period allowing archaeological fieldwork to be brought forward and on the critical path for delivery of the EIA. This would also allow sufficient time for more detail survey to be undertaken in specific locations if required.

3.10.4 Commentary on Proposed Studies

The suite of potential survey techniques proposed is in line with professional standards, however the value of undertaking test/shovel pits over a wide area is questioned; these should be concentrated in areas where prehistoric (in particular Mesolithic) activity may have occurred, such as on high ground or adjacent to watercourses, and where the nature of buried remains would likely not be identified by geophysics and trial trenching. Further discussion and justification would be helpful in this regard.

The potential use of LiDAR 'where available' is noted, it is recommended that a LiDAR survey is commissioned for the project, as this is now a cost-effective method that provides data that can be used by a wide range of disciplines apart from archaeology. It is also the only method of identifying minor/ploughed earthworks that are invisible to other techniques. It is understood from the technical review meeting with NuGeneration on 15th June 2015 that full LiDAR is available for the site, at a resolution of 50cm. It is considered appropriate level of detail, however to date 'false lighting' has not been used to identify potential sites and historic landscape features; this should be undertaken as a priority to enable the features to be investigated and assessed as part of the overall evaluation strategy.

3.10.5 Commentary on Adequacy of Key Issues Raised & Data

The Scoping Report discusses key issues and impacts, and sets out historic assets to be assessed and those to be excluded from further assessment. These seem reasonable, however without further information on these sites, and a site visit, it is difficult to confirm whether these exclusions are justified.

3.10.6 Adequacy of Graphics

In respect of graphical material supporting the Scoping Report for historic environment, the Council notes that Figure 13.1 should only show designated heritage assets and Figure 13.2 Initial Scoping Land would ideally be presented as shaded as hatching makes the drawing difficult to read at present.

3.10.7 Summary

The Council notes that the approach taken by NuGeneration to the Scoping Report and wider Stage 1 material gives the Council confidence on Historic Environment. Notwithstanding, there are matters which the Council would wish to raise to NuGeneration's attention at this time. Some of these matters are common across other disciplines, in particular in respect of the relationship between Historic Environment, Landscape and Visual topics. The Council notes the challenge in providing a commentary on Historic Environment from the perspective of the whole project, given a limited degree of information on the potential range of effects arising from proposals in AD sites. This is a particular matter for the ZoI and the Council would encourage NuGeneration to give this matter further consideration as the scope of development in AD sites becomes clearer.

The Council would seek NuGeneration's views on a more targeted approach to undertaking test/shovel pits and the inclusion of LiDAR survey being commissioned for the project.

The Council would encourage NuGeneration to adopt a precautionary approach to scoping and to scope matters in where development and the nature of their effects is yet to be fully defined.

3.11 Biodiversity (Section 14)

This section provides the Council's commentary on biodiversity matters related to Section 14 of the Scoping Report and also the Survey and Monitoring Plan.

3.11.1 Adequacy of Baseline

As an overall position, the Council would note that the baseline description provides a reasonable basis for setting out the scope and methodology for the EIA based on current information sources available. However, the Council notes some apparent omissions and areas for improvement that are described following.

The Council would seek clarity from NuGeneration on the definition of ZoI with regard to air pollution. It is unclear and justification is sought on why the zone of influence is set at 15km for statutory sites but this is reduced to 2km for non-statutory sites, when it is assumed significant impacts could occur within habitats to the greater range. Ancient woodland is briefly referred to in the text, although the Council notes a limited description of its distribution within the baseline section. The baseline section provides a brief description of S41 Natural Environment and Rural Communities (NERC) Act 2006 mammals (brown hare and hedgehog only) although there is no mention of polecat or harvest mouse records or lack thereof in this section.

Further additions / information which the Council has identified from the review of baseline are described following. In Section 14.3.2, the dates when data were received should be inserted, and the search radii for protected sites should be specified. This would introduce more certainty to the baseline section.

The Council notes and as also raised by Natural England within the Habitats Regulations (HRA) response, when using data from NBN, it should be clearly stated that the applicant have commercial permission to use this source and have the relevant permissions of individual data set owners.

It is unclear in Section 14.5.7 if Rivers Ehen and Calder are considered barriers to Natterjack Toad given the suggestion that animals may use the Initial Scoping Land occasionally. If this is the case, it would be helpful to clarify whether these animals are thought to be from the Braystones or Sellafeld populations.

It would be helpful to use scientific names of fish (e.g. Table 14.4) given the potential confusion when just using vernacular, such as 'sole'.

Precision should be added to Section 14.5.23 regarding leatherback turtle records in the Irish Sea, with the closest such records should be identified. Likewise, there is one reference to basking shark within the scoping section but no other description of this species is present. This should be covered within the baseline.

3.11.2 Adequacy of Terms of Reference

The Council notes that NuGeneration has provided a comprehensive list of legislation, policies and guidance in the Scoping Report. However, further detailed explanation of the Copeland Local Plan 2013-2028 policies and their

relationship to biodiversity would be helpful. In particular, due consideration should be given to the following policies;

- Policy ENV2 – Coastal Management,
- Policy ENV3 – Biodiversity and Geodiversity,
- Policy ST1 – Strategic Development Principles,
- Policy DM25 – Protecting Nature Conservation Sites, Habitats and Species, and
- Policy DM28 – Protection of Trees.

It is recognised that a comprehensive list of legislation, policies and guidance is listed. However a greater detailed explanation of Copeland Local Plan 2013-2028 policies is required. Forthcoming changes to guidance, notably Chartered Institute of Ecology and Environmental Management (CIEEM) Ecological Impact Assessment (EcIA) and water vole survey and mitigation, should be incorporated.

3.11.3 Commentary on Consultation Activity to Date

The Council welcomes NuGeneration's consultation to date which it judges to have been relatively comprehensive and the HRA EP contains a useful summary of HRA specific responses to date. The Council notes that a similar list of consultation responses would be helpful within the Scoping Report.

3.11.4 Commentary on Proposed Studies

This section describes the Council's commentary on proposed studies where included within the Scoping Report and SMP. It is noted that in the main, surveys are described in methodological terms (as might be expected for EIA Scoping). NuGeneration's commitment to continuing dialogue in the application of this proposed survey methodology to the evolving design (in varying locations of the Moorside Search Area and AD Search Areas) is supported by the Council. The Council proposes that particular survey needs, driven by the particular context encountered at the local scale of proposed survey be discussed with them.

In respect of the bird surveys, the Council notes that further justification is needed for the 500m distance from the Initial Scoping Land for intertidal bird surveys. This would be seemingly low based on wider survey experience given the relative lack of detail on project design at this stage. NuGeneration notes the importance of continued engagement in the scoping of surveys and the Council would be supportive of this. It will be imperative that time / season based surveys are conducted to the physical extent required in order to characterise the effects arising from the project as it evolves.

The Council would seek further justification on the number and distribution of sites considered in relation to potential effects associated with aerial deposition, although the Council notes (Table 14.2) the inclusion of some sites at close range (1km). The Council would seek further clarity / confirmation that none of these

sites are hydrologically linked and other impacts, such as traffic/noise, could affect them.

Additional surveys for NERC S41 mammals, such as brown hare, hedgehog, polecat and harvest mouse, may be required and justification should be presented for their exclusion / scoping out at this stage, particularly in respect of the AD Search Areas which are less well characterised in terms of the proposed scope of development at this stage.

The Council notes that Natural England has advised NuGeneration on the need for two years of avian surveys (Table A.2 within HRA Evidence Plan) but NuGeneration is proposing one year and interval review of data to determine if more is needed. The Council considers that further justification is needed for this approach as given potential inter-year variability, two years seems would appear to be a reasonable duration of data gathering.

In the SMP National Vegetation Classification (NVC) surveys are proposed only at selected sites. The Council would seek confirmation on whether these include all relevant hydrologically linked sites including CWSs and SSSIs. In addition to designated sites, the NVC should target high quality habitat outside these areas and S41 habitats. Associated reporting should include discussion of results and reference to candidate CWS criteria.

The Council notes that in respect of Terrestrial Invertebrates, the number of sites is limited and should not just be focussed on previous areas. This should be extended into other potentially valuable habitats including brownfield sites (potentially therefore on AD sites). It is unclear to the Council how surveys will target legally protected and other key species and indeed what specifically these are given the large variety of potential invertebrates on the various lists stated. The methods proposed use few techniques; for example, no light trapping is proposed which seems likely to be necessary to effectively sample Lepidoptera. Further justification, dialogue is anticipated on this matter from the Council.

In terms of Badger, the Council notes that no camera trapping is proposed to aid in sett classification and usage conclusions. This could greatly add to conclusion certainty and is recommended.

In respect of bats, the Council seeks further explanation of why the site is assessed to be of 'medium' quality as per Bat Conservation Trust (BCT) guidelines. Furthermore, the number of proposed transects and static detectors to be used should be indicated; the reason for delaying roost surveys until 2016 needs explanation and it appears that sound analysis is only proposed for static detector results. All bat surveys including transects and emergence surveys should collect sound data that should be analysed in this way. The rationale for excluding AD Site A also needs presenting as this is unclear to the Council at this time. The relative habitat quality scores for the AD sites should also be presented.

The Council notes that in respect of Great crested newt (GCN), there is a danger that if only ponds with positive eDNA results are surveyed in 2016, populations may be underestimated given GCN move between ponds in different years. The Council would recommend that if positive results are obtained, all connected and suitable ponds should be surveyed and treated as pond clusters.

In terms of Reptiles the Council seeks clarification on the type of survey proposed and the number of visits as well as population size class assessment or presence/absence and the year these surveys will take place.

The Council would highlight that in respect of Amphibious Mammals NuGeneration proposes that 'surveys will be extended off-line'. Confirmation is required as to how far these will be extended to search for otter and water vole. In addition, the Council notes that the reference used for the water vole conservation handbook is out of date and the 3rd edition methods should be used.

In terms of Ornithology Surveys (Terrestrial) the Council notes that the Breeding bird survey only refers to walking field boundaries. It is unclear to the Council how the woodland will be surveyed and whether point count methods will be employed. It is unclear whether any special methods will be employed for kingfisher. The rationale for missing out September and October (when migrant species may use the site) should be explained and justified. The data presentation section refers to target species, but this term is not defined and it is assumed all bird species would be presented. The rationale for excluding the AD Site E should also be presented. Barn owl activity methods are discussed for the AD sites but not for the main site (Moorside Search Area). It is unclear whether these will also be undertaken on the Moorside Search Area.

The Council would highlight that in terms of Aquatic Macroinvertebrates, the reference to UKBAP should be replaced with S41 and key species as defined for the West Cumbria Coastal Plain needs further reference or explanation. The rationale for excluding AD Sites C and E also needs presenting.

In terms of Freshwater Pearl Mussel the Council seeks clarification on whether any Freshwater Pearl Mussel downstream from the SAC boundary are being considered as part of the SAC population or if such reaches will be treated as contributing habitat to the SAC. This will clearly be an important matter for inclusion / discussion with the HRA.

The Council notes that in respect of the Pond Ecological Quality Assessment, allowance should be made on site (within the Moorside Search Area) and at AD locations to include any new ponds found during the Phase 1 survey not shown on local plans or maps.

In respect of NERC S41 Mammals, the Council understands that NuGeneration do not propose surveys for these species. However, the rationale for this approach needs explanation in order to support the Council's endorsement of this approach. Given recent declines, if the site supports hedgehog, an accurate assessment of value should be underpinned by robust data.

The Council notes that in respect of White-clawed crayfish, this species is only mentioned for the AD sites. There is no mention of surveys proposed for the main site (Moorside Search Area) or in the Scoping Report, though low potential appears to have been noted on site in 2010 and 2012 (Appendix A2 to the Survey and Monitoring Plan). Further explanation is thus sought on this matter from the Council. Furthermore, the Council notes in (19.12.11 P432 Scoping Report) that "the Environment Agency does not hold records of crayfish from the River Ehen

catchment and therefore no crayfish surveys will be undertaken at AD G". The Council seek further explanation and justification for this decision.

3.11.5 Commentary on Adequacy of Key Issues Raised & Data

In terms of key issues identified within the Stage 1 material and Scoping Report, the Council note that given marine invasive species are included within Section 14.7 P333, it seems appropriate to include terrestrial invasive species in addition.

Within Section 5.8.14 of the HRA, there is no mention of a mechanism to include other new projects within the in-combination assessment that may come forward between now and the application date. A defined cut-off date for such project inclusion would be helpful and will give the Council more confidence that such new projects will be included in the assessment.

Within the Scoping Report, it is unclear to the Council why only selected habitats are identified as having the potential to receive significant effects. At this stage it is unclear on what basis (noting uncertainty in project development in each of the Search Areas) any habitats within and adjacent to the site can be scoped out (notably including NERC S41 habitats such as hedgerows and ponds) given baseline data collecting is still ongoing. The Council notes that NuGeneration have a continuum of survey effort and it may well be that further data (not included in the information made available at Stage 1) has enabled / informed this position to be reached.

The Council seeks clarity on the use of the CIEEM EcIA methodology for the Biodiversity assessment. It is unclear whether the Biodiversity chapter within the Environmental Statement proposes to employ this method fully, wherein the actual determination of whether an impact is ecologically significant is made irrespective of the value of the receptor in question. In this respect the IEEM methodology differs from some other approaches to EIA and it will be important that this is reflected in the Environmental Statement.

Within the HRA Evidence Plan, the timetable suggests that the final HRA report will be issued in September 2016. The Council is unclear as to how this relates to the fact that data gathering is proposed to carry on until the end of 2016. The Council assumes that this is due to uncertainty over whether 2016 data gathering will indeed be needed, but if so, an alternative timetable for HRA submission should be presented to the Council and wider stakeholders.

3.11.6 Adequacy of Graphics

In respect of graphical material supporting Biodiversity, the Council notes that Figures 3.1 to 3.2 within the Survey and Monitoring Plan are incorrect and are instead for Ground Investigation and groundwater monitoring.

3.11.7 Summary

Overall the work presented appears well consulted and covers most expected potential receptors.

Given the lack of detail on the project design thus far, survey areas and scope should be kept as broad as possible.

The lack of surveys proposed for S41 mammals needs further justification and is a surprising omission.

Given the uncertainty of scheme design and site layout presented, there can be no guarantee that any habitat within the site boundaries will be retained or available for mitigation, compensation or enhancement measures; therefore data collection phase should be including effort to identify off-site receptor areas for e.g. reptile translocation or new pond creation.

At the technical review meeting held with NuGeneration on 16th June 2015, we were initially told that the impact of shipping would be covered in the transport chapter; during questioning we discussed with the applicant that associated impacts on ecological chapters should be covered in the biodiversity chapter and stressed the importance of all EIA disciplines working together to deliver a coherent assessment. The same comment applies for other cross cutting themes such as acoustic effects and air pollution.

3.12 Countryside Recreation (Section 15)

The following section provides the Council's response to Section 15 of the Scoping Report and Survey and Monitoring Plan in respect of the Countryside Recreation.

3.12.1 Adequacy of Baseline

The Council notes that the definition of ZoI seems appropriate and has been agreed with relevant stakeholders. In order to inform the assessment and for the purposes of driving Statement of Common Ground the Council would suggest that written evidence to show this agreement would be useful, alongside the agreed reasons for selecting this zone.

It is recommended that the ZoI is reviewed against that of other disciplines (e.g. noise, LVIA, air quality, transport) in order to ensure cumulative effects are not missed and relationships are fully explored in the Environmental Statement.

It is recognised by NuGeneration that there are gaps in existing baseline data regarding usage levels of countryside resources. Proposed use of automated devices seems sensible and will allow long term data collection (NuGeneration suggest a minimum period of twelve months). The devices also record activity times and can therefore indicate peak usage times. Consideration needs to be given as to how the raw data will be collated and analysed – it was acknowledged that there is a margin of error with regards to double-counting, misinterpretation of pedestrians/equestrians etc.

It is recognised that automated devices are unsuitable for monitoring water-based recreation usage. NuGeneration proposes engagement with relevant user groups and clubs, however it is recommended that surveys should be required.

The Council would wish to stress the importance of appropriate consideration of the future baseline such as the proposed England Coastal Path. For the purposes of Environmental Impact Assessment, this will require a review of all proposed development supported by engagement with the Council (this is referred to in para 15.5.12 *Scoping Report*). The Council would recommend that NuGeneration provide a list of future baseline items for the Council to review. The future baseline list will need updating on a regular basis as new proposals are consented / brought forward.

The Council would note the value of defining exactly which areas / resources and users are considered within this section as it is taken forward to the Environmental Statement. In particular, it is unclear which land and water based resources are included, for example, the Council is unclear whether this includes amenity space, parks, accessible woodlands, green infrastructure, lakes, reservoirs and so forth. Equally, the Council would welcome further definition of what is proposed for scoping out at this stage. It is suggested that Canal & Rivers Trust may be able to provide usage data for the water bodies they monitor/control.

In addition, Nugeneration should consider the potential effects during construction including those on the recreational coast and bathing water standards. Potential impacts associated with the MOLF and AD sites require further consideration, along with an appropriate mitigation strategy.

3.12.2 Adequacy of Terms of Reference

The Scoping Report uses high-level legislative and policy review which is appropriate for the scoping stage. It would be expected that the Scoping Report include reference to relevant PINS advice notes including Advice Note Seven. In addition, it is expected that the guidance and best practice to be relied upon has been agreed with the relevant bodies as recommended by PINS Advice Note Seven. There is no reference to this in the Scoping Report, unclear if this has taken place.

3.12.3 Commentary on Consultation Activity to Date

The Council notes and welcomes the high level engagement which has taken place with Copeland and Allerdale, Cumbria Tourism, the Marine Management Organisation and Natural England. The Council welcomes the list of proposed consultees in the Scoping Report (15.4.5 P343 *Scoping Report*) which is comprehensive. The Council notes the value of maintaining a wider recognition of these contacts and further details of additional local recreation groups and organisations as NuGeneration's proposals evolve.

The Council would welcome continuing dialogue on the proposed consultation strategy for wider groups e.g. methods and timescales for engagement, how will comments be collated, considered and reported on in the future.

3.12.4 Commentary on Proposed Studies

It is accepted that the methodology is currently high level, therefore detail will be required in due course on how different effects will be assessed (amenity and land take) and how mitigation will be identified and secured. This should be agreed through continued engagement with stakeholders, including the Council.

Consideration should be given to the following factors in the sensitivity rating of receptors (Table 15.1):

- Usage levels; those who use a receptor on a regular basis would be more sensitive than one-off users; and
- ability of users to absorb change.

Consideration should be given to the following factors in the magnitude rating of change (Table 15.2):

- Duration of effect; long term or permanent changes would have a high magnitude, whereas short term reversible changes would be lower; and

- ability of resource to continue functioning; high magnitude would mean the resource is closed, low magnitude would mean the resource is compromised or inconvenienced.

It is unclear how amenity and land take effects will be assessed. The Council recommend that the magnitude of each receptor be fully assessed. Amenity should look at cumulative environmental effects on users e.g. a combination of noise, visual and air quality effects (see HS2 Phase One Environmental Statement for exemplar methodology).

The Council understands that NuGeneration is committed to surveys with users to identify potential deterrent effects. Whilst this could provide useful qualitative context, it is recommended that a quantitative amenity assessment is included which determines cumulative environmental effects on users. Users will find it difficult to quantify how they might be deterred from using a resource without any confirmation of what the significant effects on that resource would be. The Council would recommend further dialogue on this.

It should be noted that the amenity assessment should also be applied to community and business resources (not suggested as being covered by this section of the Scoping Report) and that there should be a consistent approach to the assessment of these topics. The Council notes that it is vital that the other environmental disciplines within the NuGeneration team are aware that countryside recreation, community and business resources need to be scoped into their assessments to ensure no significant effects are missed.

The Council notes that this section does not cover how mitigation would be considered/secured and how this would be taken into account in residual effects. The Council stresses that PINS Advice Note Seven states that this should be included and would be expected in the Environmental Statement.

This section of the Scoping Report does not cover how cumulative effects with other proposed developments would be considered, for example with the adjacent Sellafield decommissioning programme would be considered. PINS Advice Note Seven states that this should be included and this would be expected from NuGeneration. Furthermore, the Council notes that there is no specific reference as to how construction/operation/decommission effects will be covered and this would be expected in the Environmental Statement.

3.12.5 Commentary on Adequacy of Key Issues Raised & Data

Section 15.7 identifies potential effects on users including severance and deterrent effects; the methodology needs to be clear as to how each of these effects would be assessed.

The Council notes that the list of potential effects cannot be confirmed until further design information is available however initial list seems logical. It would be useful to know if this has been informed by other environmental disciplines e.g. LVIA and noise ZoI.

3.12.6 Adequacy of Graphics

Figure 15.1 defines the 'Countryside recreation zone of influence' and Figure 15.2 shows the 'Designated recreational routes'. Both figures are relevant to this EIA technical chapter and provide useful context.

3.12.7 Summary

Given that this is not a 'standard' EIA topic, it is difficult to compare to previous examples. The baseline coverage seems appropriate and engagement has been undertaken with the key stakeholders to confirm this.

Confirmation required as to how existing gaps in baseline data will be filled, proposed surveys and engagement can provide useful qualitative input however this should be supported by a robust quantitative assessment. The amenity assessment is important this and 'Socioeconomics/human population' chapters are the only ones where cumulative environmental effects will be assessed.

It is accepted that the methodology is currently high level, however detail is required on how different effects will be assessed (amenity and land take) and how mitigation will be identified and secured. This should be agreed through continued engagement with stakeholders.

3.13 Socio-economics and Human Population (Section 16)

The following section provides the Council's response to Section 16 of the Scoping Report in respect of the socio-economics and human population technical matters.

3.13.1 Adequacy of Baseline

The baseline set out in the Scoping Report appears adequate. As a minimum it should cover economy and employment characteristics/trend, demographic and settlement characteristics/trends, education and facilities characteristics, community/local perceptions, other local socio-economic issues/services, housing and accommodation market characteristics (including holiday accommodation market), and health and facilities characteristics. There will be a number of "cross-cutting" issues which will need to be addressed and managed and this would be of great interest to Local Authorities.

The Council notes that the proposed nuclear facility which covers the employment programme, workforce, and economic characteristics/ trends and supply chain should be included within the Environmental Statement. However, there are gaps within the baseline information including the supply chain (i.e. numbers; sectors; size, location etc.).

Youth unemployment is another omission which was acknowledged as being important in the technical review meeting held on the 15th June 2015 by the Council with NuGeneration. There will also be pockets of deprivation in relation to education, skills and employment. It is understandable that CBC and other Local Authorities will want to secure the maximum benefit for local businesses, communities and places.

The Council would expect to see an assessment of the impacts on people, place and business for the construction and operational phases. This should include labour requirements; recruitment and the impact of NuGeneration expenditure on locally procured/purchased goods and services and what this would mean for local services, local manufacturers and suppliers. With increasing pressure in the local labour market with skill shortages in certain categories, it makes economic sense to develop pathways to skills and employment targeted at young people and others which could increase the local input to this project and others later on.

It should be borne in mind that NuGeneration will not just be interested in turbine generator suppliers or reactor pressure vessel manufacturers (which will most likely be global concerns) but also the main civil works, contractors and other suppliers such as caterers; health care; security firms even taxi firms etc.

It is suggested that with Moorside using new nuclear technology that a key outcome must be to identify opportunities for UK (local) and global suppliers to develop partnering arrangements e.g. in modular construction, reactor protection systems etc. A proactive procurement approach would facilitate this. The baseline analysis would identify gaps in the supply chain and skills.

The Council would also expect that elements of the baseline are brought up to date in line with statistical releases of new data particularly those concerning employment (BRES), enterprise (BRES) and unemployment (claimant count).

It is recommended to include agriculture as an economic sector to include employment and main activities description. This would complement analysis already present on fisheries. Its inclusion would represent the fact that Cumbria still has agricultural activity (e.g. upland farming).

Private rented sector housing data should be included given its importance as a potential sensitive receptor.

Analysis of worklessness should be undertaken through a review of persons on other working age benefits (accessible for Nov 2014 last based on NOMIS accessible data). In addition, analysis of worklessness/areas of deprivation by geography/areas/neighbourhoods should be undertaken as this would enable targeting of support to be developed and access to employment/skills and apprenticeships improved. This will be an important consideration for the Local Authorities and their partner organisations at community and regional levels. A reference to “pathways to employment” as part of Appendix F (Scoping Report) should be made.

Youth unemployment rate is higher than for the adult population, this needs further explanation. Similarly youth under-employment is a key issue which, with the right support and approach could be addressed via the project.

Section 16.5.25, Social and Community Infrastructure, is too limited in its scope and description. Community infrastructure is often used to engage disadvantaged groups and provide support for learning, careers, skills and employment either as part of community economic development or access to wider training and employment.

Project jobs analysis should include the incidence of outage worker and their relationship to a peak workforce. Analysis should also be undertaken of the existing nuclear “capable” workforce as represented in Sellafield and the nuclear related defence engineering.

A review of the SME economy is essential as it is likely that the opportunities offered by the nuclear facility will be much wider than nuclear. There will be a number of indirect and induced effect opportunities which will need to be analysed when impacts and opportunities are explored

Information on employment sites and premises, sites of a specific size would be helpful as storage/ lay down facilities (for bringing together sub-assemblies implicit in a modular design approach) will be required in appropriate locations.

The Council notes that in Section 16.7 further assessment is required, for instance people seeking employment and reference to youth/young people required.

The Council also notes that Household Projections are now available², this should be included within the Environmental Statement. Inclusion of tourism bedspace stock by type and LAD would be a useful addition to the baseline information section.

3.13.2 Adequacy of Terms of Reference

The Scoping Report uses high-level legislation and policy review which is appropriate for the scoping stage.

However the Council notes that the following policies set out in Copeland Local Plan should be taken into consideration:

- Policy ER7 – Principal Town Centre, Key Service Centres, Local Centres and other service areas: Roles and Functions; and
- Policy SS4 – Community and Cultural Facilities and Services.

3.13.3 Commentary on Consultation Activity to Date

The Council has acknowledged that both business and public sector stakeholder bodies will be consulted.

3.13.4 Commentary on Proposed Studies

The tourism study needs to be programmed in such a way that data on accommodation providers can be realistically fed into the assessment process. The Council requests further understanding and information on occupancy. In addition, further understanding and information on the sampling strategy that will be used to get a balanced view of tourism impacts is required.

3.13.5 Commentary on Adequacy of Key Issues Raised & Data

It should be noted that neighbourhood and business/SME data could be more expansive and the youth unemployment data could be drawn out.

Modular construction is an area where the UK supply chain could share work with global suppliers and probably has a medium capability to deliver. This could be explored as this may be a key area bearing in mind the nature of the reactor etc. The Council notes that more baseline information is needed on how the areas could be developed into practical initiatives.

3.13.6 Adequacy of Graphics

The Zones of Influence defined for Socio Economics should be mapped out showing the time contours and the selected impact area for the 90 minute area. Local Area locations described should be defined at an appropriate geographical level.

² <https://www.gov.uk/government/collections/household-projections>

3.13.7 Summary

The Council notes that baseline coverage seems appropriate and engagement has been undertaken with the key stakeholders to confirm this position. Confirmation is required as to how current omissions in baseline data will be addressed.

Proposed surveys and / or engagement can provide useful qualitative input, however the Council notes this should to be supported by a robust quantitative assessment. The amenity assessment is important as this and NuGeneration's approach to the socioeconomics / human population sections of the proposed Environmental Statement are primary areas where cumulative environmental effects will be assessed.

It is accepted that the methodology is currently high level, therefore details will need to be agreed in due course on how different effects will be assessed (amenity and land take) and how mitigation will be identified and secured. This should be agreed through continued engagement with stakeholders with the Council.

3.14 Climate (Section 17)

This section presents the Council's response on climate issues informed by Section 17 of the Scoping Report and also the Survey and Monitoring Plan.

3.14.1 Adequacy of Baseline

The assessment of existing climate is appropriate and uses data from the nearest/most representative meteorological station. The assumptions provided for a future baseline are also appropriate.

3.14.2 Adequacy of Terms of Reference

The list of legislation, guidance and policy is comprehensive. Further consideration is required of the relevant local policies from Copeland's Local Plan.

Reference should be made to HM Treasury's Infrastructure Carbon Review (November 2013) outlining the significance of construction carbon which will increase as the grid is decarbonised and operational emissions reduce.

3.14.3 Commentary on Consultation Activity to Date

It is noted that consultation relating to the inclusion of climate change adaptation measures will be undertaken during the pre-submission stage however it is unclear on the extent of previous consultation in relation to climate.

It was noted at the technical review meeting between the Council and NuGeneration held on 16th June 2015 that should any improvements to the strategic highway network be required as a result of the scheme that other interim advice notes from Highways England may need to be used and regard would need to be given to the National Networks National Policy Statement (NN NPS). The NN NPS should also be considered with regard to the improvements to the rail network required during construction and operation of the scheme. It should be clarified whether changes to the rail network meet the criteria to be considered under the NN NPS.

3.14.4 Commentary on Proposed Studies

In respect of climate (as it relates to emissions of greenhouse gases), the Council notes that no studies are proposed by NuGeneration 17.7.2 (P388 *Scoping Report*). Whilst the Council understands the rationale for significant effects during the operational phase to be scoped out, it is recommended that further justification is provided with regard to scoping out carbon footprinting during the construction phase. The Council notes that climate matters are addressed at a topic specific level elsewhere within the Scoping Report but there appears to be no commitment to carbon footprinting as a particular matter. The Council notes the provisions within the HM Treasury Infrastructure Carbon Review. This recommends 1.5

(P14) that a significant opportunity to cut capital carbon is in ‘cutting the volume of materials consumed and using resources more efficiently’. The Council would anticipate that NuGeneration will be encouraged to take a view on this matter and provide evidence to support an assessment of carbon in construction. Furthermore, Copeland’s Local Plan Policy ST1 A states that ‘the Council should encourage development that minimises carbon emissions, maximises energy efficiency and helps to adapt to the effects of climate change’ and would encourage NuGeneration in support of this policy.

3.14.5 Commentary on Adequacy of Key Issues Raised & Data

The assessment of existing climate is appropriate and uses data from the nearest/most representative meteorological station. The assumptions provided for a future baseline are also appropriate. The scope of assessment of the construction stage requires further consideration.

3.14.6 Adequacy of Graphics

It would have been useful to include a graphic showing the identified human and ecological receptors in Table 6.2, 6.3 and 6.4.

3.14.7 Summary

The Council notes that no studies are proposed by NuGeneration 17.7.2 (P388 Scoping Report). Whilst the Council understands the rationale for significant effects during the operational phase to be scoped out, it is recommended that further justification is provided with regard to scoping out carbon footprinting during the construction phase. The Council notes that climate matters are addressed at a topic specific level elsewhere within the Scoping Report but there appears to be no commitment to carbon footprinting as a particular matter. The Council notes the provisions within the HM Treasury Infrastructure Carbon Review. This recommends 1.5 (P14) that a significant opportunity to cut capital carbon is in ‘cutting the volume of materials consumed and using resources more efficiently’. The Council would anticipate that NuGeneration will be encouraged to take a view on this matter and provide evidence to support an assessment of carbon in construction. Furthermore, Copeland’s Local Plan Policy ST1 A states that ‘the Council should encourage development that minimises carbon emissions, maximises energy efficiency and helps to adapt to the effects of climate change’ and would encourage NuGeneration in support of this policy.