



Draft Joint response of Suffolk County Council and East Suffolk Council to EDF Energy's Stage 4 Public Consultation

This response is the joint response of the two Councils unless where otherwise identified throughout the text.

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GLOSSARY OF ACRONYMS

AIL	Abnormal Indivisible Load
AONB	Suffolk Coast and Heaths Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
AQO	Air Quality Order
CEMP	Construction Environmental Management Plan
DCO	Development Consent Order
DMRB	Design Manual for Roads and Bridge
ESC	East Suffolk Council
GRIP	Governance for Railway Investment Projects
HGV	Heavy Goods Vehicle
HER	Historic Environment Record
HRA	Habitats Regulations Assessment
IAQM	Institute of Air Quality Management
IPC	Infrastructure Planning Commission
LEEIE	Land east of Eastlands Industrial Estate
LEMP	Landscape and Ecology Management Plan
LGV	Light Goods Vehicle
LVIA	Landscape and Visual Impact Assessment
NPPF	National Planning Policy Framework
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
SCC	Suffolk County Council
SO	System Operator
SSSI	Site of Special Scientific Interest
SuD	Sustainable Drainage Systems
WMZ	Water Management Zone

EXECUTIVE SUMMARY

- A. This document is the joint response of Suffolk County Council and East Suffolk Council (referred to as “the Councils” in this response) to EDF Energy’s Stage 4 public consultation. Unless it is identified otherwise in specific sections, the Councils share the views on matters within this response. The response has been formally agreed in Cabinet Meetings of the Councils, on 23 September 2019 by East Suffolk Council’s Cabinet, and on 24 March 2019 by Suffolk County Council’s Cabinet.
- B. Previously, the joint responses have been between Suffolk County Council and Suffolk Coastal District Council, with Waveney District Council sending their own independent response. Following the successful merger of the Councils earlier this year, Suffolk County Council are now working jointly with East Suffolk Council which represents the formerly identified areas of Suffolk Coastal and Waveney Districts.
- C. The Councils’ response is prepared after a community consultation event with the Parish Councils on 26 July 2019 and, alongside representations from local residents, draws upon their advice and local understanding. The Councils have also discussed the issues raised by EDF Energy with other statutory consultees.
- D. The Cabinets of the two Councils agreed a comprehensive response to the previous Stage 3 public consultation in March 2019. This response still stands in its entirety (unless specified), and the Councils’ Stage 4 response will need to be considered in combination with and with reference to the Stage 3 response.
- E. This document provides a comprehensive response on all matters of the Stage 4 consultation. In summary, based on the new information put forward in the Stage 4 Consultation, the Councils ask EDF Energy to particularly address the following points:
 - 1) As highlighted in the joint Stage 3 response, the Councils expect EDF Energy to use a deliverable sustainable transport strategy to transport materials to/from the site. Unless there is strong appropriate evidence and justification, deviation away from a sustainable transport strategy should be considered to be unacceptable and the Councils continue to expect maximising the use of marine- and rail-based transport to transport materials to/from the site. The Councils are disappointed that Stage 4 suggests that the lack of progress on the rail-led strategy is now jeopardising delivery of this option.
 - 2) Based on the above, the Councils expect EDF Energy and other stakeholders including Network Rail to prioritise pursuing the rail-led strategy and confirm that we

- will support EDF Energy where required in pursuing a rail-led strategy above alternative road-led options.
- 3) The Councils expect EDF Energy to provide proportional mitigation to address their impacts at locations where their traffic is exacerbating a capacity or road safety concern, most prominently at the A12 in Woodbridge, but also other locations to the North of Woodbridge.
 - 4) The Councils express their continued opposition to four new tall pylons to the development site, which would have considerable detrimental impact on the AONB, and the options presented at Stage 4 do not appear to significantly reduce this impact;
 - 5) The Councils are pleased to see revisions to the layout of the Land east of Eastlands Industrial Estate (LEEIE) but express concern about the continued lack of detail, in particular in relation to surface water drainage solutions for the site.
 - 6) The Councils welcome the additional ecological mitigation and compensation areas, for Fen Meadow and Marsh Harriers, but are concerned that the feasibility of these sites cannot be evidenced and overall ecological mitigation and compensation for the whole Sizewell C DCO remains insufficient.
 - 7) The Councils welcome the identification of flood compensation areas but defer to the Environment Agency to provide expert advice as to their suitability, size and locations. Further detail is required for the Councils to comment on the environmental impacts of these options.
 - 8) Suffolk County Council requires further evidence in relation to the Sizewell Link Road route selection and the potential option for removal of the Sizewell Link Road post-construction phase.
 - 9) The Councils welcome the commitments made for project and economic benefits of the programme including the Community Fund, but require further work related to the increase workforce number of 8,500 and its impact and required mitigation on local housing and tourism accommodation, workforce displacement, health and other socio-economic issues.
- F. In addition to these key points, the response in this document provides detailed commentary on many of the more minor changes proposed in the Stage 4 consultation document.
- G. The Councils note their disappointment that the opportunity of a Stage 4 consultation was not used to clarify and fully evidence at least some more of the issues we raised

at Stage 3 (and previous), leaving the Councils unable to come to an evidence-based view on so many matters. We take this opportunity to re-iterate in summary the previously highlighted concerns.

Introduction

1. These comments are made in response to the information contained in the Sizewell C Stage 4 Pre-Application Consultation Document. Comments previously submitted (published by Suffolk County Council and Suffolk Coastal District Council) in response to the Stage 3 Pre-Application Consultation Document remain unchanged and valid in full unless specifically stated otherwise here.
2. Since the Stage 3 consultation response, Suffolk Coastal District Council has merged with Waveney District Council (who sent an independent response to the Stage 3 consultation) and formed East Suffolk Council. For the context of this response the “Councils” refers to Suffolk County Council and East Suffolk Council.
3. For all elements of the proposals that are not commented upon, EDF Energy should refer to the Councils' Stage 3 consultation response (published by Suffolk County Council and Suffolk Coastal District Council).
4. While the Councils welcome the opportunity to comment on the proposals during a fourth stage of consultation, they are disappointed that EDF Energy has not taken this opportunity to respond to key elements of concern raised in our Stage 3 response.
5. In advance of the Stage 2 consultation, the Councils agreed on our common strategic objectives for the delivery of a new nuclear power station at Sizewell. It is against these objectives that we assess the proposals of Stage 4, as we have done for Stage 2 and Stage 3 proposals. The Councils' agreed strategic objectives are that the development:
 - a. Provides a lasting legacy for the local communities and the economy;
 - b. Appropriately mitigates and/or compensates for local impacts;
 - c. Secures skills and education benefits for the wider area;
 - d. Supports economic growth of the region and East Suffolk in particular;
 - e. Acts as an environmental exemplar within the protected landscape, Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB);
 - f. Secures an infrastructure legacy;
 - g. Provides for funding of long-term community benefit; and
 - h. Has an appropriate decommissioning and removal of nuclear waste strategy.
6. At the end of each section of this document, a summary box clearly sets out the position of the Councils on each topic.

Summary of Introduction

7. In summary, the comments made in this response are to be read in conjunction with the Councils' Stage 3 response. Comments previously submitted in response to Stage 3 remain unchanged unless specifically stated otherwise in this document.
8. The Councils are disappointed that EDF Energy has not taken this opportunity to respond to key elements of concern raised in our Stage 3 response.

General environment comments

Natural Environment

9. The Councils wish to reiterate that we expect EDF Energy to demonstrate across ALL elements of their proposals, including all associated development as well as the main site, that it is applying the industry accepted mitigation hierarchy, including:
 - a. Establishing (in accordance with all necessary guidance) what is currently found at the sites and how this will be affected by the development;
 - b. Demonstrating how it has applied the hierarchy of: Avoid – Mitigate – Compensate – Enhance;
 - c. What commitments it is making to achieving Biodiversity Net Gain;
 - d. How it intends to develop an agreed Construction and Environment Management Plan (CEMP); and
 - e. Its commitment to an agreed Landscape and Ecological Management Plan (LEMP)- with all necessary mechanisms in place for delivery – for the entire lifespan, including decommissioning, of the power station.
10. As with Stage 3, there is a lack of clear evidence in this Stage 4 Consultation Document to support a number of assertions and statements made in respect of the potential ecological effects of the proposals and, whilst we acknowledge that further investigations are ongoing, we remain concerned that there is very little time for these to be completed and factored into the proposals before EDF Energy submits its application for a development consent order (DCO).
11. The Councils remain concerned that at this late stage there is very little recognition from EDF Energy of the highly sensitive location for the proposed development within the AONB, despite this being clearly identified in the Appraisal of Sustainability for this location within National Policy Statement for Nuclear Power Generation EN-6. The Stage 4 Consultation document makes no reference to this policy context, despite several of the specific proposals within the document having direct consequences on the purposes of this nationally designated landscape, contrary to the overarching National Policy Statement for Energy EN-1 which, in respect of nationally designated landscapes, states that *'...Each of these designated areas has specific statutory purposes which help ensure their continued protection and which the IPC should have regard to in its decisions. The conservation of the natural beauty of the landscape and countryside should be given substantial weight by the IPC in deciding on applications for development consent in these areas.'*

Summary of the Councils' additional Stage 4 positions on natural environment

12. The Councils reiterate that EDF Energy needs to demonstrate across all elements of their proposals that it is applying the accepted mitigation hierarchy as set out in paragraph 9 above.
13. There is still a lack of evidence related to ecological impacts, and the Councils remain concerned that there is little time to produce full evidence.
14. EDF Energy continue to fail to give due recognition in their proposals to the importance of supporting the purposes of the AONB.

Archaeology

15. Any new areas now added to the red line boundary will need to be scoped in for archaeological work if ground disturbance is involved. For those scheme elements which have small additions in areas already trenched e.g. the new attenuation pond at Darsham, evaluation and mitigation can be undertaken post consent. For those areas where trench plans are in place and the commencement of trenching is imminent, plans will need to be updated to include any new red line extension areas. For some of the entirely new areas e.g. fen meadow and flood compensation areas, pre-DCO evaluation would be appropriate given their sensitivity so EDF Energy should discuss these with Suffolk County Council's Archaeological Service at the earliest opportunity. The Marsh Harrier sites should be scoped in for post consent evaluation, with provision to avoid works which involve ground disturbance in any areas where sensitive archaeological remains are defined.
16. The Councils are concerned that large new additions to the red line boundary have been made at such a late stage without any prior discussion with the archaeology service, given their location in archaeologically sensitive areas, as this will make securing appropriate pre-DCO assessment challenging. Without this assessment EDF Energy will not be able to demonstrate that the proposed mitigation work is deliverable (especially for the flood compensation areas) as, if sensitive archaeological remains are defined, preservation in situ which prevents ground disturbance may be appropriate. At present, from an archaeological perspective, we are unable to support the selected locations for some of the proposed ecological mitigation and both of the flood compensation areas.
17. Ensuring as many areas as possible within the red line boundary are fully evaluated in terms of archaeological impact pre-DCO is important to ensure that the Councils have as much information as possible to base our advice upon at DCO stage, to safeguard the

archaeology and ensure the deliverability of the scheme e.g. so appropriate timescales for archaeological mitigation can be factored into project programmes. We request that EDF Energy continues the discussions regarding priority areas for below ground evaluation over the coming months, if schedules and land access mean that evaluating all areas continues to be unlikely, to ensure that the most archaeologically sensitive areas have been properly assessed. Any areas not able to be fully evaluated pre-DCO should be scheduled-in for assessment at the earliest opportunity.

18. From an archaeological perspective we would welcome further information regarding any proposed landscape enhancement schemes (including tree planting) which are proposed and which fall outside the red line boundary area, as well as any additional utilities schemes associated with this development (either within or outside the red line boundary) and would ask to be included in consultations regarding planned works. This is due to the potential for these proposals to have significant impact upon above and below ground heritage assets.

Summary of the Councils' Stage 4 positions on archaeology

19. In summary, any new areas now added inside the red line boundary will need to be scoped in for archaeological work if ground disturbance is involved. The Councils expect EDF Energy to fully evaluate as many areas as possible within the red line boundary in terms of archaeological impact pre-DCO submission, in order to safeguard the archaeology and ensure the deliverability of the scheme.
20. Further information and archaeological assessment are required regarding any landscape and utilities schemes outside the red-line boundary but associated with the development.

Air quality, noise and vibration

21. The Councils highlight the impact of the proposals on local air quality. Air pollution is the largest environmental health risk in the UK, and directly impacts the quality of life of affected residents. It shortens lives and contributes to chronic illness. It is a major public health risk ranking alongside cancer, heart disease and obesity and causes more harm than passive smoking. As such any transport options that reduce the level of emissions from HGVs should be fully explored. There is an acknowledgment that there will be increases in traffic for the project and that this will be mostly larger or heavy goods vehicles (HGVs), but also cars, Light Goods Vehicles (LGVs) and buses. Where this can

be mitigated by wider use of rail, this should be considered fully to reduce the impact on the local population from poor air quality.

22. There are various changes to potential scheme designs within the Stage 4 public consultation such as:
 - a. The proposal to adopt an integrated transport strategy, which would result in changes such as an increase in freight deliveries by rail (in comparison to road-led);
 - b. Revised proposals for Wickham Market traffic mitigation (section 6.7.4 - 6.7.5);
 - c. Changes in the assumed number of the construction workforce within traffic modelling; and
 - d. Option for movements of freight via Felixstowe or Lowestoft (this has previously been raised but is not discussed in the Stage 4 consultation).

These may affect previous assessments of the air quality impacts of the proposed development.

23. The Councils expect the air quality assessments carried out previously to be updated in the light of these new scheme changes. Assumptions associated with the traffic model used in the air quality assessment should be clearly presented. In addition, to entirely capture potential air quality impacts, the criteria for traffic flow defined by Institute of Air Quality Management and for speed change defined in the Design Manual for Roads and Bridges should be applied to the complete traffic model network. The Councils require full justification if it is not proposed to carry out detailed assessment for roads which may exceed these criteria. A fully updated report on air quality aspects of the proposal is appended to this response for completeness.
24. We would welcome further clarification of what is meant by the “extended hours” of HGV movement as stated in the document. Impacts from increased air pollution or noise levels, especially at night, on the local community will need to be fully understood as community anxiety and stress is a concern that will need to be addressed.
25. Greater clarification is still required concerning the hours of work which are to be implemented for the construction of the new road links to the site (i.e. the two village bypass, the proposed Sizewell Link Road and other highway improvement schemes), the land east of Eastland’s Industrial Estate (LEEIE) and the green rail route. This will have a bearing on noise and vibration impacts for areas affected by such workings and may require further studies.

26. It is assumed that the other off-site developments such as the park and ride sites and the off-site freight management facility will be constructed during normal working hours.
27. Whilst a significant amount of measurement data has been accumulated in respect to the construction of the main development site, there is concern that the movement of materials by rail at night will impact a large number of residential properties which are in close proximity to the existing rail line. Further consideration should be provided as to how significant this night-time noise and vibration from rail freight movement may be; on properties along the rail route at least as far back as Ipswich, at the LEEIE rail terminal and to properties affected by the green rail route.
28. Where properties are likely to be significantly affected by noise or vibration; from the construction of the rail or road schemes, from transport movements of freight to or from the site or from other off-site facilities as part of this development, then a mitigation plan should be produced for each property indicating what measures are proposed to be adopted.
29. As stated in Stage 3, the Councils expect the provision of a 'Complaints Procedure'. This should be provided for both the construction period and the operation of the Sizewell C site. These procedures should detail a suitably competent noise consultancy to undertake investigations of noise complaints, how investigations will be carried out and reported and the scope of amelioration in the event that complaints are justified.
30. We would also expect that other measures to reduce the pollution caused by all transport in relation to the project are considered.
31. We would also expect that EDF Energy, throughout the life of the project, actively and fully liaises with the Councils on issues around air quality to ensure that both the local populations and the workers are not exposed to unduly high levels of pollutants.
32. Further specific comments on air quality, noise and vibration are included in relevant sections below, as well as in the Appendix.

Summary of the Councils' additional Stage 4 positions on air quality, noise and vibration

33. In summary, the Councils expect that the air quality and noise assessments carried out previously to be updated in the light of the scheme changes from Stage 4.
34. Greater clarification is required regarding the hours of work on all sites during construction and the proposed extended hours of HGV movements, to understand noise and vibration impacts. Further evidence, and mitigation measures, is also expected on the noise and vibration impact of night-time rail movements, at the LEEIE, along the East Suffolk line and the Sizewell branch line.
35. A mitigation plan is expected for each property significantly affected by noise or vibration; from the construction of the rail or road schemes, from transport movements of freight to or from the site or from other off-site facilities as part of this development.

Freight Management Strategy

Overview

36. The Councils have always made our position clear that we expect EDF Energy to have a deliverable sustainable transport strategy to transport materials to/from the site, in line with national and local policies.

37. We quote the National Planning Policy Framework (NPPF, February 2019), in its guidance for reviewing planning applications on transport grounds (paragraphs 108 and 109):

'In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) Safe and suitable access to the site can be achieved for all users; and

c) Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

38. Within the same document, sustainable transport modes are defined as “Any efficient, safe and accessible means of transport with overall low impact on the environment”. The Councils stress that, in a freight management context, this would be marine- or rail-based transport modes.

39. This is consistent with both the National Policy Statement guidance as well as local transport policy.

40. At Stage 3, the Councils in our response were not content with the removal of a marine-led materials transport strategy nor with the introduction of a road-led strategy alongside the alternative of a rail-led option. The Councils continued to support marine-led and rail-led transport strategies and had not yet seen convincing evidence that a marine-led strategy is not feasible and/or environmentally preferable. If the marine-led option is proven to be undeliverable, the Councils wish to see the rail-led strategy implemented. The Councils, at Stage 3, were not content with a road-led option, one concern being the increase in number of HGVs over and above the rail-led approach resulting in a

detrimental effect on Suffolk's road network. The Councils were not content with the possibility of a relaxation of HGV operating hours into the night-time.

41. The Councils maintain these positions at Stage 4. Unless there is strong appropriate evidence and justification, deviation away from a deliverable sustainable transport strategy should be considered to be unacceptable and the Councils continue to expect maximising the use of marine- and rail-based transport modes to transport materials to/from the site.
42. The Councils wish to re-state that National Policy Statement EN1 recognises that energy projects can have a significant impact on transport infrastructure. EDF Energy considers that the embedded mitigation significantly reduces this impact (paragraph 4.11). While the Councils accept that mitigation reduces the impact, the Councils consider that:
 - a. The details of all transport options require more evidence for the Councils to robustly assess the impact;
 - b. The volume of traffic (HGV, buses, cars) is so large over a significant proportion of the network that, whilst the proposed mitigation reduces the impact on parts of the network these may remain severe at some locations, for example the A12 between the A14 and Wickham Market bypass and the single carriageway section from Marlesford to Little Glemham and the B1122 (rail-option only);
 - c. We expect the mitigation to be in place at the time the impacts become severe;
 - d. In Stage 4, with the introduction of the integrated option and the pessimistic description of the ability to deliver a rail-led option, EDF Energy appears to be moving towards a road transport dominated option;
 - e. The Councils are disappointed that the lack of progress on the rail-led strategy now appears to be jeopardising delivery of this option.
43. Despite these concerns which are described in more detail in the following paragraphs, the Councils are willing to continue to work with EDF Energy to seek to agree the necessary requirements and other control measures necessary to mitigate and manage the transport impacts of Sizewell C.
44. As part of their Stage 4 consultation, EDF Energy present two road options for its freight management strategy, including a newly proposed integrated strategy as a potential alternative to the previously identified road-led strategy, with the rail-led strategy as presented at Stage 3 remaining as an alternative option (both road-led and rail-led strategies remain unchanged from Stage 3, albeit with a reduction in peak day HGVs as commented on below). All three strategies present a mix of the use of road and rail

network to transport freight to and from the site, as well as the use of the Beach Landing Facility for some Abnormal Indivisible Loads. As such, the term integrated strategy may be misleading; for ease of reference, the Councils nevertheless use the term integrated strategy throughout this response.

45. The integrated strategy can be seen as a hybrid of the road-led and rail-led strategy, however it is much closer to the road-led strategy in terms of its relative use of the rail network, the number of HGV movements and the mitigation being provided. Compared to the road-led strategy, it does represent an increase in the use of the rail network and some decrease in HGV movements. Table 1 below provides an overview of how the three strategies differ as taken from the Stage 4 consultation document. The table does not include all of the road mitigation as, aside from the Sizewell Link Road proposals and Freight Management Facility, this is consistent across all three strategies.

Table 1 – Summaries of the freight management strategies

Freight Management Strategy	Early Years	Rail and Road Mitigation	Peak Construction Trains	Peak Construction HGVs
Rail-led	<p>Two Trains Overnight along East Suffolk Line to and from Hold Points (4x train movements).</p> <p>Two Trains During Day along Branch Line to and from LEEIE (4x train movements).</p>	<p>Green Rail Route. East Suffolk Line. Passing Loop.</p> <p>Level Crossing: 12 Closures and 33 Upgrades (note – the Councils understand that not all of these closures may be necessary).</p> <p>Branch Line Upgrade (track and level crossings).</p> <p>Theberton Bypass.</p>	<p>Five train arrivals and departures daytime (10x train movements).</p>	<p>Typical Day = 450 movements.</p> <p>Busiest Day = 700 movements.</p> <p>HGV Operation 07:00 to 23:00</p>
Integrated	<p>Two Trains Overnight along ESL to and from Hold Points (4x train movements).</p> <p>Two Trains During Day along Branch Line to and from LEEIE (4x train movements)</p>	<p>Green Rail Route. Branch Line Upgrade (track and level crossings).</p> <p>Sizewell Link Road.</p> <p>Freight Management Facility.</p>	<p>Five overnight train movements to main site and one daytime movement (6x train movements).</p>	<p>Typical Day = 650 movements.</p> <p>Busiest Day = 1,000 movements.</p> <p>HGV Operation potentially 24/7.</p>
Road-led	<p>Two Trains Overnight along ESL to and from Hold Points (4x train movements).</p> <p>Two Trains During Day along Branch Line to and from LEEIE (4x train movements)</p>	<p>Branch Line Upgrade (track and level crossings).</p> <p>Sizewell Link Road.</p> <p>Freight Management Facility.</p>	<p>Two Trains Overnight along ESL to and from Hold Points (4x train movements).</p> <p>Two Trains During Day along Branch Line to and from LEEIE (4x train movements).</p>	<p>Typical Day = 750 movements.</p> <p>Busiest Day = 1,150 movements.</p> <p>HGV Operation potentially 24/7.</p>

46. As is evident, the integrated strategy includes all road mitigation measures associated with the road-led scenario, plus the Leiston Branch Line rail proposals associated with the rail-led scenario (i.e. the “Green” rail route into the main site).
47. EDF Energy's justification for the inclusion of their integrated strategy is set out in section 3.7 of their consultation document and is based upon the risk to its programme that delivery of the rail infrastructure brings and the subsequent impact on investment and costs. This risk is defined by the challenge of Network Rail's estimated programme for completing the work on the East Suffolk Link to meet EDF Energy's programme and that Network Rail are unable to give assurances to EDF regarding this risk. The integrated strategy is therefore presented as an attempt to maximise the use of rail whilst minimising the risk associated with the delivery of the rail infrastructure, because no infrastructure would be needed to be delivered on the East Suffolk Line. It is worth noting that there is limited detail on the nature of these risks, what they would mean for phasing of the project, and importantly what the associated impacts could be. On this basis, the Councils are unable to formally comment in detail, but can comment on the principles.
48. In the following paragraphs, we comment on the impacts and evidence provided related to the new integrated strategy in comparison to road and rail-led strategies, considerations related to the deliverability of the rail-led strategy, changes to HGV peak numbers and related monitoring requirements, and about issues related to Abnormal Indivisible Loads and the programming of development, and air quality.

Comparison of impacts of integrated, rail-led and road-led strategies

49. As illustrated in Table 2, when compared to the rail-led scenario, the total number of HGVs travelling to/from the site increases in the integrated strategy by around 43% but decreases by only 13% when compared to the road-led scenario. When comparing road-led with rail-led strategies, the increase of HGVs is around 65%. These figures show that, whilst the integrated strategy would provide some reduction in HGVs, the reduction is relatively small.
50. EDF Energy identify that under the rail-led strategy it would be required to limit HGV movements to between 07:00 and 23:00, but due to additional mitigation in the other two strategies, it is considering the potential for extending the hours of HGV movements for both the road-led and integrated strategies (paragraph 3.6.15). While there may be benefits in terms of capacity from longer haulage periods, these are likely to be outweighed by significant environmental impacts, in terms of noise and vibration impacts on residential properties. The claim (paragraph 3.5.6) that HGVs are further from residential areas due to the proposed highway mitigation is not correct for the whole route.

The traffic will still have to pass through or close to a number of urban settlements, such as Woodbridge, Saxmundham and Martlesham and will have significant impacts on residents close to the A12 at Marlesford or Little Glemham for instance. The Councils consider this should have been included as a disadvantage in Table 3.4. As stated in our Stage 3 response, the Councils are not content with the possibility of a relaxation of HGV operating hours into the night-time.

Table 2 – Comparison of the HGV numbers of the different freight management strategies

	HGV numbers at peak			
	Typical	Busiest day	HGV increase compared to rail-led	HGV operating hours
Rail-led	450	700	n/a	7:00-23:00
Integrated	650	1000	ca. 43%	“Potentially over extended hours”
Road-led	750	1150	ca. 65%	“Potentially over extended hours”

51. According to the Stage 4 documentation, the integrated strategy proposes one additional rail delivery per 24-hour period compared to the road-led strategy, but two fewer rail deliveries compared to the rail-led strategy. For the integrated strategy, five of the six rail movements would occur at night time, between 11pm and 6am, compared to no overnight rail movement in the rail-led strategy, and four overnight rail movements in the road-led strategy (although it is not clear from the consultation document why the road-led strategy cannot also use the afternoon rail path proposed to be used in the integrated option). Table 3 provides an overview of the rail movements of the different options.

52. Whilst the Councils wish to see the maximum amount of materials transported by rail to site, the Councils have concerns about the additional environmental impacts of the integrated strategy of five night-time trains running along the East Suffolk Line for the seven to ten year life of the project after ‘Early Years’ construction. This would have associated impacts on communities, with significant numbers of residents living close to the rail line being affected in places including Ipswich, Woodbridge, and Saxmundham. EDF Energy has not included any mitigation proposals for this matter in its consultation documents.

53. In comparison, during peak construction, the rail-led strategy proposes no overnight trains, with all rail movements occurring at daytime, and the road-led strategy four overnight train movements (with shorter trains).
54. We understand that the integrated strategy proposes the use of longer trains compared to those in the road-led strategy and the 'early years' proposals, as the rail facilities at Sizewell Halt or the LEEIE would not be able handle the length of trains that are stated as possible on the Green Rail Route (paragraph 3.6.8). This would cause additional environmental impacts which EDF Energy needs to evidence through the Environmental Statement. We also note that the improvements to the East Suffolk Line for the rail-led strategy would enable trains to run at 40mph. Without these improvements (i.e. in the integrated and road-led strategies) trains will be restricted to 20mph (paragraph 3.6.7). At present the Councils do not have any information to indicate whether this is a significant factor when evaluating the impacts of rail movements. EDF Energy needs to provide further evidence on this matter through the Environmental Statement.
55. All proposed transport strategies include use of Sizewell Halt for up to two trains in each direction a day in the early years (paragraph 3.5.1) – for the road-led strategy, up to two trains a day would continue to go to the LEEIE throughout the construction period. All material delivered to either Sizewell Halt or the LEEIE will require final movement to the main site by road via Lovers Lane. It is disappointing that the Stage 4 consultation has not provided further details of a programme that would clarify when infrastructure will be delivered, for example when the Green Rail Route will become available. A detailed overview of phasing should be submitted prior to the DCO submission.
56. Prior to EDF Energy's DCO submission, the Councils expect the provision of detailed information on the rail movements from (if applicable) Ipswich, Felixstowe and Lowestoft to Sizewell. This should specify where trains will pass, including at the LEEIE, at the crossover or the proposed passing loop between Melton and Wickham Market.
57. More specific time information is required on when the trains will operate overnight in both directions on the branch line between Saxmundham and Sizewell, and on the East Suffolk Line (i.e. the hours when rail movements are expected between 11pm and 7am). This is most important for the integrated strategy where greater rail movement will occur overnight. The Councils await further information on the noise and vibration impacts of overnight trains on the East Suffolk Line (paragraph 3.8.8) and expect this to be assessed as part of the Environmental Statement. The environmental impacts of overnight trains are considered to be a significant disadvantage and the Councils consider that it should be included as such in Table 3.4. and 3.5.

58. Confirmation will also be required that the freight trains will not be permitted to idle except for essential passing manoeuvres at clearly stated locations, and this should be made clear as part of the Environmental Statement. The Councils are not convinced that it is realistically possible to get train operators to turn off engines for shorter periods of being stationary, as we are mindful of risks of re-start failures of the trains in such instances.
59. In terms of the rail network, the integrated strategy offers essentially no legacy benefit, with no improvements to line speed, no passing loop and, as a result, no improved network resilience. While there are some legacy benefits in the road network, this needs to be weighed against the associated environmental impacts of the additional overnight train movements. No data has been provided to evaluate the environmental impact of each strategy, such as the resulting increased carbon emissions, and this should be made clear as part of the Environmental Statement.

Table 3 – Comparison of the rail movements of the different freight management strategies

	East Suffolk Line		Sizewell branch line	
	No. of rail movements daytime	No. of rail movements between 11pm and 6am	No. of rail movements daytime	No. of rail movements between 11pm and 6am
Rail-led	10	0	10 (into site)	0
Integrated	1	5	1 (into site)	5 (into site)
Road-led	0	4	4 (to LEEIE)	0

60. The Stage 4 document states (in Table 3.5) that the mitigation provided for integrated and road-led options “comprehensively responds to the call for direct mitigation for all the communities along the B1122”. The Councils consider, from the information made available to them by other stakeholders, that use of the wording “comprehensively responds to the call” is not appropriate.
61. The majority of air quality impacts have been identified within the applicant’s previously published Preliminary Environmental Information Report (PEIR). Identified impacts include sensitive human health receptors and ecological receptors which could be affected by proposed nuclear development and associated scheme locations. This will need to be revisited once the extent of the affected road network is established. A range of other improvements to the proposed assessment methodology and impact mitigation strategy have been identified and are included elsewhere in this report.

62. The rail-led construction strategy is likely to have the least impact upon air quality, and is therefore principally preferable from the perspective of avoiding air quality impacts. However, consideration should be given to idling emissions from trains.
63. It is clear from the impacts discussed above that there are significant disadvantages, in terms of significantly increased impacts, of the integrated strategy (and even more for the road-led strategy) in comparison with the rail-led strategy. As such, the Councils expect EDF Energy to work closely with relevant stakeholders, in particular Network Rail, and give them the necessary resources, information and support to determine a way to deliver the rail-led strategy.
64. With regards to the freight strategy, National Policy Statement EN-1 sets out that “Water-borne or rail transport is preferred over road transport at all stages of the project, where cost-effective” and goes on to say that “If an applicant suggests that the costs of meeting any obligations or requirements would make the proposal economically unviable this should not in itself justify the relaxation by the IPC of any obligations or requirements needed to secure the mitigation.” This paragraph clearly sets out that all efforts need to be undertaken by the applicant to aim for a water-borne or rail-based transport strategy, and that costs on its own are not necessarily a reason to move away from such a strategy.
65. The Stage 4 consultation states that Network Rail’s response to the Stage 3 consultation (referred to in paragraph 2.1.3 but not made available in full to the Councils) identified that completing the design and construction work to comply with EDF Energy’s programme will be ‘challenging’ (paragraph 3.7.7). This is seemingly due to a lack of resources at Network Rail, as their resources are committed to improvements on the wider rail network. The Stage 4 consultation shows EDF Energy regard this uncertainty as a significant risk to delivery of Sizewell C within their programme. This has resulted in the East Suffolk Line improvements being proposed as a separate Transport and Works Act Order.
66. It is noted in the “Office of Rail and Road, 2018 periodic review final determination: Overview of approach and decisions” (reference 4.2) that there should be flexibility to adapt to changing circumstances (3.10) and collaboration (3.40) stating ‘*it is important that the routes/SO (as well as Network Rail more widely) work with the rest of the rail industry to drive improvements in performance and efficiency on the railway. There is no simple prescription for achieving this: it will require flexibility and commitment from industry participants and, where appropriate, targeted support from ORR*’.
67. In Stage 4, the entirety of the Leiston Branch Line is now included in the red line boundary. Paragraph 3.7.11 identifies that EDF Energy is in discussions with Network Rail over

undertaking works on the branch line, however it states that this possibility does not exist for the East Suffolk Line, due to the existing passenger services running on that line and associated operational and safety issues. It is noted that the red line proposed in Stage 4 does include a section of the East Suffolk Line where the Leiston Branch joins. Based on the Office of Rail and Road report from 2018 quoted above, the Office of Rail and Road promotes flexibility in how to deliver improvements, with no simple prescription for achieving this. Therefore, the Councils seek confirmation from EDF Energy, Network Rail and the Office of Rail and Road whether the East Suffolk Line works could be included within the red line boundary and approved as part of the DCO, instead of being pursued as a separate Transport and Works Act Order, and whether this would provide greater confidence in the delivery of these works within EDF Energy's required programme, as implied within the consultation document. If this was the case, given the strategic importance of the project and the potential to minimise freight traffic on the road as set out in the National Policy Statement – EN1 and to significantly reduce its impact in line with national planning policy, the Councils believe that this option would need to be pursued further by EDF Energy and Network Rail.

68. The Councils are exasperated by the lack of progress in pursuing the rail-led option and associated improvements during and after the Stage 3 consultation, and the Councils believe that flexibility and collaboration can be improved to deliver the rail strategy. In particular, the Councils are concerned by the statement that the Stage 3 of the Governance for Railway Investment Projects (GRIP) process 'option selection' only commenced this year (paragraph 3.10.2). No information is included in Stage 4 to state whether reports resulting from Stage 3 of the GRIP process, its conclusion nor a timeline for GRIP Stages 4 and 5 is available. Thus it would appear that EDF Energy will be making the decision for the DCO (paragraph 3.10.3) with only partial information on the rail-led strategy.
69. The Councils urge both parties to continue to work together as a priority and expect that increased collaboration aiming to deliver the rail-led strategy should be pursued by a number of actions, including:
 - a. EDF Energy and Network Rail to provide clarity on progress to date, for example by sharing all reports associated with the GRIP3 feasibility report with the Councils;
 - b. EDF Energy and Network Rail to provide a clear programme for delivery of the works required for the rail-led option showing gateways such as progress through stages of design (GRIP) and delivery including those associated with the Transport

and Work Acts Order, as well as investigating whether the inclusion of East Suffolk Line upgrades within the DCO may accelerate the programme.

70. The Councils offer our support to work with EDF Energy, Network Rail and Government to deliver the rail-led option by recommending solutions to blockages or mediating between parties.

HGV management

71. In addition to the inclusion of the integrated strategy, EDF Energy has also reduced the number of HGVs associated with their assessment of the peak day. Justification of this is set out at paragraph 4.3.2, and is based around experiences from the ongoing construction of Hinkley Point C. At previous consultation stages it has been assumed that the peak day could exceed the average day by double; the latest stage of consultation indicates that it would now be (just over) 1.5 times the average. Looking at the available information from Hinkley Point C, it indicates that there have been only two quarters to date where this ratio has been exceeded, and this was only by a small amount in the first year of construction, and importantly occurred where EDF Energy was under no obligation to not exceed a ratio of 1.5 times the average day. This gives some indication that this is a reasonable approach and assumption to be undertaken, and we would expect this evidence to be submitted as part of the Transport Assessment.
72. The Councils will expect stringent controls on and monitoring of HGV numbers so that they remain within those predicted by the Transport Assessment. The Councils will require planning requirements to control:
- a. the absolute number of HGV movements for any given day;
 - b. that the average number of movements does not exceed that assessed within the modelling for any three-month period during peak construction; and
 - c. the routing of HGV traffic, to the routes and times modelled, including the split of 85% of HGV traffic coming from the south and 15% from the north.
73. This is to ensure that the impacts on the road network do not exceed those assessed within the transport model. This means that by reducing their peak day to 1.5 times the average, EDF Energy are putting more stringent controls, to be agreed through planning requirements, on themselves over how they manage their freight traffic. This approach is compliant with National Policy Statement EN1 as indicated at paragraph 5.13.8, which sets out that: *'Where mitigation is needed, possible demand management measures must be considered and if feasible and operationally reasonable, required, before considering*

requirements for the provision of new inland transport infrastructure to deal with remaining transport impacts.'

74. EDF Energy proposes to use a Delivery Management System to manage HGV deliveries (paragraph 3.5.6). This is an alternative to Automatic Number Plate Recognition used to control HGV movements at Hinkley Point. How this system is to be operated and route compliance enforced has yet to be demonstrated. We would expect this to be embedded within a planning requirement agreed with the Councils before submission to the Planning Inspectorate (PINS).
75. With regards to the Environmental Statement, which was recently scoped, EDF Energy needs to ensure that its impacts in delivery of the project do not exceed those assessed within its Environmental Statement. The Councils need to consider whether this will be the case, particularly if EDF Energy cannot guarantee the delivery of its mitigation by the Construction Peak year assessed. Further information on the phasing of the delivery of the mitigation is necessary prior to the submission of the DCO to fully understand the length of impacts and the associated risks.

Abnormal Indivisible Load (AIL)

76. In paragraph 3.2.1 it is noted that the beach landing facility would enable some large deliveries by sea, implying that some large deliveries will not come in by sea. Details have not yet been provided of the quantity of AILs, the routing of AILs and the proportion of AILs that will be carried by the road network. The Councils express concern that these details have not been provided to enable a factual evaluation of the impacts on the highway network.
77. Structures constructed as part of the two village bypass and the Sizewell Link Road (and any other highway mitigation) should be designed to carry the appropriate loads to avoid AILs being diverted onto local roads. Further work will be required during the planning process to evidence that the routes selected for AIL movements are suitable and these should form part of the DCO submission.

Delivery of Mitigation Works

78. The Councils are disappointed that no further information has been provided in the Stage 4 consultation regarding timing and delivery of the various mitigation schemes. The Councils remain concerned that without early delivery of the highway mitigation schemes there will be a severe impact on the A12 and B1122 that form the sole haul road for HGV's during early stages of construction. This is especially the case for the A12 given its strategic function and regional importance.

Summary of the Councils' position on the Stage 4 Freight Management Strategy proposals

79. In summary, the Councils' Stage 3 position remains unchanged, in that we expect EDF Energy to use a deliverable sustainable transport strategy to transport materials to/from the site. Unless there is strong appropriate evidence and justification, deviation away from a sustainable transport strategy should be considered unacceptable and the Councils continue to expect maximising the use of marine- and rail-based transport modes to transport materials to/from the site. Having regard to each of the options:
- a. The Councils are not content with a road-led option, with the significant number of additional HGVs resulting in a detrimental effect on Suffolk's road network;
 - b. In the Councils' view, the new integrated strategy has significant disadvantages in comparison to the rail-led strategy. These disadvantages include a very significant proportion of goods still being transported by HGVs, rail deliveries throughout the night and essentially no rail-related legacy benefits (and additional road-related legacy benefits being limited to those associated with the Sizewell Link Road);
 - c. The Councils continue to support a rail-led strategy and are disappointed that Stage 4 suggests that the lack of progress on the rail-led strategy is now jeopardising delivery of this option.
80. Based on the above, the Councils expect EDF Energy and other stakeholders including Network Rail to prioritise pursuing the rail-led strategy. The Councils are concerned by the lack of progress during and after the Stage 3 consultation, and that the GRIP process 'option selection' only commenced this year. The Councils promote increasing flexibility and collaboration with an overall aim to deliver the rail strategy. This should include consideration of whether the East Suffolk Line improvements could be included in the red line, rather than being subject to a separate Transport and Works Act Order. The Councils urge EDF Energy and Network Rail to continue to work together as a matter of priority, and request as a matter of urgency:
- a. EDF Energy and Network Rail to provide clarity on progress to date, for example by sharing all reports associated with the GRIP3 feasibility report with the Councils;
 - b. EDF Energy and Network Rail to provide a clear programme for delivery of the works required for the rail-led option showing gateways such as progress through stages of design (GRIP) and delivery including those associated with the Transport and Work Acts Order, as well as investigating whether the inclusion of East Suffolk Line upgrades within the DCO may accelerate the programme.

- c. The Councils offer our support to work with EDF Energy, Network Rail and Government to deliver the rail-led Option by recommending solutions to blockages or mediating between parties.

81. The Councils remain not content with the possibility of a relaxation of HGV operating hours into the night-time in the rail-led and integrated strategies.

82. Notwithstanding the above positions, to fully assess the impact of the three strategies proposed, further evidence is required on:

- a. Details of the quantity of AILs, the routeing and the proportion of these that will remain to be carried by the road network (noting that it is implied that not all large deliveries would come in by sea), to be included in the DCO submission. The Councils express disappointment and concern that these details have not yet been provided to enable a factual evaluation of the impacts on the highway network;
- b. A programme of when infrastructure and transport mitigation schemes will be delivered, which should be provided prior to DCO submission – as without early delivery of the highway and rail mitigation schemes there will be a severe impact on the A12 and B1122 that form the sole haul-road for HGV's during early stages of construction;
- c. The environmental impact (including air quality) of the use of longer night-time trains in the integrated strategy compared to those in the road-led strategy and the 'early years' proposals in the integrated strategy;
- d. The environmental impact (including air quality) of freight trains on the East Suffolk Line travelling at 20mph (in the integrated and road-led strategies) compared with those travelling at 40mph (in the rail-led strategy) through the Environmental Statement;
- e. Detailed information on the rail movements from Ipswich, Felixstowe and Lowestoft to Sizewell, which should form part of the DCO submission. This should specify where trains will pass, including at the LEEIE, at the crossover and the passing loop between Melton and Wickham Market;
- f. More specific information on when the trains will operate overnight in both directions on the branch line between Saxmundham and Sizewell and on the East Suffolk Line (i.e. movements per each hour between 11pm and 6am), and related air quality, noise and vibration impacts, to be submitted as part of the DCO;

- g. Confirmation, and clarification of monitoring and enforcement regimes to ensure that freight trains will not be permitted to idle except for essential passing manoeuvres at clearly stated locations;
 - h. The provision of data to evaluate the environmental impact of each strategy, including resulting increased carbon emissions, through the Environmental Statement;
 - i. Details on how the proposed Delivery Management System to manage HGV deliveries would operate, to be agreed through a planning requirement.
83. Based on experience at Hinkley Point C, the Councils accept that the new ratio for peak HGV numbers of 1.5 times the average day is a reasonable assumption, and evidence should be submitted as part of the Transport Assessment. The Councils will expect stringent controls on and monitoring of HGV numbers, as part of planning requirements.

Traffic Modelling

84. The Councils have reviewed the traffic data provided in the Stage 4 consultation. We note that this data is underpinned by detailed modelling which will be helpful as part of the evidence base. However, as this has not been presented in the consultation documents, we have to limit our comments in this response to the information included within Stage 4 documents. We stress that, as stated in our Stage 3 response, the cumulative impacts of the Scottish Power Renewables projects and Sizewell C need to be considered in the traffic modelling.
85. Tables 4.2 to 4.14 identify the relative traffic impacts of each of the Freight Management Strategies. As set out in paragraph 4.5.8 in some locations the reported traffic flows are not noticeably different due to rounding to the nearest 50 vehicles, and this has been considered when reviewing. The Councils note that there appears to be a slight error in the calculation of some of the changes in HGV traffic in Table 4.4. As an example, the rail-led and integrated strategies are shown to have the same level of increases of HGV and bus movements, but the total of traffic movements shows different increases, and therefore also a proportional increase, for each of the strategies. However, in general, the differences are not considered to be material and we will not comment on this further.
86. The statement that the impact of the project diminishes with distance, in paragraph 4.11.5, should be clarified. It is noted that this paragraph, and Tables 4.4 and 4.5 relates to HGV and buses only; the transport impacts on cars and LGVs are not presented in these tables.
87. For the daily impacts, when comparing the three strategies, there are two main areas of differences, as described below.
88. First, there are locations where there is a relative increase in traffic impact in the rail-led scenario (compared to the integrated and road-led scenarios) as a result of the omission of the Sizewell Link Road. This includes minor daily increases in daily vehicle movements at B1122 Abbey Road, B1119 Saxmundham, B1121 Saxmundham and B1116 Hacheston, as well as far more material impacts at B1122 East of Yoxford, A12 Yoxford and B1122 Middleton Moor. A similar increase is also reflected in the peak hour impacts across the network, provided in percentages. These increases do not necessarily result in a significant impact in terms of capacity or road safety but may well have an environmental impact.
89. Secondly, there is an overall difference in HGVs between each strategy. In summary:

- a. To the north of the site along the A12 the relative increase on a typical day is an additional 20 HGV movements between the rail-led and integrated scenarios and an additional 30 HGV movements between the rail-led and road-led scenarios. The impacts are greater on the busiest day.
 - b. To the south of the site along the A12 the relative increase on a typical day is an additional 170 HGV movements between the rail-led and integrated scenarios and an additional 260 HGV movements between the rail-led and road-led scenarios. The impacts are greater on the busiest day.
90. This underlines the statement made above in the Freight Management Strategy chapter that the integrated strategy should not be seen as a halfway house between the road and rail strategies as there is a 40 to 45% increase in HGV movements when comparing the integrated with the rail-led strategy, and only a 20-25% decrease when comparing the integrated with the road-led strategy.
91. While the daily capacity of the network is unlikely to be exceeded (paragraphs 4.5.4, 4.7.6, 4.7.7, 4.9.2, 4.10.3, 4.11.2) neither the Stage 3 nor 4 consultation contains junction modelling to show if specific sites exceed their theoretical capacity, for example during peak hours, nor if there is a severe impact (in NPPF terms). Whilst it is true that total traffic flows for the integrated transport strategy (paragraph 4.5.7) are less than the road-led strategy it should be appreciated that the three strategies only change the number of HGVs on the network, but not cars, buses or LGVs. Specifically, the claim made in paragraph 4.11.2 that Sizewell C traffic is unlikely to create additional congestion or delays is not evidenced and the Councils do not believe this claim to be correct. We are awaiting evidence on the actual impact of additional congestion to determine whether this impact is considered to be severe or acceptable.
92. The Councils note that evidence from Hinkley Point C suggests that shift patterns create AM peaks, typically before the 'local' AM peak, but the PM peaks coincide to a degree. This is also reflected in HGV movements with significantly higher numbers in the morning than afternoon. Given the above, it needs to be considered whether the modelling undertaken is reflective of the reality and whether a 'worst case' has been assessed especially for the network peak hours.
93. Details of site working hours for the Associated Development Sites have not been provided so the Councils cannot make any comments; these should be included within the DCO submission and will be agreed through relevant planning requirements.
94. Due to the complexity and phasing of the project, there will be a number of locations that would experience different impacts during the Early Years, and other stages of the

project, as compared to the peak construction years. The consultation material does not provide any evidence on this, with a general lack of clarity around phasing (e.g. around the transportation of materials from site, use of Sizewell Gap Road, construction of associated development). As this may result in additional mitigation requirements, the impacts during different phases of the construction period will need to be established in advance of submitting the DCO.

95. **Car sharing factors:** As set out at Table 4.1 of the consultation document, the car sharing factors used within the assessment remain at 1.1 persons per vehicle for home-based staff and 2.0 for non-home-based workers. These were figures disputed by the Councils at Stage 3. A review of more recent evidence provided in relation to Hinkley Point C confirmed that there is an average car sharing factor of 1.2, across both non-home-based and home-based workers, occurring at the time of assessment. This is clearly a significantly lower proportion than what is being assumed for Sizewell C. We continue to expect that the modelling submitted as part of the DCO is updated to reflect this, and that mitigation is proposed that will ensure that the figures used in the assessment are acceptable. Without this, the Councils have concerns that the assessment of staff vehicle trips is being significantly underestimated, which would have implications for car parking provision and for impacts at local junctions.
96. **Visitors parking:** In Table 4.1 the number of visitors is set out at 200 daily visitors to the construction site and up to 800 daily visitors to the visitor centre. As part of the Transport Assessment, the Councils request a better understanding and evidence for how these numbers compare to experiences at Hinkley Point C.
97. **Woodbridge mitigation:** The Councils expect EDF Energy to provide proportional mitigation to address their impacts at locations where their traffic is exacerbating a capacity or road safety concern. Within its assessment EDF Energy have identified that this is most prominent at the A12 Woodbridge. The Councils have recognised the need for improvements here and consider it appropriate to expect EDF Energy to contribute proportionately to mitigate their relative impact.
98. Looking at the figures provided at Table 4.2 of the consultation document, background growth represents a 2,700 traffic increase in traffic flow. Across the three different strategies the relative increases in daily traffic associated with Sizewell C are set out as 2,450, 2,650 and 2,700 vehicles respectively. However, the Sizewell C increases are particularly focussed on heavy goods traffic: Compared to the baseline there is an increase in general growth of 140 HGVs/buses, whilst across the three Sizewell C scenarios the increase in HGVs and buses is 400, 570 and 660 respectively on a typical

day. Larger vehicles, due to size, acceleration speeds and deceleration speeds have a greater adverse impact on the operation of junctions and capacity and thus creating delays likely to encourage drivers to divert to other routes. Using the Department for Transport passenger car unit conversion factor¹ of 1.0 for all other vehicles, 2.0 for buses and 2.4 for HGVs, results in the proportional increases outlined in Table 4.

Table 4 – A12 Woodbridge Contribution Calculations

Note: As no individual baseline bus and HGV figures are provided it is assumed that the traffic growth is the same proportion as stated for the rail-led i.e. 5% bus and 95% HGV.

Scenario	Increase in Vehicle	Increase in Vehicles – Buses/ HGVs	Increase in Buses	Increase in Buses (including factor)	Increase in HGVs	Increase in HGVS (including factor)	Total	%age compared to back-ground growth
Background	2700	2560	7	14	133	319.2	2,893.2	N/A
Rail-led	2450	2050	20	40	380	912	3,002.0	51%
Integrated	2650	2080	20	40	550	1320	3,440.0	54%
Road-led	2700	2040	20	40	640	1536	3,616.0	56%

99. The cost and exact works of an improvement scheme for Woodbridge is yet to be identified; early consideration of feasible options is being undertaken. It would be reasonable to expect a contribution of at least 60% from EDF Energy depending on the impacts shown in the DCO submission and to be agreed through Section 106 agreements. (We note that a contribution based on a consistent methodology will also be sought from other major projects which impact this corridor so that a proportionate approach is taken.) As this is the main route for 85% of the HGVs we consider the benefits for EDF Energy in terms of reliability of journey times and network resilience will also be considerable. The Councils request further discussions with EDF Energy on this matter.

100. **Re-routeing impacts:** paragraphs 4.5.5 and 4.5.6 of the Stage 4 document briefly mention the potential for re-routeing as a result of congestion. In some cases this is likely to occur with or without Sizewell C traffic due to background traffic growth; however, traffic associated with Sizewell C traffic is likely to exacerbate the issue. EDF Energy have

¹ Department for Transport “Tag Unit M3.1 – Highway Assignment Modelling”, 2014.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/427124/webtag-tag-unit-m3-1-highway-assignment-modelling.pdf

provided flow ranges to show the with and without re-routeing traffic flows; in the majority of cases these ranges represent a change in daily traffic flows as a result of re-routeing of approximately 1%. However, there are a few noticeable cases where the change is potentially significantly greater and where further work needs to be undertaken to evidence the potential impact and if required mitigation measures; these are:

- a. B1069 Tunstall;
- b. A12 Woodbridge;
- c. B1119 Saxmundham; and
- d. B1121 Saxmundham.

101. **A14 Seven Hills:** The traffic flow numbers on the A14 east of Seven Hills (location T) in Table 4.2 indicate very small impacts, and very limited differences in impacts across the three strategies, which is not what would be expected given the omission of the Freight Management Facility in the rail-led scenario. The potential implications on traffic flow should be considered and must be picked up as part of the Environmental Statement and Transport Assessment.

102. **A145 Beccles:** It is assumed that the locations within Table 4.2 should be treated as indicative, as location M shows an increase in HGV movements to the north of the Beccles Southern Relief Road. All HGV movements to/from the A145 north would be required to utilise the Relief Road and to not travel through central Beccles. This will need to be agreed through relevant HGV routeing controls through a planning requirement.

103. **Leiston / Knodishall:** There is noticeable growth in daily traffic in all scenarios at B1122 Leiston (location B); this is assumed to be as a result of a number of impacts, including staff travelling to the staff car park through Leiston and staff travelling to other facilities out of their working hours. Ways of reducing this impact need to be considered through the Construction Workforce Transport Management Plan, including the potential for the use of additional buses travelling to other communities, as well as services for the existing community and an improved sustainable transport network. This also need to be considered in the context of the increased closures of the Leiston level crossings for access to the LEEIE railhead, even if these will occur only a few times a day.

104. The Council note that Stage 4 does not include any additional mitigation for the impacts that the additional workers modelled in the 7,900 + 600 scenario would have on Leiston and Knodishall as raised in paragraph 215 of our Stage 3 response. Table 4.1 states that 950 workers all in the Leiston and Knodishall area will travel to and from site by bus. No proposals have been put forward by EDF Energy to state how this will be controlled and

monitored. As stated above and in our Stage 3 response the car occupancy of 2.0 for non-home-based workers is considered flawed. The proportion of visitors traveling by car or by bus or minibus is not stated. Further data regarding the destination / origin of LGVs is required. All relevant data will need to be included within the Transport Assessment.

105. **Other locations in Table 4.2:** There are a number of locations that see increases in traffic that are not impacted by HGV movements. The Councils would like a better understanding of locations where the increase in traffic is less explicable, as an example Location F 'Westleton', sees a daily increase of 650 vehicles, but is not on the HGV route, nor is it in a location where more than a small number of staff trips to/from the site should travel through (due to the small population in this area and the presence of the Darsham park and ride). There are a number of trips that could still use this route (e.g. LGVs, staff non-work trips, and visitor trips) and it would be helpful to understand the type of trip so that specific types of mitigation can be identified where appropriate. Those locations where unforeseen impacts are experienced would be expected to be addressed through the Transport Review Group, and relevant levels of funding will need to be agreed through Section 106 agreements.

106. **Locations not included:** As set out at Stage 3 (see the Councils Stage 3 response, paragraph 442), there are a number of locations where it would have been appropriate to provide traffic figures so that there is a better understanding of the overall impacts across the network. It is disappointing that Stage 4 has not provided details for these locations.

Summary of the Councils' position on Stage 4 Traffic Modelling information

107. The Councils welcome that detailed modelling has been undertaken to underpin the figures in the consultation document; however as this information is not included in the document, we can only comment on the provided figures. In summary, with regard to the traffic mode information, the Councils expect:

- a. Clarification of the statement that the impact of the project diminishes with distance;
- b. Through the Transport Assessment, a peak hour assessment for the capacity of junctions (as this is currently based on daily capacity) and evidence that the modelling undertaken is reflective of the reality and whether a 'worst case' has been assessed especially for the network peak hours;
- c. Through the Transport Assessment, evidence on the actual impact of additional congestion and delays to determine whether this impact is considered to be severe or acceptable – disputing the Stage 4 statement that "Sizewell C traffic is unlikely to create additional congestion or delays";
- d. Through the Transport Assessment, assessment of traffic impacts on locations during different phases, including early years and other phases in advance of submitting the DCO; this may result in additional mitigation requirements;
- e. As part of the DCO submission, EDF Energy to reduce their car sharing factors within the assessment to reflect experience at Hinkley Point C; and
- f. Through the Transport Assessment, further evidence on expected visitor numbers and car parking impacts, based on experience at Hinkley Point C.

108. The Councils expect EDF Energy to provide proportional mitigation to address their impacts at locations where their traffic is exacerbating a capacity or road safety concern. On specific locations, the Councils expect:

- a. For the A12 at Woodbridge, EDF Energy is expected to contribute proportionately to improvements to mitigate their relative impact, to be agreed through Section 106 agreement;
- b. Through the Transport Assessment, further assessment and, if required, mitigation for re-routeing impacts, noticeable at B1069 Tunstall, A12 Woodbridge, B1119 Saxmundham and B1121 Saxmundham where there is a more significant change;
- c. Through the Transport Assessment, consideration of potential implications of Sizewell C traffic on traffic flow at A14 Seven Hills;

- d. As part of a planning requirement, for the Leiston/Knodishall area with its noticeable growth in daily traffic numbers in the assessments, a strategy of reducing and mitigating this impact as part of the Construction Workforce Transport Management Plan (including the potential for the use of additional buses travelling to other communities, as well as services for the existing community and an improved sustainable transport network), further proposals on controls and monitoring to ensure bus use of residents, and additional data regarding destination/origin of LGVs; and
- e. For other locations such as Westleton with less significant increases in traffic, further information and an explanation on these increases as part of the DCO submission.

109. As set out at Stage 3, there are a number of locations where it would have been appropriate to provide traffic figures so that there is a better understanding of the overall impacts across the network. It is disappointing that Stage 4 has not provided data for these locations.

Main Development site

Red line boundary and design changes (Chapter 5.1 and Table 5.1)

110. We note the changes to the red line boundary of the main development site. The Councils are concerned that large new additions to the red line boundary have been made at such a late stage without any prior discussion with the archaeology service, given their location in archaeologically sensitive areas, as this will make securing appropriate pre-DCO assessment challenging. Without this assessment EDF Energy will not be able to demonstrate that the proposed mitigation work is deliverable (especially for the flood compensation areas), as if sensitive archaeological remains are defined, preservation in situ which prevents ground disturbance may be appropriate.

111. The Councils require all new main development site additions to the red line boundary to be scoped in for archaeological evaluation and mitigation. This work is required pre-DCO for the two flood compensation areas given the high archaeological sensitivity which may make these sites unviable options.

112. As new red line boundary areas have yet to be subject to archaeological assessment, the impacts as part of the preliminary environmental assessment are not known. If significant archaeological remains are defined and groundworks were proposed which would destroy them, this would lead to a high magnitude impact.

Summary of the Councils' position on red line boundary changes

113. In summary, the Councils require all new main development site additions to the red line boundary to be scoped in for archaeological evaluation and mitigation. This work is required pre-DCO for the two flood compensation areas given the high archaeological sensitivity which may make these sites unviable options.

Access roundabout (Chapter 5.2/ Table 5.1) / entrance hub (figure 2.7) and secondary site access (paragraph 2.3.31)

114. EDF Energy states (paragraph 5.2.4) that the red line boundary for the scheme was extended to allow for a larger roundabout, as a result of an increase in the design speed from the 30mph (as proposed in Stage 3) to 40mph, as "Suffolk County Council (...) expressed a preference for the speed limit through the roundabout to be 40mph". A 40mph design speed as an appropriate speed restriction is in the Councils' view more realistic due to the rural, undeveloped nature of the site. This is supported by national and local guidance on setting speed limits. It is considered that even with a signed 30mph

speed limit compliance would be poor with a risk of vehicles travelling at higher speeds being unable to negotiate the tighter roundabout or stop within the visibility provided.

115. Consideration needs to be given to providing dropped kerb and tactile paving crossing facilities on the arms of the proposed main access roundabout that are not served by the Pegasus crossing to provide as direct a route as possible for pedestrians travelling to/from the site.
116. The Councils request to see details of the location of the secure zone to better inform comments about the internal road layout, specifically to ensure that there is no risk for traffic backing onto the public highway.
117. The increased size of the roundabout and approach road at the site entrance will need to be factored into the design of the surface water drainage system (paragraph 2.3.34).
118. There is insufficient evidence presented to support preliminary environmental information/assessment in respect of terrestrial ecology and ornithology for this proposal; we note EDF Energy's commitment to additional survey and assessment of impacts on bat roosts and the bat corridor.
119. EDF Energy is asked to discuss the new roundabout design with Historic England at the earliest opportunity given the potential setting impacts upon Leiston Abbey, which has previously been raised as a concern.
120. With regard to the site entrance hub, it is unclear how surface water from this large, impermeable, heavily trafficked area will be treated, attenuated and discharged using Sustainable Drainage Systems (SuDS) without the reliance of proprietary treatment systems or underground storage (Figure 2.7).
121. Secondary Site Access / Lovers Lane: Whilst paragraph 2.3.31 refers to the Secondary Site Access, neither Stage 3 or 4 consultations have provided details of the secondary site access to the main site off Lovers Lane. Through the Transport Assessment, the Councils will require confidence that this is suitably designed to safely cope with the anticipated traffic without any detrimental impact on highway users.

Summary of the Councils' position on access roundabout, entrance hub and secondary site access

122. The Councils support the increase of speed limit for the access roundabout to 40mph.

Further design detail is required:

- a. For the roundabout, including of the surface water drainage system;
- b. For the surface water approach of the entrance hub; and
- c. For the secondary site access.

123. Further investigation and evidence are required in respect of terrestrial ecology and terrestrial historic environment before conclusions can be drawn from the preliminary environmental assessment.

National Grid pylons (chapter 5.3 / Table 5.1)

124. We note that the Stage 4 proposals now include the replacement and repositioning of one of the existing National Grid pylons with a pylon up to 60 metres in height, with the red line boundary being extended to give National Grid more working space.

125. These changes result in the loss of an additional 0.37ha of the Sizewell Marshes Site of Special Scientific Interest (SSSI). Whilst it is stated that habitat loss in this area would be temporary, the information in paragraph 5.3.6 does not satisfactorily demonstrate this and therefore should be assessed as permanent loss until proven otherwise. The Councils welcome the reduction in SSSI land take in the area south of Dunwich Forest and west of Goose Hill. The Councils expect no further additional SSSI loss as a result of the outstanding detailed analysis of the replacement pylon.

126. The Councils see no justification or evidence within the Stage 4 consultation for the potential additional 5 metre height of the replacement National Grid pylon. The impact of these changes does not appear to be covered in the updated preliminary environmental information/ assessment and in any case cannot be properly assessed without a full Landscape and Visual Impact Assessment (LVIA) having been carried out. There is also insufficient evidence to support the preliminary environmental assessment for terrestrial ecology in relation to the temporary use of SSSI land.

Summary of the Councils' position on National Grid pylons proposals

127. The Councils expect the SSSI habitat loss as a result of the National Grid pylons work to be assessed as permanent loss unless it is proven to be temporary.

128. The Councils see no justification for the potential additional 5 metre height of the replacement pylon over the existing.

129. The changes do not appear to be covered in the updated preliminary environmental information/ assessment; the Councils expect a full LVIA and full evidence for territorial ecology in relation to the SSSI land.

Sizewell C pylons (chapter 5.4 / Table 5.1)

130. We note that EDF Energy is still assessing the practicability of undergrounding its cable connections to the National Grid substation and we welcome this, as it remains our strongly preferred approach given the highly sensitive and nationally important AONB setting of the proposed development site. We also note that EDF Energy do not consider that further design development will result in a change to the red line boundary. It is unclear if this is irrespective of any potentially feasible undergrounding solution. There is reference in 5.4.4 to the implications of undergrounding for the project as "...likely to be significant". There is no explanation of this assertion, but we would remind EDF Energy again of the National Policy context for this location and their obligation to do everything possible to minimise the detrimental impact of the proposed development on the AONB within which it is located.

131. The Councils remain not content with the proposed addition of pylons and overhead cabling to the main development site. National Policy requires EDF Energy to exhaust all alternative options in the light of the site's location within the AONB.

132. The Councils expect EDF Energy to further investigate in depth any options that avoid overhead power export connections, including, if required, the option of extending the red line boundary to enable undergrounding of the lines (and as previously requested, enabling sea defences to be pushed back in the footprint). We recognise that there would potentially be other consequences of this, including potential further loss of SSSI, but until further detail on the scope for and implications of undergrounding are fully presented it is impossible for the Councils to weigh up the positive and negatives of the two alternate scenarios.

133. The Councils are seeking technical advice on this matter. In the absence of further evidence, whilst we accept it may have its challenges, we are not convinced that

undergrounding is technically impossible or unreasonable and that costs are prohibitive as a proportion of the total civil engineering costs, in comparison to the environmental benefits that would occur from avoidance of pylons and overhead lines. We require EDF Energy to provide further evidence on a number of matters, including:

- a. The Stage 3 consultation referred to '*significant safety and programme risks with constructing and operating an underground cable option*'. EDF Energy is asked to clarify if the safety risks identified would be common to all similar schemes constructed within the UK, and if so, why these have not been identified sooner. Given that undergrounding the electrical connections was its original plan, EDF Energy is asked to explain why the programme risk has significantly changed following the original proposals from Stage 2.
- b. The Stage 4 consultation refers (in paragraph 5.4.4) to EDF Energy '*continuing to assess the practicality of this (undergrounding) and the implications for the project, which are likely to be significant*'. The Councils expect that this assessment should not only cover programming and financial considerations but also environmental merits. We expect that the decision-making process is carefully weighted in considering monetary and programme issues against environmental and amenity factors.
- c. We are aware that significant investment in research and development has been undertaken across Europe in recent years aimed at reducing the cost differential between overhead lines and underground cabling, and that National Grid is currently undertaking a project funded by Ofgem known as "National Grid's Visual Impact Provision" (VIP) aiming to replace existing overhead transmission lines with underground solutions. Based on these developments, the Councils expect EDF Energy to demonstrate how such technology has been taken into account when considering overhead lines against underground cables, and how to EDF Energy's Sizewell C pylon proposals align themselves with National Grid's/Ofgem's current thinking in the desire to underground cables within designated landscapes.
- d. We note from this Stage 4 consultation that EDF Energy are considering two different options for an over-ground connection: Option 1 would reduce the height of three of the four pylons presented at Stage 3 by 25% with the most northerly pylon remaining full size. Option 2 is to add a fifth pylon to allow all the pylons to be reduced in height by 25%, which we consider likely to have an even more detrimental impact. It is disappointing that the actual height of pylons is hidden in small font size in the key of two figures 5.5 and 5.10; according to this, the actual

proposed heights of the pylons appears to be 65m for the taller and 48m for the smaller pylons). It is disappointing that neither of these options have yet been subject to a full LVIA. These options may be a slight improvement with regard to height of the pylons, however this goes nowhere near far enough in addressing the consultees' preferred option of undergrounding the cables. Paragraph 5.4.9 states that "*These options have been developed in response to consultation feedback to minimise the visual impact of the pylons as far as reasonably practicable*". The Consultees are clearly aware of the issue relating to overhead lines and the effect that it has on the community in sensitive areas. We believe that a detailed assessment should be undertaken to address not only the needs for ease of construction but also the requirements for the environmental issues resulting from this project.

- e. The Councils consider that the Stage 4 consultation provides only partial and limited information in respect of the options for the electrical connection, whether underground or overground, between Sizewell C and the National Grid substation, with no consideration of alternative pylon designs such as the T-pylon, folded plate or tubular structure designs, and therefore does not provide a basis on which to draw any conclusions beyond a very strong preference for an underground solution to be found. The Councils request to engage further with EDF Energy on these matters, in a specific workshop session supported by the sharing of a comprehensive technical note and are seeking further technical advice to inform and support the discussion.
- f. The potential impacts of any pylon and overhead cabling design option on birds and bats also need to be investigated and reported upon by EDF Energy.

Summary of the Councils' position on Sizewell C pylon proposals

134. The Councils welcome that EDF Energy continues assessing the practicability of undergrounding its cable connections to the National Grid substation. As per our Stage 3 response, we do not support the addition of pylons and overhead cabling to the main development site and are yet to be convinced that undergrounding is not feasible, given that the sensitivities of the surrounding environment merit a full and detailed consideration of alternative non-intrusive options. We expect EDF Energy to further investigate in depth any options that avoid overhead power export connections, including, if required, the option of extending the red line boundary to enable undergrounding of the cable connections. The Councils request to engage further with EDF Energy on these matters, in a specific workshop session supported by the sharing of a comprehensive technical note. The Councils are seeking technical advice to inform and support the discussion.

135. If undergrounding of the power connections was proven not to be possible, EDF Energy would be expected to reduce the impact of overhead power export connections as much as possible – by reducing number and height of pylons and using alternative less intrusive design. As such, any reduction in height is welcome, but it is unlikely that an additional pylon (as in Stage 4's Option 2) would be desirable.

136. EDF Energy needs to assess the potential impacts of any pylon and overhead cabling on birds and bats and justify the loss of SSSI habitat, together with detailed proposals for mitigation and compensation.

Land East of Eastlands Industrial Estate (LEEIE) (Paragraph 2.3.4, chapter 2.5 and chapter 5.5)

137. The Councils welcome proposed revisions to the layout of the LEEIE (sometimes described as "Big Field"), and the additional information on its intended uses (paragraph 2.3.4). The Councils note that the uses include a park and ride facility, an HGV and bus management area and (for option 3) a rail link within the site. Further details are requested on the purpose and operation of the park and ride and the 'logistics compound', given its relative proximity to the site and the impacts on Lovers Lane / Sizewell Gap Road and Leiston in terms of traffic volumes and access details. For the park and ride, the Councils request full details as to its function and capacity and whether it would be operational throughout the construction or only during "early years", and if the latter, what the usage of the site would be following early years park and ride use. In general, we request further

detail on how the LEEIE will operate, at the different stages of the construction phase as we believe the usage will evolve over the years.

138. Further detail is required on environmental health impacts on neighbouring uses including the caravan site. Greater detail is required as to how this site will operate and what noise mitigation measures will be required to ensure night time working will not have a significant or adverse effect on; occupiers of nearby residential property, occupiers of residential properties along Lovers Lane, Leiston or on workers based at the adjacent caravan site.
139. The Councils also expect EDF Energy to outline its post construction considerations, including biodiversity net gain for the site.
140. As previously raised, the Councils have considerable concerns about the lack of proposals to deal with surface water drainage as we know that there is already a significant issue in this part of Leiston. Paragraph 2.3.4 makes no mention of surface water drainage infrastructure. The Councils have continually expressed the importance of providing a sustainable means of surface water drainage at this location which is known to have a high surface water flood risk. This remains an outstanding issue of significant concern.
141. The indicative layouts shown in Figures 2.12 – 2.14 and stated in paragraph 2.5.5 do not make allowance for above ground surface water storage. On a site where the storage of materials is proposed, the Councils are not convinced that below ground storage is feasible. This approach would be contrary to National Policy Statement EN-1 5.7.9 which states that priority is given to the use of SuDS. In this instance, it appears that everything else on the LEEIE has been prioritised above SuDS. The impacts of this are potentially detrimental given the high surface water flood risk on Valley Road.
142. It is unclear if Valley Road is included within the red line boundary of Figures 2.12 – 2.14. It is not clear why the area south of the railway bridge has been included in the red line. If Valley Road, outside the properties opposite LEEIE is not included in the red line boundary, we have queries regarding the alternate options available to EDF Energy should infiltration be proven unfeasible. If infiltration is not feasible at LEEIE, the red line boundary does not allow for an alternative solution.
143. It is disappointing that, to date, the proposals do not result in a longer-term reduction in flood risk for residents of Leiston. Many of those at the most severe risk, such as those on Valley Road, will have to live with significant impacts of Sizewell C's construction whilst receiving no long-term benefit. There is a clear opportunity for EDF Energy to deliver betterment and a long-term reduction in flood risk as part of the LEEIE drainage strategy

but it would appear it has not yet been explored by EDF Energy. The Councils encourage EDF Energy to consider such an approach further and discuss this matter with the Councils.

144. Stage 4 includes a new layout option for the LEEIE, with a more centrally located rail spur. The other options from Stage 3 remain unchanged. The reconfigured 'option 3 rail spur' not only incorporates a new sidings layout but also reconfigures the logistics compound and park and ride facility.

145. The Councils welcome the further consideration on how the layout on this site works and support the proposal to keep more distance between construction activity / topsoil compound and the dwellings on Valley Road. From an environmental health aspect, the newly proposed layout of the LEEIE appears to be an improvement as it centralises the noise from train movements and the unloading and loading operations, whilst improving the location of the material transfer laydown area. The area for caravan pitches has been increased enabling (subject to future detailed layout drawings) the site to meet requirements with regards to licencing for caravan sites.

146. Two benefits for option 3 are claimed by EDF Energy (paragraph 5.5.3):

- a. Topsoil stockpile is further from the residential properties on Valley Road; and
- b. The park and ride is further from Crown Lodge although the Councils note that it is replaced by a logistics area for which details of the activities have not been provided to show if this is of benefit or not.

147. The Councils see the following advantages and disadvantages of the three layout options presented for LEEIE as presented in Table 4 below. Although further detail is required, the table confirms that the Councils, at this point, believe that Option 3 is the least worst option of those presented.

Table 4: Overview of advantages and disadvantages of the LEEIE options

Option	Advantages	Disadvantages
Option 1: Use Sizewell Halt	<ul style="list-style-type: none"> • Less construction movements. • Majority of LEEIE accessed from Lovers Lane. • Legacy benefit? 	<ul style="list-style-type: none"> • Regular use of level crossing affecting traffic movements. • Conveyor over King George Avenue. • Closer to residential area (Heath View). • Longest conveyor route (noise / dust).
Option 2: Additional siding next to existing rail track	<ul style="list-style-type: none"> • No trains cross King George Avenue. • No overhead conveyor. • Legacy benefit? 	<ul style="list-style-type: none"> • Close to residential areas (Valley Road / King George Avenue).
Option 3: Rail spur within LEEIE	<ul style="list-style-type: none"> • No trains cross King George Avenue. • No overhead conveyor, shortest conveyor route. • Unloading furthest from residential areas. • Park and ride further from residential properties (replaced by logistics area). • Topsoil stockpile slightly further from Valley Road residential properties. 	<ul style="list-style-type: none"> • Splits site in two affecting drainage and movement. • Traffic can only access park and ride and Logistics Compound from King George Avenue. • More HGV movements to construct and remove spur.

Summary of the Councils' position on the Stage 4 proposals for the Land east of Eastlands Industrial Estate (LEEIE)

148. With regard to the additional layout option (Option 3) for the LEEIE, the Councils welcome these revisions to the layout which we believe, in the absence of full details of the operations of the LEEIE, is the least worst option of the layouts presented to date, as it constitutes an improvement with regard to environmental health aspects.

149. The Councils are disappointed about the continued lack of proposals to deal with surface water drainage at the LEEIE, an area which is known to have a high surface water flood risk; currently the layouts do not appear to make allowance for any above ground surface water storage. Detrimental impacts on Valley Road must be avoided; and the Councils encourage EDF Energy to deliver as part of their scheme a betterment and long-term reduction in flood risk.

150. To fully understand and assess the impacts of the LEEIE proposals, further details are requested on:

- a. The purpose, capacity and operation of the park and ride and 'logistics compound';
- b. How the LEEIE will operate at the different stages of the construction phase as we believe the usage will evolve over the years;
- c. Environmental health impacts on neighbouring uses including the caravan site; and
- d. Post-construction considerations including biodiversity net gain.

Public Rights of Way and Bridleway 19 diversion (chapter 5.6/ Table 5.1)

151. The Councils welcome involvement with EDF Energy to develop an access strategy for Public Rights of Way and specifically BW19 (paragraph 5.6.1), and the proposed changes to the BW19 diversion. It would be advantageous for details of this strategy to be put in the public domain at an early stage to assist in discussions with local stakeholders.

152. The changes to the red line to include the land west of the B1122 and the east of Lovers Lane in the "Big Field" to enable a wider corridor for the Bridleway and to facilitate construction (paragraph 5.6.3) are acceptable to the Councils. However, we also request an extension to the red line along Eastbridge Road, north of Round House. The current red line includes the first field to the north of Round House for use as a borrow pit during construction. The red line should be extended as a corridor into the field north of this to enable the extension of the off-road bridleway to Eastbridge. This would address the Councils' concerns raised at Stage 3 that no safe provision has been provided for diverted

walkers, cyclists and horse riders to access Eastbridge and re-join the Suffolk Coast Path at Minsmere Sluice and would otherwise have to use the narrow highway at this point. This route should remain as a legacy during the operational phase and beyond increasing the extent, amenity value and safety for the users of the bridleway and the Sustrans cycle route.

153. The plans provided (Figures 5.17 and 5.18) are complex and unclear. The scale and lack of clarity in the background mapping together with the thickness of the plotted coloured lines make it difficult to interpret the proposals. Larger scale plans should be provided that gives more background detail such as those shown on the masterplans (Figures 2.3, 2.5 and 2.60) as well as greater clarity on the proposals. Consultees would then be able to review the proposals in the proper context of the landscape and land use around them.
154. The Councils expect to have further detailed discussions with EDF Energy regarding the specification and width for the alternative BW19 route (paragraph 5.6.4). The Councils expect EDF Energy to construct and maintain this route throughout the construction period before a handover to Suffolk County Council of the route as a public bridleway (highway). This must be guaranteed in the DCO process.
155. The Councils welcome the location of the alternative bridleway route west of the B1122 and the reduction in the number of road crossings (paragraph 5.6.5) as an improvement to the Stage 3 proposals. Facilities for pedestrians and cyclist should follow a direct route with the minimum number of obstructions as practical.
156. The legacy benefits of adopting the signalised pedestrian crossings (paragraph 5.6.6) into the public highway need to be considered further. At present the Pegasus crossing on the B1122 west of the main site would be considered for adoption for safety benefits. Adoption of the remaining sites will depend on the usage and risks associated with the number and speed of vehicles. The Councils recommend that sufficient flexibility is provided in the DCO for this matter to be addressed at the end of the construction phase.
157. Where signalised crossings are provided on the public highway a speed restriction of 40mph or less is recommended for safety reasons, i.e. also on Lover's Lane, although on some well-designed major roads a limit of 50mph may be acceptable.
158. The Councils welcome the proposal to provide a pedestrian link between LEEIE and the Main Site (paragraph 5.6.10) to encourage sustainable modes of transport. However, this should also be suitable for cyclists. As stated in our Stage 3 response the Councils regard improvements of footways and where possible cycleways as vital to provide sustainable alternatives for workers to travel between their residence and place of work. Regrettably

little additional detail is provided for any footway or cycle improvements in the centre of Leiston or further south to Knodishall.

159. Details of the timing of the mitigation are not provided in Stage 4. Delivery of the BW19 diversion prior to any closure of the England Coast Path, for example to construct the Beach Landing Facility, and prior to significant increases in traffic on Lovers Lane / Sizewell Gap Road, is vital. The Councils expect the DCO to evidence that the construction programme will deliver this mitigation before the impacts occur.
160. The Councils welcome that the existing permissive paths around Kenton Hills and Goose Hill will be reopened in the operational phase. The Councils request EDF Energy to dedicate some or all of these routes as Public Rights of Way to safeguard their future. The Councils expect to see additional details of how the paths, regardless of legal status, interact with other infrastructure retained for the operational phase such as the access road to Sizewell C and the car parking on Goose Hill.
161. As the majority of rail movements on the Green Rail Route in the integrated strategy are at night the Councils request that the temporary closure of the Public Rights of Way that cross the rail spur west of the B1122 is reassessed as we consider the closure not to be required if that option were to be adopted.
162. **Ecological considerations:** We note that the BW19 diversion proposals would result in an additional 0.49ha loss of land from Aldhurst Farm. It is unclear what habitat is to be lost or whether this is a permanent loss. We also note the proposal to widen the bridleway corridor for multiple use whilst retaining vegetation along it. Aldhurst Farm is intended to deliver compensation habitats for some of those to be lost to the main development platform and any reduction in the area of compensation habitat available must be clearly set out and justified so that it can be ensured that adequate alternative compensation can be delivered. More generally, the Councils remain concerned that the limitations of Aldhurst Farm to provide adequate habitat compensation, alongside EDF Energy's consideration of increasing opportunities for public access, are not being recognised and that additional provision should be explored elsewhere.
163. There is insufficient evidence in the consultation documents to support the preliminary environmental assessment conclusions for terrestrial ecology and ornithology; evidence needs to be provided as to how the widening will affect the existing features' use as ecological corridors.

Summary of the Councils' position on the Stage 4 proposals for Public Rights of Way and Bridleway 19 diversion

164. The Councils generally welcome the proposed improvements to the Bridleway 19 diversion routes, with a reduction in the number of road crossings, and the proposal to provide a pedestrian link between LEEIE and the Main Development Site to encourage sustainable modes of transport; the latter should also be suitable for cyclists.

165. The Councils raise the following issues regarding Public Rights of Way around the Main Development Site, in addition to those raised at Stage 3, on which we wish to work with EDF Energy to resolve:

- a. The Councils request an extension to the red line along Eastbridge Road to north of Round House, to enable the extension of the off-road bridleway to Eastbridge, to be created for the construction period and retained as legacy;
- b. Delivery of the BR19 diversion route measures need to occur prior to any closure of the England Coast Path;
- c. The BR19 diversion proposals would result in an additional 0.49ha loss of land from Aldhurst Farm; this needs to be justified and additional compensation habitats established elsewhere. Evidence needs to be provided in the preliminary environmental assessment as to how the widening will affect existing features as ecological corridors;
- d. Existing permissive paths around Kenton Hills and Goose Hill should be dedicated as Public Rights of Way in the operational phase; and
- e. As the majority of rail movements on the Green Rail Route in the integrated strategy are at night, the need for temporary closure of the Public Rights of Way that cross the rail spur west of the B1122 needs to be reassessed.

166. Further discussions between the Councils and EDF Energy are required to agree:

- a. The specification and width for the alternative BW19 route;
- b. Speed restrictions on the roads with signalised crossings;
- c. Maintenance arrangements during construction; and
- d. If all elements of the proposals will be adopted after the Sizewell C construction period.

Leiston off-site sports facilities (chapter 5.7)

167. The Councils welcome the proposed provision of off-site sports facilities in Leiston.

168. The new sports facility needs to be scoped in for archaeological evaluation and mitigation post-DCO.

169. It is still unclear how the proposed sports facilities will be drained without presenting an increase in flood risk to Leiston.

170. The Councils request continued working with EDF Energy to consider how to connect the proposed sports facilities with their campus by sustainable transport modes as this does not appear to have been considered yet. References are made to coaches travelling between the accommodation campus and the facilities (paragraph 5.7.1), and further details of these services are required. Consideration should also be given to including cycle improvements and facilities (including cycle parking); this should be considered in the context of how to provide greater connectivity with the community of Leiston, as part of a wider transport strategy.

171. The preliminary environmental assessment (Table 5.2) states that parking is adequate and that no on-street parking should result. No details such as numbers of users, modes of transport or numbers of existing and future parking spaces have been provided to assess this statement.

Summary of the Councils' position on Leiston Off-Site Sports Facilities

172. The Councils welcome the proposed provision of off-site sports facilities in Leiston. Further work is required on:

- a. Archaeological evaluation of the site;
- b. Drainage proposals;
- c. Sustainable transport connections and associated transport proposals between the sports facilities and the campus;

Round House (chapter 5.8)

173. The Councils welcome the inclusion of this property within the red line.

Kenton Hills car park (chapter 5.9/ Table 5.1)

174. The Councils in principle welcome the proposed improvements to the Kenton Hills car park, and the change of red line to enable improvements to the car park is acceptable to the Councils. However, all recreation and amenity access in this area is permissive and the possibility of it being withdrawn at any time remains. The stated objective of providing permanent improvements during operation would be better met by providing permanent

access rights such as Public Rights of Way or dedicated open access land. The Councils request EDF Energy to dedicate these routes as Public Rights of Way on completion of the construction phase.

175. No link is provided in the proposals between the Kenton Hills car park and the Public Rights of Way network, specifically the diverted BW19. The Councils regard this as a significant omission as it prevents safe access to Kenton Hills for non-motorised users.

176. The impact of the proposed inclusion and improvements to the car park, and consequent increased usage of the area accessible from it, does not appear to have been considered in the preliminary environmental assessment.

177. Depending on the size of the proposed car park, surface water drainage details and a flood risk assessment may be required.

Summary of the Councils' position on Kenton Hills car park

178. The Councils in principle welcome the proposed improvements to Kenton Hills car park. Further work is required by EDF Energy on drainage and flood risk impacts, the environmental impact of the proposals, and proposals to connect the car park with the changed Public Rights of Way network.

Marsh harrier compensation land (chapter 5.10/ Table 5.3)

179. The Councils welcome EDF Energy's acknowledgement that additional marsh harrier compensation habitat is required, beyond that which can be delivered on the wider EDF Energy estate.

180. It appears from paragraph 5.10.3 that the intention is to only bring forward this additional compensation if an impact is observed during construction. We consider that by the time an impact is observed it will be too late to deliver additional compensation habitat, as any additional habitat will take time to establish and will not be immediately available or attractive to marsh harriers. Compensation habitat must be provided in advance of any impact occurring and therefore needs to be established at the very start of the project. The amount of compensation habitat provided should be based on a realistic worst-case scenario to ensure that it can provide mitigation in time for possible worst-case impacts.

181. It is unclear whether the proposal is to create and manage these areas as additional foraging habitat for marsh harriers on a permanent basis or for the duration of the construction period only. The consultation documentation suggests it unlikely for the full extent of the three areas identified to be required, though there is no evidence provided to support this assertion. The Councils expect a commitment from EDF Energy to

achieving biodiversity net gain, and therefore we expect the maximum amount of marsh harrier compensatory habitat to be provided, not least because of the length of time to establish it, the uncertainty of how marsh harriers will utilise it, as well as contingency against any unforeseen failure of ongoing management.

182. From the plans provided it appears that not all parts of the sites identified (Figures 5.22 – 5.24) would be suitable for delivering compensation habitat. This must be assessed prior to the submission of the DCO to ensure that sufficient compensation habitat is deliverable.

183. The amount of land provided also needs to reflect the disturbance factor of Public Rights Of Way crossing some of the proposed mitigation sites: Site 3 (Figure 5.24) has a public footpath running north to south through the centre of the site and a public footpath and a restricted byway running east-west. Site 1 has a public footpath running north-south on the eastern part of the site and Site 2 has an adjacent public footpath adjacent. The degree of disturbance caused by Public Rights of Way users may limit these sites as mitigation

184. The comments as set out in paragraph 9 under the General Natural Environment section will also apply, especially the requirement for a robust and pro-active management regime throughout the entire lifespan of the project.

185. The details of proposed works for the marsh harrier mitigation sites are vague and thus it is difficult to evaluate impacts. It may be possible that the marsh harrier sites will be able to use a methodology which protects surviving below ground archaeology, but this is not clear. The marsh harrier sites should be scoped in for post consent evaluation, with provision to avoid works which involve ground disturbance in any areas where sensitive archaeological remains are defined.

Summary of the Councils' position on marsh harrier compensation land

186. The Councils welcome EDF Energy's acknowledgement that additional marsh harrier compensation habitat will be required. We expect this habitat to be brought forward in advance of any potential construction impact, rather than being brought forward only if an impact is observed during construction as proposed. We expect this compensation to be delivered before any impact occurs, with the amount of suitable habitat provided to be maximised and based on a realistic worst-case scenario which also takes into account the disturbance factor of Public Rights of Way crossing some of the sites. Further details of the actual proposed works are required to consider other impacts.

Fen meadow compensation land (Chapter 5.11/ Table 5.4)

187. We welcome the efforts of EDF Energy in identifying suitable locations to compensate for the loss of fen meadow. The Stage 4 consultation document suggests that the two sites identified, South of Benhall and East of Halesworth, are seen by EDF Energy as having 'good potential to create new fen meadow habitats over the long term'. There is insufficient evidence in the consultation document to judge this statement.
188. The Councils do not consider that in applying the mitigation hierarchy, the justification for the loss of fen meadow within the SSSI has been adequately established. Whilst National Policy Statement EN6 does recognise there will be some loss of SSSI as a result of the development, the area of fen meadow now proposed to be lost is outside the nominated area identified in the National Policy Statement. EDF Energy has not yet presented adequate evidence that the loss of fen meadow proposed is insignificant, either in relation to Sizewell Marshes SSSI or the national network of SSSIs designated for the presence of fen meadow habitats. Evidence of the area of specific habitats to be lost is required.
189. In relation to the compensation sites identified, the Stage 4 consultation does not include any detail on their existing ecological value, and it is therefore unclear whether converting them to fen meadow will have an adverse impact on other important ecological receptors. It is also unclear whether the sites identified contain enough potentially suitable areas for fen meadow creation.
190. We note from paragraph 5.11.1 that '*approximately 0.5ha of fen meadow is being lost from the Sizewell Marshes SSSI*', whilst the combined area of the two potential compensation land sites is 16.94ha. Creation of good fen meadow habitat is extremely difficult to achieve successfully and therefore any attempt should be across a significantly larger area than that which is being lost. In fact, it has not yet been demonstrated that the 16.94ha of land identified across the two sites contains enough potential area to achieve this.
191. Whilst initial work has identified the two areas as potentially suitable for providing fen meadow compensation, in the absence of more detailed investigation work there remains no guarantee that adequate compensation can be delivered. Further consideration is required as to the approach within the DCO if adequate compensation cannot be delivered through these sites.
192. If compensation habitat on these sites is deliverable, the sites need to have a clear and enforceable long-term commitment to secure the sites' control, management and maintenance in perpetuity.

193. In addition to the above, the main development site plans continue to include the loss of wet woodland habitats for which no mitigation or compensation measures have yet been put forward. This is not acceptable and must be addressed prior to the submission of the DCO.
194. Based upon the Stage 4 document, the fen meadow sites will involve ground disturbance which would impact upon archaeological remains. We request further clarification regarding planned works in these areas. Without further archaeological evaluation and mitigation, we are unable to comment on the selected locations. The County Council's Archaeological Service should be consulted regarding any planned site investigation works as any works have the potential to impact upon surviving archaeological remains. As to the preliminary environmental assessment in table 5.4, insufficient information regarding the scope of planned works and lack of archaeological assessment means that archaeological impacts are as yet unknown.
195. Site 1 south of Benhall (paragraph 5.11.3) has a public footpath running north to south along the western boundary and a public footpath that centrally crosses the site east to west. The raising of water levels (Table 5.4 PEI) will not be a temporary effect on a public footpath as described in the Environmental Assessment. The Councils will require assurance that the habitat creation, including raising of water levels, does not have a deleterious effect on uses of the public footpaths, or that otherwise suitable mitigation is provided. Good design principles should be followed to protect the public footpaths and enhance amenity levels.

Summary of the Councils position on fen meadow compensation land

196. The Councils welcome the efforts of EDF Energy in identifying suitable locations to compensate for the loss of Fen Meadow.

197. The Councils still have not seen sufficient evidence to justify the principle of loss of fen meadow within the SSSI, nor details of the proportions of specific habitats to be lost.

198. EDF Energy needs to provide mitigation and compensation not only for the loss of fen meadow within the SSSI, but also for the loss of wet woodland habitats – none has been suggested to date.

199. With regard to the proposed fen meadow compensation land:

- a. It has not been demonstrated that the land identified across the two sites contains enough potential area to achieve sufficient compensation for the habitat lost;
- b. EDF Energy needs to propose an approach within the DCO if adequate compensation cannot be delivered through these sites;
- c. The sites need to have a clear and enforceable long-term commitment to secure the sites' control, management and maintenance in perpetuity;
- d. An archaeological evaluation and mitigation of the sites is required; and
- e. The public footpath running through Site 1 south of Benhall should not be negatively affected by the measures.

Flood compensation land (Chapter 5.12/ Table 5.5)

200. EDF Energy propose two sites for the location of flood compensation land to mitigate the loss of floodplain at the SSSI crossing, to the east of Lower Abbey Farm and to the south of Sandy Lane. The Councils welcome the identification of flood compensation areas but defer to the Environment Agency as to the suitability of these sites to deliver the required flood compensation land.

201. In terms of the impact on the natural environment, we agree in principle with the statement in paragraph 5.12.3 that with sensitive design and effective management these areas could become good quality wildlife habitats. However, at present there is insufficient evidence provided on what is currently there, what might be lost in the construction of these areas, and how they will be managed in the long-term to understand the relative impacts.

202. Site 1 is located within an area identified for the delivery of marsh harrier compensation habitat. Whilst creation of flood compensation storage may create habitats suitable for marsh harriers the construction activities required have the potential to result in significant adverse impacts on this species and may also delay the delivery of the required marsh harrier compensation habitat.
203. We note that further assessment of the impact of this on bat corridors and on the Minsmere Nature Reserve is continuing.
204. If flood compensation creation is to be required in this area it must be subject to ecological assessment (including assessing impacts on bats as recognised in the Stage 4 consultation documents) and Habitats Regulations Assessment (HRA) prior to the submission of the DCO to ensure that it does not either result in any direct or indirect adverse impacts. The area is adjacent to the Minsmere South Levels which are designated as part of the Minsmere-Walberswick Heaths and Marshes SSSI. No assessment of the potential impacts of the creation of flood compensation storage on the SSSI are included in the Stage 4 consultation, this must be addressed prior to the submission of the DCO.
205. Site 1 is adjacent to FP20 which is also part of the diversion route during closures of the Suffolk Coast Path. The Councils will require assurance that use as a flood compensation area will not have an impact on the water level and hence use of FP20.
206. Based upon the Stage 4 document, the flood compensation sites will involve ground disturbance which would impact upon archaeological remains. Archaeological evaluation and mitigation for these sites is required pre-DCO given the high archaeological sensitivity of the sites which may make them unviable options.
207. As to the preliminary environmental impact in Table 5.5, the lack of archaeological assessment means that the significance of surviving archaeology and archaeological impacts are not yet known. Proposed works will involve significant ground disturbance which is likely to make preservation in situ unviable. Upfront assessment is key to determining the most appropriate archaeological mitigation and therefore the viability of the selected locations for the proposed works.
208. It is not clear from the consultation what engineering works will be necessary to construct the flood compensation area, nor how the site is accessed or if the work will generate additional trips on the highway network. The Councils will expect such details to be provided within the DCO submission. Site 2 is accessed from the public bridleway; an unsurfaced, narrow track with limited visibility. Information is required as to how EDF Energy intends to ensure that the bridleway remains fully available and safe for the public

to use and how the surface is to be protected and restored as necessary during and after construction.

Summary of the Councils' position on flood compensation land

209. The Councils welcome the identification of flood compensation areas but defer to the Environment Agency as to the suitability of these sites to deliver the required flood compensation land.

210. In order to comment fully on the proposals, the Councils need more detail and evidence on the natural environment impacts on the proposal, including evidence of existing habitat, the works proposed and their impact, and impacts on the Minsmere South Levels. We encourage EDF Energy to consider sensitive design and effective management to make these areas good quality wildlife habitats.

211. The Councils expect the flood compensation area at Site 1 not to have an undue impact on the use of Footpath 20 adjacent to the site.

212. Full archaeological assessments are required.

213. Details of construction related access need to be provided.

Other main development site comments

Sea defences

214. The Stage 4 document states, in paragraph 2.3.32: "The area within the Suffolk coast section of the main development site would include the phased delivery of sea defences during construction and the beach landing facility to the north-east of the main power station platform." This text implies that materials for sea defence construction may be delivered along the full length of the main development site rather than solely at the Beach Landing Facility. The Councils expect clarification on this, as well as comprehensive impact assessments and mitigation of such an approach.

Water Management Zones (WMZs)

215. It is evident there has been a reduction in the overall number of proposed WMZs when comparing Figures 2.5 & 2.6 of Stage 4 to Figure 7.31 from Stage 3. This has not been offset by an increase in the plan area of the other WMZs. This net reduction in space allocated for WMZs has not been explained in Stage 4, nor has it been justified. Regardless of this, insufficient evidence has been provided to demonstrate that the WMZs are appropriately sized, located or designed to fulfil their function of managing surface water volume and quality whilst delivering biodiversity benefits.

216. It is unclear which areas will drain to which WMZs. However, due to the location of the northern WMZ and the fact that it is separated from the main part of the main development site by the borrow pits, it is unclear how water will be directed into this WMZ when the borrow pits are being extracted.

217. The purpose of the WMZs (such as water re-use or being part of surface water treatment train) and their discharge locations (whether it is water re-use, infiltration, watercourse, sea) has not been stated. It is also unclear if there is sufficient space to treat this surface water upstream, prior to entering the WMZs.

218. No further details have been given regarding the accommodation campus. The surface water drainage of this area should be incorporated into the site layout, as would be expected for any development. It would appear there is a prime opportunity for water re-use at this location given what will undoubtedly be high levels of demand.

219. The cross-section in Figure 5.16 illustrates the difficulties that will be encountered transferring surface water from beyond the green rail route into the WMZ given the rail construction and stockpile area whilst ensuring the WMZ is not constructed to an unreasonable depth.

Summary of the Councils' position on other issues related to the main development site

220. The Councils require clarification whether materials for sea defence construction may be delivered along the full length of the main development site rather than solely at the Beach Landing Facility, and any impacts arising from this.

221. More clarity is required with regard to the design and usage of water management zones (WMZs) throughout the main development site, including evidence that WMZs are appropriately sized, located and designed.

Associated Development

Other rail improvements and changes to level crossings (Sections 2.5 and 6.2)

222. Stage 4 includes some changes to the rail proposals, for the LEEIE and the branch line.

223. Three options for the rail sidings at LEEIE are proposed for freight trains delivering to Sizewell C in the Early Years, and for the whole construction period in the road-led strategy. Little information is available beyond that shown in Figures 2.12, 2.13 and 2.14. Additional information such as rail movements and timings, vehicle movements and access arrangements from the public highway is required before the Councils can provide a full response. The impacts on noise, vibration and air quality associated with movement and storage of materials will be a significant factor in the Councils' response but no details are provided in the consultation.

224. It is understood that the rail-led and integrated strategies both rely on materials being unloaded and transferred to site via the LEEIE during the 'Early Years'. Whilst the existing Sizewell Halt siding has not been ruled out at this stage, it is clear that moving a large quantity of materials by an overhead conveyor over King Georges Avenue to the new terminal would require increased storage space, present double handling of materials, risk delay from breakdowns to the conveyor and most importantly increase noise and dust from this operation. The Councils consider that Sizewell Halt should not be used for this purpose.

225. The design options for LEEIE are further discussed in paragraphs 137-150 above.

226. Further clarity on rail movements is required particularly in relation to the LEEIE – the potential of overnight unloading of freight and aggregate will need to be assessed (along with impacts further down the East Suffolk Line). We will need timings, activities on the LEEIE, train idling and passing points, with the impacts of each fully assessed.

227. **Sizewell Branch Line:** The Councils have no objections to the branch line being included within the red line for the project recognising the greater flexibility this provides in delivery. However, the Councils note that the Stage 4 PEIR for rail improvements does not refer to any transport implications such as additional haulage or workers required to improve the route. Nor are areas set aside for site compounds. This needs to be considered further by EDF Energy. It is not clear whether the red line provides adequate space for dealing with stabling points of trains which may require features such as security fencing, welfare facilities for train crew while stabled and road access arrangements.

228. **Green Rail Route:** No changes are proposed to the Stage 3 proposals, other than the inclusion of this within the integrated strategy with three rail movements in each direction

(paragraph 2.4.9), most overnight. In transport terms the inclusion of the Green Rail Route in the integrated strategy would in principle be acceptable to the Councils. However further details of the timing of rail movements is necessary to balance the benefits of removing rail movements in Leiston against the disruption night movements will cause elsewhere.

229. The Councils reiterate their comment from Stage 3 that the proposed green rail route intersects an area of surface water flood risk, as identified in the Leiston Surface Water Management Plan. The impacts of the proposed works will require assessment and mitigation if there is an identified increase in on-site or off-site flood risk.

Summary of the Councils’ position on Stage 4 “Other rail improvements” proposals

230. The Councils require additional information such as rail movements and timings, for the East Suffolk Line, branch line and LEEIE, including potential overnight unloading of freight, train idling and passing points, and related impacts on noise, vibration and air quality.

231. The Councils have no objections to the branch line being included within the red line. Implications of branch line construction on transport movements and the need for site compounds needs to be considered. Further work is required with regard to surface water impacts of the Green Rail Route, and details of the proposals for holding points for trains.

Sizewell Link Road (Chapters 2.6 and 6.3/ Table 6.2) / Theberton Bypass (Chapters 2.7 and 6.4/ Table 6.3)

232. The comments below are made notwithstanding the Councils’ position on the Freight Management Strategies, as outlined above, as the supported rail-led strategy does not propose the inclusion of the Sizewell Link Road. In general, our Stage 3 response on the Sizewell Link Road remains valid.

Selection of the Sizewell Link Road

233. As stated at Stage 3, the Councils welcome the inclusion of mitigation to relieve the impacts of construction traffic using the B1122, and welcome that EDF Energy accept that, also for the integrated strategy, the numbers of HGVs justify mitigation along the entire length of the B1122 and the A12 through Yoxford rather than just at Theberton (as in the rail-led strategy).

234. At Stage 3, whilst EDF Energy included in its Stage 3 consultation reasons for its choice, the Councils did not consider that the case of the Sizewell Link Road being the best possible route had been ‘justified’ (see the Councils’ Stage 3 response, paragraph 763).

Paragraph 2.6.16 of the Stage 4 consultation document confirms EDF Energy's Stage 3 position on the selection of the Sizewell Link Road, including the 'justification of the selection' of their preferred choice, stating that further analysis since Stage 3 supports the route selection of the Sizewell Link Road as the most appropriate option, in comparison to routes further south referred to in Stage 3, including the Route "W" from South of Saxmundham to Leiston (similar to the "D2" route).

235. SCC as the Highway Authority considers significant gaps remain in the information presented by EDF Energy to enable it to make an evidence-based response to the Sizewell Link Road proposals. SCC has still not seen convincing detailed evidence (including an in-depth assessment of the impacts, cost and benefits of each of the schemes) that justifies the selection of the chosen route above any reasonable alternatives, in particular the Route "W" North / D2. SCC does not agree with EDF Energy's Stage 4 statement that the '*route "D2" would not present a viable option*', and has not seen evidence that backs this contentious statement up.

236. EDF Energy refer to further analysis undertaken since Stage 3 (2.6.17), however this has not been included within the consultation document. It is disappointing that therefore Stage 4 still does not allow SCC to make an evidence-based response to EDF Energy's selection of Route Z. SCC still expect detailed evidence that justifies the selection of the route above any reasonable alternatives. Such detailed evidence needs to include an in-depth assessment of the impacts, cost and benefits of each of the schemes, rather than any high-level assessment.

237. Based on this lack of further evidence, SCC maintains its strategic position about the Sizewell Link Road from Stage 3, as set out in our response in the paragraphs 763/764 and 773/774.

238. At Stage 3, ESC (then Suffolk Coastal District Council) stated that it considered that although not supporting a road-led strategy above a marine or rail-led strategy, should a road-led strategy be identified and evidenced by EDF Energy, the route demonstrated for the Sizewell Link Road was potential acceptable subject to further detailed studies and assessments. ESC considered it positive for HGV movements to be taken out of the centre of Yoxford. ESC continue to not support a southern alignment for a Sizewell Link Road due to a potential adverse effect on a proposed Local Plan allocation.

Permanence of the Sizewell Link Road and Theberton Bypass

239. EDF Energy are consulting on whether the Sizewell Link Road should be a permanent feature (paragraph 6.3.14). The adoption as highway of any new link road between the site and the A12 is yet to be agreed between EDF Energy and SCC as the Local Highway

Authority. The comments below are without prejudicing our overall position regarding the Freight Management Strategies and choice of route outlined above.

240. SCC as the Local Highway Authority recognises the legacy benefit of the Theberton bypass element of the Sizewell Link Road as well as the element of the Sizewell Link Road that allows traffic to bypass Yoxford, which would provide a potential alternative route for HGVs and greater network resilience. SCC considers that the remainder of the route has significantly less legacy benefit apart from possibly during Sizewell B and C Outages, while still representing a significant additional maintenance liability for SCC. However, if the existing B1122 were to be downgraded to make it a less attractive route for vehicle trips and a more attractive route for cyclists and pedestrians, this would mean that the new Sizewell Link Road would no longer provide a parallel function and could act as the sole through route for Leiston and Sizewell.

241. At Stage 3, ESC raised concerns with potential adverse environmental impacts of removal of a Sizewell Link Road post the construction phase. ESC retains this view and would not support proposals to remove a Sizewell Link Road post construction. ESC considers a separate HGV route to serve the existing A and B stations as well as the new C station to be a positive legacy of the development.

242. Removal of the Sizewell Link Road would restore the landscape to its original condition and return farmland to productive use. This would need to be balanced with the environmental impacts of removal which would result in the same area being disturbed twice in a relatively short period of time. The farmland would have been continued to be farmed around the Sizewell Link Road so it is difficult to quantify the level of benefit to farmers to be attributed to returning the farmland post-construction given the impacts associated with this. Removal would also increase the duration of the construction phase of the Sizewell C project. Evidence to inform the Councils' opinions is required on the environmental benefits of returning the landscape to its original condition, in comparison to the ecological impacts that would result from the removal work as well as any that may arise from its retention, as well as the impacts of the additional traffic movements, noise, dust and vibration that would result from removal of all or parts of the Sizewell Link Road.

243. A removal of the Sizewell Link Road and reinstatement to greenfield would need to be carefully completed to ensure that ground conditions mimic the natural drainage regime. Failure to do so may require the installation of permanent surface water drainage infrastructure to prevent an increase in flood risk. This would require maintenance in perpetuity. The removal of the Sizewell Link Road and more specifically the removal of

the SuDS that serve the Sizewell Link Road could have a negative impact on the biodiversity that would have established in the SuDS from the time they were constructed.

244. In terms of noise, if the Sizewell Link Road was removed, Sizewell C operational traffic (along with that of Sizewell A and B) would be diverted back onto the existing B1122. Hence it would then subject properties which may not have previously been considered for noise mitigation measures to additional traffic noise as these properties are not adjacent to the Sizewell Link Road route. This should be considered through the Environmental Statement, if removal of the Sizewell Link Road is proposed as part of the DCO.

245. If all or parts of the Sizewell Link Road are put forward for adoption as highway maintainable at public expense, an appropriate commuted sum would be required to contribute to future maintenance. SCC as Highway Authority would also have to consider at what date (if any) the Sizewell Link Road would be adopted. The initial opinion is that this could be at the end of the construction period to avoid the public funding maintenance of a highway that is primarily for use by Sizewell C traffic.

246. In paragraph 6.4.3, EDF Energy states that it also welcomes views on the potential to remove the Theberton Bypass. The Councils consider the Theberton Bypass as a legacy benefit of the development, by removing through traffic from the village, with likely associated benefits on noise and air quality and greater network resilience, and strongly believe it should be retained following construction.

Sizewell Link Road Alignment

247. The Stage 4 consultation proposes minor changes to the main alignment of the road as well as changes to some of the junctions or closures of minor roads on the route.

248. We welcome the extension of the red line (paragraph 6.3.3) to enable flexibility in the relocating of the public footpaths in this area.

249. There is very little information in the consultation document on the existing terrestrial ecology of the route corridor and therefore the potential impact of the proposed road. We reiterate the general points related to natural environment made in paragraph 9 above in respect of this and all associated development proposed.

250. The route of the proposed Sizewell Link Road crosses several watercourses, including two designated as main rivers. It is understood that these watercourses are to be crossed using culverts. The Councils do not support the use of culverts, in accordance with Environment Agency policy, and favour the use of clear span bridges where watercourses need to be crossed. We consider that the use of culverts should thus be avoided as they

create adverse ecological impacts, particularly by inhibiting the movement of certain species such as water vole and otter. Instead any water course crossing should be by viaduct/open span bridge. In addition to this, the two main rivers are connected to European designated sites to the north-east, and no assessment of this linkage and the adverse impacts which the road may have on these sites has been provided. This must be assessed as part of the Habitats Regulations Assessment (HRA) process.

251. Approved archaeological trench plans for the Sizewell Link Road/Theberton Bypass need to be updated to include any new red line boundary additions. As much of these routes as possible need to be evaluated pre-DCO, but the County Council's Archaeological Service has already identified key areas for trenching, based upon geophysical survey results and areas of unploughed land which have potential for excellent preservation. A walkover earthwork survey is also required for the area located within the original extent of the parkland surrounding Theberton Hall in order to identify any surviving parkland features which warrant preservation in situ.
252. The historic environment impacts of the schemes, as per the preliminary impact assessment in table 6.2/6.3, are currently unknown due to lack of archaeological assessment.
253. **Littlemore Road (paragraph 6.3.4):** This was previously shown to remain open with a new junction with the Sizewell Link Road to enable traffic to travel southwards towards Kelsale-cum-Carlton. The Stage 4 proposal is to close Littlemore Road so no junction is formed with the Sizewell Link Road. This proposal might be acceptable to the Councils, provided that safe access for pedestrians and cyclists is maintained between the two parts of the truncated Littlemore Road, either retained as public highway or stopped up with a bridleway created.
254. **Fordley Road:** This was proposed in the Stage 3 consultation to be closed with no vehicular access to the Sizewell Link Road. These proposals have changed in Stage 4 with a junction allowing access from the Sizewell Link Road southwards on Fordley Road. No access is proposed along the existing line of Fordley Road between the Sizewell Link Road and the B1122. While the Councils do consider that Fordley Road is a slightly more suitable road to remain open than Littlemore Road, they are aware of local residents' concerns that such minor roads will be used as rat runs by workers associated with Sizewell C. The Councils believe the use of minor roads by Sizewell C workers will be limited under normal circumstances however we do have concerns that local traffic is likely to be displaced by the additional Sizewell C traffic onto such roads leading to a perceptible increase in use. This is alluded to in Table 6.2 in the consultation document

where it is noted that the changes will reduce journey time between Middleton and Saxmundham compared to the Stage 3 proposals. Further work is required to demonstrate how this can be managed during the construction phase and beyond. The Councils expect that safe pedestrian and cycling access will remain between the B1122 and Fordley Road south of the B1122.

255. **Trust Farm:** Stage 4 proposes a new link between the B1122 and the Sizewell Link Road to the north-east of Trust Farm and then from the Sizewell Link Road to Trust Farm. In principle the Councils do not object to these proposals although safe pedestrian and cycle facilities must be provided. The Councils anticipate that the link to the B1122 would be public highway (if a decision to adopt Sizewell Link Road is made) but the access road to Trust Farm will be private with the route of Public Right of Way protected.

256. **Pretty Road / Theberton Bypass section:** The proposal of a bridge for non-motorised users might, subject to satisfying issues such as landscaping and visual intrusion, be acceptable to the Councils although further details of the connections between this bridge, the public highway and Public Right of Way needs to be clarified. The Councils require the full LVIA before we can comment on the landscape and visual impact assessment conclusions.

257. There are several public footpaths to the east of Theberton village which provide good circular walks in quiet and attractive countryside for local people. The Councils ask for clarity on how connectivity of the Public Right of Way network will be achieved in the stretch of link road between Pretty Road and Moat Road.

258. The proposal for a junction of Pretty Road and the Sizewell Link Road to provide access to the south is subject to the same concerns as Fordley Road raised above, specifically the risk of 'rat running'. The Councils do recognise that Pretty Road is more suitable as a connection than Moat Road due to the latter's very limited width, but Pretty Road would not be suitable for any significant additional use.

259. The Sizewell Link Road is proposed at Stage 4 to be in a cutting for a greater length than before around Theberton. The Councils welcome this proposal, as it will help reduce the visible and audible impacts of traffic, although further details are required to confirm such a reduction of impacts and that there are no other adverse impacts, for example on the landscape, ecology or for users of Public Rights of Way crossing the Sizewell Link Road.

260. The interaction of the Sizewell Link Road and Public Rights of Way south of Theberton is complex and not properly reflected in Figures 2.20 and 2.21. The Councils expect to work together with EDF Energy to ensure good integration of the existing Public Rights of Way with the Sizewell Link Road proposals and provide improvements to the network.

261. **Surface Water Management:** EDF Energy must have confidence it can facilitate a surface water drainage strategy in compliance with industry standards and the requirements of Suffolk County Council as the Lead Local Flood Authority within the red line boundary identified and justified in Section 6.3 and 6.4. A drainage strategy has not yet been agreed therefore the red line boundary must contain sufficient flexibility to facilitate infiltration or discharge to a watercourse dependent on the results of infiltration testing and boreholes to determine groundwater levels. The vertical alignment of the road and the earthworks required to facilitate this must be considered alongside the provision of the above surface water drainage options in determining the extent of the red line boundary.
262. The size and locations of the basins shown in Figures 2.17 – 2.22 are yet to be justified. They are described as infiltration basins however infiltration testing has not yet been carried out to establish the feasibility of infiltration. It is unclear if these basins are suitable in size or location for use as infiltration or attenuation basins (if infiltration rates are found not to be favourable). It is also unclear if there is sufficient upstream treatment of surface water prior to any infiltration.
263. Paragraphs 2.6.14 (in relation to the Sizewell Link Road) and 2.7.6 (in relation to Theberton Bypass) refer the reader back to Stage 3 consultation documents for further details on earthworks and surface water drainage. As per the Councils' comments at Stage 3, very little meaningful detail has been provided regarding these matters. It is not possible to assess whether sufficient space has been allowed for within the red line boundary for surface water treatment and attenuation. Nor is it possible to assess the feasibility of any single method of surface water disposal.
264. **Design Speed and Road Safety:** The Councils welcome the change of design speed from 50mph to 60mph. This reflects our technical opinion that during times with lower traffic flows, drivers are likely to drive at speeds closer to the national speed limit and that the highway geometry should be designed accordingly. Safe crossing points, designed for the appropriate speed should be provided where pedestrians, cyclists and equestrians cross the Sizewell Link Road. The Stage 1 Road Safety Audit proposed in paragraph 6.3.24 is welcomed as good practice. The Councils consider that the audit should include side roads and crossing points.
265. The changes to the Theberton Bypass proposed in the Stage 4 consultation are the same as for the Sizewell Link Road and are covered in the paragraphs above.

Summary of the Councils' position on the Stage 4 proposals for Sizewell Link Road

266. The respective Stage 3 positions of the Councils on the selection of the route for the Sizewell Link Road remains unchanged. SCC as the Highway Authority still expects detailed evidence (including an in-depth assessment of the impacts, cost and benefits of each of the schemes) that justifies the selection of the chosen route above any reasonable alternatives, including the Route W/D2". ESC is content with the alignment proposed for the Sizewell Link Road subject to further detailed studies and assessments.

267. SCC as the Highway Authority requests further discussions with EDF Energy on the retention or removal of parts of the Sizewell Link Road following construction before concluding its position. This needs to include EDF Energy supported and funded proposals for the existing B1122 to be downgraded to make it a more attractive route for cyclists and pedestrians. Further impact assessments, including ecological assessments, are required for both the options of retaining and removing the road after construction. ESC do not support removal of a Sizewell Link Road post-construction and consider the reduction in use of the former B1122 by HGV and other vehicles resulting from a new Sizewell Link Road to be a legacy benefit to local communities, as will a Sizewell Link Road offering a HGV route to Sizewell A, B and C.

268. Both Councils believe that the Theberton Bypass should be retained in any case.

269. If all or parts of the Sizewell Link Road are put forward for adoption as highway maintainable at public expense, an appropriate commuted sum would be required to contribute to future maintenance.

270. The Councils' position on specific elements on the alignment of the Sizewell Link Road is, in summary:

- a. Impacts on the existing terrestrial ecology need to be assessed, as well as impacts on European designated sites to the north-east by way of their connection with the two main rivers;
- b. The proposed use of culverts to cross any watercourse along the route should be avoided, to avoid associated adverse ecological impacts. Viaducts/open span bridges should be proposed instead;
- c. Archaeological trench plans need to be updated to include any new red line boundary additions;
- d. A surface water drainage strategy needs to be drawn up, and size and location of infiltration basins be justified;

- e. The proposal to close Littlemore Road might be acceptable, provided safe pedestrian and cyclist access is maintained;
- f. For the proposal to allow access from the Sizewell Link Road into Fordley Road, further evidence is required to demonstrate that this would not result in undue traffic increases to confirm the Councils' position;
- g. The Councils do not object to the proposals of a new link between the B1122 and the Sizewell Link Road to the north-east of Trust Farm and then from the Sizewell Link Road to Trust Farm, subject to provision of safe pedestrian and cycle facilities.
- h. The proposal of a bridge for non-motorised users at Pretty Road would be acceptable to the Councils, subject to satisfying issues such as landscaping, visual intrusion and connectivity between the bridge, public highway and the wider public rights of way network;
- i. For the proposal of a junction of Pretty Road and the Sizewell Link Road into Pretty Road, further work is required to demonstrate that this would not result in undue traffic increases to confirm the Councils' position;
- j. Further detail and impact assessments are required for the increase of the length of the proposed cutting around Theberton;
- k. The Councils welcome the change of design speed from 50mph to 60mph;
- l. Safe crossing points, designed for the appropriate speed should be provided where pedestrians, cyclists and equestrians cross the Sizewell Link Road.

271. The changes to the Theberton Bypass proposed in the Stage 4 consultation are the same as for the Sizewell Link Road and are covered above.

Two-village bypass (Chapters 2.8 and 6.5/ Table 6.4)

272. As stated at Stage 3, the Councils welcome that EDF Energy considers the two-village bypass to be required mitigation for both road- and rail-led, and now also integrated, transport strategies.

273. The proposals in Stage 4 of the consultation include the following changes:

- a. Repositioning of the western roundabout;
- b. Higher embankment across the River Alde valley;
- c. Deepening of the cutting for the northern end of the bypass; and

- d. Changes to the scheme boundary for drainage (northern roundabout) or PRow improvements (Farnham Hall track).

274. Whilst from a transport perspective all these changes are acceptable, the Councils are concerned about environmental impacts of elements of the scheme.

275. The route of the proposed two-village bypass crosses the River Alde and its floodplain and runs in close proximity to Foxburrow Wood County Wildlife Site, designated as ancient woodland. As well as the route of the road, the plans provided identify the need for areas of flood compensation storage to be created close to the route. The bypass is likely to result in several ecological impacts which have not been demonstrated can be adequately mitigated or compensated. Of particular concern is the loss of floodplain grazing marsh which is UK Priority Habitat (under Section 41 of the Natural Environment and Rural Communities Act (2006)); the fragmentation of habitats and species as a result of the use of a causeway and narrow span bridge crossing of the river, and the impact (particularly on hydrology) on Foxburrow Wood as a result of the construction of a cutting adjacent to it. The information presented in the Stage 4 consultation does not address any of these matters. This must be done before the submission of the DCO.

276. **River Alde crossing/flood compensation land:** Stage 4 has identified areas of land for flood compensation (paragraph 2.8.7). The amount of flood compensation land should be minimised. The Councils wish to see a viaduct or an alternative design that reduces the requirement for flood storage compensation and reduces the potential impacts on ecology and archaeology from an increase in upstream flood risk and the requirement for flood compensation storage.

277. The Councils have some concern regarding the environmental impacts of raising the embankment across the River Alde valley. Without a full LVIA the conclusions in the preliminary environmental assessment regarding the landscape and visual impact of the higher alignment of the road as it crosses the River Alde is premature.

278. **Farnham Hall Track/Foxborrow Wood:** The impacts of the deeper cutting and the non-motorised user bridge near Farnham Hall are not evidenced in the consultation document and the preliminary conclusions stated in the preliminary environmental impact assessment are premature.

279. The adjustment of the proposed route to avoid direct loss of part of Foxburrow Wood is welcome but the impact of a deeper cutting close to the edge of the wood must be properly assessed, including groundwater impacts, and any necessary mitigation for that identified. It is noted that the deeper cutting is likely to have some benefits with some

reduction in noise and visual disturbance (paragraph 6.5.5). In principle this is to be welcomed but further evidence on this is required.

280. Inclusion of additional land to enable upgrade to the bridleway (paragraph 6.5.4) is welcomed. However, there is a discrepancy between the red line and the recorded legal alignment of the public footpath. Thus, the red line captures the walked line at Walk Barn Farm, but not the legally recorded line for the footpath. This detail must be discussed further with Suffolk County Council, as the red line is possibly a better alignment for the bridleway than the legally recorded footpath line which is through the garden. The red line may need to be broadened to encompass the current public footpath and the proposed bridleway route.

281. The 2.5m high embankment required to provide suitable access to the pedestrian and cycle bridge over the two-village bypass will require careful consideration during the design process to minimise the visual impact and avoid the proposed footbridge and ramps overlooking nearby properties. The bridge must also be designed for equestrians as it will serve a bridleway.

282. **Surface Water Management:** EDF Energy must have confidence they can facilitate a surface water drainage strategy in compliance with industry standards and the requirements of the Suffolk County Council as the Lead Local Flood Authority within the red line boundary identified and justified in Section 6.5. A drainage strategy has not yet been agreed. Therefore the red line boundary must contain sufficient flexibility to facilitate infiltration or discharge to a watercourse dependant on the results of infiltration testing and boreholes to determine groundwater levels. The vertical alignment of the road and the earthworks required to facilitate this must be considered alongside the provision of the above surface water drainage options in determining the extent of the red line boundary.

283. Figure 2.23 illustrates a basin to the east of the River Alde crossing. The Councils previously commented that basins may be required on both sides of the Alde. It is assumed the bridge would be a low point which will make piping water across the bridge into a basin on the opposite side unfeasible from an engineering perspective, thus basins would be required on both sides of the river.

284. Figure 2.23 also illustrates a basin south-east of the Friday Street roundabout. It is unclear whether the proposed road levels allow for a straight fall from a single crown in either direction to the basins shown. If not, additional basins would be required. The drawing and information provided at Stage 3 does not indicate the presence of any additional

treatment other than the basins. This would not be acceptable for such a heavily trafficked road.

285. The 4.5m deep cutting stated in Paragraph 6.5.5 is a development since Stage 3. If infiltration of any sort is proposed at depths greater than 2m below existing ground levels, this will be classified as deep infiltration and will require consent from the Environment Agency. The Councils have concerns regarding the clearance from the base of infiltration at this location (if applicable) to underlying groundwater. The Councils also have concerns regarding the feasibility of sustainably transferring water via gravity to the basins proposed as part of this scheme. If infiltration at source is proposed this would be a concern to the Councils as it is unlikely that sufficient surface water treatment could be undertaken prior to discharge.

286. **Cycle route 41 crossing:** A safe route and crossing point must be provided for users of cycle route 41 and suitable links from this route to Stratford St Andrew.

287. **Historic Environment impacts:** Approved archaeological trench plans for the two village bypass need to be updated to include any new red line boundary additions. As much of this route needs evaluating pre-DCO as possible. The additional flood compensation areas are archaeologically sensitive locations. The historic environment impacts of the schemes, as per the preliminary impact assessment in table 6.4, are currently unknown due to lack of archaeological assessment.

288. **Air Quality Management Area at Stratford St Andrew:** The NO₂ annual mean concentrations within the Stratford St Andrew air quality management area (AQMA) have been just below the air quality objective (AQO) in 2017 and 2018, although they remain at risk of returning to exceedance with an increase in road emissions, specifically any significant increase in HGV numbers. The two-village bypass would assist the Councils in maintaining compliance with AQOs within the Stratford St Andrew AQMA.

289. Due to the presence of the AQMA at Stratford St Andrew, the Councils expect the two-village bypass to be constructed before substantial HGV numbers (i.e. greater than 25 Sizewell C related HGV movements per day) pass through Stratford St Andrew, to ensure NO₂ concentrations are not exacerbated within this AQMA.

290. **Alternative alignment around Foxburrow Wood:** The Councils have carefully considered both the EDF Energy proposed route and the alternative alignment put forward by Farnham with Stratford St. Andrew Parish Council in their response to the Stage 3 consultation. Their alternative route would (from west to east) travel to the south of Pond Barn Cottages before curving northwards, passing Foxburrow Wood on its east

side and meeting the proposed Friday Street Roundabout to the north. This matter is discussed in paragraphs 6.5.8 to 6.5.11 of the Stage 4 consultation.

291. Examining both arguments and amplifying our comments in paragraph 812 of our Stage 3 response, the Councils consider that:

- a. Either of the alignments provide mitigation for the traffic generated by the construction phase of Sizewell C, specifically by removing the construction traffic from the A12 through Stratford St Andrew and Farnham;
- b. The difference in the length between the two options (400m) would not be significant in terms of use. It is unlikely to encourage traffic through Stratford St Andrew and Farnham in preference to the two-village bypass, although it would increase journey times;
- c. In terms of cost the longer route is likely to be more expensive although more information is required to confirm this;
- d. The alternative route has a lesser impact on residents by being further away from the majority of dwellings; and
- e. Landscape, environmental and ecological issues should be most important in the selection of the exact routeing. The Councils note that both Foxburrow Wood and Palant's Grove are on Natural England's Ancient Woodland Inventory (listed as Foxburrow Wood) and are designated as a County Wildlife Site (again as Foxburrow Wood). The alternative route proposed would result in the loss of ancient woodland and cannot be supported on ecological grounds.

292. In conclusion, the Councils recognise that the alternative routeing proposed by Stratford St Andrew with Farnham Parish Council, to the east of the route presented by EDF Energy, has merits in terms of reducing impacts on nearby properties. However, notwithstanding the outstanding survey work, the route further to the east would result in the direct loss of ancient woodland and therefore is assumed would cause greater direct ecological damage than the route proposed by EDF Energy and is therefore less preferable.

Summary of the Councils' position on the Stage 4 design changes to the Two Village bypass

293. The Councils welcome that the two-village bypass is accepted by EDF Energy as required mitigation for all three transport strategies.

294. In highway terms the Councils do not object to the principles of the proposed changes to the two-village bypass design, but we are concerned about environmental impacts of elements of the scheme:

- a. The bypass is likely to result in a number of ecological impacts which it has not been demonstrated can be adequately mitigated or compensated. Of particular concern are the loss of floodplain grazing marsh, the fragmentation of habitats and species as a result of the use of a causeway and narrow span bridge crossing of the river and the impact (particularly on hydrology) on Foxburrow Wood as a result of the construction of a cutting adjacent to it;
- b. The Councils wish to see a viaduct or an alternative design for the River Alde Crossing that reduces the requirement for flood storage compensation and reduces the potential impacts on ecology and archaeology from an increase in upstream flood risk and the requirement for flood compensation storage. A full LVIA is required;
- c. The adjustment of the proposed route to avoid direct loss of part of Foxburrow Wood is welcome but the impact of a deeper cutting close to the edge of the wood must be properly assessed, including groundwater impacts;
- d. Whilst the principle of a pedestrian and cycle bridge over the two-village bypass is accepted, the 2.5m high embankment required to provide suitable access needs to minimise the visual impact and avoid the proposed footbridge and ramps overlooking nearby properties;
- e. An appropriate surface water drainage strategy is required. The Councils are not convinced about the feasibility of some of the proposals, such as the lack of basin on one side of the River Alde crossing, how the basin at the Friday Street roundabout would work, and if the infiltration within the cutting is feasible;
- f. A safe crossing point for Cycle Route 41 must be provided;
- g. Approved archaeological trench plans for the two-village bypass need to be updated to include any new red line boundary additions; and
- h. Due to the AQMA at Stratford St Andrew, the Councils expect the two-village bypass to be constructed before substantial HGV numbers pass through Stratford St Andrew.

Northern Park and Ride (Darsham) (Chapter 2.9 and 6.6)

295. EDF Energy's strategy for transporting the project workforce is unchanged from Stage 3 (2.9.2). This includes fundamental assumptions such as car occupancy which is used to determine likely demand for workers parking. In Stage 3 the Councils challenged the level of car occupancy as this appeared unrealistic based on data from Hinkley Point C's workforce. The Councils are concerned that this assumption remains unchanged.

296. The proposed changes for the Northern park and ride in Stage 4 are minor and the Councils have no objections in principle although such matters as the design of the roundabout forming the access will require further design and modelling to confirm it is fit for purpose. The Councils expect the roundabout to be removed after construction and that the A12 is returned to its current alignment.

297. No justification has as yet been provided to demonstrate that the space indicatively allocated for SuDS in Figure 2.24 is sufficient. It is therefore not possible to conclude whether the red line boundary is big enough alongside the sites intended use.

298. The new infiltration basin at Darsham park and ride needs to be scoped in for post-DCO archaeological evaluation and mitigation

299. The Councils are disappointed that the opportunity to improve the pedestrian and cycle connectivity between the Northern Park and Ride site and Yoxford has not been recognised, and a contribution towards such improvements should be included through planning requirement.

Summary of the Councils' position on Stage 4 Northern Park and Ride amendments

300. The proposed changes for the Northern park and ride are minor and the Councils have no objections in principle. Further detailed design work is required, including demonstration that the space for SuDS is sufficient. Pedestrian and cycle connectivity between the Park and Ride and Yoxford should be improved.

Southern Park and Ride (Wickham Market/Hacheston) (Chapter 2.10 and 6.7)

301. Only minor changes are proposed for the Southern park and ride in the Stage 4 consultation.

302. No justification has as yet been provided to demonstrate that the space indicatively allocated for SuDS in Figure 2.25 is sufficient. It is therefore not possible to conclude whether the red line boundary is big enough alongside the site's intended use.

303. The extension of the red line boundary to enable improvements to pedestrian and cycle links to Wickham Market are welcome although the Councils consider that these links should extend to the centre of the village as far as practical. As set out at paragraph 6.7.2 of the document, the B1078 / B1116 roundabout has now been included in the red line boundary to facilitate improvements to walking and cycling provision within the highway land. These improvements should be considered in the context of their overall proposals for Wickham Market to ensure a joined up and integrated strategy.

304. The Councils note that the new red line boundary areas at the Southern park and ride need to be scoped in for post-DCO archaeological evaluation and mitigation. Any works outside of the existing highway at the Fiveways roundabout would need to be scoped in for archaeological work.

Summary of the Councils' position on Stage 4 Southern park and ride amendments

305. The proposed changes for the Southern park and ride are minor and the Councils have no objections in principle. We welcome the extension of the red line boundary to improve pedestrian and cyclist access.

Wickham Market congestion mitigation (paragraph 2.10.9 and chapter 6.7))

306. Further to the two mitigation proposals included at Stage 3, an additional strategy for mitigating impacts at Wickham Market has been included at Stage 4, this is summarised by paragraph 6.7.5 of the document: "We are now also considering an alternative approach to work with the Parish Council to bring forward a public realm improvement scheme within the public highway that would act as the first phase of the Neighbourhood Plan. This would consider footway and pedestrian crossing provision as well as the optimal location of on-street parking to meet parking demand. The scheme would also provide a legacy benefit to Wickham Market."

307. The Councils welcome EDF Energy's commitment to engaging with the Parish Council on how to best mitigate their impacts; however, there are no details on the proposed mitigation within the Stage 4 consultation, so it is impossible to comment on this "alternative approach". The Councils encourage further engagement on the appropriate course of action to deliver a suitable solution at this location, which should address improving road safety and limiting impacts on delay, whilst providing an acceptable level of car parking provision and supporting Wickham Market's ambitions as a market town. The Councils should be included in these discussions to ensure that any proposals are feasible and achievable.

308. The Councils maintain our Stage 3 position on the two options previously presented for mitigating impacts at Wickham Market. The Councils note that an archaeological evaluation at Wickham Market on the B1116 (paragraph 2.13.28) junction should be undertaken at the earliest opportunity given the potential sensitivities of this area.

Summary of the Councils' position on Wickham Market congestion mitigation amendments

309. The Councils welcome EDF Energy's commitment to engaging with the Parish Council on how to best mitigate their impacts; however, even though the Stage 4 documentation present this as a new option, there are no details on the proposed mitigation within the Stage 4 document so it is impossible to comment on this "alternative approach". The Councils' position on the other two options presented at Stage 3 remains as in our Stage 3 response.

Freight Management Facility (Chapter 2.11 and 6.8)

310. The Stage 4 proposals for the two options of Freight Management Facilities remain largely unaltered from Stage 3, other than some minor changes.

311. The proposed right-turn ghost-island facility at the Seven Hills Freight Management Facility included in Stage 4 (paragraph 2.11.11) and associated changes to the red line boundary are welcomed, as it would reduce the impacts of blocking through movements, although the safe operation of the proposed junction is yet to be evidenced. The impact on Operation Stack requires consideration as the Freight Management Facility will require changes to this operation.

312. Table 6.8 sets out that for the Innocence Farm Freight Management Facility there will be a negligible impact on the operation of the A14. However, the junctions, specifically those used for turning traffic (Dock Spur or Trimley) will be impacted. Further detail for movements at these junctions is required to evidence the impacts as part of the Transport Assessment.

313. In both Stage 3 and 4 EDF Energy has stated that a Freight Management Facility is not necessary for the rail-led strategy (paragraph 2.11.3). Neither provides any evidence for this reasoning.

314. The Freight Management Facility option/s taken forward into DCO will require pre-DCO archaeological evaluation.

315. No surface water drainage infrastructure is shown in either Figure 2.27 or 2.28. These sites are proposed to deal with large volumes of HGV traffic and surface water will therefore require significant treatment prior to discharge. Even working on the basis that

the site utilises permeable paving on all impermeable surfaces, this treatment alone is insufficient as per the CIRIA Sustainable Drainage Systems (SuDS) Manual Simple Index Approach. As per National Policy Statement EN1 5.7.9, SuDS should be a priority and therefore the use of proprietary treatment at a later date due to lack of space will not be acceptable. This should be addressed prior to submission of DCO when considering the sites' red line boundary.

Summary of the Councils' position on Freight Management Facility amendments

316. The Stage 4 proposals for the two options of Freight Management Facilities remain largely unaltered from Stage 3. Impacts on the operation of the A14 and Operation Stack need to be further evidenced. No surface water drainage infrastructure is included to date; SuDS need to be included as a priority.

Yoxford Roundabout (Chapter 6.9)

317. The Councils welcome the ambition to undertake the construction of the Yoxford roundabout off-line; however, we are not convinced that this is feasible given the constraints of the site. At best there will still be works such as tie-ins that would disrupt traffic on the A12 and B1122 to the detriment of traffic and specifically the main haul route to Sizewell. The Councils maintain our position that as far as possible all on-line works on the A12 and B1122 should be completed prior to beginning construction of the main site.

318. The minor changes proposed in Stage 4 are in principle acceptable. The removal of Roadside Nature Reserve 197, location of the rare Sandy Stilt Puffball fungus, from the red line boundary is welcome, subject to clarification that the area shown in Figure 6.13 does fully incorporate the Roadside Nature Reserve and, if possible, a buffer area at either end. Any landscaping proposals in the area should allow for the creation of areas of habitat suitable for colonisation by species for which the Roadside Nature Reserve is designated.

319. Approved archaeological trench plans for the Yoxford roundabout need to be updated to include new red line boundary areas. The historic environment impacts of the schemes, as per the preliminary impact assessment in table 6.9, are currently unknown due to lack of archaeological assessment.

320. No justification as yet has been provided to justify the size and location of the basin shown in Figure 2.29. It is unclear whether the pond will function as an infiltration or attenuation basin. If infiltration is proven not to be feasible, no information is provided as to how the

development will discharge surface water without increasing flood risk. Clarity is also required on the proposed surface water treatment prior to discharge if infiltration is found to be feasible.

Summary of the Councils' position on Yoxford Roundabout amendments

321. The minor changes proposed in Stage 4 are in principle acceptable. The removal of Roadside Nature Reserve 197, location of the rare Sandy Stilt Puffball fungus, from the Red Line Boundary is welcome. The Councils welcome the ambition to undertake the construction of the Yoxford roundabout off-line but are not convinced about its feasibility. Justification of the size and location of the basin proposed, and related water treatment is required.

Other Highway Improvements (Chapter 2.13 and 6.10)

322. In relation to the proposed mitigation works in Stage 3 there have been only minor changes at Stage 4, which are generally accepted by the Councils, but EDF Energy is asked to note the following comments.

323. Stage 4 includes greater details of the central reservation of the A144 arm of the A12/A144 junction. Table 6.10 states that the width of the central island in the A12 has been widened to 10m to allow large vehicles to safely use the junction. The detailed design and swept path analysis required to evidence this assumption has not been provided. Thus, while this is a slight improvement, the Councils' concerns about whether large vehicles can safely exit from the A144 onto the southbound A12 remain.

324. It is noted that the red line boundary at the A1094/B1069 junction has been extended to allow for speed limit signs to be incorporated at an appropriate distance (paragraph 6.10.8).

325. The Councils are disappointed that EDF Energy has not used the Stage 4 consultation as an opportunity to explore mitigation at any of the additional sites identified by the Councils in our Stage 3 response. We understand that many Parish Councils raised similar concerns.

326. The cumulative impact of road transport noise from this and other major developments on the east coast of Suffolk vicinity (e.g. offshore wind farm proposals) also needs greater consideration, particularly in respect to residential properties in the villages of Marlesford and Little Glemham and along the single carriageway areas of the A12 between Woodbridge and Yoxford.

327. The Mill Street compound, the works at Friday Street and any other new compounds associated with any of the proposed road works which are not yet shown on plans will need to be scoped in for archaeological assessment.

Summary of the Councils' position on amendments regarding other highway improvements

328. In relation to the proposed mitigation works in Stage 3 there have been only minor changes at Stage 4, which are generally accepted by the Councils. The Councils are disappointed that the Stage 4 consultation has not been used to explore mitigation at any of the additional sites identified by the Councils in our Stage 3 response. The cumulative impact of road transport noise from this and other major developments on the east coast of Suffolk vicinity (e.g. offshore windfarms) also needs greater consideration.

Mitigating our Impact

Project benefits (chapter 7.3)

329. The Councils continue to welcome the intentions of EDF Energy to maximise the significant socio-economic benefits that can be realised by working with Suffolk colleges, training providers, Higher Education Institutions and businesses. We welcome the opportunity to partner with the South-West and understand the value and need to transfer some opportunities that exist at Hinkley Point C to Sizewell C.
330. We welcome the commitment to specific projects aiming to raise inspiration levels in local young people, and the commitment to work in partnership, through the All Energy Industry Council, with other Energy developers, including, where applicable, across the wider energy industry (e.g. offshore) and the associated Sector Deals.
331. We furthermore welcome the alignment of any interventions with the ambitions of the Nuclear Sector Deal, specifically its aims to improve diversity across the sector in order to achieve 40 per cent female participation.
332. We are pleased to see the inclusion within the consultation summary document of actual role numbers across the life of the projects and the job families that these roles will be within. We are however surprised that this information is included in the summary document only, and not in the full consultation document, and request confirmation from EDF Energy that this information nevertheless has the same status as any other information consulted upon. The Councils urge EDF Energy to continue to provide as much information as possible to the Councils and other key regional stakeholders to assist with skills, education and employment planning.
333. However, the Councils are disappointed about the lack of detail included in this stage of consultation following feedback at Stage 3. The Councils still expect EDF Energy to provide an updated Socio-Economic evidence base
334. We ask EDF Energy to work with the Councils and other stakeholders to secure:
- a. Inclusion of clear definition of local within home-based target for those residents in Suffolk pre-project; and
 - b. Greater understanding/commitment to maximise socio-economic benefit to those that fall within this definition.
335. There are still a number of concerns and issues raised in our Stage 3 consultation response that have not been addressed in Stage 4 and their likelihood and impact will now be far greater with the new higher peak workforce being predicted. These include:

- a. Local accommodation impacts;
- b. Social and community impacts of larger numbers of non-home-based workers working and living in the area;
- c. Impact on health and emergency services;
- d. Lack of detail relating to mitigation strategies and funding;
- e. No reference to how EDF Energy can support inward investment initiatives;
- f. No detail on how the existing supply chain work with Suffolk Chamber can be developed to more closely link with the HPC experience, Tier 1 contractor requirements, and local Suffolk business capability and interest.

336. The Councils have the following comments on the specific project benefits listed in paragraph 7.3.1/7.3.3:

337. **Number of construction workers:** The increase in the maximum number of workers from 6,100 to 8,500 (at Stage 3, the 8,500 figure was referred to only as sensitivity testing): Further engagement is required on the impacts of this increase. The Councils welcome in principle that, by using the 8,500 figure as a maximum number, any proposed mitigation is based on the maximum workforce number, rather than including contingencies to deliver a higher number. The Councils' concerns to be addressed include the following:

- a. We remain concerned that, with an unprecedented level of development planned – including other key Nationally Significant Infrastructure Projects locally, regionally and nationally – that will require a similar labour force, there is a high potential for displacement across industries in Suffolk. This is further exacerbated by the increase in volume of the various roles needed to support development of the main site workers at Sizewell C. Further analysis is therefore required to inform conclusions on construction labour availability and displacement issues for local businesses and other developments.
- b. With the confirmation of an estimate of an 8,500 strong workforce come additional opportunities to move local people into meaningful employment on the project. In order to maximise this opportunity, interventions are needed to build capacity in individuals furthest from the labour market so that regardless of their previous experience or skill level they will be able to access training that will support them in achieving a role in the project and further support those wishing to continue on their training journey through upskilling opportunities.

- c. The increase in peak workforce numbers will also have a significant impact on local infrastructure, particularly accommodation. Further discussions are required on how any additional workers will be housed if there are no planned increases to size or occupation rates at the accommodation campus or the caravan site. Assumptions based on being able to house the increase within the private rented sector, along with other assumptions based on previous workforce of 5,600, need to be revisited and we welcome a discussion on this with EDF Energy.

We believe that the available local accommodation stock (split between private rented sector and tourist use at present) is not as flexible or significant as EDF Energy are assuming and that the higher peak workforce of mainly non-home-based workers will have a huge impact on local tourist accommodation. Therefore a knock-on effect on future tourism to the area is likely to occur once difficulties are experienced in booking accommodation for leisure and finding little or no available capacity.

In order to boost existing housing market supply, East Suffolk Council in its capacity as local planning authority and environmental health licencing would be willing to support EDF Energy in seeking to boost available supply through meetings with the market and offering help and advice. An increased Housing Fund will be expected to aid mitigation for the additional non-home-based workforce but this will need to be supplemented by boosts to supply through extension to existing campsites, improvements to properties to provide houses in multiple occupation etc. East Suffolk Council would prefer to work with EDF Energy on encouraging increase in supply than be in a position of needing to enforce against unauthorised developments.

338. 900 permanent staff: As at Stage 3, the Councils expect EDF Energy to commit to as many as possible of these permanent operational roles to be filled with individual's resident from the local area prior to project commencement whilst understanding there will be a proportion of specialists who will need to be brought in. The Councils expect that the focus of some of the 'inspiration' work within education will support the long-term funnelling of local residents into education and training opportunities that will ensure they have the necessary competence to access these permanent operational roles.

339. 'A minimum target of 1,000 apprentices': The Stage 4 consultation provides a commitment from EDF Energy to create a minimum of 1,000 apprenticeships during the construction of Sizewell C. As stated in all stages of consultation feedback we expect EDF Energy to set a stretching target for the recruitment and training of local apprentices

during the project. We welcome this new commitment yet will look to EDF Energy to continue to work with us towards ensuring 5% of job roles throughout the construction programme will be apprenticeships as per the 'gold standard' – 5% club. The majority of these we wish to see coming from the local area.

340. **'Aiming to meet the nuclear sector target of a 40% female workforce'**: The Councils welcome the commitment from EDF Energy to developing a diverse nuclear workforce in line with Government's Industrial Strategy and are willing to look at ways to embed a focus on supporting local females to enter into employment on the Sizewell C project as part of a wider commitment to inclusivity and diversity.

341. **'A dedicated service in East Anglia to promote Hinkley Point C jobs to people in East Anglia and to provide for the transition of the skilled workforce from Hinkley Point C to Sizewell C'**: The Councils recognise the value of this service but also want to work closely with EDF Energy on the practicalities of how this will work to ensure that the exchange of opportunities between Sizewell C and Hinkley Point C works to maximise the positive impact of the project in the east.

Delivering our Commitments and Obligations (Chapter 7.4)

342. The commitment in paragraph 7.4.3 to include a full Schedule of Mitigation within the DCO submission is welcome but its value will be entirely dependent on the completion and full transparency of all the necessary baseline survey work and assessment of potential impacts, much of which we have yet to see. We would also expect a commitment from EDF Energy to not only deliver the required mitigation of impacts that cannot be avoided, or where this is insufficient or impractical, to deliver the appropriate compensation for permanent loss or deterioration resulting from the proposed development, but also be looking for every opportunity to deliver enhancement, including biodiversity net gain.

Compensation (Chapter 7.5)

343. We welcome the reiteration of EDF Energy's commitment to instigating a Community Fund. In this context, we would remind EDF Energy of our view at Stage 3 that "For those impacts of the development that are residual and cannot be mitigated, EDF Energy is expected to provide wider compensation packages, including to compensate for the lasting impact on and damage to the AONB and the wider landscape around the development which is important to protect and enhance the setting of the AONB and is highly valued by the local community and visitors", which remains unchanged at Stage 4.

344. Beyond mitigation and direct compensation measures, the Councils expect EDF Energy to compensate local communities for the many intangible and residual impacts, as it is apparent that the project will have an impact on the quality of life of many Suffolk residents, particularly in the vicinity to the site as well as along the main transport routes to site.
345. To that extent, we welcome the repeated notion of a Community Fund in the Stage 4 consultation, albeit the level of detail has not evolved since Stage 3.
346. Further information on the proposed Community Fund to look at the scope and eligibility would be welcomed. Stage 3 and 4 provide little further information on the mechanism or operation of this fund. The fund will be vital in mitigating the impacts from issues that cannot be alleviated or are unknown at this time. This investment and resulting activity should be aligned with current local funding mechanisms (such as LIFT Community Grants and the New Anglia Local Enterprise Partnership Community Fund) to avoid duplication and maximise the positive impact of collective resources. We would welcome further information and engagement with EDF Energy on the scope and management of the fund as well as negotiations and the total funding available along with its operations.

Summary of the Councils' position on the "Mitigating our impacts" section

347. The Councils continue to welcome the intentions of EDF Energy to maximising the significant socio-economic benefits that can be realised by working with Suffolk colleges, training providers, Higher Education Institution's and businesses, and activities proposed to promote this. However, the Councils are disappointed about the lack of detail on socio-economic issues included in this stage of consultation following feedback at Stage 3, including local accommodation impacts, social and community impacts of larger numbers of non-home-based workers working and living in the area, impact on health and emergency services and lack of detail relating to mitigation strategies and funding.
348. The Councils require further engagement with EDF Energy regarding the impacts of the increase in the maximum number of workers from 6,100 to 8,500 at Stage 4. The Councils welcome in principle that, by using the 8,500 figure as a maximum number, any proposed mitigation is based on the maximum workforce number, rather than including contingencies to deliver a higher number. The Councils' concerns to be addressed include availability and displacement of workforce, raising opportunities for local people and impacts on local infrastructure, particularly accommodation.
349. As at Stage 3, the Councils expect EDF Energy to commit to as many as possible of the 900 permanent operational roles to be filled with individual's resident from the local area prior to project commencement.
350. The Council welcome the commitment of a minimum target of 1,000 apprentices and aiming to meet the nuclear sector target of a 40% female workforce.
351. The Councils expect a commitment from EDF Energy to not only deliver the required mitigation of impacts that cannot be avoided, or where this is insufficient or impractical, to deliver the appropriate compensation for permanent loss or deterioration resulting from the proposed development, but also be looking for every opportunity to deliver enhancement, including biodiversity net gain.
352. The Councils welcome the reiteration of EDF Energy's commitment to instigating a Community Fund. The level of detail has not evolved since Stage 3, so our Stage 3 comments remain valid. We remind EDF Energy that is expected to provide wider compensation packages for those impacts of the development that are residual and cannot be mitigated. This includes compensation for the impact on the quality of life of local communities, as well as compensation for the lasting impact on and damage to the AONB and the wider landscape.

Missing in the consultation

353. As stated above, the Councils are disappointed that the opportunity of a Stage 4 consultation was not used to clarify and fully evidence at least some of the issues raised by the Councils and other consultees. This leaves the Councils still unable to come to an evidence-based view on so many matters. Amongst many other issues, we are particularly disappointed that the matters highlighted in the summary table below have not been addressed in Stage 4.

Summary of the Councils' position on issues not addressed in Stage 4

- 354. The removal of a marine-led strategy.** Whilst EDF Energy introduced at Stage 4 an integrated transport strategy, the Councils have still not received the justification for removal of a marine-led strategy. Concerns remain regarding the ability for EDF Energy and Network Rail to deliver a rail-led strategy. Notwithstanding this, the Councils would support a marine or rail-led approach over a road-based strategy. Of the two road-based strategies proposed there are concerns with both – these are assessed in full in this response.
- 355. Introduction of four pylons.** The Councils note the revision proposed but do not consider it addresses the concern raised. There is no reduction in the number of pylons since Stage 3. One Stage 4 option reduces the height of three of the pylons by 25% but the fourth remains at full height, unfortunately the fourth is considered the most prominent in the landscape. The alternative option presented is to reduce the height of all four pylons by 25% but to have five pylons in total.
- 356. The introduction of additional permanent development within the AONB – training centre and outage car parking on Goose Hill.** It is very disappointing that the opportunity has not been taken in this further round of public consultation to revise proposals to reduce additional development within the AONB.
- 357. Mitigation proposals for Wickham Market.** Stage 4 provides no further specific revisions to proposals for Wickham Market but suggests working with the Parish Council to provide further options. This is not satisfactory; we consider further work should already have been undertaken to seek resolution to this difficult problem.
- 358. Mitigation proposals for an increased workforce now proposed at 7900 + 600.** This was raised at Stage 3 when the increased figure was sensitivity tested; now that Stage 4 proposes these figures as a maximum for the development, we will need additional mitigation proposals and significant increases in mitigation measures such as the Housing Fund. In addition we expect to work closely with EDF Energy on proposing supplementary measures to a Housing Fund including support for landlords and holiday accommodation providers in order to increase availability of accommodation in the catchment area of the development.
- 359. Further ecological surveys and mitigation.** Whilst the Councils recognise that this is still an ongoing process and that further work is being undertaken by EDF Energy, there remain concerns that the Environmental Statement supporting the DCO will be incomplete in this area. If this is the case, it will remain difficult to fully understand the potential ecological impacts and thus the mitigation and/or compensation required.

360. **Platform footprint and position.** No further detail has been provided; this is an area of great concern to the Councils and the lack of further detail is unsatisfactory.
361. **Coastal processes.** Again, this is an area of great concern to the Councils, and it is disappointing that no further detail has been provided. The Councils are still seeking recognition of the ongoing monitoring regime that will be required.
362. **Design of the nuclear power station – independent review.** The Councils still seek confirmation that non-nuclear buildings on the site will be subject to review by the Design Council.
363. **SSSI Crossing.** The Stage 4 consultation does not include a satisfactory response to our concerns raised at Stage 3.
364. **Beach landing facility.** The Stage 4 consultation does not include a satisfactory response to our concerns raised at Stage 3.
365. **Northern Mound.** The Stage 4 consultation does not include a satisfactory response to our concerns raised at Stage 3.
366. **Spoil management proposals.** No change or further detail has been provided since Stage 3, hence no change to our concerns raised at Stage 3.
367. **Evidence for siting of campus where proposed.** The Councils still await further evidence as to why campus is not sited in Ipswich or Lowestoft. SCC still awaits a response to its request for EDF Energy to reconsider the nearby Leiston airfield site as an alternative location for the campus.
368. **Proposals for LEEIE.** The Councils welcome that revisions to the original layout have been proposed, which appear to address some of the Councils concerns raised at Stage 3. However, there are still remaining concerns and uncertainties, as raised in paragraph 137-150 above.
369. **Surface, ground and potable water impacts.** Further detail, assessment and reassurance in this area is required.
370. **Leiston Recycling Centre, Lovers Lane.** This has not been addressed since Stage 3.
371. **Suitability of proposed traffic mitigation measures.** Whilst some additional information has been provided since Stage 3, further clarification and evidence is required in a number of areas, related to traffic modelling and the suitability and comprehensiveness of the proposed traffic mitigation measures.

372. Route of the proposed Sizewell Link Road from the A12 to the site. EDF Energy has provided the Councils with an unpublished peer review of the route selection process for the Sizewell Link Road. SCC does not believe that this peer review addresses its concerns raised in Stage 3. ESC is less concerned having read the review. The stances of each of the Councils with regard to the possibility of removing parts of or all of the Link Road are outlined in paragraphs 232-271.

373. Requirement for road and junction improvements in addition to those proposed in Stage 3. EDF Energy have not provided any further evidence or mitigation proposals for additional traffic pinch points affected by Sizewell C construction traffic which have not been covered by EDF Energy in Stage 3. The Councils expect that improvements are required for the A12 in the Woodbridge area, for several other junctions along the A12, and for the B1078 and A1120 as well as Leiston and rural roads; these have not been reflected in Stage 4.

374. Phasing of associated transport infrastructure. A phasing plan is still required to ensure that appropriate mitigation is in place at the necessary time in the construction programme.

375. Car park spaces justification. Further detail is still required on this.

376. Additional road mitigation for the rail-led strategy. EDF Energy has still not provided additional evidence whether additional road mitigation measures may be required for the rail-led strategy.

Conclusions

377. The Councils continue to support the principle of a new nuclear power station at Sizewell C, however, based on the information put forward in the Stage 3 and 4 public consultations, the Councils remain not yet able to fully support the specific proposals by EDF Energy, as the impacts of the proposed development are not yet fully developed or evidenced.
378. The Stage 4 consultation has provided some additional details to EDF Energy's proposals, but there are still significant gaps for a full evidence-based assessment. The Councils welcome the continued engagement with EDF Energy over the past months and look forward to further engagement over the coming year.
379. It should be noted that the proposals of Stage 3 and Stage 4 do not yet sufficiently reflect or make reference to a vision and an overarching set of objectives of how EDF Energy expects the development to work in practice, how different workstreams interact, and what the overall legacy vision for the project is. As part of the preparation for the submission of the DCO, the Councils hope that EDF Energy will provide a cohesive overview how all elements of the proposal will sustainably work together within the Suffolk context. This should include transport, environmental and socio-economic aspects of the proposal, providing clarity on proposed management plans, socio-economic impacts and mitigation, as well as governance and monitoring approaches.
380. The Councils acknowledge that the DCO submission is expected to be made in Q1 2020. Whilst there is a significant amount of work still to be undertaken and the Councils do have concerns over many aspects of the proposal, the Councils will endeavour to work with EDF Energy and others to ensure that as many of the issues that need further work can be appropriately resolved.

Appendix: Sizewell C Air Quality PEIR Review



Ricardo
Energy & Environment

Sizewell C Stage 4 Air Quality PEIR review

Report for East Suffolk Council and Suffolk County Council

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Executive summary

Ricardo Energy & Environment was commissioned by East Suffolk Council (ESC) and Suffolk County Council to carry out a critical review of the information relating to air quality in the Development Control Order (DCO) preliminary environmental information report (PEIR) in support of the construction and operational phases for the Sizewell C Nuclear development site. Ricardo have previously reviewed the stage 3 PEIR documents, this is a review of additional information from the stage 4 PEIR documents. Comments from the stage 3 appraisal have been reiterated where these have not been addressed within the stage 4 PEIR. It should be noted that Suffolk Coastal District Council, which is currently under the administration of ESC, is referenced due to some of the historical involvement of this former local authority.

This stage 4 PEIR introduces the following key developments with the potential to affect local air quality:

- A new transport strategy termed 'Integrated Approach',
- A traffic management scheme at Wickham Market
- Consideration of whether Sizewell link road should be removed at the end of the construction phase.

It is stated within the stage 4 consultation documents that air quality impacts of the 'integrated approach' will be less than the road-led approach in stage 3 consultation documents. Ricardo agrees that air quality impacts will lower from heavy good vehicles, although there is no mention of the air quality impacts associated with changes to Sizewell C link road and Wickham Market plans. These potential impacts should be considered and assessed by the applicant. It is noted that the traffic modelling assumes the higher construction workforce estimate of 7,900 which will result in a more robust air quality assessment.

There are uncertainties whether the full extent of potential air quality impacts has been captured, however the application of IAQM's traffic flow and DMRB's speed change criteria will capture all potential construction and redistribution impacts from traffic which can cause a material impact upon air quality.

The stage 4 consultation document does not change the most preferable transport strategy from an air quality perspective. It is still likely that the rail-led construction strategy will have the smallest impact upon air quality. It is therefore preferable, from the perspective of avoiding air quality impacts, for the transport strategy to be delivered through the rail-led option.

The 2-village bypass is proposed under both the rail-led and road-led transport strategy. This bypass will be valuable for mitigating potential impacts of all aspects of the proposed Sizewell B facilities re-location and Sizewell C developments, and will also be valuable for mitigating the impacts during construction of nearby offshore windfarms, if these projects go ahead. The bypass could therefore provide valuable mitigation of potential air quality impacts from 2022 onwards, when construction traffic associated with Sizewell B's facilities re-location is programmed to start using the road network, and 2024 for the off-shore windfarms. Recently measured NO₂ annual mean concentrations within the Stratford St Andrew air quality management area (AQMA) have complied with the air quality objective (AQO), although there remains a risk of returning to exceedance with an increase in road emissions. The bypass would assist East Suffolk Council to maintain compliance with AQOs within the Stratford St Andrew AQMA.

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1 Introduction

Ricardo Energy & Environment was commissioned by East Suffolk Council and Suffolk County Council to carry out a critical review of the information relating to air quality in the Development Control Order (DCO) preliminary environmental information report (PEIR) in support of the construction and operational phases for the Sizewell C Nuclear development site.

1.1 Air quality

In order to carry out the air quality review, the issues identified with regard to the air quality aspects of the PEIR were tabulated and prioritised. A recommendation is provided in respect of each issue identified.

The findings of this review are set out in Chapter 2, with overall conclusions in Chapter 3. Comments are rated as follows:

- High significance: potentially important for understanding the impact of Sizewell C on the conclusions of the air quality assessment;
- Medium significance: important to be addressed; unlikely to alter understanding of Sizewell C air quality assessment;
- Low significance: May be required for completeness;
- Advisory: Comment to assist the decision-making authority
- Editorial: Correction to the text – e.g. typographical error

1.2 Documents Reviewed

Suffolk Coastal District Council was replaced by ESC in 2019, but is referenced due to the prior involvement of this former local authority. The purpose of this review is to complement the existing comments from the collaborative response made by Suffolk County Council (SCC) and Suffolk Coastal District Council (SCDC). Suffolk councils are particularly concerned about potential operational and construction air quality impacts being considered upon human health within nearby Air Quality Management Areas (AQMAs) and, if necessary, mitigated. In addition, air quality impacts upon habitats and the management of dust caused by construction activities have also been considered.

The following document was reviewed as part of this appraisal.

- Sizewell C Stage 4 pre-application consultation: Consultation Summary Document, dated summer 2019

The following documents have previously been reviewed:

- Sizewell C Stage 3 pre-application consultation: Volume 1 Development Proposals
- Sizewell C Stage 3 pre-application consultation: Volume 2A Preliminary Environmental Information
- Sizewell C Stage 3 pre-application consultation: Volume 3 Preliminary Environmental Information Figures
- Sizewell C Stage 3 pre-application consultation: Consultation Summary Document
- Joint Response of Suffolk Coastal District Council and Suffolk County Council to EDF Energy's Stage 3 Public Consultation
- Sizewell C EIA Scoping Report May 2019; Planning Inspectorate Ref:EN010012;
- Sizewell C Proposed Nuclear Development: Sizewell C EIA Scoping Report, April 2014 Planning Inspectorate Ref:EN010012;
- Response of Suffolk Coastal District Council to EDF's May 2014 Air Quality Scoping Report

2 Review of air quality issues

Table 1 identifies air quality issues which have been provisionally scoped out, but which should be re-considered as the scheme design develops. In addition, Table 1 identifies activities with the potential to impact local air quality which have not yet been considered. The observations made during the stage 3 consultation have been reviewed in the light of additional information from the stage 4 consultation. The comments which remain have not been addressed by the stage 4 consultation and are therefore still valid. In addition, a new observation has been made on the stage 4 consultation documents in AQ10.

To ensure that all of Ricardo and Suffolk Council's observations from previous reviews of Sizewell C documentation are recorded in one place, scoping report observations have also been entered into Table 1. Observations from AQ18 onwards relate to the Scoping report appraisal which forms part of an independent review, see report titled 'Sizewell C DCO Scoping Report Review' for further information.

Table 1: Comments on Sizewell C Stage 3 Consultation documents

Document	Section	Ref.	Description	Significance	Recommendation
Volume 2A Preliminary Environmental Information	4.8.9	AQ1	<p>The applicant has scoped out the assessment of railway emissions on the basis that they do not feature within Table 7.2 of Defra's Heavy Traffic of Diesel Trains.</p> <p>No additional information in Stage 4 Consultation</p>	Low	<p>Before this justification can be applied, as per paragraph 7.18 from LAQM.TG(16), it is recommended that the applicant demonstrates that no more than 3 trains are stationary for more than 15 minutes per day. In addition, it should be demonstrated that concentrations of NO₂ annual mean are below 22µg/m³ at areas of exposure within 30 metres of trains, thereby, fully meeting assessment requirements within LAQM.TG(16).</p>
Volume 2A Preliminary Environmental Information	4.8.18 and 4.18.9	AQ2	<p>Whilst the use of the IAQM construction dust guidance is best practice, not enough information has been provided to agree with the applicant's risk rating of "medium," or that the mitigation proposed is consistent with the IAQM guidance and would be sufficient to offset the risk.</p> <p>No additional information in Stage 4 Consultation</p>	Medium	<p>The applicant should submit a construction dust nuisance assessment in accordance with the IAQM guidance, which presents all the information the guidance requests, including mitigation measures to offset impacts within the EIA. If features of the proposed development go beyond the scope of the IAQM guidance (e.g. coastal location; extended duration</p>

Document	Section	Ref.	Description	Significance	Recommendation
					of construction programme; extensive storage of materials), this should be reflected in the applicant's assessment and proposed mitigation of dust impacts.
Volume 2A Preliminary Environmental Information	4.8.20	AQ3	The applicant has screened out the assessment of HGVs for the rail-led option on the basis that the HGV movements are highly unlikely to trigger assessment thresholds. No additional information in Stage 4 Consultation	High	It is recommended that the applicant should review and document the number of HGVs proposed for the development to confirm that construction vehicles can be screened out from the air quality assessment.
Volume 2A Preliminary Environmental Information	5.8.13	AQ4	The applicant has mentioned the screening criteria for construction vehicles is 100 AADT. Whilst this is true for HGVs outside of AQMAs, the more stringent threshold of 25 HGVs AADT should be considered within AQMAs. No additional information in Stage 4 Consultation	Low	The applicant should use the more stringent assessment thresholds for HGV movements within AQMAs.
Volume 2A Preliminary Environmental Information	2.8.33	AQ5	The applicant refers to a range of sources, such as emergency diesel generators, which are proposed for the nuclear development, and notes that these would be regulated by the Environment Agency. The applicant refers to some sources which are not considered likely to be significant, such as the ammonia emissions from steam generators in the context of potential effects on nearby habitat sites. It is not clear if the applicant is going to include these within further air quality assessments. No additional information in Stage 4 Consultation	Medium	For the avoidance of doubt, emissions from all potentially relevant sources should be assessed in the EIA using appropriate screening and/or detailed assessment methods.
Volume 2A Preliminary Environmental Information	2.8.38	AQ6	It is unclear whether formaldehyde and carbon monoxide will be included in the assessment of commissioning and shutdown periods. No additional information in Stage 4 Consultation	Low	These pollutants should be assessed further in the air quality assessment. If they are scoped out, clear

Document	Section	Ref.	Description	Significance	Recommendation
					<p>justification for why should be provided.</p> <p>Formaldehyde and carbon monoxide emissions should be formally screened using a method such as the Environment Agency’s risk assessment method (https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit)</p>
Volume 2A Preliminary Environmental Information	Section2	AQ7	<p>No mention has been made on the effects of water vapour plumes affecting visibility.</p> <p>No additional information in Stage 4 Consultation</p>	Low	<p>The applicant should assess whether visible water vapour plumes could occur, and if so, should assess their potential effects on (for example) visual amenity and road safety. Visible plumes should be taken into account in the landscape and visual assessment.</p>
Volume 2A Preliminary Environmental Information	Section 8.8.18 and 8.8.19	AQ8	<p>The applicant’s statement regarding buses using the Park and Ride facilities is reasonable: ‘it is unlikely that there would be significant air quality effects.’ However, it is not the buses themselves which are the main air quality concern. Concerns with regard to the Park and Ride facilities are related principally to the number of passenger car trips to/from the park and ride facilities, together with bus movements.</p> <p>No additional information in Stage 4 Consultation</p>	Medium	<p>It is recommended that the total air quality impact due to vehicle emissions on roads which meet IAQM traffic thresholds should be assessed. The mitigation that Suffolk County Council and Suffolk Coastal council have recommended in paragraph 81 of their scoping opinion would be sensible to minimise these</p>

Document	Section	Ref.	Description	Significance	Recommendation
Volume 2A Preliminary Environmental Information	Section 8.8 and 9.8	AQ9	<p>Both preliminary environmental assessments identify human health receptors within close proximity to the car parks. However, there is no discussion on the potential impact upon local air quality concentrations from cars within the car park.</p> <p>No additional information in Stage 4 Consultation</p>	Medium	<p>impacts. Nevertheless, a worst-case approach to ensure a conservative assessment is recommended with the assumption that there will be no electric vehicles in emission calculations.</p> <p>The assessment should include the consideration of explicitly modelling emissions from engine starts and movement. In addition, impacts from stationary cars through 'hot soak' should also be considered in assessing local air quality concentrations of benzene.</p>
Stage 4 Preliminary Environmental Information	Various, initially bullet points within 1.1.5	AQ10	<p>There are various changes to potential scheme designs such as:</p> <ul style="list-style-type: none"> • The proposal to adopt an 'integrated approach' transport strategy, which would result in changes such as an increase in freight deliveries by rail; • Revised proposals for Wickham Market traffic mitigation (section 6.7.4 to 6.7.5) • Changes in the assumed number of construction workforce within traffic modelling. • Option for movements of freight via Felixstowe or Lowestoft (this has previously been raised, but is not discussed in Stage 4 consultation. <p>These may affect previous assessments of the air quality impacts of the proposed development.</p>	High	<p>The air quality assessments carried out previously should be updated in the light of these new scheme changes, and the opportunity taken to incorporate the recommendations in comments AQ1 to AQ9 above.</p> <p>Assumptions associated with the traffic model used in the air quality assessment should be clearly presented. In addition, to entirely capture</p>

Document	Section	Ref.	Description	Significance	Recommendation
					potential air quality impacts, IAQM's traffic flow and DMRB's speed change criteria should be applied to the entire traffic model network. If it is not proposed to carry out detailed assessment for roads which meet these criteria, this should be fully justified.
SCC and SCDC's Stage 3 Consultation Response					
SCC&SCDC's joint response to stage 3 consultation, Scoping Opinion	Paragraph 79	AQ11	No discussion on assessment of PM _{2.5} .	N/A	Where road transport is the main emission source of concern the applicant should present modelled concentration for the following pollutants; NO _x , NO ₂ PM ₁₀ and PM _{2.5} .
SCC&SCDC's joint response to stage 3 consultation, Scoping Opinion	Paragraph 75	AQ12	Detail to be provided within construction dust risk assessment.	N/A	The EIA shall detail all potential construction site works which may give rise to dust (e.g. excavation, demolition, use of explosives, movement of vehicles, loading and stockpiling of soil and rubble, crushing of material, concrete batching, production of asphalt). These shall be specified together with the location and the particular methods of dust suppression to be

Document	Section	Ref.	Description	Significance	Recommendation
SCC&SCDC's joint response to stage 3 consultation, Scoping Opinion	Paragraph 81	AQ13	Provision of electric vehicle facilities.	N/A	used for each specific activity. In order to facilitate use of electric vehicles for workers and contractors, the Councils request provision of electric charge points at the main site, park and ride sites, accommodation campus and freight management centre.
SCC&SCDC's joint response to stage 3 consultation, Scoping Opinion	Paragraph 82	AQ14	Request for construction vehicles to meet EURO VI (or equivalent emission standard) standards.	N/A	We request that HGVs contracted to work on the Sizewell C development are specified as minimum Euro VI (or have equivalent emissions), to ensure that the cleanest vehicles are being deployed. This will be particularly important if the road-led option is chosen.
SCC&SCDC's joint response to stage 3 consultation, Scoping Opinion	Paragraph 83	AQ15	Request for buses associated with Sizewell C to be zero-emission or ultra-low emission bus technology.	N/A	We request that buses used for Sizewell C are either electric or ultra-low emission vehicles, to minimise the air quality impacts of the bus fleet.
SCC&SCDC's joint response to stage 3 consultation, Scoping Opinion	Paragraph 85	AQ16	Low emission trains associated with Sizewell C.	N/A	We request that engines used for rail movements are low emission.

Document	Section	Ref.	Description	Significance	Recommendation
SCC&SCDC's joint response to stage 3 consultation, Scoping Opinion	Paragraph 86	AQ17	Request for monitoring locations at agreed locations prior to works and construction period.	N/A	We request that air quality monitoring is undertaken at agreed locations during the works in order to confirm modelled pollutant concentrations. This should start 1 year prior to any early construction works in order to obtain a baseline and continue for the duration of the construction period.
Comments for Air Quality Assessment Methodology as Scheme/Assessment Matures					
No report	N/A	AQ18	<p>For road traffic dispersion modelling emission calculations should reflect variations in speed as accurately as possible. Generally, the VISSIM traffic model should provide the necessary granularity in speed changes. However, there are concerns that recent local air quality management measures to lower concentrations within Stratford St Andrew by moving the 50mph speed limit may not have altered previous driving behaviour. In other words that vehicles have continued to accelerate up to 50mph at the old speed limit change.</p> <p>The emission factor toolkit (EFT) is the best practice methodology, amongst air quality professionals, for calculating road emissions. The EFT is a simulation of emission responses to varying speeds. Like any simulation or modelling exercise it is important to be aware of the limitations to ensure reasonably pessimistic emissions are calculated for road traffic.</p> <p>The EFT's local traffic data inputs are vehicle numbers and speed, with no option to represent local vehicles accelerating, coasting or breaking. Although the EFT draws upon a database of emission measurement for specific speeds which have some consideration of acceleration, dependent on the road type e.g. urban and rural, it will not accurately represent the influence of acceleration between 30 to 50mph at Stratford St Andrew.</p>	Medium	<p>To account for concerns that the 50mph speed limit sign location change has not altered driving behaviour. It is requested that the speed between 30mph and 50mph with the highest NO_x emissions is assumed for roads in and near the Stratford St Andrew AQMA.</p> <p>The annual daily average speed calculation should be weighted by the varying vehicle types.</p>

Document	Section	Ref.	Description	Significance	Recommendation
			<p>As the EFT will not best represent the affect of acceleration upon emission rates, simply using 50mph within the EFT may not be the most pessimistic calculation of emissions. As such a comparison of NO_x emissions calculated between 30 through to 50 mph should be undertaken to establish the speed which results in the highest NO_x emissions. The speed with the highest NO_x emission should be used for assessment within Stratford St Andrew AQMA.</p> <p>A weighted annual daily average speed should be used to calculate throughout all scenarios. This is essential in reflecting the influence of large HGVs numbers upon daily average speeds in emission calculations.</p>		
No report	N/A	AQ19	Assessment of impacts upon Ozone concentrations.	N/A	Impacts upon Ozone concentrations should be assessed at areas with the largest increases in NO _x .
No report	N/A	AQ20	Representation of fleet mix across scenarios should be as accurate as possible for emission calculations.	N/A	<p>Where possible local information should be used to develop information on mix of different vehicle types, euro standards and weight categories for existing baseline emission calculations. For future baseline fleet mixes, should local data be used, it should be projected using NAEI's fleet turnover assumptions.</p> <p>http://naei.beis.gov.uk/data/ef-transport</p> <p>A sensitivity test for the future baseline and construction and operation scenarios should be undertaken. Which</p>

Document	Section	Ref.	Description	Significance	Recommendation
					demonstrates what the potential concentrations could be if fleet projections and associated emission standards are not achieved. The fleet mix for construction scenarios should as accurately as possible reflect the proposed construction vehicles fleet.
No report	N/A	AQ21	<p>Areas which display street canyon characteristics and meet the IAQM assessment criteria should be represented within the dispersion modelling exercise.</p> <p>Street canyons restrict mixing of air between polluted areas (street canyon environment) and less polluted areas adjacent. This tends to elevate concentrations and therefore should be reflected within dispersion modelling.</p>	High	<p>The affected road network within a street canyon should reflect this with dispersion modelling. It would be satisfactory to include street canyons through zonal verification or in a dispersion model canyons module.</p> <p>Street canyon locations shared by the local authority should be considered within the applicant's assessment.</p>
No report	N/A	AQ22	Emission standards for non-road mobile machinery emissions.	Advisory	Any non-road mobile machinery (NRMM) plant should meet stage IIIB engine standards from the NRMM emission standard 97/68/EC directive.
No report	N/A	AQ23	Dispersion models are a way of simulating how emissions result in pollutant concentrations. It is important that the model is set up to reflect the actual circumstances of the emissions as closely as possible. In	High	It is likely that spreading emissions over a 24hr period, regardless of when

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			<p>particular, if emissions vary during the day (as is often the case with road traffic emissions), the actual time of day emissions are released should be specified within the model to reflect the emission source activity. For example, if there were 1,000 annual daily average HDV movements associated with Sizewell C construction, which occur as 200 movements each hour between 7am through to 12pm. If movements were modelled as if they were spread evenly over a 24hr period, this would dilute the emissions released at the actual time of activity. Consequently, this approach is likely to be conservative for the annual mean although may not fully capture the short-term impacts.</p>		<p>emission activity occurs, is conservative for assessment against air quality standards with an averaging time of 24hr or longer. There are key areas where programming dispersion models to release emissions at actual time of activity would be preferred to confirm whether 24hr emission spreading is conservative.</p> <p>These key areas are AQMAs within East Suffolk and Suffolk County Council and the areas with suggested street canyon locations.</p> <p>It is requested that predicted 1-hour mean concentration due to construction traffic should be specifically modelled for comparison against the objective for the 99.79th percentile of 1-hour mean concentrations. Because of the specific nature of planned construction programme, LAQM TG(16)'s screening guideline of annual mean 60 µg/m³ as a proxy for risk of achieving compliance</p>

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					with the 1-hour objective should not be used.
SCC and SCDC's Stage 3 Consultation Response					
Sizewell C EIA Scoping Report May 2019	6.5.9	AQ24	<p>The report states <i>“The study area for the air quality assessment remains as defined in paragraphs 7.8.15 to 7.8.20 of the 2014 EIA Scoping Report...”</i>.</p> <p>Paragraph 7.8.17 within the 2014 report states: <i>“The study area will include the A12 en route to Sizewell (between Ipswich to the south and Lowestoft to the north) and the B1122, which was proposed at Stage 1 consultation as the main access route for HGVs to the construction site from the A12. Other roads in the vicinity of the construction site that are likely to experience some increases in car traffic will also be considered as appropriate.</i></p> <p>Paragraph 7.8.18 of the 2014 ES states: <i>The locations where targeted ADMS-Roads modelling will be undertaken for the above routes and sensitive receptors will be determined using the screening criteria developed by the Highways Agency and EPUK, together with professional judgement.</i></p> <p>This approach will capture the largest increases associated with the development, but it will not include all increases and decreases, which would be needed to inform overall conclusions of significance and any necessary mitigation. In particular, by limiting the areas to apply DMRB/IAQM screening criteria to the <i>“A12 en route to Sizewell (between Ipswich to the South and Lowestoft to the North)”</i>.</p>	High	The IAQM/DMRB assessment screening criteria should be applied to the whole traffic model network, with detailed dispersion modelling carried out for any areas which trigger the IAQM/DMRB criteria. As per AQ3 from the PEIR review, the applicant should apply this criteria to traffic changes during construction and operational phases for both the rail-led and road-led options.
Sizewell C EIA Scoping Report May 2019	5.5.7	AQ25	<p>The applicant references section 5.5 for further information on cumulative assessment approach. It is mentioned that schemes which have a scoping report on the planning inspectorate website will be included. This is satisfactory as it will include EA1N, EA2 and Sizewell B facilities re-location. However, there is no information on how the impact of construction and operational traffic resulting from these schemes will be represented in the assessment of Sizewell C's various phases.</p>	High	The potential infrastructure projects of EA1N and EA2. In addition, the EIA application of Sizewell B needs to have a reasonable worst-case representation in the assessment of Sizewell C. For the phases

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					of construction and operation that over-lap, the corresponding peak period traffic flows should be assessed. Justification should be provided for why the peak period traffic flows were not included in the air quality assessment.
Sizewell C EIA Scoping Report May 2019	6.4.19	AQ26	Mitigation measures from sections 7.7.25 through to 7.7.28 in the 2014 Scoping report are referenced. However, the 2014 mitigation measures does not include the requirement for Euro VI vehicles.	High	Euro VI emission standard should be required for all construction vehicles, from tier 1 through to tier 3 contractors.
Sizewell C EIA Scoping Report May 2019	6.5.18 Table 6.8	AQ27	The footnote to this table states: "The assessment methodology includes a combination of criteria from DMRB HA207/07 and from IAQM 2017." No previous reference has been made to DMRB HA207/07 criteria, whereas there is extensive preceding discussion of the IAQM criteria. The IAQM criteria are both more recent and more relevant to this application.	High	Where the metric for screening overlaps between the two guidance notes IAQM criteria should be used, and DMRB HA207/07 criteria should be disregarded. In brief, only speeds from DMRB should be used.
Sizewell C EIA Scoping Report May 2019	Tables 6.6 and 6.7	AQ28	Application of magnitude of change and impact descriptors from IAQM's land use and development control guidance.	Medium	Where receptors which are predicted to experience a beneficial or adverse change, bordering receptors should be included until the maximum extent of perceptible impacts have been considered. This is important to ensure that conclusions of significance

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					<p>and subsequent mitigation are thoroughly informed.</p> <p>Receptor locations shared by the local authority should be considered within the applicant's assessment.</p>

3 Conclusions

3.1 Air quality

The stage 4 consultation documents have not altered the stage 3 consultation conclusions. Although updates have been made in light of additional information, as per the penultimate and final sentence in conclusions.

The applicant has taken into account best practice industry guidance for scoping in or out development activities which could give rise to air quality issues. The two key references are guidance documents produced by the Institute for Air Quality Management (IAQM) covering assessment and management of construction, and land use and development control. These two guidance documents are accepted methodologies within the air quality community for undertaking air quality assessments of dust nuisance and emissions from road vehicles and construction/operational plant.

The PEIR indicates that much of the Sizewell C development and associated infrastructure is unlikely to cause any impacts. Whilst this is likely to be true, apart from evidence that baseline pollutant concentrations are relatively low, there is little information to support these claims yet. Similarly, little information has been provided on the proposed methodology to assess the final design within the EIA. For the avoidance of doubt, it is recommended the following should be implemented on all aspects of the air quality assessment:

1. Pollutants identified for assessment by the consultant include NO₂, NO_x, PM₁₀, CO and formaldehyde (CH₂O). As identified within SCC/SCDC's opinion paragraph 79, PM_{2.5} should also be considered. In addition, benzene should also be considered when assessing air quality impacts from the car park.
2. The study area for assessing the impact of the proposed development on road traffic should include all roads which meet relevant thresholds in the IAQM guidance on land use and development control assessment thresholds. Thresholds for locations within Air Quality Management Areas (AQMAs) and other areas should be considered. This comment is relevant to Sizewell C main development and all associated developments with potential effects on traffic flows. In addition, should there be any potentially significant HGV movements in the vicinity of the docks, the docks should also be included within the study area.
3. The human health receptors identified by the applicant for dwellings and ecological receptors seem appropriate. In the EIA, consideration should also be given to receptors which are representative of worst-case short-term NO₂ and PM₁₀ pollutant impacts. For example, for new roads or existing roads within the affected road network, the 1 hour and 24 hour mean standards for NO₂ and PM₁₀ should be considered.
4. Whilst there is no guidance specifying the exact dispersion model software, for use within a local air quality assessment, this should at a minimum be a new generation Gaussian dispersion model such as ADMS-Urban or AERMOD. Dispersion modelling should use Defra's Local Air Quality Management guidance LAQM.TG(16) as guide on the minimum requirements e.g. for model verification, identification of suitable receptors, and consideration of the potential effects of street canyons upon predicted concentrations.
5. Vehicle emission calculations should ideally be undertaken with Copert V as the source data: Although the use of the latest Emission Factor Toolkit would also be acceptable. For the input data, traffic flows and speed should ideally come from road links which have been included in the traffic model calibration/validation exercise, showing discrepancy between modelled and measured flows and speeds where possible. The development of fleet mix i.e. the proportion of unique vehicle types, sizes and euro standards should be documented within the assessment.
6. The Euro standards and weight of construction vehicles included within the construction traffic emission calculations should be clearly demonstrated. As identified within paragraph 82 of SCC and SCDC's scoping opinion response, Euro VI standard HGVs have been requested to be used for the construction vehicle fleet. If this specification is included within a DCO requirement then it would be acceptable to calculate emissions for HGVs with 100% assumed as Euro VI.

7. The Two Village Bypass should be constructed before substantial (i.e. greater than 25 HGV movements per day) pass through Stratford St Andrew, to ensure NO₂ concentrations are not exacerbated within this AQMA.

The majority of air quality impacts have been identified within the applicant's PEIR. Identified impacts include sensitive human health receptors and ecological receptors which could be affected by proposed nuclear development and associated scheme locations. This will need to be revisited once the extent of the affected road network is established. A range of other improvements to the proposed assessment methodology and impact mitigation strategy have been identified in this report and in the joint response submitted by Suffolk County Council and Suffolk Coastal District Council.

The rail-led construction strategy is likely to have the least impact upon air quality, and would therefore in principle be preferable from the perspective of avoiding air quality impacts. Although as mentioned within Table 1, consideration should be given to idling emissions from trains.

The 2-village bypass is proposed under both the rail-led and road-led transport strategy. This bypass will be valuable for mitigating potential impacts of all aspects of the proposed Sizewell B facilities re-location and Sizewell C developments, and will also be valuable for mitigating the impacts during construction of nearby offshore windfarms, if these projects go ahead. The bypass could therefore provide valuable mitigation of potential air quality impacts from 2022 onwards, when construction traffic associated with Sizewell B's facilities re-location is programmed to start using the road network, and 2024 for the off-shore windfarms. NO₂ annual mean concentrations within the Stratford St Andrew air quality management area (AQMA) have been under the air quality objective (AQO), although are still at risk of returning to exceedance with an increase in road emissions. The bypass would assist East Suffolk maintain compliance with AQOs within the Stratford St Andrew AQMA.

The applicant should ensure that any changes in the air quality impacts due to traffic travelling to and from the Wickham Market park and ride facility are taken into account.

The applicant should ensure that any change in air quality resulting from changes to the scheme described in the Stage 4 Consultation Document are taken into account.



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