

# **Joint response of Suffolk Coastal District Council and Suffolk County Council to EDF Energy's Stage 3 Public Consultation**

**26 March 2019**



## CONTENTS

### **GLOSSARY OF ACRONYMS** (6.)

### **EXECUTIVE SUMMARY** (8.)

### **OVERVIEW** (14.)

- **Overall Representation** (14.)
- **Planning Policy Context** (14.)

### **IMPACTS ON THE ENVIRONMENT** (16.)

- **Natural environment** (16.)
  - **Policy context** (16.)
  - **Overview of Stage 3 coverage of the natural environment** (17.)
  - **Local principles and the mitigation hierarchy** (19.)
  - **Cumulative impacts with SPR and NGV proposals** (21.)
  - **Landscape and Ecology Management Plan** (21.)
  - **Marine ecology & water quality** (22.)
  - **Associated development natural environment impacts** (22.)
- **Historic environment** (24.)
- **Environmental Health and Protection** (25.)
  - **Air Quality** (25.)
  - **Environmental Protection** (27.)
  - **Construction - Hours of working** (28.)
  - **Construction - Noise and vibration** (28.)
  - **Construction - Contaminated land and soils** (29.)
  - **Construction - Lighting** (30.)
  - **Construction - Water quality** (30.)
  - **Site operation - Noise and vibration** (30.)
  - **Radioactive Discharges** (30.)
  - **Other Ancillary Environmental Protection Matters** (31.)
  - **Decommissioning** (31.)
- **Coastal impacts** (32.)
- **Inland Flood and Water Management** (32.)
- **Construction materials and their spoil and soil management implications** (35.)

### **SOCIO-ECONOMIC STRATEGY** (38.)

- **Tourism** (42.)
- **Skills, Employment and Education** (44.)
- **Supply Chain** (48.)
- **Gravity Model and sensitivity testing** (49.)
  - **Transport implications of the gravity model and sensitivity testing** (50.)
- **Accommodation Strategy** (52.)
  - **Caravan site at the LEEIE** (55.)
- **Impacts on public services** (59.)
  - **Access to public services and community facilities** (59.)
  - **Schools and childcare** (59.)
  - **Social services and safeguarding** (60.)
  - **Healthcare facilities** (62.)
  - **Emergency / blue light services** (64.)

- **Emergency planning** (66.)
  - **Assessment of Impact on REPPIR Off Site Emergency Plan** (66.)
- **Community impacts** (67.)
  - **Sports and recreation** (67.)
  - **Community cohesion and integration** (68.)
  - **Community Fund** (69.)
  - **Community Safety Management Plan (CSMP) and Worker Code of Conduct** (69.)
  - **Impacts on the Leiston Recycling Centre** (70.)

## **TRANSPORT STRATEGY** (71.)

- **Transport strategy overview** (71.)
- **Transport strategy for the construction workforce** (71.)
- **Transport strategy for moving materials and freight** (74.)
  - **Material quantities** (79.)
  - **Abnormal Indivisible Loads (AIL)** (79.)
  - **Light Goods Vehicles** (80.)
- **Comments on the differences in the proposals for the rail-led and road-led strategies** (82.)
  - **Rail improvements** (82.)
  - **Road improvements** (82.)
- **Phasing** (84.)
- **Transport air quality, noise, vibration** (84.)
- **Maintenance** (86.)
- **Monitoring and mitigation** (86.)

## **TRAFFIC MODELLING** (87.)

- **Traffic Modelling approach** (87.)
- **Traffic modelling of impacts on the A12** (89.)
- **Traffic modelling related to junction improvements** (91.)

## **MAIN DEVELOPMENT SITE** (94.)

- **Illustrative construction programme** (94.)
- **General flood and water comments** (94.)
- **The power station platform** (97.)
  - **Power station design – overview** (97.)
  - **Main reactor buildings** (97.)
  - **Turbine halls and Operational Service Centre (OSC)** (97.)
  - **Dry Fuel Storage** (98.)
  - **Forebays** (98.)
  - **Pylons** (98.)
  - **Drainage and ecology** (100.)
  - **Historic Environment** (100.)
- **Sizewell B Relocated Facilities** (101.)
- **Developments on Goose Hill** (102.)
- **SSSI Crossing** (105.)
- **Northern Mound** (106.)
- **Sea Defences and coastal processes** (107.)
  - **Monitoring and mitigation** (109.)
  - **Impact Assessments** (110.)
  - **Impact of climate change and sea level rise on erosion and flood risk assessment** (110.)
  - **Impact on Coralline Crag** (110.)
  - **External influences from coastal management actions by others** (110.)

- Coastal processes - Decommissioning (111.)
- Impact on access (111.)
- Cooling water infrastructure (112.)
- Combined construction outfall (CCO) and Fish recovery return (FRR) (112.)
- Beach landing facility (113.)
- Helipad (115.)
- Land east of Eastlands Industrial Estate (LEEIE) (116.)
- Temporary construction area (118.)
  - General AONB and ecological impacts (118.)
  - Spoil management strategy (119.)
  - Borrow pits (120.)
  - Stockpiling (121.)
  - Temporary construction areas – historic environment comments (123.)
  - Other construction site area features (124.)
  - Upper Abbey Farmhouse (125.)
  - Restoration of the construction laydown area (126.)
- Accommodation campus (126.)

## RAIL (131.)

- Green Rail Route (133.)

## LEVEL CROSSINGS (135.)

## SIZEWELL LINK ROAD (140.)

- Additional Suffolk County Council comments regarding the Sizewell Link Road (145.)
- Additional Suffolk Coastal District Council comments regarding the Sizewell Link Road (147.)

## THEBERTON BYPASS (149.)

## TWO-VILLAGES BYPASS (153.)

## NORTHERN PARK AND RIDE (159.)

## SOUTHERN PARK AND RIDE (162.)

- Associated Mitigation for the Southern Park and Ride (165.)

## FREIGHT MANAGEMENT FACILITIES (167.)

## YOXFORD ROUNDABOUT (170.)

## HIGHWAYS IMPROVEMENTS, CYCLING, AND RIGHTS OF WAY (173.)

- Highway Improvements (173.)
- Public Rights of Way (PROW) (176.)
  - Construction phase - impact on access (178.)
  - Operational - impact on access (180.)
  - Traffic Issues – Impact on access (180.)
  - PROW impacts of proposed bypasses (181.)
- Cycling (183.)

## IN-COMBINATION EFFECTS (185.)

## NEXT STEPS (187.)

## GLOSSARY OF ACRONYMS

<b>AIL</b>	Abnormal Indivisible Load
<b>AONB</b>	Suffolk Coast and Heaths Area of Outstanding Natural Beauty
<b>AQMA</b>	Air Quality Management Area
<b>AW</b>	Anglian Water
<b>BEIS</b>	Department of Business, Energy and Industrial Strategy
<b>BGS</b>	British Geological Survey
<b>BLF</b>	Beach Landing Facility
<b>CCA</b>	Civil Contingencies Act 2004
<b>CCG</b>	Clinical Commissioning Group
<b>CEMP</b>	Construction Environment Management Plan
<b>CHP</b>	Combined Heat and Power
<b>CLEA</b>	Guidance on soil concentrations
<b>CSMP</b>	Community Safety Management Plan
<b>DCO</b>	Development Consent Order
<b>DECC</b>	Department of Energy and Climate Change
<b>DMO</b>	Suffolk Coast Destination Management Organisation
<b>DMRB</b>	Design Manual for Roads and Bridges
<b>EA</b>	Environment Agency
<b>EcIA</b>	Economic Impact Assessment
<b>EIA</b>	Environmental Impact Assessment
<b>FEH</b>	Flood Estimation Handbook
<b>FRA</b>	Flood Risk Assessment
<b>GVA</b>	Gross Value Added
<b>HB</b>	Home Based worker
<b>HCDF</b>	Hard Coastal Defence Feature
<b>HER</b>	Historic Environment Record
<b>HGV</b>	Heavy Goods Vehicle
<b>HIA</b>	Health Impact Assessment
<b>HLC</b>	Historic Landscape Characteristics
<b>HMO</b>	House in Multiple Occupation
<b>HRA</b>	Habitat Regulation Assessment
<b>LEEIE</b>	Land east of Eastlands Industrial Estate
<b>LEMP</b>	Landscape and Ecology Management Plan
<b>LGV</b>	Light Goods Vehicle

<b>LIDAR</b>	Light Detection and Ranging
<b>LLFA</b>	Lead Local Flood Authority
<b>LTP</b>	Local Transport Plan
<b>LVIA</b>	Landscape and Visual Impact Assessment
<b>MHW</b>	Mean High Water
<b>Mt</b>	Million tonnes
<b>MUGA</b>	Multi Use Games Area
<b>NALEP</b>	New Anglia Local Enterprise Partnership
<b>NEET</b>	Not in Education, Employment or Training
<b>NHB</b>	Non Home-Based worker
<b>NPPF</b>	National Planning Policy Framework
<b>NPS</b>	National Policy Statement
<b>NSIP</b>	Nationally Significant Infrastructure Project
<b>OSC</b>	Operational Service Centre
<b>PEIR</b>	Preliminary Environmental Information Report
<b>PINS</b>	Planning Inspectorate
<b>PM10</b>	Particulate matter
<b>PROW</b>	Public Right of Way
<b>PRS</b>	Private Rented Sector
<b>REPPiR</b>	Radiation (Emergency Preparedness and Public Information) Regulations 2019
<b>RSPB</b>	Royal Society for the Protection of Birds
<b>SMART</b>	Specific, Measurable, Attainable, Realistic / Relevant, Timely
<b>SSSI</b>	Site of Special Scientific Interest
<b>STEMC</b>	Science, Technology, Engineering, Mathematics and Construction
<b>SuDS</b>	Sustainable Drainage Systems
<b>SWMP</b>	Leiston Surface Water Management Plan
<b>TCA</b>	Temporary Construction Area
<b>TCPA</b>	Town and Country Planning Act
<b>WSI</b>	Archaeological Written Scheme of Investigation

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

## **EXECUTIVE SUMMARY**

1. This document is the joint response of Suffolk County Council and Suffolk Coastal District Council (referred to as “the Councils” in this response) to EDF Energy’s Stage 3 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 11 March 2019 by Suffolk Coastal District Council’s Cabinet, and on 12 March 2019 by Suffolk County Council’s Cabinet.
2. In line with previously determined policy, the Councils continue to support the principle of a new nuclear power station at Sizewell, recognising the significant benefit that such a development would bring to Suffolk. The Councils are disappointed that the Stage 3 proposals have not evolved more considerably since Stage 2, particularly given the time that has been available and that this is a final public consultation. There remain a considerable number of issues to be addressed between Stage 3 and submission of the Development Consent Order (DCO). At this stage there are still some areas where the Councils are not content, cannot come to a clear view or have been unable to update our response since Stage 2.
3. Based on the new information put forward in the Stage 3 Consultation, the Councils are still not able to support all the specific proposals put forward by EDF Energy and the impacts of the proposed development are still not yet fully developed or evidenced. The Councils expect to work with EDF Energy towards a position where the Councils can conclude that on balance the advantages of EDF Energy’s proposals outweigh the disadvantages.
4. This document provides a comprehensive response on all matters of the Stage 3 consultation. The most significant points made in this document are summarised below:
5. To make the development deliverable in Suffolk and address areas of considerable public concern, there are several issues that EDF Energy needs to address. The Councils are not content with the following aspects of the proposal:
  - a) The dropping of a marine-led materials transport strategy with the introduction of a road-led strategy alongside the alternative of a rail-led option. The Councils continue to support marine-led and rail-led transport strategies and have not yet seen convincing evidence that a marine-led strategy is not feasible or environmentally preferable. If the marine-led option is proven to be impossible, the Councils wish to see the rail-led strategy implemented (in accordance with National Policy Statement (NPS) EN-1 paragraph 5.13.10. The Councils are not content with a road-led option, with the significant number of additional Heavy Goods Vehicles (HGVs) resulting in a detrimental effect on Suffolk’s road network. The Councils are not content with the possibility of a relaxation of HGV operating hours into the night time.
  - b) The introduction of four tall pylons to the development site, which would have considerable detrimental impact on the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB), the justification for these and the lack of alternatives needs to be demonstrated;



- c) The introduction of additional permanent development within the AONB, including the proposal of a training centre and outage car parking on Goose Hill. There are no exceptional circumstances justifying these elements of the scheme in the AONB (NOS EN-1, paragraph 5.9.9, 5.9.10);
  - d) The mitigation proposals for Wickham Market – while the Councils welcome the recognition of potential delays on the B1078 in Wickham Market as a result of additional Sizewell C traffic, the two proposed options for mitigation (removal of on-street car parking in Wickham Market or a diversion route via the narrow, weight restricted, listed Glevering Bridge) are not appropriate (contrary to NPS EN-1 paragraph 5.13.7).
6. Due to a lack of further detail and / or enough evidence, the Councils are not yet able to come to a considered view regarding the following topic areas put forward in the Stage 3 Consultation, and expect further engagement with EDF Energy to consider more appropriate solutions on:
- a) Socio-economic impacts: While the Stage 3 consultation recognises the areas of work and impacts that need to be addressed, more information is required on the delivery mechanisms to achieve the socio-economic aspirations and mitigations. EDF Energy need to further detail their assessment of the adverse economic impacts, on tourism and other industries, and provide further detail to determine and mitigate the impact of the proposal on public services;
  - b) Mitigation proposals for a possible increase of the expected workforce from 5,600 + 500 to 7,900 + 600, as part of EDF Energy's sensitivity testing: To consider the acceptability of an increase of the workforce number beyond 5600, the Councils expect deliverable and enforceable mitigation proposals, to avoid or mitigate impacts on the local housing market, the local workforce and transport infrastructure. The Councils do not accept that the consultation suggests that an increase of the workforce to up to 7900 does not create any additional traffic impact as suggested;
  - c) Ecological surveys and mitigation: EDF Energy need to undertake further significant work to seek to survey, understand, quantify and qualify and mitigate impacts of the development on the ecology;
  - d) The platform footprint and position: The Councils highlighted at Stage 2 that the proposed footprint is further seaward than Sizewell B, which gives the Councils significant concerns around the impact on coastal processes and coastline and may make this design unacceptable. The Councils need to see a full assessment of the coastal process impacts and an assessment of alternatives (such as moving the platform back inland, or redesigning the layout);
  - e) Coastal processes: EDF Energy need to undertake further assessments, and establish with the Councils a robust process for ongoing monitoring of coastal change and Sizewell C impacts, with an obligation for EDF Energy to provide mitigation if actual change departs from anticipated baseline change;
  - f) The design of the proposed nuclear power station: While improvements have been made to the design of some non-nuclear buildings (see 7.c) below), the Councils remain concerned about the overall design of the site, and request that notwithstanding the

limitations with regards to nuclear critical buildings, the nuclear power station design is independently reviewed through The Design Council (formerly known as CABE);

- g) The site access crossing over the Site of Special Scientific Interest (SSSI): The Councils require further evidence to show why EDF Energy have chosen the causeway with culvert as their proposed scheme above the three-span bridge, which had been the Councils' preference at Stage 2;
- h) The Beach Landing Facility (BLF): While the Councils support the principle of a BLF to allow deliveries of large items via sea, EDF Energy need to provide appropriate levels of detail and evidence on the impacts and practicalities of such a facility, addressing concerns including impacts on coastal processes, ecology, landscape and access to the beach and the England Coast Path;
- i) The proposed redevelopment of the Northern Mound: Further detail and impact assessment need to be provided;
- j) The spoil management proposals: The Councils require additional information and evidence to convince them that the proposed borrow pits and stockpiling will not have an unacceptable impact on the sensitive local environment (including on the AONB and Royal Society for the Protection of Birds (RSPB) Minsmere) and on neighbouring land uses;
- k) The location of the accommodation campus remains a local concern: EDF Energy is requested to provide further evidence to demonstrate why they consider their favoured location to be the optimal location. The Councils would like to see the evidence behind not choosing either Ipswich or Lowestoft for an accommodation campus. Suffolk County Council request EDF Energy to also reconsider the nearby Leiston airfield site as an alternative location for the campus. Subject to receipt of that justification, whatever accommodation campus site is chosen, EDF Energy will need to prove that environmental impacts can be sufficiently mitigated and compensated for;
- l) Land east of Eastlands Industrial Estate (LEEIE): While the Councils are content with the principle of operational construction use of the LEEIE, to provide evidence that the site can be appropriately drained from a surface water perspective, does not include overdevelopment of the caravan site, and can provide mitigation for potential detrimental environmental health impacts on neighbouring residents;
- m) Surface, ground and potable water impacts: EDF Energy is asked to provide detailed proposals on drainage and dealing with surface water. EDF Energy needs to provide assessments on potential impacts on ground water, and evidence that the development does not result in unacceptable impacts on groundwater levels and related biodiversity (including from an increase in weight of the platform as a result of its increased height). They need to provide evidence that the development has no detrimental impact on potable water supply in the area. This is required to comply with NPS EN-1 section 5.9.
- n) Impact on the Leiston Recycling Centre in Lovers Lane: EDF Energy is asked to discuss with Suffolk County Council how to mitigate the impact of increased traffic on Lovers Lane on the Recycling Centre so that Leiston and the surrounding area can continue to receive a good and safely delivered recycling service;
- o) Notwithstanding paragraph 5.a) regarding our overall concerns with the transport strategy, the Councils consider that for the following aspects of a rail-led, road-led or

indeed marine-led proposal, lack of sufficient evidence means the Councils cannot come to a considered view on:

- i. The suitability of proposed traffic mitigation measures: The Councils require further clarification in several areas related to EDF Energy's traffic modelling and gravity model to determine whether the traffic mitigation measures are enough. The Councils require evidence to explain the modelled HGV numbers, to justify the assumption of a split of 85% of materials coming from the South and 15% from the North, and an indication of the number of Abnormal Indivisible Loads (AILs) arriving by road and by sea. As part of EDF Energy's sensitivity testing, the Councils require clarity on assumptions and resulting impacts of an increase of the workforce number, and do not accept that the consultation suggests that an increase in workers has no additional transport impact;
  - ii. The route of the proposed Sizewell Link Road from the A12 to the development site in the road-led strategy: the provision of a relief road for the B1122 is welcome but the option proposed is yet to be supported by sufficient evidence. The case to justify the best possible route must revisit the routes considered, with a comprehensive highways analysis and be mindful of any impact on allocations in the District Council's Local Plan and potential other developments;
  - iii. The requirement for road and junction improvements in addition to those proposed in Stage 3: EDF Energy is asked to develop mitigation proposals for additional traffic pinch points affected by Sizewell C construction traffic which have not been covered, or to provide full evidence that these locations and communities are not significantly affected by their proposal. 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;
  - iv. Phasing of associated transport infrastructure: The Councils require a firm commitment for early delivery of the associated transport infrastructure to avoid disruption to the main haul route (A12-B1122) during the construction period;
  - v. Car park spaces: EDF Energy need to justify that the total number of proposed car park spaces, at Park and Ride sites, on site and at the accommodation campus, is required;
  - vi. (Rail-led strategy) Additional road mitigation: EDF Energy need to evidence whether the rail-led strategy may require additional road mitigation as proposed under the road-led strategy, including mitigation for Middleton Moor and the provision of a Freight Management Facility.
7. The Councils recognise that positive progress has been made in several topic areas, and support the following proposals put forward in the consultation:
- a) The aspirations set for the socio-economic topics, although the Councils ask EDF Energy to be even more ambitious in increasing the percentage of locally based workers (see also recommendation 6.a) above);
  - b) The proposal to set up a Housing Fund and Tourism Fund to provide mitigation in these areas, the details of which are still to be developed

- c) The improvements in the design of some of the non-nuclear buildings on the main development site (see also 6.f) above);
- d) The location of sports facilities in Leiston;
- e) Notwithstanding paragraph 5.a) regarding our concerns of the transport strategy, the Councils support the principle of the following aspects of a transport strategy:
  - i. Two-villages bypass for Farnham and Stratford St Andrew: The Councils welcome this proposal as we had requested the two-villages bypass as minimum mitigation in Stage 2, however the Councils are still reviewing whether additional mitigation, particularly for a road-led strategy, for Marlesford and especially Little Glemham will be required;
  - ii. Two-villages bypass for Farnham and Stratford St Andrew: The Councils welcome this proposal as we had requested the two-villages bypass as minimum mitigation in Stage 2, however the Councils are still reviewing whether for a road-led strategy additional mitigation for Marlesford and particularly Little Glemham will be required;
  - iii. The proposed locations for Park and Ride facilities in Darsham and Wickham Market / Lower Hacheston;
  - iv. The principle of the proposed roundabout at the A12 / B1122 junction in Yoxford;
  - v. (Rail-led strategy) The proposed upgrade of the East Suffolk Line, including a new passing loop and upgrades of level crossings (subject to specific comments particularly related to some of the proposed level crossing closures);
  - vi. (Rail-led strategy): The principle of mitigation for the B1122, and creating a bypass for Theberton (further consideration will need to be given whether additional mitigation is required for Middleton Moor);
  - vii. (Road-led strategy) The principle of mitigation for the B1122, and of creating an alternative route from the A12 to site in the road-led strategy (but see 6.o)ii) above);
  - viii. (Road-led strategy) The principle of a Freight Management Facility in the wider Ipswich area, although further information, including the assessment of alternative options, is required to advise on the Councils' preferred location.
- 8. 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. The Councils will want to discuss the governance of such a fund with EDF Energy. It should be stressed that compensation should only be considered after having exhausted options to avoid or mitigate impacts.
- 9. The Councils expect EDF Energy to assess the in-combination effects of Sizewell C and proposals related to Offshore Wind projects and National Grid interconnectors in the Leiston area. EDF Energy, and each of the other developers, will be required to explain how the in-combination effects will be addressed. EDF Energy is asked to work closely with other developers, including Scottish Power Renewables and National Grid Ventures, to consider how mitigation across the schemes can be combined to minimise the impact of the totality of developments on the local area.

10. EDF Energy should work with the Councils, Government and other partners to seek to maximise the wider benefits and skills and employment opportunities from the development.
11. A substantial amount of evidence, assessments and detail is still required at this, likely to be final, stage of public consultation. The Councils are very concerned that by the time of EDF Energy's submission of a DCO application, due to the expected short time scale, there may still not be sufficient evidence for the Councils to come to an informed view on many topic areas. The Councils expect EDF Energy to discuss with the Councils at the earliest opportunity how to address and prioritise the evidence gaps and concerns highlighted by the Councils in this response.
12. The Councils will continue to work closely and pro-actively with EDF Energy to help them address the issues the Councils identify in this response and develop their proposals, including seeking mutually to resolve the necessary mitigation and compensation.

## **OVERVIEW**

13. This document is the joint response of Suffolk County Council and Suffolk Coastal District Council (referred to as “the Councils” in this response) to EDF Energy’s Stage 3 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 11 March 2019 by Suffolk Coastal District Council’s Cabinet, and on 12 March 2019 by Suffolk County Council’s Cabinet.
14. On the 1 April 2019 a new East Suffolk Council will be formed from the areas formerly known as Suffolk Coastal District Council and Waveney District Council. Any references within this document to Suffolk Coastal District Council from the 1 April 2019 should be taken as East Suffolk Council.
15. EDF Energy’s Stage 3 consultation is grouped under specific topic headings and this response generally follows that pattern so EDF Energy can easily cross-reference the response to their report. We have added additional subject headings where we considered EDF Energy’s documents to be lacking in the necessary detail. In particular, we have introduced a chapter to discuss environmental issues for the development proposals as a whole.

### **Overall representation**

16. In line with previously determined policy, the Councils continue to support the principle of a new nuclear power station at Sizewell, recognising the significant benefit that such a development would bring to Suffolk. The Councils are disappointed that the Stage 3 proposals have not evolved more considerably since Stage 2, particularly given the time that has been available and that this is a final public consultation. There remain a considerable number of issues to be addressed between Stage 3 and submission of the Development Consent Order (DCO). At this stage there are still some areas where the Councils are not content, cannot come to a clear view or have been unable to update our response since Stage 2.
17. Based on the new information put forward in the Stage 3 Consultation, the Councils are still not able to support all the specific proposals put forward by EDF Energy and the impacts of the proposed development are still not yet fully developed or evidenced. The Councils expect to work with EDF Energy towards a position where the Councils can conclude that on balance the advantages of EDF Energy’s proposals outweigh the disadvantages.

### **Planning policy context**

18. The proposal is considered a Nationally Significant Infrastructure Project (NSIP) as established under the Planning Act 2008; consent for an NSIP takes the form of a DCO. The determining authority is the Secretary of State for Business, Energy and Industrial Strategy (BEIS) and the application process is carried out by the Planning Inspectorate (PINS).
19. The over-arching Energy NPS is EN-1. The site at Sizewell was identified in the NPS for Nuclear Power Generation (EN-6) as one of eight sites suitable for new nuclear generation in England and Wales. EN-6 does not seek to repeat EN-1 (paragraph 1.3.2), unless stated. Policy specific to nuclear energy is covered in EN-6 but general policy is not repeated from EN-1. However, the fact that a site is identified as potentially suitable

within the NPS does not prevent the impacts being considered greater than the benefits, with the consequence that the application could be rejected.

20. EN-6 recognises that the Sizewell C site is located in a sensitive area and that there may be adverse effects on the integrity of nine European sites. EN-6 takes into account the need for new nuclear power generation and the potential for avoidance and mitigation, the Government therefore concluded that there is Imperative Reason of Overriding Public Interest that favoured the inclusion of the site in the NPS. Importance is placed on the promotor to pay full regard to the need to limit, mitigate, or compensate for impacts, where practical.
21. The 2013 Core Strategy and Development Management Policies Suffolk Coastal Local Plan includes policy SP13 on Nuclear Energy, this policy supports the principle of new nuclear development in Suffolk Coastal but lists a number of areas and issues that it expects to be considered in any development proposed, the proposal acknowledges the likelihood of dis-benefits arising from such a proposal and highlights the areas in which benefits can be maximised including: economic benefits and community benefits.
22. The final draft Local Plan is currently out to its final stage of public consultation (ending 25 February 2019), and includes policy SCLP3.4 Proposals for Major Energy Infrastructure Projects. This policy identifies the need to mitigate the impacts arising from such developments and will be used to guide the Councils. The Plan has not yet been examined but is in its final stage of public consultation on its soundness so limited weight can be given to it at this time. It is expected to be adopted planning policy by the time the DCO is submitted to PINS which is expected in the first quarter of 2020.
23. Suffolk County Council's Local Transport Plan (LTP2) recognises the 'Energy Coast', including Sizewell C as a key area for growth and development. The four-villages bypass is included as a strategic scheme in Part 2 of the County's LTP as a medium to long term project delivered by developers. Also included in the LTP are proposals for improvements in Coddensham to relieve the impacts of HGV's on the village and major improvements to the A14 / A12 Copdock Interchange.
24. The Suffolk Minerals & Waste Local Plan Submission Draft (June 2018) provides guidance for sand and gravel extraction and may be of relevance in relation to sourcing materials.
25. This document refers back to relevant policies within some of the topic responses.

## IMPACTS ON THE ENVIRONMENT

26. The Stage 3 consultation document does not include a specific chapter on impacts on the natural and built environment. As many concerns and comments are cutting across a number of aspects of the development, this chapter provides the Councils' perspective on the overall consideration of impacts on the environment. Specific environmental issues and concerns are then raised in the site-specific chapters below.

### Natural environment

#### *Policy context*

27. NPS EN-1 5.3 and 5.9 refer to biodiversity and geological conservation and landscape and visual effects of energy projects; NPS EN-6 and its Appendix EN-6 Vol II then clearly refer to the potential for environmental impacts from new nuclear development. In addition, the Habitats Regulation Assessment (HRA) and Appraisal of Sustainability for Sizewell that form part of EN-6 highlight the significant environmental challenges at Sizewell, referring to the need for avoidance and mitigation as well as to probable residual impacts, given the environmental sensitivity of the area. Residual environmental impacts include those on the nationally and internationally designated sites surrounding the development and on the nationally designated landscape within which the proposed main development site wholly sits. The likelihood of these impacts is strongly represented in the NPS EN-6 documents.

28. Government assessments in EN-6 Vol II highlight:

- “There is potential for some long lasting adverse direct and indirect effects on landscape character and visual impacts on the Suffolk Coast and Heaths AONB, a nationally recognised landscape, with limited potential for mitigation given that the site is wholly within the AONB. This could have an effect on the purpose of the designation.” (EN-6 Vol II paragraph C.8.81/82)
- “Given the scope for mitigation of biodiversity effects identified in the Appraisal of Sustainability for sites of national importance, it is reasonable to conclude that it may be possible to avoid or mitigate impacts to an extent. However, the Appraisal of Sustainability has highlighted that the site includes permanent land take from Sizewell Marshes SSSI that could lead to direct impacts.” (EN-6 Vol II paragraph C.8.65)
- “Given that the Habitats Regulations Assessment has not been able to rule out adverse impacts on sites of European nature conservation importance, the Government has carefully considered whether it is appropriate to include this site in the NPS.’ (EN-6 Vol II paragraph C.8.57).

29. All these statements illustrate the environmental challenge, but also the likelihood of residual impacts.



### *Overview of Stage 3 coverage of the natural environment*

30. At Stages 1 and 2 the Councils noted that the nominated site lies on the Suffolk Heritage Coast, wholly within the nationally designated AONB, and the laydown area during construction phase will cross the entire width of the AONB. As a result, there is limited scope for mitigation. The Councils noted:
- Adverse effects on a number of nature conservation sites of European and UK importance (European Sites and SSSIs);
  - Effects on water quality and fish / shellfish populations in nearby coastal waters due to the abstraction and release of sea water which will have been used for cooling;
  - Significant adverse impacts on European Protected Species (EPS) particularly bats;
  - Significant and long-lasting visual impact on the natural beauty and special qualities of the AONB;
  - A direct impact upon surviving below-ground archaeological remains and a setting/visual impact upon above-ground heritage assets.
31. The Councils also noted that considering the requirements of the identified NPSs and previous comments made at Stage 1, the Stage 2 consultation was disappointing in that it failed to recognise or truly acknowledge the environmental challenge that development at this site faces, nor the likelihood of residual impacts in a number of areas. We also noted that a considerable amount of further work was required to survey, understand, quantify and qualify many of these impacts.
32. It is even more disappointing therefore that at this Stage 3 consultation, significant aspects of the potential environmental impacts of the proposed development have still not been properly assessed or evidenced.
33. This is particularly worrying given that the challenges of this site had already been acknowledged in the EN-6 'Appraisal of Sustainability: Site Report for Sizewell' (Department of Energy and Climate Change (DECC), 2010), in Table 6.1 (copied below for reference). The 'double-negatives' for both 'Biodiversity and Ecosystems' and 'Landscape' reflect the known sustainability issues, and that mitigation/negotiation will be difficult or expensive and that effects will be of regional, national and international importance. For biodiversity the table highlights the uncertainty of these effects and therefore the challenge of how they can best be avoided or mitigated should the project proceed.
34. The information that has been gathered and shared by EDF Energy is insufficient in a number of areas to be able to assess the potential environmental impacts of the proposals let alone to justify some of the preliminary assessments of effects given in the Stage 3 documents.
35. Since Stage 2, the Councils have continued to offer to engage with EDF Energy on these matters, but we have been disappointed at the level of engagement on specific ecological topics during this period. We are being advised by EDF Energy that further engagement will take place prior to DCO submission.

36. The Stage 3 Consultation's Preliminary Environmental Information Report (PEIR) quotes, in Vol. 3 paragraph 1.1.2, the Planning Act 2008: Guidance on the pre-application process dated March 2015: "For the pre-application consultation process, applicants are advised to include sufficient preliminary environmental information to enable consultees to develop an informed view of the project", and in Vol. 3 paragraph 1.1.3 the PINS Advice Note 7: "A good PEI document is one that enables consultees (both specialist and non-specialist) to understand the likely effects of the Proposed Development and helps to inform their consultation responses on the Proposed Development during the pre-application stage." Given the concerns raised above, that the information provided in Stage 3 and the PEIR is insufficient and incomplete, the Councils do not agree that the documentation provides sufficient preliminary environmental information to enable them to understand the likely environmental impacts of the Proposed Development. Despite this, the Councils welcome that a PEIR has been produced, attempting to provide a comprehensive overview of areas that should be assessed, while also highlighting gaps in the assessment to date.
37. There are many references in the Stage 3 documents to 'ongoing assessment' and 'further planned work' but at this late stage we are very concerned that this will leave little time to appropriately consider the results and assess the options for avoidance and/or mitigation. The PEIR provided as part of the Stage 3 consultation does at least provide a reasonably comprehensive framework for that ongoing assessment, albeit there is a lack of substantive content in many areas.
38. The Councils note that a Landscape and Visual Impact Assessment (LVIA) process is still ongoing (as at Stage 2) and will be reported as part of the Environmental Impact Assessment (EIA). Only once this is completed by EDF Energy, we will be in a position to fully understand the visual impacts from key viewpoints in the surrounding landscape. The scope of this response to matters of landscape and visual impact is inevitably limited by the fact that the LVIA remains uncompleted to date.
39. It remains the case therefore that it is difficult to comment in any real detail on many aspects of the environmental impacts of EDF Energy's proposals. The Councils expect to see and have had the time to assess a fully completed EIA before being able to agree any statements of common ground with EDF Energy.

**Table 6.1: Summary of the Significance of Potential Strategic Sustainability Effects**

Sustainable Development Themes:	Significance of potential Strategic effect at each Development stage:		
	Construction	Operation	Decommissioning
Air Quality	-	-?	-?
Biodiversity and Ecosystems	--?	--?	--?
Climate Change	-	++	-?
Communities: Population, Employment and Viability	+	+	0
Communities: Supporting Infrastructure	-	-	-
Human Health and Well-Being	+	+	+
Cultural Heritage	-	-	-
Landscape	--	--	0?
Soils, Geology and Land Use	-	-?	-?
Water Quality and Resources	-	-	-
Flood Risk	-	-	-
<b>Key: Significance and Categories of Potential Strategic Effects</b>			
<b>++</b>	Development actively encouraged as it would resolve an existing sustainability problem; effect considered to be of regional/national/international significance		
<b>+</b>	No sustainability constraints and development acceptable; effect considered to be of regional/ national/international significance		
<b>0</b>	Neutral effect		
<b>-</b>	Potential sustainability issues, mitigation and/or negotiation possible; effect considered to be of regional/national/international significance		
<b>--</b>	Problematical because of known sustainability issues; mitigation or negotiation difficult and/or expensive; effect considered to be of regional/national/ international significance		
<b>Uncertainty</b>			
<b>?</b>	Where the significance of an effect is particularly uncertain, for example because insufficient information is available at the plan stage to fully appraise the effects of the development or the potential for successful mitigation, the significance category is qualified by the addition of '?'		

*Local principles and the mitigation hierarchy*

- To reflect the importance the Councils and partner agencies place on the environment locally, we developed (with local partners) in 2014 a set of principles documents, for environment and other areas, that set out what we expect to see from EDF Energy, as a responsible developer, as they develop their proposals. These can be found on the East Suffolk Councils website at <https://www.eastsuffolk.gov.uk/planning/sizewell-nuclear-power-station/sizewell-c-ecology-access-design-estate-and-skills-principles/>.

41. These important documents will continue to frame our approach as to whether the Councils feel that environmental proposals, particularly in the thorough application of the mitigation hierarchy, including compensation and enhancement, are adequate in relation to the Sizewell C project.
42. Given the high environmental sensitivity of the development site in a landscape and natural environment of national and international importance and sensitivity, EDF Energy must seek to deliver Sizewell C in a manner which can be described as an environmental exemplar.
43. Where EDF Energy's proposals and approach to mitigation fail to meet the highest standards, we expect in such a sensitive location, the Councils will require robust and open discussions with and commitment from EDF Energy regarding mechanisms for compensating and enhancing the area. We will continue to work with EDF Energy and other local stakeholders to avoid environmental impacts wherever possible, and to minimise and fully mitigate those that cannot. In light of the proposals contained in the Stage 3 consultation however, the probability of extensive and severe residual impacts from this development appear certain.
44. Understanding the full extent of impacts and mitigation options will be vital in agreeing that EDF Energy has made full and proper use of the mitigation hierarchy. It is therefore disappointing that at this late stage the proposals still do not provide sufficient information to enable the Council's to reach a view as to whether EDF Energy's proposals look acceptable in ecological or landscape terms, for either local, regional, national or international features.
45. With regard to compensation measures, EDF Energy is asked to consider the existing Section 106 agreements that the Councils have in place for residual impacts associated with EDF Energy's Sizewell B dry fuel store and for the Galloper Offshore Wind Farm Ltd sub-station. While the severity and spatial scale of the residual impacts we currently anticipate from the Sizewell C proposals far exceeds these previous developments, the Councils would note that the model itself is working successfully. We would not be seeking a direct replica funding mechanism for this development but a bespoke model addressing the significant impacts the construction and operation phases will have on the natural environment.
46. The Councils have specific statutory duties under section 85 of the Countryside and Rights of Way Act 2000 to conserve and enhance the Natural Beauty of the AONB and under section 40 of the Natural Environment and Rural Communities Act 2006 to conserve biodiversity.
47. We are pleased that the Stage 3 consultation redresses the omission at Stage 2 of any reference to the AONB Natural Beauty and Special Qualities document, which EDF Energy commissioned and developed in consultation with the Councils and the AONB Partnership. EDF Energy needs to have regard to the special qualities referred to in this document when considering the impacts of its development on the AONB.
48. We note that the proposals for the operational buildings for the main development site include improved design and layout of permanent, non-nuclear operational buildings (see from paragraph 468 onwards). However, the proposals at Stage 3 also introduce overhead cables carried by four additional tall pylons on the site, as well as additional developments within the AONB, at Goose Hill and as part of Sizewell B relocated

facilities. More detailed comments can be found in the main development section, but the Councils would like to highlight the following conclusions:

49. The Councils concur with the conclusion in the PEIR that there will be significant residual adverse effects on landscape character and the special qualities of the AONB resulting from the main reactor site. Notwithstanding the improved layout and design of permanent operational buildings on the main site, we remain of the view that the proposal, sited as it is in a landscape of national importance and sensitivity, will have significant residual effects on the character of that landscape and the special qualities for which it is designated as an AONB and in doing so will undermine the purpose of that designation. The introduction of pylons further exacerbates this. The Councils urge EDF Energy to do everything possible to avoid and reduce the visual impact of their development.
50. We are clear that there will be impacts from the development that are residual and cannot be mitigated. EDF Energy is expected to provide substantial 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. The Councils would like to discuss the governance of such a fund. It should be stressed that compensation should only be considered after having exhausted options to avoid or mitigate impacts.

#### *Cumulative impacts with SPR and NGV proposals*

51. Since the Stage 2 consultation, the baseline conditions around the development site have changed. EN-6 Vol II identified that the Sizewell C project alone posed a risk to the purposes of the AONB designation. The addition of pylons and the proposals for Goose Hill (new training building and outage parking) add to this risk, but more significantly the likely 'in combination' effects of the proposal with the offshore elements of the East Anglia Two offshore windfarm adds significantly to the potential damage to the purposes of designation. The Section 42 consultation for East Anglia Two identifies that the windfarm proposal is anticipated to have significant impacts both visually and on the character and special qualities of the AONB. At the time of publication of the Stage 3 documentation there was not the detailed information available for EDF Energy to carry out an in-depth cumulative assessment of Scottish Power Renewables proposals with their own. However, Scottish Power Renewables have since published their Section 42 consultation and we expect a detailed cumulative assessment of their proposals in combination with EDF Energy's proposals to be within the DCO application for Sizewell C.

#### *Landscape and Ecology Management Plan*

52. There is frequent reference in the PEIR to a Landscape and Ecology Management Plan (LEMP) as mitigation for a range of impacts on wildlife during the operation of the site, but we have not seen this and cannot assess its adequacy in addressing these, for some of which we still lack the basic evidence from EDF Energy to justify their assessment. Bats are a case in point. As EDF Energy is aware, there are significant populations of rare bat species using the main construction area and associated woodland and hedgerows. Given the significant challenges the development undoubtedly faces in managing impacts on bats, we look forward to hearing more about how EDF Energy will

avoid, minimise, mitigate, compensate and enhance the bat population on this site and in the surrounding area (given its importance) both prior to, during and post-construction.

53. Generally, the summary of effects on terrestrial ecology and ornithology provided in the PEIR requires considerable further evidence and there are numerous references to ongoing assessment to inform the Environmental Statement that will be required.
54. The Councils expect to see a scheme of offsite planting included as part of the proposal in order to minimise landscape and visual harm where such harm is identified through the LVIA process. The Councils expect development of the main site and accommodation campus to be accompanied by a Construction Environment Management Plan (CEMP) to minimise impacts on landscape and amenity during construction of the project. The proposals for the mitigation of the Operational phase of the main site should be captured in a LEMP. Both these documents should accompany the DCO.
55. Where design issues are not finalised at consent stage, the Councils expect such details that include design, colour, lighting and finishes to be secured by appropriate requirements and processes in the DCO. Optimal mitigation should not be compromised by value engineering processes.
56. To date the Councils have been unable to engage in effective discussion on the assessment of impacts. The proposals at Stage 3 introduce significant new elements and impacts that will need to be fully considered as part of the LVIA process. There is also a need to resolve issues regarding the assessment and representation of construction effects as part of the LVIA.

#### *Marine ecology & water quality*

57. We are aware of potentially complex interactions between the construction and operation of the proposed facility and the health of the marine ecosystem in this area. It is important that data being used to assess impacts and possible mitigations is as up to date as possible. We note that impacts upon birds such as three species of Tern, Lesser Black-Backed Gull and Red Throated Diver are still to be assessed. The Councils are engaged in the parallel HRA process, though yet to be assured that this is scoped adequately.
58. Further assessment and identification of mitigation strategies for release of pollutants during construction and operation, including the detailed monitoring strategy and the mitigation and the compensation that will be available if required is expected.

#### *Natural environment impacts of associated developments*

59. The Stage 3 consultation contains some additional information on proposed development associated with the construction and operation of Sizewell C. In general terms there is a paucity of baseline environmental information provided in relation to these proposed developments and therefore any comments from the Councils at this stage are very preliminary even where they are possible at all. The assessments given in the PEIR appear to be largely based on desk-based exercises with very little actual field survey work to underpin them. As previously stated, it is extremely worrying to the Councils that this work has not been undertaken (or if it has, not been shared) at such a late stage of developing these proposals.

60. In terms of habitats and species, the need for a detailed assessment of impacts and how they will be mitigated applies to almost every aspect of the associated developments presented. This includes all road and rail schemes under either transport strategy, the Park & Ride facilities, the Freight Management Facility, and the wider highway improvements.
61. As well as the expansion of the footprint of the permanent development at and around the main site since Stage 2, there has also been a significant increase in the wider permanent works associated with the scheme, specifically the two road schemes. Whilst this potentially benefits scheme delivery it does significantly increase the landscape harm of the scheme overall. It is notable that chapter 13 of the PEIR recognises these effects specifically in relation to some European Protected Species. In landscape terms the overall extent of harm and loss or severance of characteristic features should also be addressed as part of the mitigation for the whole project. It is anticipated that remedial planting in mitigation of adverse impacts on landscape character should be very much aimed at restoring and enhancing landscape character wherever possible.
62. Detailed natural environment comments on associated developments can be found in the relevant sections below.

63. In summary, given the high environmental sensitivity of the development site in a landscape and natural environment of national and international importance and sensitivity, EDF Energy must give high priority appropriately to avoid, mitigate or as a last resort compensate any negative environmental impact of the development. EDF Energy must seek to deliver Sizewell C in a manner which can be described as an environmental exemplar.
64. The Councils are thus very disappointed that at this Stage 3 consultation, significant aspects of the potential environmental impacts of the proposed development have still not been properly assessed or evidenced. The Councils stress that the significant residual effects on the character of that landscape and the special qualities for which it is designated as an AONB will undermine the purpose of that designation.
65. In particular, EDF Energy must address the following concerns:
- The Councils are not content with the proposal of four pylons for the development site, with their considerable detrimental impact on the AONB, and urge EDF Energy to avoid introducing pylons on site and generally reduce the visual impact of their development on the AONB;
  - Significant aspects of the potential ecological and landscape impacts of the proposed development have still not been properly assessed or evidenced; EDF Energy must undertake further significant work to survey, understand, quantify, qualify and mitigate impacts of the development on the ecology;
  - Natural environment impacts of associated developments have not yet been assessed, or assessments not yet been shared;
  - EDF Energy need to consider the in-combination effects of the environmental impacts of its proposals and those of Scottish Power Renewables and National Grid Ventures.
66. The Councils note that there will be impacts of the development that are residual and cannot be mitigated. EDF Energy is expected to provide substantial 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 highly valued by the local community and visitors. The Councils expect to discuss with EDF Energy the governance of such a fund. It should be stressed that compensation should only be considered after having exhausted options to avoid or mitigate impacts.

### **Historic environment**

67. The general approach to above and below ground heritage throughout the document is reasonable; detailed comments relating to individual elements of the scheme can be found in the relevant sections below.
68. All elements of the scheme which involve groundworks should be scoped in for archaeological assessment. There are a number of amendments to previous proposals as well as additional development proposals since Stage 3 which are not yet covered by an archaeological evaluation Written Scheme of Investigation (WSI). Whilst archaeological evaluation has now commenced for some development areas, there is still an extensive amount of archaeological assessment ongoing and as such the impact



of the development cannot yet be fully ascertained and mitigation strategies for each element of the proposal have yet to be determined. WSIs are not yet in place for all required evaluation works.

69. Specific mitigation strategies will need to be designed around detailed plans and agreed with the Councils. Where archaeological Historic Environment Records (HER) sites are referred to going forward in reports, EDF Energy should use parish codes and not Monument Suffolk (MSF) numbers.
70. EDF Energy needs to provide further information regarding landscape enhancement schemes (including tree planting) and ecological mitigation schemes, as well as any additional utilities schemes associated with this development (especially any works beyond current red line boundaries) 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.

71. In summary, whilst the general aspirations to above and below ground heritage throughout the document are reasonable, the Councils expect archaeological assessments for all elements of the scheme which involve groundworks to ensure the aspirations are delivered.

## **Environmental Health and Protection**

72. This section discusses environmental health and protection impacts across the scheme. Under the transport strategy chapter, noise, air quality and vibration impacts of transport impacts are discussed in further detail.

### *Air Quality*

73. In accordance with the Local Air Quality Management requirements placed on the Council by the Environment Act 1995, Suffolk Coastal District Council examines all relevant planning applications likely to have an impact on local air quality. As part of this process the Councils require developers to provide air quality assessments in order to determine the impact of the development and whether any of the Air Quality Objectives are likely to be exceeded.
74. An Air Quality survey has been undertaken utilising a screening distance of up to 500m from the closest site boundary and the results have been discussed with the Councils. Currently all receptor locations are compliant for the atmospheric concentration of the seven pollutants included within the 'Local Air Quality Management Regime' namely; carbon monoxide; nitrogen dioxide; benzene; 1,3-butadiene; lead; sulphur dioxide; and particulate matter (PM10). (Note: for these purposes Sizewell Beach is also to be included as a relevant receptor location for pollutants objectives with averaging times of 15 minutes and 1 hour.)
75. 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 used for each specific activity.

76. Atmospheric concentrations of PM10 arising from all potential construction works, loading operations and vehicle movements shall also be predicted at the nearest relevant receptor locations and submitted for the purposes of the Local Air Quality Management Regime. The predicted concentrations for each receptor shall be formatted for comparison with the objectives included in the Air Quality (England) Regulations 2015 and Air Quality Standards Regulations 2010. If at any time any of the Air Quality Standards or Objectives in the Air Quality (England) Regulations 2015 and Air Quality Standards Regulations 2010, set for Local Air Quality Management, are predicted to be exceeded by the above-mentioned activities, further assessment will be required. This may include monitoring at relevant receptor locations, detailed computer modelling and investigations of solutions to reduce pollutant concentrations.
77. There are no detailed assessment results for air quality presented in the Stage 3 Consultation documents on which the Councils can comment. We expect to see detailed assessment findings for all sites listed in the documents (for the relevant pollutants of concern):
- Main development site;
  - Green Rail route;
  - Other Rail Improvements including the level crossings;
  - Sizewell Link Road;
  - Theberton bypass;
  - Two-villages bypass;
  - Northern and Southern Park and Ride sites;
  - Freight Management Facility options;
  - Yoxford roundabout; and
  - Highway Improvements to Wickham Market.
78. We are very concerned that there appears to be no reference to air quality assessments required for the affected road network as a whole. Much of the chosen route for Sizewell C HGV traffic, via the A12 and B1122 has receptor locations in close proximity to the kerbside. We will require detailed air quality assessment of all roads impacted by Sizewell C traffic during successive stages of the project to determine the likelihood of exceedance of any of the Air Quality Objectives at relevant receptor locations. This should include particularly vulnerable receptors such as schools, for example, Farlingaye High School is adjacent to the A12.
79. Current guidance produced for Local Air Quality Management with respect to PM2.5 tasks local authorities with tackling local emissions alongside other pollutants. The Government's Clean Air Strategy 2019, launched in January, focuses on a number of pollutants including fine particulates – PM2.5. The Strategy advises that the Government will publish evidence early in 2019 to examine what action would be needed to meet the World Health Organisation annual mean guideline limit of 10 µg/m<sup>3</sup> and use this to set a new, ambitious, long-term target to reduce people's exposure to PM2.5. With this in mind, we will require emissions of PM2.5 to be considered for all aspects associated with

the Sizewell C development. The Stage 3 consultation documents do not refer to PM2.5 in any great depth.

80. The only anticipated air quality impact from site operations relate to the use of the stand-by diesel generator, which will be regulated by Environmental Permit. Full details of the generator type, location, chimney stack height requirements and emissions shall be submitted within the EIA.

#### *Air quality - potential mitigation*

81. 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.
82. 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.
83. 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.
84. The documents advise that buses will run from Ipswich and Lowestoft to transport the workforce during peak years. This is to be commended. We ask whether these buses would also be a useful asset either side of peak years to reduce associated traffic flows?
85. We request that engines used for rail movements are low emission.
86. 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.

#### *Environmental Protection*

87. A full EIA and 'safety case' will need to be presented to demonstrate that the presence of two new nuclear reactors can be positioned in this location on the Suffolk coast without presenting a health risk to the local community.
88. A full and detailed working framework needs to be provided detailing the following information:
  - Site design and offsite facilities (i.e. beach landing facility, rail head, road network improvements etc.) once the various options have been determined;
  - Security;
  - Frequency and details of outages;
  - Waste storage facilities for the life of the site (i.e. Interim Spent Fuel, Intermediate Level Waste and Low Level Waste);
  - Adverse impacts on existing Noise and Air Quality parameters; and
  - Protection against flood risk and contamination.

### *Environmental Health during construction*

89. An EIA will need to detail the programme of civil engineering works which are to be undertaken on site during the 'Construction Phase' and provide the following information:
- The location of all major engineering tasks to be carried out (e.g. excavation work, dredging, dewatering, piling, stockpiling of soil/peat, road and bridge building, rail line construction, demolition of existing buildings, use of explosives, construction of new buildings etc.);
  - The likely timing of these tasks (e.g. start and end dates where possible);
  - Approximate quantities of all excavated materials to be stored on site or at offsite facilities, including how this material will be transported away from the site;
  - Approximate quantities of all incoming inert materials to be stored on site or at offsite facilities, including how this material will be transported to the site;
  - Full details of transportation infrastructure including the construction of any beach landing facility, new rail line and rail head, haul and access roads; and
  - Where multiple forms of material transportation are to be used; the proportions of materials to be moved via each route should also be indicated.

### *Hours of working*

90. The EIA will need to detail the hours of working both onsite and at any off-site facilities and the timing of all anticipated transportation movements to and from the site or to any offsite facilities. It is noted that 24 hour working shift patterns are likely to be used and consideration shall be needed to mitigate noise from night time and weekend works, in particular coastal operations, piling, rail and road movements.

### *Noise and vibration during Construction*

91. It is understood that a detailed background noise survey is currently being undertaken at some 39 measurement locations surrounding the development site and further noise and vibration measurement points close to proposed road and rail developments. Discussions have taken place to agree the noise and vibration measurement protocol in line with NPS's EN-1 and EN-6 and updated British Standards, together with agreeing the impact assessment methodology and criteria. The Stage 3 consultation documents do not currently provide sufficient noise or vibration data or fully mitigate the impact of the construction works, greater detail will need to be presented within the EIA. Where noise or vibration from site construction working is anticipated to have a significant or adverse effect on occupiers of nearby residential properties, based on the prevailing background noise levels; the EIA shall detail all such construction and demolition works (e.g. coastal dredging and piling, access and haul road development, bridgeworks, earthworks, beach landing facility construction, rail line and rail head construction etc.). Anticipated noise levels from site operations such as: any use of explosives, piling rigs, steel erection, vehicular movements and various plant (e.g. diggers, bulldozers, cranes, excavators, riveters, mixers, pneumatic breakers, drills, de-watering pumps, boring equipment, compressors, generators etc.) shall be presented, together with appropriate noise mitigation measures:

- At source;
  - By way of barrier or shielding; and
  - Any other form of mitigation.
92. The EIA shall also detail the degree of noise or vibration reduction likely to be achieved by the mitigation measures proposed, by way of comparison with the existing background and ambient noise levels, measured as part of this consultation process. All proposed methods of noise or vibration attenuation shall be aimed to achieve 'Best Environmental Practice'.
93. All transportation movements or essential construction works (e.g. dewatering, dredging etc.) which may be undertaken during the evening or at night should be particularly highlighted as these may cause loss of sleep. Mitigation will be particularly important in these circumstances.
94. Any other relevant acoustic or vibration data in respect of confined tones or low frequency noise propagation which may impact on any noise sensitive properties should also be made available within the EIA. It is possible the Councils will control construction site noise by implementation of Section 60 of the Control of Pollution Act 1974 or by prior consent (if applied for) under Section 61 of the Control of Pollution Act 1974.

#### *Contaminated land and soils*

95. The Stage 3 consultation does not provide any additional information to that presented within the Stage 1 and Stage 2 Pre-Application documents. A previous site survey including samples from some 150 locations across the Sizewell C site has been undertaken for the presence of contaminated material. This survey has not indicated any significant forms of contamination and as such the site remains in a low to very low category of potential risk for contamination. Additional sampling will need to be undertaken during site excavation and any identified contamination will need to be safely removed or encapsulation on site.
96. In order to ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors, a robust discovery strategy will need to be developed for the event unexpected contamination is discovered or suspected.
97. In the event contamination is encountered or suspected it should be reported immediately in writing to Suffolk Coastal District Council (the Local Planning Authority) and an investigation and risk assessment must be completed by competent persons and conform with prevailing guidance (including BS 10175:2011+A1:2013 and CLR11). If remediation were to be required a detailed Remediation Method Statement should be prepared and agreed in writing with Suffolk Coastal District Council prior to implementation.
98. Details of all material (e.g. soil, peat, contaminated material etc.) which are to be stockpiled, relocated, removed from site for disposal purposes or safely encapsulated on site shall be recorded and notified to both the Environmental Protection Team at Suffolk

Coastal District Council and the Environment Agency. Validation shall be required following this remediation action to indicate the site is suitable for its new specified use.

99. Consideration must also be given in the event contamination occurs in the course of the development through such mechanism as a pollution event. Detailed evidence in the form of certification to 'CLEA standard' will need to be supplied to indicate the source and suitability of all imported material used on site.

#### *Lighting*

100. The Stage 3 consultation does not provide any additional information to that presented within the Stage 1 and Stage 2 documents. The EIA shall detail; the location, height, design, sensors and luminance of all construction site floodlighting and all mitigation measures used to:
- Limit obtrusive glare to nearby residential properties; and
  - Minimise sky-glow.
101. The mitigation measures shall also indicate the extent of light reduction likely to be achieved.

#### *Water quality*

102. A significant number of activities (dewatering, excavation, piling, coffer dam construction etc.) have the potential to adversely impact the hydrology and water quality of the area. There are private water supplies that we are aware of, and undoubtedly supplies that we are not, in this area which may be detrimentally affected by the scale and scope of these activities.
103. The EIA shall detail any potential impact on the hydrology and hydraulic continuity of the area which may adversely affect private water supply quality. Mitigation measures to protect any water source should be identified where impact is anticipated.

#### *Noise and vibration during site operation*

104. Projected levels for operational site noise from the newly constructed Sizewell C power station have been calculated at all nearby noise sensitive properties and indicate that no significant noise impact is likely. Additional noise mitigation measures are therefore considered unnecessary. Additional consideration may be necessary for short term events (e.g. grid reconnection's, stand-by diesel generator use etc.) These shall be calculated and represented as a LAeq (5 minute) value at all nearby noise sensitive properties. Where noise impact may be considered significant, noise attenuation or time limitations shall be specified to achieve 'Best Environmental Practice'.
105. There are no significant noise or vibration issues identified from road or rail transportation movements once the site is in operation. A proposed 'Complaints Procedure' detailing who will undertake investigations of noise complaints on behalf of the site operators and the scope of amelioration in the event that complaints are justified shall be provided.

#### *Radioactive discharges*

106. The EIA shall identify and compare baseline/existing radiological data with any projected data for the new Sizewell C site. Detailed information should be provided as to the integrity of all radioactive material storage and any radioactive waste packaging

facility on site. This should include comments on the suitability of storage over the proposed 60-year life of the site.

107. Any intended off-site storage or disposal facility of radioactive waste, whether interim or permanent should be detailed in full including; location, capacity (together with the radiological significance and justification for storing this type of fuel off site). This may include any re-use of Sizewell A or B Stations for spent fuel or radioactive waste storage.
108. The issues surrounding the utilisation of Sizewell C for the storing of radioactive waste derived from other sources, together with any cumulative impact of increased radioactive discharges that may arise in such circumstances, should be considered within the EIA.
109. Any power-lines/cabling alterations to be undertaken on site, which may adversely affect occupiers of nearby residential properties, should be detailed together with any likely increases of the electro-magnetic radiation field.

#### *Other Ancillary Environmental Protection Matters*

110. The EIA shall detail all non-radioactive wastes stored or disposed of on site. The material should be identified and categorised so as to indicate 'Best Environmental Practice' is being taken, (e.g. fuel oil stored in double-bunded tanks etc.).
111. A detailed health and safety risk assessment should be provided to cover public safety for all access along the shore line and public areas surrounding the site once Sizewell C is operational.
112. Information shall be provided as to the Emergency Measures, which may be necessary in the event of coastal flooding, war, civil emergencies, societal breakdown or other major disasters. The EIA should also indicate whether there is any feasibility in reusing waste heat generated by both Sizewell B and C Stations rather than disposing of this to sea.

#### *Decommissioning*

113. The EIA shall as far as possible, detail a programme for the decommissioning and final site clearance of the site, including:
  - The types of works that will be undertaken;
  - The removal of existing structures;
  - The disposal of all remaining waste material; and
  - The suitability of the site for restoration or future use.

114. In summary, for a number of environmental protection aspects detailed in the section above, EDF Energy have not made the necessary information available for the Councils to make an informed judgement on its proposals. The Councils expect EDF Energy to provide:

- Detailed air quality assessments for all parts of the development, as well as for affected road network, (to date no detailed assessment results for air quality are available);
- A 'safety case', with a full and detailed working framework, to demonstrate that the presence of two new nuclear reactors can be positioned in this location without presenting a health risk to the local community;
- Comprehensive noise and vibration data and appropriate mitigation proposals to fully mitigate the impact of the construction works and operation;
- a robust discovery strategy for contamination for the event unexpected contamination is discovered or suspected;
- Detail on the construction lighting strategy and mitigation strategies aiming for light reduction;
- Assessments of any potential impact on and mitigation measures for the hydrology and hydraulic continuity of the area which may adversely affect private water supply quality;
- Detailed information as to the integrity of all radioactive material storage and any radioactive waste packaging facility on site.

115. The Councils will continue to work with EDF Energy on identifying the key areas of concern and potential avoidance and mitigation strategies to ensure the environmental protection aspects of the proposal during construction and operation of the power station can be avoided or mitigated for.

### **Coastal impacts**

116. Please note that coastal impacts are commented on as part of the response to the proposals of sea defences and beach landing facility, in the Main Development Site section of the report (from paragraph 533 onwards)

### **Inland Flood and Water Management**

117. Suffolk County Council is the statutory Lead Local Flood Authority (LLFA) and therefore the Councils need to be content with the proposals in respect of impacts on soil and agriculture, geology and land quality, groundwater, surface water, and flood risk.

118. NPS EN-1 sets out the Flood Risk requirements for developers (NPS EN-1 Section 5.7) which include:

- Provision of a Flood Risk Assessment (FRA) (with minimum requirements for the FRA stated);
- Proposals should take account of policy on climate change adaption;



- Proposals need to be in line with any relevant national and local flood risk management strategy – particular attention should be paid to Appendix A of the Suffolk Flood Risk Management Strategy;
  - Priority has been given to the use of sustainable drainage systems (SuDS) – detailed further in NPS EN-1, 5.7.19.
119. NPS EN-1 also sets out requirements for water quality and water resources (NPS EN-1, Section 5.15).
120. The following comments relate to the wider project area or are relevant to more than one site.
121. As per NPS EN-1, SuDs must be prioritised. The surface water drainage hierarchy must also be adhered to. The Councils are concerned that a recurrent theme throughout the review of the submitted documentation is that SuDS have not been prioritised and due consideration has not been given to the surface water drainage hierarchy. There are a number of examples for this, which are raised in the detailed comments in the relevant sections for each site. Local SuDS guidance can be found in Appendix A of the Suffolk Flood Risk Management Strategy.
122. Whilst the Councils are generally content that the right receptors have been assessed, they are not convinced that the potential impact on these receptors can be appropriately assessed without detailed mitigation information. An example of this is 'incorporating SuDS' into the design. This could be a range of measures, not all of which would be suitable or sufficient. Without further details it is not possible to fully assess the effects and/or any residual effects.
123. Although not clearly stated, it would appear the current proposals are to discharge the majority of surface water generated by the Main Development Site out to sea using a combined outfall. This is not a SuDS approach. There could be potentially negative ecological implications from removing this source of groundwater recharge. Furthermore, it is unclear whether a sufficient water supply has been identified for the site. The re-use of surface water must be considered - either on site or for adjacent landowners that rely on irrigation. Any potential legacy benefits for farm irrigation would be welcomed but would require discussions with local farmers.
124. The hazard presented by surface water pollution should be assessed using the CIRIA SuDS Manual Simple Index Method for all sites other than adoptable highways. Adoptable highways can use methods outlined in the Design Manual for Roads and Bridges (DMRB).
125. Locations with regular HGV movements or HGV parking areas will be required to have additional pollution control measures. Fuel and oil storage areas will also require additional mitigation. In order for a SuDS component to be considered as a mitigation measure it must be designed fully in accordance with the CIRIA SuDS Manual design criteria.
126. Many decisions regarding flood risk are proposed in Stage 3 to be informed by the FRA. This is an acceptable approach which will further inform potential mitigation measures. Consideration must be given to the potential increase in off-site flood risk. Whilst bunding will help to ensure surface water does not flow off site, it will also prevent surface water flowing on to the site. In some instances, bunding will intersect

identified flood flow paths. These flow paths must be maintained. Diversion of a flow path is highly likely to increase flood risk off site.

127. Climate change (peak rainfall intensity) allowances for permanent works must be 40%. For temporary works, a climate change allowance of 10% is acceptable.
128. All modelling must use Flood Estimation Handbook (FEH) data.
129. Design criteria for proposed road improvements will be specified by the Councils. Surface water exceedance routes for all temporary and permanent drainage infrastructure must be assessed. This is especially important where existing ground levels are being altered by earthworks.
130. Large earthworks will be required as part of the construction phase, including cut and fill. It should be noted that SuDS must not be located in fill. Furthermore, the location of SuDS in cut must consider the clearance to groundwater below the base of infiltration. Cutting into the superficial aquifer has been proposed at multiple locations. This could present both long- and short-term hazards to groundwater and the proposed infrastructure which haven't been adequately assessed.
131. It is apparent that the CEMP is going to contain key details of mitigation measures for all sites. Thus, without having sight of the CEMP it is not possible to review the suitability of all mitigation methods.
132. It is proposed to store materials away from watercourses. This mitigation measure is encouraged but is likely to be required alongside further mitigation measures to prevent silt laden run-off from entering watercourses. 'Industry standard methods' are proposed to control this run off. This is very vague and will require further details to be submitted.
133. Remediation of soils will be required at multiple locations (for example, due to consolidation from stockpiling or due to a temporary change of use such as freight management facilities, green rail and park & ride sites). This remediation is required to return the soils to their original characteristics to prevent any fundamental long-term change in the site's drainage. Failure to sufficiently remediate soils may result in an increase in surface water run-off, an increase in soil erosion and a decrease in water permeating into the underlying aquifers. Remediation will be required for haul roads and contractors' compounds where contamination must also be a consideration. These matters are generally covered in the PEIR documents however capping is a listed remediation method which would drastically alter the sites long term drainage characteristics.
134. Multiple locations determine there to be limited connectivity between the superficial and bedrock aquifer. There is no detailed justification provided to support this approach. In some locations, new roads are proposed to be located in cut, encroaching on the superficial aquifer. A comprehensive assessment will need to be completed to demonstrate that groundwater is not at risk of pollution. Equally there will need to be evidence to demonstrate the proposed infrastructure is not at risk from groundwater flooding. Thus far, there is insufficient evidence to demonstrate this.
135. Infiltration rates have been provided for the Green Rail route but no other options. It is surprising that this information is not available. It is impossible to assess the suitability of any drainage strategy without this information. This is compounded in locations

which are entirely reliant on infiltration as the method of surface water discharge (LEEIE and Yoxford roundabout). Given there is no apparent alternative for surface water discharge at these locations, a failure of infiltration would presumably result in the site not being suitable for the proposed use. Half drain times for a 1:100 + Climate Change event will need to be kept below 24 hours. If this is not possible then storage volume for an additional 1:10 storm event will be required.

136. Any drainage to be installed that will remain once construction has been completed must be identified with the party responsible for maintenance clearly identified. This includes SSSI crossing, access roads, any drainage for remediated fields/storage areas and any other applicable areas.
137. The Councils also expect evidence that the development has no detrimental impact on potable water supply in the area. We understand from Essex and Suffolk Water that they do not believe there to be an issue, however we expect to see such evidence from EDF Energy.

138. In summary, EDF Energy needs to provide detailed proposals on drainage and dealing with surface water. Proposals must include provision for SuDS on all sites. Assessments on potential impacts on ground water and impacts on potable water supply in the area need to be provided.

### **Construction materials and spoil and soil management implications**

139. Through the spoil management strategy proposed by EDF Energy, it is assumed that much of the fill material would be sourced from within the main site itself. The Stage 3 documentation includes a general overview of the “material quantities” (Vol. 1 Table 5.2 & paragraph 5.4.23) including non-aggregate materials. However, the consultation does not provide any indication of the materials balance or answer how much additional material is required to be brought in at worst case, if the borrow pits will be enough for the materials required, if there will be surplus materials, and what happens with any spare materials.
140. The Suffolk Minerals & Waste Local Plan Submission Draft (June 2018) makes provision for sand and gravel to meet demand up until 2036 based on an average of the last ten years sales of 1.112 Million tonnes (Mt) (December 2017 figure). It has been calculated that at the present level of sales the existing permitted reserves would run out in July 2028. Therefore, sites containing a further 14.770 Mt have been identified in the Plan as future working areas. It has been calculated that approximately 2.59 Mt within these sites would be left unworked at the end of Plan period in 2036 based on the continuation of the existing level of sales.
141. The Minerals & Waste Plan does not preclude non-designated sites from gaining planning permission. An early review of the Plan could be undertaken if necessary if a significant number of new sites are required within Suffolk.

<https://www.suffolk.gov.uk/council-and-democracy/consultations-petitions-and-elections/consultations/minerals-and-waste-local-plan-consultation/#SMWL>

(look under previous consultations tab)

142. We understand that much of the fill material is likely to be sourced from within the main site itself although this has not been evidenced to the Councils' satisfaction. It is unclear if the borrow pits will have the capacity for the unsuitable fill arising from the main construction. Additional quantities of suitable fill would most likely be sourced from the Suffolk or surrounding Counties. High quality aggregates such as limestone for use on the power station and granite for roads are not found in Suffolk and would need to be supplied by road, rail or indirectly by sea. We assume that some concreting aggregates would be most likely be sourced from Suffolk and the surrounding Counties.
143. The level of detail provided in respect the amount, type and source of aggregates required is unspecific and therefore it is not possible to draw any reliable conclusions as to ability of local, regional and national reserves to supply the project.
144. The Councils have tried to work out the capacity of the borrow pits. Publicly available information on the geology of the area is limited. However, British Geological Survey (BGS) data from a borehole near Upper Abbey Farm provides the following:
- Borehole from 60ft O.D with water at 51ft depth with blowing sand (Crag Deposits) although data above 52 ft is not provided.
  - To the west a borehole near Theberton indicates 30ft of Glacial Till (Clay) above another 30ft of Glacial Sand over Crag. Ground water levels were recorded as stabilising at 31ft depth.
145. Based on this data and the area of the borrow pit around 750,000 tonnes is available from this source. However, a proportion of this will be unacceptable and not usable. It appears likely that there will be a shortfall in space available to deposit the two million tonnes of unacceptable material from the main excavation. The borehole data available indicates that the majority of the deposits available are sand and that there is little coarser material such as gravel.
146. The Councils have serious concerns that the soil management plan for the main development and green rail option do not comply with national guidance on the storage of topsoil. Specifically, the height of the stockpiles and duration of the storage are considered likely to have a detrimental impact on the quality of the topsoil for reuse in the remediation phase. The Specification for Highway Works Series 200 Clause 602.10 states that topsoil shall wherever practical be used immediately after stripping and if not stored in stockpiles not exceeding 2m or other heights stated in contract specific Appendix 6/8. This clause and Series 600 clause 618 both state that topsoil should not be stored for more than two years. Guidance on the stripping and storage of topsoil in BS3882: 2015 shall be included in the management plan for stockpiling topsoil for all sites included the Associated Works. It may be that the remediation of the site to acid grassland post construction does not require top quality topsoil, but this is not demonstrated or explained in the submitted documentation and should be clarified further.
147. Further comments about the proposed spoil management strategy are included in the section on stockpiles and borrow pits (see from paragraph 610 onwards), in the Main Development Site chapter.

148. In summary, EDF Energy needs to provide further detail on its plans for construction materials, regarding the amount, type and source of aggregates required, to allow the Councils to draw reliable conclusions as to ability of local, regional and national reserves to supply the project, and to inform materials balance considerations as part of the transport strategy.

149. EDF Energy must clarify its soil management plan with regards to their strategy for topsoil storage.

(See also recommendations in paragraphs 631 and 632 regarding the spoil management strategy)

## **SOCIO-ECONOMIC STRATEGY**

150. The socio-economic chapter is surprisingly light in content given topic areas included within this subject area. The consultation includes several strategic proposals and opportunities in relation to the project but does not include significant detail in any of the areas.
151. EDF Energy considers that their development will put at least £100 million a year into the regional economy during peak construction and £40 million per year during its 60 years of operation. As part of their proposals, EDF Energy has the intent to ensure local people can access the jobs and benefits Sizewell C will bring, including through an education and skills strategy, supply chain opportunities, employment opportunities and through mitigation funds including a Tourism Fund, a Housing Fund and a Community Fund. There will be residual impacts of the development on the local community that cannot be mitigated. It should be noted that although the potential benefits of the Sizewell C development will be widely felt across Suffolk and beyond, the negative impacts requiring significant mitigation will be very locally felt in the area of East Suffolk where the development is focused. As such a Community Fund would be expected to compensate local communities for the construction phases and the lifetime of the building (including during the decommissioning phase). EDF Energy has not yet commenced discussions with the Councils in relation to any of these specified funds, or any other funds that may be necessary. The Councils fully expect to engage with EDF Energy in this area in the time period leading up to DCO submission.

### **Economic impacts**

152. Since Stage 2, and in order to prepare for Stage 3, the Councils have jointly funded an Economic Impact Assessment (EclA) to independently assess EDF Energy's proposals. Case studies used as part of the independent assessment included the Hinkley Point C new nuclear proposal and other large-scale infrastructure projects such as the Olympic Park in East London. The assessment also looked at the cumulative impact of Sizewell C being delivered at the same time as other infrastructure projects in Suffolk.
153. The EclA, which is available on the Councils' Sizewell C website ([www.eastsuffolk.gov.uk](http://www.eastsuffolk.gov.uk)), includes recommendations for mitigating actions. These include:
- investment in local workforce development;
  - commitment from EDF Energy and all supply chain businesses to the recruitment of local workers;
  - investment in training and workforce development to minimise any negative impact of displacement in the local economy;
  - prioritisation of recruitment of local workers into higher quality roles;
  - ensuring sufficient campus accommodation to manage the number of non-home-based workers in tourist accommodation;
  - support to local businesses to help them to identify supply chain opportunities and achieve accreditation to be able to win work in the supply chain;
  - investment in attracting inward investors to the local area; and

- investment in marketing and business support to the tourism sector to minimise the loss of visitors to the local area.
154. There are areas of EDF Energy's project assumptions that we support and agree with, these include:
- Use of a scenario-based approach to understand what the economic implications will be if the peak workforce required is higher than anticipated. Evidence from Hinkley suggests that EDF Energy's higher target is likely to be more realistic and we need to monitor and prepare for this scenario;
  - Recognition that this increase would need to primarily be met through Non-Home-Based Workers (NHB) and that this would create additional negative impacts on the local economy that will require further assessment and mitigation;
  - Recognition that without intervention most higher skilled roles will be filled by NHB; and
  - Recognition that subsistence rates of NHB are low and that the potential to realise local economic benefit from these workers is consequently limited.
155. There are issues not adequately addressed in the documentation and these include:
- EDF Energy's forecast of over half of the roles being homebased for over half of the construction phase (Vol.1 paragraph 4.2.15) may not be achievable, given the tight labour market and prevailing economic conditions; mitigation measures should take this into consideration;
  - The Stage 3 documentation does not consider the impact of additional pressures on the labour market, generated by other major construction projects likely to be ongoing at the same time including the construction of East Anglia One North and East Anglia Two offshore windfarm projects, Bradwell B, other power stations in England and Wales and sizeable engineering projects such as Crossrail 2. Without considering the impact of multiple projects, any mitigations may be inadequate for the local impacts;
  - Impact of Brexit is also likely to exacerbate labour market situation;
  - No information is given on likely wages to enable any forecasting / calculation of likely GVA (gross value added) benefit to the local economy; and
  - No information is given on likely duration of job roles throughout the construction programme.
156. Resulting from this we expect EDF Energy's follow-on actions to include the following:
- Without additional mitigation, evidence suggests that local economic benefits will be lower than anticipated whilst negative effects such as displacement are likely to be greater. It is therefore essential for the Councils to seek from EDF Energy early agreement of a robust and properly resourced mitigation plan to increase local economic benefits and reduce negative effects;
  - To develop a substantial and creative package of measures to support upskilling of local workforce. This needs to be formalised by the beginning of 2020 at the

latest, so that training programmes can be planned and delivered in time for a major recruitment drive;

- To develop clearly defined partnership strategies focussed on other potential areas of economic benefit such as inward investment and supply chain (see paragraph 163);
- To develop innovative schemes to encourage NHB to spend money with local retailers – initiatives such as noticeboard in the shared facilities such as campus, canteen facilities etc to enable local businesses to advertise direct to workers, bus link from the construction site to the town centre and local sports facilities, would be encouraged.

157. At Stage 2, the Councils raised concerns about the unambitious 36% Home-Based Workers (HB) target at peak, and our concerns that too many of these HB workers might be employed in lower skilled roles. The Councils expect to work with EDF Energy to agree and implement significant investment to ensure a substantial proportion of local residents can take on higher skilled and higher value roles within the project.
158. EDF Energy implies as part of their estimated HB/NHB workforce split, referencing Construction Industry Training Board research, that Suffolk has high mobility rates for construction workers and is therefore flexible enough to deliver the numbers of HB workers that are estimated. The Councils have concerns whether such a level of flexibility really exists.
159. At Vol.1 paragraph 4.2.12 EDF Energy indicates that higher skilled jobs will be mainly resourced from outside the area due to Tier 1 contractor preferences and local supply chain constraints. The Councils urge EDF Energy to provide greater investment in skills training (legacy first) and to set specific targets both for EDF Energy and their contractors to deliver a higher proportion of HB workers in higher skilled jobs.
160. Estimates given within the documents do not detail how the total HB/NHB workforce is split into nature of roles identified nor their duration or any comment on the potential to upskill and move from role to role during the construction phase. EDF Energy is requested to provide such estimates.
161. In case of a higher peak workforce scenario of 7900 + 600 (see from paragraph 199 onwards), EDF Energy assumes that the increase will be taken up by NHB workers except for associated development site roles which would be taken up by HB workers. The Councils are concerned that this would further increase the likelihood of HB workers primarily being employed in low-skilled jobs such as catering, housekeeping, security etc with little or no opportunity to develop into higher skilled roles. We expect a programme to be in place by EDF Energy and their contractors to ensure that HB workers are given time, training and opportunities to seek higher skilled work.
162. Overall Sizewell C represents a major investment in and a significant opportunity for the Suffolk economy. To maximise the benefits of the project in the local area, there needs to be a strong and pro-active partnership between EDF Energy, the Councils and other stakeholder bodies including NALEP and the Suffolk Chamber of Commerce. EDF Energy are equally expected to work with these stakeholders to minimise negative economic impacts on local communities and the local and regional economy. This includes defining mitigation measures to be included in the DCO and agreeing



statements of common ground where we are confident EDF Energy's proposals can deliver the appropriate mitigation.

163. EDF Energy has not yet provided any proposals in relation to additional inward investment. The Councils would welcome EDF Energy to engage with them on to significantly further increase the local economic benefit, through inward investment (such as consideration of locating a regional EDF Energy base / office in Suffolk) and the potential for an innovation centre, similar to that implemented with partners at Hinkley Point C.
164. The Councils expect to see a clear, realistic, positive mitigation strategy with key targets and ranges for financial investment that EDF Energy is proposing for each economic area affected, including skills, tourism, supply chain etc. The Councils need to have greater understanding of and further discussion on the intent and scale of investment from EDF Energy.
165. The DCO application needs to include for the provision of an agreed Gravity Model (see from paragraph 197 onwards) that will help to highlight potential localities where workers may cluster to live and therefore will help for appropriate mitigating measures to be proposed and incorporated in the DCO. These would be in addition to proposals such as a robust Worker Code of Conduct with appropriate penalties and a construction environmental management plan which will include measures to mitigate adverse impacts on residents local to the construction and associated development sites.

166. While the Stage 3 consultation recognises the areas of work and impacts that need to be addressed, more information is required on the delivery mechanisms to achieve sufficiently ambitious socio-economic aspirations and mitigations, including commitment for providing employment opportunities for local residents, particularly for higher value roles. While there are a number of assumptions the Councils agree with (listed in paragraph 154), others (listed in paragraph 155) need to be clarified or are not adequately addressed.
167. EDF Energy need to further detail their assessment of and mitigation proposals for the adverse economic impacts, on tourism and other industries. EDF Energy is expected to
- Develop and ensure early implementation of a robust and properly resourced mitigation plan to increase local economic benefits and reduce negative effects including displacement;
  - Develop a substantial and creative package of measures to support upskilling of local workforce. This needs to be formalised by the beginning of 2020 at the latest, so that training programmes can be planned and delivered in time for a major recruitment drive;
  - Develop clearly defined partnership strategies focussed on other potential areas of economic benefit such as inward investment and supply chain;
  - To develop innovative schemes to encourage non-home based workers to spend money with local retailers.
168. The Councils expect to see a clear, realistic, positive mitigation strategy with key targets and ranges for financial investment that EDF Energy is proposing in each economic subject area including skills, tourism and supply chain. The Councils also expect clarification on local economic benefits and how they can be increased, as detailed in the section above.

## **Tourism**

169. The Councils are concerned of the potentially significant negative impact of the development on the tourism sector. This is important given that, according to the Councils' Volume and Value Study for all of Suffolk (2017 data), it is estimated that the total value of tourism is £2.03bn, with 42,118 tourism related jobs accounting for 13.5% of all employment (far higher than the EDF Energy stated estimate of 9.6%).
170. Given these figures from our Volume and Value study, the Councils do not agree with the statement in EDF Energy's Stage 3 consultation that the tourism economy is 'notoriously difficult to define' in terms of volume and value. Our own "Cambridge Model" estimates provide a robust picture of the tourism economy for all of Suffolk and any local areas within. The Councils agree that opportunities and mitigation measures need to be identified as soon as possible. The Councils' EclA recommends this course of action as a key mitigation action.
171. Using Office of National Statistics (ONS) SIZ sector data to estimate tourism employment does not provide a complete picture of the tourism economy, as this data does not include small and micro tourism and tourism related businesses that do not register on

ONS datasets (if not using PAYE for example). This point is also relevant to the Sizewell B employment experience referred to in Vol.1 paragraph 4.5.92.

172. Vol.1 paragraph 4.5.93 suggests that anecdotally in terms of labour supply the tourism sector is highly flexible and would be able to vary supply to meet demand over the year and lifetime of the project. However, no actual evidence is presented to support this claim. In fact, the tourism labour market is generally fully employed over the summer months, so an increased demand for accommodation from Sizewell workers in combination with the displacement of workers from the existing tourism sector to work for Sizewell C would have a significant detrimental effect on the tourism sector especially as these would be all-year-round impacts.
173. The Stage 3 documents refer to working with stakeholders to identify the extent to which the construction project impacts on the attractiveness of the area to tourists. It mentions plans for a visitor survey to assess the extent of this and other tourism related issues. The tourism survey developed by EDF Energy has been detailed to us and we have expressed reservations about the robustness of the qualitative phase of work (already completed) and the narrowness of the brief given to very small focus groups. We are waiting for further details on the quantitative survey element, into which we have fed comments previously; we understand that this is likely to be conducted via online methodology and not face to face surveys.
174. The Councils welcome the reference to a Tourism Fund to mitigate negative impacts on the tourism and visitor economy. We expect to be fully involved in developing this fund further. We particularly expect to have firm commitment from EDF Energy to support marketing and promotion activities to be undertaken by our partner, the Suffolk Coast Destination Management Organisation (DMO). Proposals should also include direct support for attractions and events, and we would like further detail on what this may include.
175. There is a proposal to fund capital and revenue investment to improve the visitor economy offer and the support offered for a tourism strategy and action plan (our own EclA also recommends these actions). The Councils strongly recommend that these mitigations are properly and fully funded and managed and delivered through existing tourism partnerships between the Councils, the DMO, the AONB, RSPB and the National Trust. There are no Tourist Information Centres remaining in east Suffolk but the Councils would welcome directing the investment into our tourism services and partnership organisations such as the Suffolk Coast DMO and Visit Suffolk.
176. The proposal for a visitor centre to be shared with the B Station is noted and we welcome the provision for a visitor centre. The Councils would like further information on how local interest groups can be involved in the design and delivery of the new centre.

177. In summary, the Councils are concerned about the potential impact on the tourism sector in Suffolk. We expect EDF Energy to:
- Provide further detail on the tourism impact and work with existing tourism partnerships to develop a tourism strategy and action plan with suitable mitigation;
  - Provide a firm commitment to the tourism fund with a clear indication of the scale of investment proposed so that stakeholders can begin to shape relevant campaign and marketing activities (evidence from the EclA suggest that early mitigation has been highly effective in preventing negative impacts on tourism in the South West); and
  - Work with local stakeholders to commission research that will help to define a vision and options for the proposed visitor centre that will maximise benefits for the local economy.

### **Skills, Employment and Education**

178. The Councils welcome EDF Energy's intentions to invest in, support and develop skills and employment activity that will create a long-term positive legacy for the area, but are disappointed that the majority of concerns and requests raised by local partners in our response to Stage 2 have not been addressed at Stage 3.
179. Whilst Stage 3 outlines positive intentions it does not demonstrate that these broad intentions are underpinned by sufficiently strong and specific commitments, detailed proposals and a robust evidence base that provides local partners with the assurance that these ambitions will result in tangible outcomes for local residents and the Suffolk economy.
180. We expect EDF Energy to set and deliver an ambitious plan to maximise the skills and employment outcomes for local residents. This expectation is not met within the Stage 3 documentation. There are clear opportunities for EDF Energy to capitalise on the skills and employment programmes already being delivered, working with us and other local organisations across our skills system to create a legacy that will benefit the area and positively impact people's lives for years to come. Stage 3 does not demonstrate this sufficiently. To assist EDF Energy in developing their proposal we list our expectations of actions from EDF Energy to capitalise on this opportunity at the end of this section.
181. EDF Energy sets out its understanding of the characteristics of the economy and labour markets within Suffolk (and the wider area) as a basis for predicting potential skills and employment responses and the effects of the project on these markets. The Councils continue to have significant concerns regarding the validity and adequacy of some of the evidence used and conclusions reached. The following highlights some of our key questions.
182. There is a lack of information on the availability of a non-UK workforce to fill these roles, any forecast as to whether this is likely to be the case nor any consideration of the potential effect of Brexit on availability of migrant labour.
183. EDF Energy's document refers to existing job sectors such as tourism, food production, and business support as being 'strong' and implies that improvements to skill levels

through Sizewell C jobs would therefore create a long-term legacy for these sectors. It is not clear how this 'skills uplift' legacy would be created; and the Councils have serious concerns about the displacement of people from existing roles in these sectors to Sizewell C and how this can be avoided or mitigated.

184. EDF Energy suggests (Vol.1 paragraph 4.5.24) that 'there is always significant range, flexibility and movement within the labour supply in Suffolk'. There is little evidence given to support this claim other than 33,000 people in Suffolk who are unemployed but seeking work or economically inactive but want to work. However, this figure is irrelevant in assessing readily available labour because it does not represent the pool of individuals who are likely to be 'work ready' for roles at Sizewell C. Whilst we are supportive of any initiatives that moves this cohort closer to the labour market we do not agree that this is indicative of a ready supply of labour. The current labour market is much tighter than inferred by EDF Energy.
185. The Councils seriously question EDF Energy's assertion that the construction sector has a highly flexible and responsive labour supply, with a mobile construction workforce that would easily flex into and out of short-term jobs at Sizewell C. The Councils remain concerned that there is an unprecedented level of development planned – including other key NSIPs – that will also require a similar labour force. There is a high potential for displacement of workers across Suffolk. Further analysis is therefore required to inform conclusions on construction labour availability and displacement issues for local businesses and other developments.
186. EDF Energy considers labour market churn as positive (Vol.1 paragraph 4.5.38), in particular for the individual worker. Local partners however are concerned that higher churn may mean higher displacement for local companies. Local partners also question whether EDF Energy have correctly assessed the impact of short-term labour market churn. Where multiple people complete a short-term work package this has the potential to significantly increase the overall labour needed to meet project demand and would also result in less local economic benefits gained.
187. There is reference to HB who get a job at Sizewell C being able to recycle into different roles on the project. The Councils support this concept but want to see evidence as to how it would be achieved. Vol.1 paragraph 4.5.38 implies that Tier 1 contractors will promote recycling of workers as it is in their best interests to do so. We would need assurance that this requirement would be built into contracts between EDF Energy and its Tier 1 contractors.
188. The Councils question EDF Energy's position on the ease of meeting the demand for low skill level roles on site (Vol.1 paragraph 4.2.11). There is no evidence provided to discount valid concerns that displacement into low skilled work on the project could create significant gaps and issues in the local economy. We expect EDF Energy to put plans in place to mitigate against this through upskilling those furthest from the labour market, as well as support for individuals once in these roles to upskill further and progress to higher levels, including through "recycling" during or after their involvement on the project.
189. EDF Energy argues that displacement is 'good' because it allows individuals to gain greater skills for themselves. However, this does not take into account the impact on the existing businesses these people run or work within. There is an additional concern

regarding the displacement of workers in the social care and emergency services areas which is raised in paragraphs 259, 260 and 278.

190. EDF Energy references helping local businesses in Suffolk to get the skills and competencies to win contracts at Sizewell C. The Councils welcome this but there needs to be clarity and specific details about how this will be achieved in partnership with the Councils and other stakeholders.
191. As at Stage 2, we restate our request for EDF Energy to clarify how a better understanding of the existing labour market and its ability to respond to the potential labour market pressures and resulting tensions will be established.
192. In order to maximise the benefit to local people and the local economy in relation to skills, employment and education, the Councils expect EDF Energy to:
  - Set clear, ambitious and SMART (Specific, Measurable, Attainable, Relevant/Realistic, Timely) employment targets that will benefit the local indigenous population, including particular targets for increasing the proportion of local people in higher skilled roles. Current forecasts provided for HB reflect unacceptably low levels in higher level categories. EDF Energy must provide further information on the likely breakdown of labour demand in order to set such targets and clearly distinguish between forecasts of home-based workers and ambitions for employing local residents. Planned interventions and investment – such as support for an employment brokerage service – should be factored in to the setting of these ambitions.
  - Commit to maximising the employment of local residents to fill the 900 permanent operation roles through establishing a training pathway that develops a local talent pipeline and to work with local partners to put into place early interventions to make this possible.
  - Set an ambition for 5% of the roles required by the Sizewell C project to be filled by apprentices, in line with national best practise (“5% club”) and develop a clear apprenticeship strategy to achieve this. This should include setting targets for supply chain partners and supporting the development of apprenticeships in small and medium sized enterprises in the local economy to help mitigate the effects of workforce displacement.
  - Commit to the substantial investment in local skills infrastructure that will be necessary to secure the cutting-edge facilities and specialist teaching resources necessary to create a lasting education and skills legacy to service the needs of the build and support local residents beyond the build. We expect levels of investment at least equivalent to those provided in Somerset will be required to support the building of Science, Technology, Engineering, Mathematics, Construction (STEMC) capacity across the region. Local Councils expect investment across multiple providers, ensuring that there are opportunities to access enhanced provision for residents across the county. This includes investment to support training for nuclear operational roles (via National College for Nuclear provision), mechanical and electrical, professional management roles, civils operatives and logistics. The Councils note there are no references to any plans for an “onboarding” facility and the substantial task of inducting and onboarding all workers before they gain access to a nuclear licensed site. We

expect EDF Energy to work with us to explore a number of solutions that would ensure a positive legacy for local stakeholders.

- Develop and share detailed plans to mitigate against the potential displacement of the current local workforce into low skilled work as well as how EDF Energy will support individuals in such roles to progress during or after their involvement. Local Councils are supportive of the intention to recycle workers across the roles but expect that plans will be put into place to ensure that movement of people between roles and contractors is used to improve progression prospects for individuals, to mitigate against displacement in the local economy and to increase local resident workforce proportions in higher skilled roles.
- Provide the investment required for a comprehensive programme of STEMC activity across our education system that complements existing interventions at primary, secondary and post-16 phases, to inspire and enable more young people to achieve in STEMC subjects and, ultimately, use the project to raise aspiration and achievement levels.
- Create specific opportunities and support for those furthest from the labour market to move into sustainable employment. By ensuring employment opportunities for all, EDF Energy will enhance regional efforts to narrow inequalities (e.g. rurality), tackle unemployment and deprivation. Local partners expect EDF Energy to set a target for employing those moving into work from unemployment (including young people classed as Not in Education, Employment or Training (NEET)) and to develop an outreach programme to ensure support for those furthest from the labour market to access employment opportunities associated with the development.
- Create tangible mechanisms for ensuring that the skills base developed for Sizewell C is as transferable as possible to other key sectors in the local economy.
- Undertake activity to increase the size and diversity of the labour market pool, e.g. to attract females and older workers.
- Put into place clear plans (e.g. commitments within contracts) to drive the behaviours of the Sizewell C supply chain to achieve skills and employment outcomes.
- Use the creation of social value as a measure of quantifying the success of any interventions

193. In summary, in order to deliver on the socio-economic opportunities we expect EDF Energy to invest in skills and employment interventions that, among other outcomes, raise aspiration and achievement levels for young people (especially in STEMC subject areas), provide opportunities for those not in employment, enhance the local skills training offer and increase skills levels that provide a legacy workforce aligned to forecast future need. Specifically, we expect EDF Energy to:

- Set clear, ambitious and SMART employment targets that will benefit the local indigenous population, including particular targets for increasing the proportion of local people in higher skilled roles.
- Commit to maximising the employment of local residents to fill the 900 permanent operation roles through establishing a training pathway that develops a local talent pipeline.
- Set an ambition for 5% of the roles required by the Sizewell C project to be filled by apprentices.
- Commit to the substantial investment in local skills infrastructure that will be necessary to secure the cutting-edge facilities and specialist teaching resources necessary to create a lasting education and skills legacy to service the needs of the build and support local residents beyond the build.
- Develop and share detailed plans to mitigate against the potential displacement of the current local workforce into low skilled work.
- Provide the investment required for a comprehensive programme of STEMC activity across our education system.
- Create specific opportunities and support for those furthest from the labour market to move into sustainable employment.
- Create tangible mechanisms for ensuring that the skills base developed for Sizewell C is as transferable as possible to other key sectors in the local economy
- Undertake activity to increase the size and diversity of the labour market pool.
- Put into place clear plans (e.g. commitments within contracts) to drive the behaviours of the Sizewell C supply chain to achieve skills and employment outcomes.
- Use the creation of social value as a measure of quantifying the success of any interventions.

## Supply Chain

194. EDF Energy's documentation refers to the opportunity to develop national expertise in construction and nuclear supply chain expertise but this does not look likely now that Moorside (Cumbria) and Wylfa (Anglesey) have been postponed or cancelled, and also appears to seriously question any potential link up between Sizewell C and Bradwell B.

195. It is considered by EDF Energy that a 'reasonable proportion' of the total economic benefits that will be delivered will be through the supply chain. The Councils would like



to see an estimate of the actual proportion of total economic benefit delivered through the supply chain, as well as a revised estimate of total economic benefit. This would give us clarity on the actual opportunities for Suffolk arising from the project. The Councils welcome proposals to extend the Suffolk Chamber of Commerce's role in the supply chain engagement strategy and the plans to appoint a local supply chain officer. We expect EDF Energy to provide clarity and assurance that it will be requiring its Tier 1 contractors to engage with and allow local companies the opportunity to bid into higher level higher value contracts at Sizewell C. We support EDF Energy in focusing on general supply chain clusters in the region rather than just Sizewell C uplift. The Councils want to see evidence and information on how this will be achieved and when a local business engagement strategy for Suffolk will be put in place.

196. In summary, we expect EDF Energy to:

- Set ambitious aspirations for the benefits to the regional economy during construction and operation, with the construction benefits aspirations reflecting the levels of benefits experienced at Hinkley Point C;
- Put focus and effort on securing high value/high skills contracts within the local area during the construction;
- Develop and implement outline engagement strategy to build links between local businesses and Tier 1 suppliers at the earliest opportunity; and
- Promote research programmes and supply chain innovation in the local area.

### **Gravity Model and sensitivity testing**

197. EDF Energy's DCO application will include a Gravity Model that will help to highlight potential localities where workers may cluster to live and therefore help to develop appropriate mitigating measures to be incorporated in the DCO primarily in relation to the accommodation strategy and transport modelling.

198. The information and assumptions contained within the Gravity Model is crucial to the assessment of Sizewell C; it identifies the location of construction workers, and therefore identifies the routes workers will travel to/from the site. The consultation document indicates that as the proposals have developed the gravity modelled has evolved. The Councils have not seen the updated version, and urgently request access to the Gravity Model in its evolved state so that we can fully understand the assumptions and potential location of numbers of staff, in particular the NHB worker.

199. The Councils request further clarification on NHB and HB workers. In particular, we need to see EDF Energy's assumptions how many of the NHB are expected to settle down in the area i.e. effectively become HB. EDF Energy state that they expect the operational jobs at Sizewell C will be taken up by HB. As the definition of a HB for the construction period is that the worker will already live within 90 mins from the construction site, this would suggest that all operational staff would already now live in the area which is unrealistic. Further clarification is required.

200. Stage 3 introduces sensitivity testing for a workforce of up to 7900 workers + 600 at associated development sites; this is a significant increase on the 5600 + 500 at associated development sites proposed previously. EDF Energy clearly state that they

are not proposing to increase the workforce but are testing to see if this would have an adverse impact on the project and its impacts on the wider locality. However, we are mindful that there is a possibility arising from this that EDF Energy will seek to increase worker numbers during the build if no adverse impacts are identified at this stage.

201. There are some areas where mitigation can be adapted such as increasing the number of car parking spaces at Park and Ride sites. However other areas cannot so easily accommodate a significant increase in workers, particularly as they are likely to be NHB. The skills and education training would have to be significantly increased in order to maximise opportunities for local people and to help provide additional construction workforce to avoid the project being overly reliant on overseas workers. In relation to the accommodation strategy, additional workers could significantly adversely impact on our local communities. The additional pressures from higher numbers of NHB would be keenly seen in pressures on the private rented sector and tourist accommodation. An increased Housing Fund may not be adequate to address this additional pressure.
202. The Councils expect to work closely with EDF Energy on alternative proposals such as seeking to provide additional accommodation on a larger scale. This could include supporting temporary expansion of existing camping and caravan sites in the locality and maximising support for the Councils to have alternative accommodation available for the more vulnerable sectors of society who are most likely to be disadvantaged and pressured/priced out of the private rented sector. The Councils expect to work closely with EDF Energy to agree scenarios and proposals to cushion and protect this area of the market before we are able to support additional workers above the 5600 + 500 originally planned for in the development proposals.
203. To consider the acceptability of an increase of the workforce number beyond 5600, the Councils expect deliverable and enforceable mitigation proposals, to avoid or mitigate impacts on the local housing market, tourism accommodation market, the local workforce and transport infrastructure.

#### *Transport implications of the gravity model and sensitivity testing*

204. Understanding EDF Energy's Gravity Model is of particular importance for understanding the traffic impacts, as the Gravity Model has significant impact on how the transport impacts have been modelled. The Councils need to see further clarification on the assumptions that have been used in the Gravity Model. This includes how it is proposed workers will travel between the accommodation campus and the main site e.g. whether they will be able to travel by foot/cycle or whether an internal bus would be provided – our assumption would be an internal bus. But equally how workers at the campus will be expected to travel to off-site sports facilities, the local town centre – again our assumption is that a shuttle bus service and bikes would be provided for workers' use.
205. Paragraph 5.13.10 of NPS EN-1 sets out that:

“The IPC (Infrastructure Planning Commission) should have regard to the cost-effectiveness of demand management measures compared to new transport infrastructure, as well as the aim to secure more sustainable patterns of transport development when considering mitigation measures”
206. The use of the Gravity Model has helped EDF Energy to determine the location of bus services and Park and Ride sites, and the Councils continue to support maximising the

number of construction workers travelling to site by sustainable modes of transport. However, the Councils welcome greater clarity in understanding how the proposed public transport mitigation is shown to meet the demands of the workforce and to maximise trips by this mode.

207. The Gravity Model distributes NHB proportionally based on location of accommodation and distance / travel time from site. Clarification is needed as to whether there is legitimate accommodation or potential for accommodation in order to be able to confirm that the Gravity Model fairly represents potential staff location and therefore transport impacts.
208. Further details are required on the layout of the proposed sports facilities, including how staff would travel to/from the LEEIE and accommodation campus and the level of parking provision for non Leiston based workers. We would encourage EDF Energy to work with us on further developing the main construction site proposals.
209. The Councils need fully to understand how the additional 2,300 construction workers and 100 associated development workers have been modelled within both the Gravity Model and the transport model. The Stage 3 consultation indicates that EDF Energy have taken different approaches to modelling the additional workforce, however, we need to understand how the assessment of housing impacts the transport modelling. EDF Energy needs to share the details of the Gravity Model with the Councils and clearly show evidence to justify the reasoning for decisions made based on this information. The Councils cannot accept that the workforce has been acceptably modelled without seeing the Gravity Model.
210. As part of their sensitivity test EDF Energy have indicated that they are not proposing to increase the capacity of their accommodation campus (paragraph 2.1.8); however, they have increased the parking provision at the two Park and Ride sites, but not at the main site. EDF Energy's expectation is that 'local landowners would respond with proposals to create or extend one or more local caravan parks' and that as it 'is HGV traffic which largely drives the need for major road improvements' no additional highway improvements are proposed in relation to potential additional workforce vehicle movements.
211. For a housing development of the scale of the accommodation campus or an employment site with 5,000 workers, significant highway improvements would normally be expected and so the Councils strongly dispute the point that no additional highway improvements are required for the potential additional workforce vehicle movement; and as set out within the NPPF, the applicant needs to demonstrate that the residual cumulative impact is not severe. The pressure of additional construction workers is likely to be felt across the local road network and especially at local existing pinch points and junctions. The Councils require sensitivity tests to be undertaken on the local road network. Additional details are set out in the Traffic Modelling section, from paragraph 412 onwards.
212. The consultation states that a large majority of the workforce will be located in and around the local town of Leiston and village of Knodishall. This distribution has not been evidenced by EDF Energy. However, even if workers' daily commute does not take them through these areas, then shopping and leisure trips will have an impact. The additional bus journeys within these areas in order to move the workforce to site will also impact

on the road network. Air quality assessment within the local villages and towns is required, with particular reference to the town of Leiston. The sensitivity test of 7900 workers (compared to 5600) assumes that the majority of the extra workers will live in rented accommodation in the same proportions as assumed for the base model. No evidence that the numbers of rental accommodation is available in this area to house the additional workers has been given. Therefore without such evidence no weight can be given to the assumption made in the consultation that the increase in workers will have no traffic impact.

213. In summary, the Councils urgently need access to the Gravity Model in its evolved state and the full set of assumptions used by EDF Energy to feed the model, so that we can fully understand the assumptions and potential locations of staff numbers, in particular of non-home-based workers, and consider the resulting impacts and mitigation requirements.
214. With regards to the possible increase of the expected workforce from 5,600 + 500 to 7,900 + 600, as part of EDF Energy's sensitivity testing, the Councils require further detail on the assumptions made for this scenario testing.
215. To consider the acceptability of an increase of the workforce number beyond 5600, the Councils expect deliverable and enforceable mitigation proposals, to avoid or mitigate impacts on the local housing market, the local workforce and transport infrastructure.
216. The Councils do not accept that the consultation suggests that an increase of the workforce to up to 7900 does not create any additional traffic impact as suggested.

### **Accommodation Strategy**

217. EDF Energy refers to a Housing Fund to mitigate the impacts of the NHB being accommodated in the area. The accommodation campus is a significant element of the housing strategy as it proposes to accommodate 2400 NHB at peak. However, if the much higher workforce number would occur as considered in EDF Energy's sensitivity testing, this would have even more significant impacts on the potential for NHB workers to be housed in the private rented sector (PRS) and / or the tourism sector. EDF Energy are currently not proposing to increase campus accommodation should the number of workers increase significantly. Also, we note that the campus is likely to only become fully available for peak construction, which is of concern even with the expected workforce number. It is acknowledged that there will be a limited number of workers who will be in the area for the duration and may choose to buy property and move their family to the area, the numbers predicted for this is such that we consider this can be accommodated in existing churn in the local housing market.
218. The Councils are very concerned about a potential increase in worker numbers and its adverse impact on the private rented and tourism accommodation sectors. East Suffolk does not have an appropriate level of accommodation in either of these sectors to accommodate significantly higher numbers of Sizewell C workers.
219. One aspect to mitigate adverse impacts on the local PRS and tourist accommodation is thus to ensure that both accommodation campus and the caravan park are completed and operational before work begins on site (the campus could have a phased

construction). In any case, we expect any mitigation proposals to reflect the “worst case” scenario, which, if the accommodation campus is not completed in advance of the work commencing may be in the early phases before the campus is available.

220. Although there is a range of serviced, self-catering, and tourist accommodation in Suffolk, existing cost and high summer occupancy will seriously impact on the ability of workers to make use of this type of accommodation. Paragraph 4.2.36 of EDF Energy’s documents suggests there is significant capacity and flexibility in Suffolk to accommodate workers (spare rooms, houses in multiple occupancy (HMO) etc.). However, no evidence is put forward to support this claim. It is assumed that NHB will want to stay near the construction site and will therefore look for PRS around Leiston, Aldeburgh, and Saxmundham creating a large transient worker population – there is no evidence to demonstrate that the PRS capacity exists to accommodate this large NHB.
221. With the forecasted number of 5600 workers + 500 in associated development sites, it is suggested that 36% (2,196) would be HB and 2400 living in campus accommodation. This would leave just over 1500 workers to be otherwise accommodated.
222. EDF Energy suggests that the caravan site at the LEEIE will host 400 caravans with average occupancy of 1.5 workers, i.e. 600. The layout illustrated for the caravan area is not able to accommodate 400 caravan pitches using the guidelines that the environmental health teams would expect to be used for licenced caravan sites. At most, it is anticipated that there would be space for around 350 pitches. This would therefore leave 1150 workers to be accommodated in the PRS and tourist accommodation.
223. Increasing the number of workers to up to 7900 + 600 (8500) but maintaining the EDF Energy accommodation offer at 2400 (campus) and 600 (caravan site – notwithstanding comments above that the proposed site cannot accommodate 600 people) leaves just over 3300 NHB to be accommodated in the PRS and tourist accommodation. It has not been demonstrated by EDF Energy that there is capacity in the local housing market to accommodate these additional workers, and the Councils do not believe that this capacity exists. EDF Energy’s solution is to propose an increased Housing Fund. However, this would not increase supply in the housing market to the level required to house an additional 3300 NHB workers. The Councils are therefore resistant to any potential increase in the maximum number of workers allowed on the construction site without an appropriate scheme in place to provide resilience in the local housing market.
224. There needs to be a balance between workers using existing local accommodation and avoiding undue pressure on local communities and tourism. We welcome the potential Housing Fund but EDF Energy needs to work in partnership with the Councils to identify adverse impacts on housing need and vulnerability as early as possible.
225. Having regard to the original maximum number of workers – 5600 + 500, it is considered that an appropriately financed Housing Fund could potentially provide the necessary resilience in the local housing market. Suggested methods (not exhaustive) that could be incorporated include:
  - Setting up a registration system for landlords to use with regard to accommodation provision: The Councils would need access to this system in order to understand which landlords are proposing to offer accommodation; there should be an appropriate lead-in time. This would be a good way for people who have spare rooms or who are under occupying to register onto the system – the

Councils could work with a specialist housing provider matching landlord and lodger.

Conversely we could see a potential increase in Section 21 notices (eviction notices from landlords expecting a more profitable Sizewell C worker in their accommodation). We would expect registration information to include details of whether the landlord is seeking to give notice to existing occupants.

- Housing Fund opportunities: Having regard to Vol.1 table 4.4, the Leiston Foyer is closing down due to lack of demand, but we would be open to funding provision in Saxmundham / Felixstowe / Lowestoft. There is no Housing Revenue Account at Suffolk Coastal District Council due to large scale voluntary transfer but there will be one for East Suffolk post April 2019. It would be an ideal opportunity to purchase a property in Waveney for use as a HMO managed by a third sector provider and to be used as an exemplar for best practice relating to standards and housing management across east Suffolk / Suffolk Coastal District Council. There is potential to adopt the model used by Waveney District Council and extend into areas with more expensive rents. There may be opportunities to work together with the District Council to build more housing.
- Bringing empty homes back into beneficial use: We would expect empty homes being brought back into use to be available for all local people as well as worker accommodation – the aim should be to boost market supply wherever possible. Ideally a proportion of these would be available at an affordable rent or Local Housing Allowance for local people. We request that EDF Energy refer to Housing Needs Officers rather than Housing Officers in order to align with the specifics of what will be required. We would expect there to be support for Floating Support or Tenancy Sustainment Services either through the Councils or a third party to provide the contractual arrangements moving forward.
- Increasing housing stock by new build developments which could then be sold to the affordable or market sectors following the project, with any necessary conversion.
- Supporting schemes to enable access to the PRS: east Suffolk Councils estimate that approximately 30% of households on the housing register are aged 18 to 24 and this age group is no longer eligible for housing benefit if not in employment. However, the Government has agreed to end this requirement. It would be ideal to have some purpose-built accommodation available, but it is difficult to gauge potential numbers – hopefully an appropriate registration process for landlords would help provide some projected figures. If Empty Homes were to be used for Private Sector Leased arrangements, we would expect as minimum of 5-year leases.
- Right to Move (2015) Statutory Guidance: Workers in social housing that would have to travel 90 minutes or more to a workplace may be entitled to invoke the 'Right to Move' clause if they can demonstrate work is of a specialist nature that they have to travel for. Such a person would go to the top of the list and may displace a local person already on the list. Further information on this is available however, the key to note is that our existing lettings turnover is about 1,000 across east Suffolk, a snapshot of the number of households registered on the

Housing Register sits at about 4,000 to 4,300. The number of additional bed spaces required as part of EDF Energy's proposals represents a high proportion of the housing register and this therefore raises concerns.

226. As is detailed above a Housing Fund will be required and the level of mitigation included in that Fund will need to be quantified and discussed further. A Housing Fund is unlikely to mitigate for additional workers above the originally proposed maximum of 5,600 + 500 and we are therefore resistant to any proposal to increase the maximum number of workers on the Sizewell C site during construction.

227. In summary, the potential impact of additional workforce on the local housing market is a key area of concern, and the information provided by EDF Energy demonstrates that there would be a significant uplift in workers seeking accommodation in the tourism sector and in the private rented sector. The locality does not have this level of availability. There is a real concern that this could be detrimental to the more vulnerable members of society currently in the private rented sector. An increased Housing Fund may not be enough to address the additional demand.

228. EDF Energy is expected to work closely with the Councils to:

- Agree a timeline and risk register for construction of campus and caravan site / contingency plan;
- Develop plans to incorporate flexibility to increase / reduce size of campus;
- Provide further evidence on the capacity in the PRS sector and the potential latent supply of accommodation; and
- Agree in detail the appropriate level of funding and any additional contingency funding required for the Housing Fund.

229. To consider the acceptability of an increase of the workforce number beyond 5600, the Councils expect deliverable and enforceable mitigation proposals, to avoid or mitigate impacts on the local housing market.

#### *Caravan site at the LEEIE*

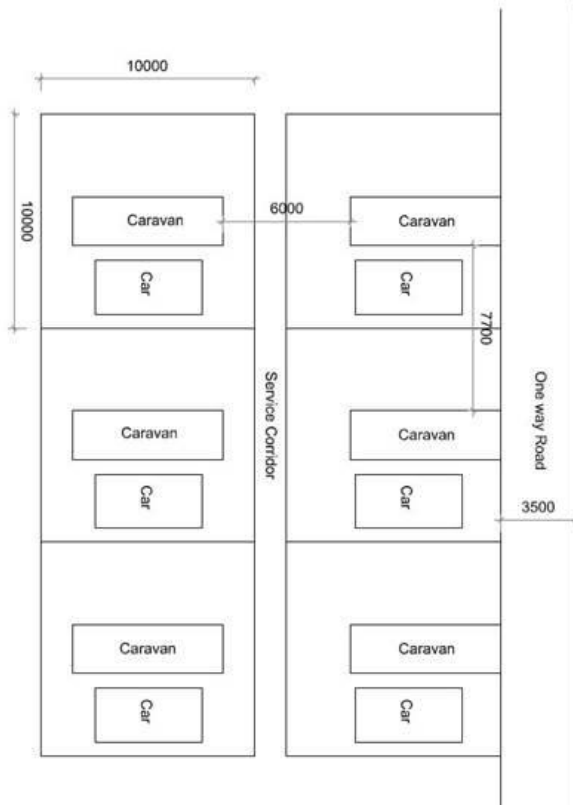
230. EDF Energy propose a caravan site at the LEEIE, to host 400 caravans with average occupancy of 1.5 workers, i.e. 600. The layout illustrated for the caravan area is not able to accommodate 400 caravan pitches using the guidelines that the environmental health teams would expect to be used. At most, it is anticipated that there would be space for around 350 pitches.

231. This would therefore leave 1,150 workers to be accommodated in the PRS and tourist accommodation.

232. As the consultation document states that there will be no static caravans, we assume that the caravans pitched at the proposed LEEIE site would be 'touring' caravans. As a result of this, we have allowed for maximum dimensions of a touring caravan of 7.0m long, by 2.3m wide. This assumes that workers throughout the full 10 – 12 years of the build will be willing to bring their own touring caravan and live in it whilst working at the site – this assumption has not been evidenced.

233. The maximum density for a standard touring site should not exceed 60 caravans to the hectare calculated based on usable area (i.e. excluding lakes, roads, communal services). As the proposal stands, allowing for a ten percent recreational space requirement, this would only leave 54,000 square metres which you would then need to discount areas covered by the roads and communal welfare facilities to determine the maximum number of pitches that could be provided on the site. This calculation has not been carried out by the Councils as we do not know what communal facilities are intended to be provided.
234. From the illustration provided, it would appear that occupiers' private vehicles are proposed to be parked on pitches. We recommend that no additions are permitted such as awnings or decking to ensure that spacing is optimised between vans and accesses/roads/pathways. (Suggested layout in Fig 1).
235. We expect the number of people occupying any one caravan to be determined by how many separate bedrooms are within each touring van. For those vans with only one designated bedroom, we would expect there to only be one occupier. There is no clarity in EDF Energy's assumption that occupancy would be at 1.5 across the site and no detail as to how EDF Energy propose to facilitate such connections to encourage sharing (i.e. housing office).
236. Whilst the site would have to comply with the requirements for holiday touring vans, the units on site will be occupied as if they were residential. We recommend that a ratio similar to that required of HMO is used, which is 1 WC per 5 persons. The same would apply for shower facilities. This will provide a much more reasonable provision of welfare facilities that would suit potential long term stays on the site.
237. The caravan site forms part of the wider site in use during multiple stages of construction. It is noted that some of these uses are likely to generate some noise and disturbance for residents of the caravan site, and we recommend ensuring mitigating features are placed, such as bunding, boundary treatments etc. to prevent shift workers being affected by site traffic, operations etc. This would take up additional spacing within the allocated area for accommodation.
238. As the site does not directly abut other residents, we would recommend that as with the proximity to other uses on the site, that suitable screening / bunding is provided to ensure there are no privacy issues. This would include from passers-by on foot / in traffic.





239. Fig 1 – Suggested layout to scale of pitches

240. It is appreciated that increasing the number of pitches on this site will provide cost-effective accommodation for a large number of workers; we strongly suggest that more conservative numbers are used in relation to total pitches on site to ensure that the living conditions remain amenable for those staying on site.
241. The workers will need to access the construction site and therefore a bus service from the site will be required. The routes for this service will need to be demonstrated and accounted for in the local area, there is a small Park and Ride facility proposed on the site – the Councils assume that workers living in the caravan accommodation on the site would use the same bus service but clarification on this is required. The impact of these additional vehicles on the local highway network will need to be assessed and mitigation incorporated as part of the overall transport strategy.
242. It is strongly suggested that in addition, alternative means of transport between the construction site and the caravan site are pursued including safe pedestrian access routes to and from the site and cycle facilities containing also the potential for workers to share cycles and have them securely parked when at the caravan site.
243. The relationship between workers and the town centre of Leiston needs to be fully considered. It is suggested that a bus service be provided between the caravan site and the town centre as well as a secure pedestrian and cycle route to the town centre from the site. Given that off-site sports facilities are proposed in Leiston and that the occupiers of caravans may need to access facilities at the accommodation campus site it is suggested that a shuttle bus system from the campus to the town centre and sports facilities travels via the caravan site to maximise the ability of NHB to get to and from these facilities.

244. There may be noise implications with having workers living adjacent to an active construction site. If the rail head is proposed to be used on a 24-hour basis then appropriate noise assessments and mitigation will need to be carried out for the residents of the caravan park. As well as noise, dust may be an issue that will need to be addressed and potentially mitigated against.

245. In summary, the Councils advise that the proposed caravan site at LEEIE cannot accommodate 400 pitches as suggested in the documentation.

246. Further work is required by EDF Energy to ensure the design of the caravan site, its interaction with the surrounding area and access arrangements are feasible, safe and acceptable to the Councils.

### **Social and Community Impact and Legacy Opportunities**

247. Vol. 1 Section 4.4 focuses on the Social and Community Strategy, including managing potential community effects in relation to the following:

- Access to public services and community facilities [4.4.5 – 4.4.10]
- Schools and childcare [4.4.11 – 4.4.19]
- Healthcare facilities [4.4.20 – 4.4.24]
- Emergency services and emergency preparedness [4.4.25 – 4.4.30]
- Sports and recreation [4.4.31 – 4.4.44]
- Community cohesion and integration [4.4.45 – 4.4.48]
- Health and wellbeing [4.4.49 – 4.4.59]
- Community fund [4.4.60 – 4.4.63]
- Community safety management plan and worker code of conduct [4.4.64 – 4.4.67]

248. In the document, EDF Energy reflect back the issues raised at Stage 2 by a range of consultees but there is very limited detail in this section of the Stage 3 document of specific proposals upon which to base a response, i.e. to understand whether mitigation proposed by EDF Energy is both appropriate and sufficient to mitigate the anticipated impacts. EDF Energy have stated throughout the Stage 3 proposal that they are working with key stakeholders e.g. health, education, police, and other emergency services to understand the issues and impacts, agreeing appropriate mitigation and understanding residual effects. However, little of this detail is within the document under consideration.

249. Although S106 contributions and other funding provision are mentioned throughout the Stage 3 document, no firm commitments have been made. The Hinkley Point C figures will no doubt serve as a benchmark, and associated feedback from Somerset will enable us to confirm whether the amounts agreed have been appropriate to mitigate the projected and actual impacts (and any discrepancy between the two).

250. The communities of east Suffolk hold mixed views about the benefits and outcomes of Sizewell C in terms of its impact upon residents, businesses and visitors. Often particular concerns are highlighted by communities based on the specific local impact

on their area. A key area of concern is the cumulative impacts on communities and EDF Energy must consider the cumulative impacts of their development alongside other housing projects and energy related proposals in east Suffolk.

251. For some communities there is no mitigation that will be enough to outweigh the anticipated residual impacts of the Sizewell C proposals. Socio-economic mitigation is only covered at a high level in the Stage 3 documents and impacts are not clearly defined; it is therefore difficult to form a definitive view over whether there will be appropriate mitigation.

### **Access to public services and community facilities**

252. The proposed audit of school places, sports and leisure facilities, healthcare, social services and children's services to establish a baseline, is welcomed, but it is important that the modelling of future impacts is based on a realistic assessment of where NHB are likely to be based and where they will access services. It is important that the mitigation, as is proposed in Vol 1, paragraph 4.4.10, flexes if the workforce increases or indeed if it is distributed differently to the modelling undertaken, as is the case in Somerset.
253. Specific concerns include the impact of congestion across roads in the area generated by a road-led transport strategy and the impact of this in terms of stopping / delaying the local population being able to access key services including GPs and dentists, shops, schools and leisure facilities.

### **Impacts on public services**

#### *Schools and childcare*

254. The Councils welcome that EDF Energy recognises that there could be effects on school capacity in the local area (Vol 1, paragraph 4.4.11-4.4.15).
255. As the Stage 3 consultation states, there are uncertainties around forecast school capacity for the period of construction. Pupil forecasts are currently only available until 2022, which is before the main workforce arrives at site for construction. Additional pressures on school places are expected as a result of additional dwellings being proposed in the catchment areas. In addition, proposals in the new draft Local Plan that Suffolk Coastal District Council is consulting on include the potential additional allocation of 800 houses in Saxmundham. Further joined-up discussions are required to consider the in-combination impacts of these proposals, including any traffic impacts from school transport to public and private schools.
256. The Stage 3 documentation does not refer to potential impacts on early years provision in the area, and the Councils request a discussion between EDF Energy and Suffolk County Council's Early Years Service to discuss potential impacts and mitigation further.
257. Safeguarding concerns from schools need to be primarily directly addressed with schools in the area, and we advise that preventative work should be considered as part of the mitigation package (see also section below on social services and safeguarding). This could include EDF Energy supporting the Personal, Social, Health and Economic curriculum and/or funding training for school staff and governors. Similarly, should there be a number of children of workers with limited English language skills/English as Additional language, any impacts and related costs to schools arising

from this would need to be addressed with schools directly. We expect EDF Energy to engage local schools early on these matters.

#### *Social services and safeguarding*

258. The Councils welcome that in their Stage 3 documentation, EDF Energy recognise that their development will have potential effects on adult and children services' social care and safeguarding (Vol 1, paragraph 4.4.16/17).
259. Those impacts on vulnerable people, and wider impacts on social care and health provision and community cohesion, are of high concern to the Councils. Council services in these areas are already now under severe pressure, and the Councils would not have spare resources or capacity to meet any additional demand
260. The Councils also believe that there may be a significant impact on our staffing, which may particularly affect social care staffing resilience, as a result of displacement, with such a big recruiter entering the area. We require further discussions with EDF Energy how these impacts can be addressed.
261. The Stage 3 document raises, under Vol 1, paragraph 4.4.17, a number of key issues which we agree need to be further assessed to agree how to avoid and, where this is not possible, mitigate the impacts. The Councils are particularly concerned about the potential Impacts on young people, and on vulnerable people in the community. Issues that need to be considered, some of which are highlighted in the Stage 3 documentation, include:

#### *Impacts on social care service provision:*

- Potential effects on the delivery of services, particularly to vulnerable older people who which to remain in their homes but require care: Displacement of carers to jobs with the Sizewell C development, more negative perception of working in Leiston, and potential issues around parking in Leiston may result in the County Council struggling to deliver social care services in Leiston. This may particularly effect elderly people who require support to live at home. The care sector workforce in the area is already fragile, relatively low-paid and works across anti-social hours, and is subject to high turnover of staff. It is already difficult to recruit in Leiston. The Council is concerned that services may become more expensive to ensure sufficient carers are retained in the area; and
- The Councils also have a concern about loss of residential home providers in that location – particularly Upper Abbey Care Home due to the proximity to the site. Residents may not want to access care in the Leiston area due to negative perceptions, putting local care homes at risk and putting further pressure on facilities in other towns in the area.

#### *Impacts on vulnerable groups:*

- Potential effects on vulnerable young people and care leavers, some of whom are in housing need or vulnerable to homelessness;
- The potential of landlords putting up rent is of particular concern for families and vulnerable households, which may put them into difficulty and may result in homelessness (see also our comments on the accommodation strategy, from paragraph 216 onwards);

- Safeguarding issues associated with renting out rooms. Landlords often do this with no checks, some of whom may be vulnerable themselves, e.g. single mothers and older people due to need for extra income. A programme of awareness-raising is recommended as mitigation;
- The risk of sexual exploitation of young people by a predominantly male workforce, and trafficking; and
- Health and social risks arising from unsafe sexual activity.

*Community and safeguarding impacts:*

- Potential effects related to cultural differences between non-home-based construction workers and residents e.g. culture of carrying weapons;
- The Councils are concerned that the additional transitory workforce may encourage an increased spread of “County Lines” to Leiston and would encourage EDF Energy to work with partners on prevention work;
- Concerns about the rise of hate crime (including against workers); community cohesion issues, including tension between incoming male workforce and existing population; and
- Potential community cohesion and integration issues – this could include resentment from local residents at the influx of primarily male, and perceived to be younger, fitter and better-paid, construction workers.

*Demand from the workforce on services:*

- There may in addition potentially be demand for social services and mental health and wellbeing services from construction workers and their families, including from workers who may be laid off by the construction contractors but decide to stay in the area; and
- Potential additional demand from workers’ families on child care and family support.

262. The Councils welcome that EDF Energy is looking to set up contingency measures for any potential effects should they occur (Vol 1, paragraph 4.4.19) but would urge EDF Energy to also support a comprehensive preventative approach targeting vulnerable groups and service providers. We welcome some of the measures proposed, including implementing a worker code of conduct and supporting community liaison activities, however further detailed work and discussions are required to discuss mitigation measures in social care and safeguarding.

263. Similarly, whilst we are pleased to see that EDF Energy have recognised the potential impact of drug and alcohol misuse in their workforce and will carry out testing, there may still be additional demand on treatment services, for workers and their families and potential increased demand in the surrounding community. There are also potential impacts in relation to health and social risks arising from unsafe sexual activity. We would therefore urge EDF Energy to consider an on-going positive education programme for young people through education and youth services and working with commissioners to monitor impact and enhance the treatment service and outreach in the area should issues arise.

### *Healthcare facilities*

264. The Councils, working closely with the local Clinical Commissioning Groups (CCGs) welcome that in their Stage 3 documentation, EDF Energy recognise that their development will have potential effects on Suffolk population health during the construction of Sizewell C (Vol 1, paragraph 4.4.20-4.4.24 and 4.4.49-4.4.55).
265. We would like to highlight that impacts on local health provision, including public health, are of high concern to the Councils. The Councils and CCGs as commissioning organisations are concerned about the potential impact of Sizewell construction on a health and social care system that is already under pressure. We would welcome further discussions with EDF Energy how these impacts can be addressed to ensure suitable provision is provided and that the local health sector is not overwhelmed or disadvantaged.
266. It should be noted that healthcare commissioning is the responsibility of three separate organisations: Public Health within Suffolk County Council, CCGs and NHS England.
267. We would like to highlight the imperative to effectively model predicted healthcare need for the Sizewell workforce as well as for impacts on the wider population. The modelling should take into account that the workforce is a particular population made up of mainly working age males. We would like to see clear mechanisms for monitoring impact and effectiveness of any mitigation.
268. The Stage 3 document raises, under a number of points, key issues which we agree need to be further assessed to avoid and, where this is not possible, mitigate the impacts. These issues highlighted in the document include:
269. Healthcare needs of Sizewell workforce. The consultation document references the provision of an occupational health facility at the main site. There is a need to better understand:
- The type and level of healthcare provision in terms of occupational health, primary care and specialist healthcare including the staff make-up of this health care provision;
  - The predicted demand on Suffolk primary, community, acute and specialist services such as sexual health and substance misuse;
  - How pathways of care between Sizewell provision and Suffolk services will be developed including the referral process;
  - How “enforcing a strict worker Code of Conduct and drug and alcohol testing policies” will reflect the nature of substance misuse in the county (for example multi-drug use, increasing use of prescription drugs) and how this will be enforced and monitored given the number of contractors and sub-contractors on site;
  - Provision to support co-occurring conditions (dual diagnosis – mental illness and substance misuse);
  - Health protection for example to reflect rising incidence of syphilis;
  - Managing potential increased demand and the effect that this may have on for example waiting times;

- Potential impact of dental health including access to dental treatment whilst on site; and
  - Potential pressure on pharmacy services.
270. Impact on Primary Care. The Councils recognise that the proposal will have an impact on primary healthcare facilities in and around the area of the development. To maintain a primary care service for the residents of in particular Leiston Surgery (but also Saxmundham and Aldeburgh surgeries), mitigation might be sought through Section 106 contributions. Therefore, a process will need to be confirmed on how any contributions will be agreed between all stakeholders. The consultation document shows the potential for up to 7,900 workforce working on the site at any one time. This could have a large impact on the nearby surgery of Leiston and its branch surgery in Yoxford. The surgery at Yoxford does not have capacity to expand its net internal area but as it is only used for appointments on Mondays, Wednesdays and Fridays it has the potential to open more often but financial contributions to help this might be required. Capacity of surgeries nearby, including Aldeburgh and Saxmundham, will also need to be considered.
271. Leiston Surgery is in a location that would make increasing the physical capacity of the building very difficult and we are concerned that the surgery may exceed capacity. Options are currently being looked at as part of the proposed Sizewell C project and cumulative growth planned in the Suffolk Coastal District Council Local Plan.
272. Impact on the wider population. The Stage 3 document references concerns and potential impacts from risky behaviours including substance misuse; sexual exploitation and trafficking; unplanned pregnancies in younger women. We would like to better understand:
- how vulnerable groups will be protected and / or supported, including corporate mechanisms such as whistle-blowing that alert authorities to issues of concern;
  - increase to the 'night time' economy and the potential effects related to additional drug and alcohol misuse and prostitution within the local environs of the construction site (including the accommodation);
  - potential increase in demand for sexual health services either via GP Practices, pharmacies or the integrated sexual health service;
  - managing potential increased demand and the effect that this may have on for example waiting times;
  - potential demand for mental health and wellbeing impacts for local residents as a result of construction works and perceived community tension/threat created by incoming workforce; and
  - how families will be supported.
273. Opportunities for prevention and health promotion:
- Reducing health harm from drug and alcohol use;
  - Use of diversionary activities to address risk-taking behaviours;

- We welcome the recognition in the consultation document of the role of robust health and safety policies and practice in the construction site and as a requirement of contracted services;
  - Opportunities to link in with wider health-promoting campaigns and programmes; and
  - Use of health checks and brief interventions to promote healthy lifestyles.
274. The Councils welcome that EDF Energy is looking to set up contingency measures for any potential effects should they occur but would urge EDF Energy to also support a comprehensive preventative approach targeting vulnerable groups and service providers such as sexual health, drug and alcohol services as well as mental health provision.
275. Other areas where Public Health would like to see effective controls, or a mitigation strategy will be around both air quality and noise quality given the project size. Wider wellbeing provision for the resident workforce should also be fully considered including enough amenities that are suitable and where possible, help promote a healthy lifestyle.
276. We welcome some of the measures proposed, including implementing a worker code of conduct and occupational health services that include an onsite medical centre. We also understand that the Health Impact Assessment (HIA) will not be undertaken until post Stage 3 consultation has occurred which will map out bespoke health mitigation plan. However, further detailed work and discussions are required regarding the points highlighted above; this has been identified in meetings with EDF Energy on the HIA process.

#### *Emergency/blue light services*

277. The Stage 3 consultation does not provide much additional detail regarding impacts on Blue Light / emergency services. Further discussions and work is required, particularly in relation to impacts on response times, safety aspects and workforce impacts.
278. Although it is proposed that EDF Energy will employ their own Occupational Health workers on site for NHB, consideration needs to be provided in terms of increased demand on the local hospitals (James Paget and Ipswich Hospitals) and the deployment of the air ambulance. Anticipated traffic congestion could cause unacceptable delays in ambulance attendance times in the event of an on-site emergency or, indeed, an extension of response times to incidents in the local area. We understand that at Hinkley Point C there has been no significant impact on emergency service response times, however the road network is significantly different in Suffolk and the increase in traffic may lead to both an increased incident rate and delayed response times. To mitigate such a potential delayed response time, creative solutions need to be considered – for example a review of existing mobile telephone network coverage could consider whether improvements may help with response time and attendance by emergency services. As such, we would welcome discussions with EDF Energy about potential input and support in the ongoing improvement of mobile (and broadband) networks in east Suffolk.



279. Key blue light services concerns include:

- Emergency service response times to the immediate locality and surrounding communities, which are likely to be increased due to increased traffic volumes and congestion;
- Safety aspects for the public, EDF Energy staff and emergency service responders emanating from the introduction of new high risk activities at the proposed site, for each of the emergency services (see also above concerns raised under community cohesion);
- The resourcing implications arising from the safety aspects above;
- Extended community safety impacts, including road safety as a result of increased traffic, residential fire safety and night time economy related potential issues; and
- Impact on workforce retention in emergency services, with staff potentially being displaced to work as part of the Sizewell C development.

280. In summary, the Councils welcome EDF Energy's recognition of the potential impact of its development on many aspects of public services, including on school places, social care and safeguarding, health and emergency services. Before submission of the DCO application, significant further work is required to agree appropriate avoidance (through early intervention), mitigation and compensation strategies, as well as acceptable monitoring frameworks to ensure that any unexpected impacts in these areas will be addressed by EDF Energy during the development.

The Councils expect EDF Energy to focus further work on:

- Ensuring widest possible focus on health and wellbeing including an emphasis on prevention and early intervention;
- Ensuring an integrated approach to health promotion targeting the local population as well as NHB;
- Understand pathways from start to finish ensuring clarity about where the workers move from the on-site provision into the wider health system i.e. referrals for further treatment off site;
- Further assess impacts on health services, and ensuring that required mitigation / financial contribution to the relevant statutory bodies is in place;
- Addressing impacts on the workforce of statutory services in these areas;
- Ensuring blue light services are not unduly affected, through appropriate mitigation proposals; and
- Undertake further work on school places implications.

281. This work needs to create links to existing programme around community safety and anti-social behaviour, we are particularly interested in the 'night-time economy', drug and alcohol use and misuse, prostitution, mental health impacts and community cohesion (including County Lines).

## Emergency planning

282. The Stage 3 consultation mentions emergency planning / emergency preparedness in generic terms in a single paragraph (Vol.1 paragraph 4.4.30). Suffolk County Council, in conjunction with other Category 1 responders operating in Suffolk, is required under Civil Contingencies Act 2004 (Contingency Planning) Regulations 2005 (CCA) to assess the risk of emergencies occurring within the county and to maintain appropriate emergency plans to prevent, reduce, control or mitigating any effects of the emergency. This duty does not apply to nuclear risks covered by Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR).
283. Under REPPIR there is a requirement to maintain an effective off-site emergency plan for the existing Sizewell B Power Station. The County Council through the District Council as part of its duty under REPPIR monitors all development within the area around the Sizewell B Power Station and provides the Office for Nuclear Regulation with an assessment of whether any new development can be accommodated within the existing off-site emergency planning arrangements, or that the off-site emergency planning arrangements can be amended to accommodate the proposed development.
284. The proposed Sizewell C construction activities, both main development site and associated infrastructure, will take place within areas identified within the Suffolk Community Risk register as being at risk of an emergency and within the current emergency planning zones around the Sizewell B Power Station. The development therefore is a material consideration for statutory emergency arrangements made under CCA and REPPIR.

### *Assessment of Impact on REPPIR Off-Site Emergency Plan*

285. During the DCO assessment phase, Suffolk County Council will be required to confirm that EDF Energy's construction activities can be accommodated within existing Sizewell B nuclear off-site emergency arrangements or that these arrangements can be suitably adapted. The Office for Nuclear Regulation will use this assessment to advise the Planning Inspectorate on nuclear safety issues, including implications on existing emergency arrangements, and will also use this information when considering any Sizewell C Nuclear Site Licence application.
286. This impact assessment will require detailed assumptions on people, road network use and any EDF Energy internal emergency arrangements that are planned. There may also be a requirement for EDF Energy to fund enhancements to existing nuclear emergency capabilities if this is needed to accommodate the construction activity. To date, EDF Energy's public consultation process has not included detailed information relevant to the emergency planning assessment but there continues to be dialogue on the topic and in December 2018 a list of detailed information requirements discussed appeared to confirm availability of such information in the future.
287. The Joint Emergency Planning Unit, will continue to engage with EDF Energy leading up to the pre-DCO application phase to secure the availability of information to allow the necessary assessment to be completed during any DCO assessment required by PINS.
288. Previous NSIPs completed within the Sizewell area, including Galloper Wind Farm, have included specific DCO requirements to ensure that appropriate emergency arrangements are in place prior to any construction activity taking place. It is expected

that similar requirements will be included in the Sizewell C DCO to ensure that statutory emergency arrangements for identified risks within the Suffolk Community Risk register and for the Sizewell B Nuclear Power Station are protected. Example DCO requirements would be:

- No part of the construction works shall commence until emergency plans relating to the construction have been agreed and issued. Nuclear emergency plans cover the EDF Energy Sizewell B Operators emergency plan and Suffolk County Council Off Site Emergency Plan issued under Radiation (Emergency Preparedness and Public Information) Regulations. Wider civil contingency arrangements cover Suffolk Resilience Forum emergency plans for identified risks that might affect the Sizewell C main development site and any associated infrastructure.
- The emergency plans shall be carried out as approved in relation to the relevant part of the relevant works, unless otherwise agreed after consultation through the Sizewell Emergency Planning Consultative Committee or Suffolk Resilience Forum as appropriate.

289. In summary, EDF Energy needs to work with the Joint Emergency Planning Unit to provide the availability of emergency planning information to allow the necessary assessment to be completed during any DCO assessment, and to agree DCO requirements.

## **Community impacts**

### *Sports and Recreation*

290. The proposal to site new sports facilities in Leiston, rather than on the accommodation campus, in response to the Stage 2 feedback has been well received by local leisure providers. Local leisure representatives advise that the proposed provision of a full-sized 3G football pitch and one Multi-Use Games Area (MUGA) in Leiston, is considered sufficient in addition to the current extensive ongoing improvements being carried out by Suffolk Coastal District Council to the Leiston Leisure Centre. Additional income is anticipated through increased memberships to the leisure centre by NHB. Provision of a MUGA elsewhere within east Suffolk communities is being considered. The Councils welcome confirmation that a refurbishment and replacement policy is being proposed at the end of the 10 – 12 year construction phase, to resurface the 3G pitch and to ensure the legacy is left in prime condition for continued community use over a significant period of time.
291. However, the impact of an all-weather football pitch and 2 MUGA pitches in the proposed location at Alde Valley Academy / Leiston Sports Centre will need to be considered. Facilities of this type are usually flood lit and allow for extended hours and seasonal use which can result in detrimental impacts in terms of noise and light. As there appears to be sensitive residential dwellings in the immediate vicinity this will need to be considered in detail and mitigation built in to the final design and location.
292. The proposed sports pitches will require an appropriate surface water drainage system, particularly given that Leiston SWMP clearly identifies the area as at risk from surface water flooding. It is unclear whether infiltration is feasible. If not, EDF Energy will need

to determine with Anglian Water (AW) if the surface water drainage system has sufficient capacity for them to discharge surface water run-off from the proposed multi use games areas into the existing surface water sewer. If not, this may leave the proposed sports pitches without a feasible method of surface water drainage.

293. The new sports facilities will require a scheme of archaeological investigation, and mitigation as appropriate, due to proximity to recorded archaeological remains.
294. The refurbishment approach for the sports pitches should be extended to any other leisure sites and equipment provided including the MUGA's and a contribution to the future refurbishment of the leisure centre (which would see a proportional increase in use from NHB).
295. The Councils also suggest that consideration be given to wider funding arrangements, such as the Community Fund, towards refurbishment and improvements to other local community facilities in Leiston, including the Sports and Social Club, Waterloo Centre, and local youth hubs including CYDS. Such facilities could be used for diversionary activities for young people and could provide community cohesion between the local communities and the NHB. We would also encourage promotion of film screenings and special events at the Leiston Film Theatre.
296. Furthermore, we would welcome opportunities for additional facilities for young people to be provided in Leiston.

#### *Community cohesion and integration*

297. The Councils are particularly concerned about managing the impacts of an influx of mainly young, comparatively well-paid men into an area with some relatively deprived communities, and how EDF Energy propose to try to maximise integration between workers and the local community and reduce potential tensions. EDF Energy state that they will provide workers with a local guide, e.g. this could support the development of a Town Plan for the local community, workers and visitors to Leiston.
298. The provision of outreach or community workers promoting community cohesion between local communities and NHB and their families and delivering diversionary activities would mitigate some of the concerns held by local communities. These community workers could utilise improved community facilities to organise both wider integration focussed projects and diversionary activities for young people. This could include support for the wider delivery of the current Crucial Crew Plus programme (aimed at 13 to 15-year olds) that is being rolled out across east Suffolk high schools and could be specifically tailored to those students in the local area who are considered to be at risk.
299. The Councils would welcome more detail about the proposed community liaison activities and what these would consist of; ideally EDF Energy would work with our own community officers to put together a programme of suitable activities for the local area.
300. Provision of training, apprenticeships, and ultimately employment opportunities particularly targeted at NEETs, and those at risk of becoming NEET, could alleviate some of the potential community safety issues. Raising aspirations within vulnerable and deprived communities and reducing the sense of 'difference' between the workforce and relatively deprived local community would support the "prevention" ambitions of partners. Furthermore, the proposed work with education providers needs to ensure the

required training provision is targeted and delivered ahead of the initial construction phase commencement, so that local employment opportunities are created, facilitated and guaranteed for local communities. The provision of a broad range of jobs and employment opportunities within local communities would contribute to positive community cohesion by enabling integration, aspirations and fostering a sense of equal opportunity.

301. With the anticipation of a multi-national workforce making up a high proportion of the circa 7,500 workforce, English language teaching provision is welcomed to reduce isolation and loneliness of international workers and their families and to promote community cohesion. Consideration and support should also be provided regarding the various faith groups likely to be present on site e.g. provision of prayer rooms.

#### *Community Fund*

302. The Councils welcome the continued commitment to the Community Fund in order to tackle residual impacts but there is no detail about the scale of the proposed funding as yet. The Councils urge EDF Energy to work closely with us to design and develop this fund and to engage local community representatives in the process using a co-production approach.
303. We would also ask EDF Energy to ensure that the Community Fund, as stated, does support new opportunities as well as projects to mitigate specific identified impacts, i.e. take a holistic view of what would offset the negative impacts of the proposed development upon east Suffolk communities.

#### *Community Safety Management Plan (CSMP) and Worker Code of Conduct*

304. Local community concerns in terms of community safety have been well documented and include effects on vulnerable citizens, drug and alcohol misuse, prostitution and sex trafficking and sexual exploitation of young people, particularly young females. Some of these concerns are undoubtedly based on the experiences of local communities during the construction of Sizewell B. There is clearly the intent to learn from the previous Sizewell B development and more recently from the mitigation measures adopted at Hinkley Point C. These include the CSMP and worker code of conduct, along with mandatory drug and alcohol testing.
305. Increased provision of Police Community Support Officers, police officers and an additional Sergeant dedicated to mitigating the potential community safety risks, anti-social behaviour and increased crime within the hot spot areas (Leiston and Saxmundham in particular) would go some way to alleviate the fears and concerns of communities.
306. The Councils are concerned that the current threat of County Lines developing across east Suffolk could be exacerbated through the influx of NHBs. A demographic of mainly young men with financial means residing in the area and their possible exposure to class-A readily available drugs, increases this risk, and we therefore anticipate that new County Lines may develop given the ready market of new customers.
307. The Councils will expect to be involved in delivering the proposed Community Impact Reports and ensuring the correct mechanisms are in place to minimise adverse effects on social cohesion, community impacts and equality impacts. This includes, where appropriate, the provision of additional local services including doctor surgery places and

school places and improvements to local infrastructure including provision of educational and visitor facilities. The Councils are also working alongside the emergency services to ensure Blue Light Services are appropriately resourced during the construction of Sizewell C.

*Impacts on the Leiston Recycling Centre*

308. The Leiston Recycling Centre (Lovers Lane IP16 4UJ) is an important community facility and the community and Leiston Town Council have expressed concern about what impact the Sizewell C development may have on the site and its services.
309. The Sizewell C development will have a significant impact on the Recycling Centre by increasing congestion, leading to the risk of queuing and associated risks to road users. EDF Energy own the Recycling Centre, leasing it out to the County Council. The County Council requires early discussions about how the impact can be mitigated, by either securing the site and improving access or identify an alternative site so that Leiston and the surrounding area can continue to receive a good recycling service.

310. In summary, the Councils:

- Support the proposal to site new sports facilities in Leiston, but further work is required on the detailed design;
- Are concerned about potential community cohesion impacts as a result of the influx of a sizeable non-home-based workforce, and require EDF Energy to develop a comprehensive strategy of integration of workers with the local community, mitigation of negative impacts and extensive monitoring to adjust this strategy;
- Request further work with EDF Energy on proposed community liaison activities;
- With to be involved in delivering the proposed Community Impact Reports and ensuring the correct mechanisms are in place to minimise adverse effects on social cohesion, community impacts and equality impacts;
- Support the proposal of a Community Fund and request to be fully involved in agreeing the scale, nature and governance of such a fund; and
- Require EDF Energy to work with the County Council to avoid and mitigate the impact of their development on the Leiston Recycling Centre, to ensure the continued provision of a good and safely delivered recycling service.

## **TRANSPORT STRATEGY**

### **Transport Strategy Overview**

311. At Stage 3, the transport strategy has developed further since Stage 2, with some greater detail, the introduction of new elements and the removal of others. The most important transport change is that EDF Energy has moved from their Stage 2 options of a marine-max or rail-max strategy to Stage 3 proposals of either a rail-led or a newly raised option of a road-led strategy, discarding the marine-max strategy option from Stage 2.
312. The other major change is the modelling of the potential of an increased workforce of 7,900, with an additional 2,300 workers to the predicted scenario. Both changes are of great concern to the Councils. It is important to note that at this stage the Councils do not accept that the additional 2,300 workers have been assessed correctly in transport terms, with the Councils needing to see the assumptions used within the Gravity Model.
313. Elements of the proposed mitigation are supported by the Councils; these are discussed in detail in this response. However, the Councils stress that significant further work needs to be undertaken to determine transport impacts and the appropriate levels of mitigation. There is limited evidence within the consultation to support the analysis that EDF Energy have undertaken and so this response highlights information that needs to be provided to the Councils as part of development of a Statement of Common Ground, and sets out the Councils' current position, based on the information provided within the consultation, regarding the proposed mitigation.
314. It is acknowledged that an application for a DCO will be accompanied by a full Transport Assessment and Environmental Statement, which should provide the level of detail required. The Councils' Stage 3 response identifies several issues that need to be addressed by EDF Energy to ensure that any information gaps are fully closed prior to any formal DCO submission. We welcome further engagement with EDF Energy on transport matters.
315. As set out in the Suffolk County Council Local Transport Plan (LTP) a high priority is to support the growth of Suffolk's businesses so that they can capitalise on future opportunities. One of the key areas of growth is the Suffolk Energy Coast, which includes the development of Sizewell C nuclear power station.
316. The Councils are aware of the proposed East Anglia One North and East Anglia Two offshore windfarm DCO proposals and will continue to look for EDF Energy and Scottish Power Renewables (promotor of the windfarms) to consider the impacts of the energy developments holistically. This must include both parties working together to identify the most suitable form of mitigation for the overall impact and effective methods of delivering these.

### **Transport strategy for the construction workforce**

317. The transport strategy for the construction workforce is determined by the Gravity Model, with assumptions around home-based and non-home-based workers and the predicted spread of where they would live. We have commented in paragraph 197 about our concern that the Councils do not have a current version of the Gravity Model with the current assumptions, the result being that the Councils are unable to come to a fully considered view on the proposals and the traffic impacts of the construction workforce.

*Park and Ride sites, car parking and bus services*

318. EDF Energy confirmed in Stage 3 their preferred Park and Ride sites, at Lower Hacheston at the A12 Wickham Market Junction, and at Darsham. Access arrangements to the Darsham site have changed, to join the A12 North of Willow Marsh Lane. The number of parking spaces at each of these Park and Ride sites has increased from Stage 2 figures of 900 / 1,000 to 1,250 spaces at each site. In addition, the revised transport strategy includes a small park and ride to be provided on the LEEIE, particularly for the early years of development, however no detail of this is provided, so the Councils are unable to comment on the acceptability and practicalities of this proposal but welcome it as an alternative to unauthorised park and rides resulting from not having an early years proposal. There is also an on-site car park proposed with 1,000 car park spaces – this is unchanged from Stage 2.
319. The Councils continue to support the principle of Park and Ride sites to transport workers to the development site and are content with the proposed locations. However, as already noted at Stage 2, there is not enough evidence / justification to determine whether the total number of car park spaces across the different sites (Park and Ride, on-site and at the accommodation campus) is required, sight of the Gravity Model may help the Councils to understand the proposals further.
320. At each car park, adequate parking for electric vehicles, cycles and motorcycles will be required and access to each Park and Ride should be safely enabled for pedestrians and cyclists.
321. The Councils welcome the Parking Permit management system proposed and will work with EDF Energy to ensure that the system maximises the number of staff utilising the Park and Ride sites and travelling to the site by sustainable modes. The Councils also welcome EDF Energy's commitment to reducing "fly parking" associated with staff and we will work with EDF Energy to minimise the potential for this to occur through the Parking Permit system and other agreed management measures.
322. The Councils support the ambition to transport as much of the construction workforce by public transport as possible. The commitment to Park and Ride facilities and direct bus services operating from the LEEIE, Leiston, Saxmundham, Ipswich and Lowestoft is welcomed. While the proposal to have a bus service between an East Suffolk Line station and the development site is welcome, the Councils are not convinced that Saxmundham is the best transfer station (as proposed in Stage 3) due to creating additional bus traffic through Saxmundham, and we would ask EDF Energy to consider whether Darsham is a better location for that transfer to take place. The Councils want discussion of what additional benefits the bus services could offer to the local community.
323. Services will need to be malleable to cater for unexpected demand and so will need to be reviewed periodically and this should be managed through a Transport Review Group, the Construction Worker Travel Plan or another acceptable means.
324. We would expect all buses used for the site to be either electric or ultra-low emission to minimise the air quality impacts of the bus fleet.
325. More detail on improvements to local bus services (i.e. shuttle buses), cycle routes and joining up of sustainable modes of public transport will be necessary within a detailed travel plan in the EIA. It may be considered worthwhile to link the various Park and Ride



schemes with existing services to provide a network of access for commuters into some of the local towns and shopping centres.

326. Further detail about the proposed Park and Ride facilities can be found from paragraph 848 onwards (for the Northern Park and Ride) and from paragraph 871 onwards (for the Southern Park and Ride).
327. A sustainable travel plan will be expected to be provided to support a development of this scale particularly given the large construction workforce proposed and during operation the 900 permanent workers. A detailed construction workforce travel plan will be expected to be provided to cover the construction phase and the operational phase. The Councils are happy to support the progression of this Travel Plan in accordance with our guidelines, drawing on EDF Energy's experience at Hinkley Point C and past experience of the Councils in these matters.
328. A full travel plan will need to be presented within the EIA and contain both physical and behavioural measures to increase travel choices and reduce reliance on single-occupancy car travel to reduce congestion, pollution and demand for parking spaces.
329. There is no standard format or content, but it would be expected to contain (not exclusively):
  - Objectives and targets;
  - Priority given to non-car modes of transport or car sharing - signage, layouts;
  - Controls on car parking (ensure adequate numbers of suitably designed parking space for disabled people; car sharing; pool cars);
  - Nomination of a travel plan co-ordinator and associated support;
  - Provision of improved public transport, cycling and walking facilities (e.g. lobby areas where information about public transport or car sharing can be made available, lighting, landscaping and shelters);
  - Use of low emission transport between the park and ride and construction site;
  - Well designed and conveniently located cycle routes and cycle parking areas;
  - Provision of shower and changing facilities and safe storage at convenient locations throughout the site;
  - Electric bike / car charging points;
  - Measures to facilitate public transport (e.g. shuttle buses to stations and other key destinations, negotiation with local transport providers, discounts on tickets etc.),
  - Interim or aspirational targets for the breakdown of transport types (including staff transport and freight movements)
  - Reduced traffic speeds (particularly during development);
  - Travel information and marketing; and
  - Monitoring and review mechanisms.

330. In summary, the Councils support the principle of Park and Ride sites, as well as maximising direct bus transport provision and other sustainable transport measures to the site but require further evidence / justification on the number of car park spaces across the different sites.

### **Overall Strategy for moving materials and freight**

331. EDF Energy state that their vision in this respect is to deliver the Sizewell C Project 'so that adverse transport effects on the environment and local communities are limited through mitigation in advance of effects being felt, where reasonably practical'. Current government policy is to promote the use of rail or water freight transport, as a method to reduce the environmental and congestion impacts of road freight. As part of their Stage 3 proposals, EDF Energy have dropped proposals for a marine-led transport strategy as proposed at Stage 2 and have introduced a road-led option alongside a rail-led proposal.

- The Councils are disappointed that the marine strategy is no longer being considered, and we do not believe that sufficient evidence has been given to rule out the delivery of a marine led strategy. As set out at Stage 2 and Stage 1, we support delivery of construction material to the site through marine and rail to limit the significant impact that will occur on Suffolk's roads as a result of development of the site. This view is in line with national policy:
- Paragraph 5.13.10 from the NPS EN-1 sets out that 'Water-borne or rail transport is preferred over road transport at all stages of the project, where cost-effective'.
- Paragraph 5.12.12 of the NPS EN-1 goes onto state 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 (Infrastructure Planning Commission) of any obligations or requirements needed to secure the mitigation'.

332. Vol. 1 paragraph 5.1.6 of EDF Energy's Stage 3 consultation document sets out that:

'A marine-led strategy has been considered in which a significant proportion of construction materials would be delivered by sea. However, following further study, EDF Energy has concluded that this is not feasible due to the impacts on marine ecology of constructing the jetty. Measures to reduce this impact would significantly increase the overall time taken to construct the power station, would not fully address those impacts and would not meet the "urgent" need for new nuclear power identified by Government in the NPS (Ref. 5.1, Ref. 5.2)'.

333. This statement suggests that a marine-led option is no longer cost effective (as indicated as the test within NPS EN-1) due to the impact on the delivery time and the associated impact on costs. Equally, EDF Energy suggests (Vol. 1 paragraph 5.4.4) that the construction of a jetty was likely 'to cause significant adverse effects on marine ecology, fisheries and marine mammals, including porpoise'. The evidence for these conclusions has not been provided. As part of any pursuance of a non-marine led option, the Councils will need to be convinced that the environmental impacts of the jetty on marine ecology outweigh the environmental impacts of the resultant highway-based mitigation.

334. The Councils continue to support a marine-led transport strategy, as the Councils have not seen evidence that a marine-led strategy is not feasible or environmentally preferable to a rail-led (or road-led) strategy. The Councils ask EDF Energy to re-consider a marine-led strategy, or at the very least provide adequate justification for its abandonment.
335. If a marine strategy proves to be undeliverable or evidenced to not be cost effective, the Councils urge EDF Energy to focus on a rail-led strategy as the preferred option, as indicated as appropriate by NPS EN-1. The Councils will be happy to work with EDF Energy, with the established resources and experience they have available in this sector, in order to expedite the rail-led strategy essential for our local communities support EDF Energy to strengthen their case for rail improvements with Network Rail.
336. Further to the loss of the marine strategy, the Stage 3 consultation indicates that there are significant risks associated with the timescales for the rail led strategy, as indicated at Vol. 1 paragraph 2.1.7 and further underlined at Vol.1 paragraph 5.1.4. At this, final public round of consultation, the Councils and the public should have far greater assurances of any option being presented. This work should have been completed by EDF Energy before Stage 3 to ascertain exactly what infrastructure is required to deliver the rail option and that it is deliverable within the required timescales.
337. The Councils welcome the proposed investment in upgrading the East Suffolk Line and the associated legacy benefit of the rail-led strategy, including the upgrading of level crossings, the new passing loop and the track crossing. The Councils support increasing line speeds and improving journey times along the East Suffolk Line, as set out in The Suffolk Rail Prospectus. We ask for further clarification on whether the location of the passing loop presents the greatest legacy benefit for achieving additional future passenger services along the line and would like to work with EDF Energy to ensure that the greatest legacy benefit is achieved.
338. To date, it is noted that EDF Energy and Network Rail appear solely to have focused on the East Suffolk Rail Line east of Ipswich. However, no evidence is presented that Network Rail and / or the rail freight companies are able to provide or make available the necessary capacity west or south of Ipswich for the five train paths required, avoiding displacement. The Councils are aware of severe limitations on additional train paths being available for both passenger and freight capacity in this region.
339. EDF Energy are requested to provide clear evidence, in conjunction with Network Rail and the rail freight companies:
- That the additional five new paths required from the aggregate source sites yet to be identified can be made available on the appropriate time scales within the network capacity. There should be consideration of the wider short and long term strategic needs for rail capacity in the region including both the increased passenger train frequencies and speeds committed to in the Greater Anglia franchise, and the ability for the Port of Felixstowe to make use of the new paths about to become available between Felixstowe and Ipswich.
  - That the two rail paths required for the early years of development will be made available as soon as possible at the start of the construction phase. There are two rail paths reserved for use by the Nuclear Decommissioning Authority that could add to flexibility and availability on the East Suffolk Line. We expect EDF

Energy with Network Rail to explore fully the availability of those rail paths for passenger and freight opportunities.

340. We request that EDF Energy identify and undertake the work that needs to be completed to ensure that the rail-led scenario is deliverable for both the early years and peak construction years, and importantly to ensure that the road-led scenario does not become the default option due to deliverability.
341. Furthermore, EDF Energy have not yet provided evidence that in the road-led scenario (and the early years of the rail-led scenario) the two proposed rail deliveries per night are deliverable. As highlighted above, the Stage 3 consultation indicates that there are significant risks associated with the timescales for the rail-led strategy. As some of the rail upgrades may equally be required for the road-led scenario, including the potential need to strengthen bridges, and the rail paths need also to be available across the wider network, there appears to be a level of uncertainty about the deliverability of these paths too. As such, until further evidence is presented, EDF Energy needs to consider in any transport assessment a worst-case scenario that 100% of materials would be brought to site by road. While the Councils strongly encourage a maximisation of rail transport as part of the materials strategy, we would expect EDF Energy to base their transport assessment, at this stage, on such a worst-case scenario.
342. Vol. 1 paragraph 8.8.2 of the Consultation sets out that in order to deliver the works associated with the rail strategy, a number of other consents, licences and approvals are required. The Councils request further clarification on the development of this strategy.
343. The NPS for National Networks sets out that:

‘Rail transport has a crucial role to play in delivering significant reductions in pollution and congestion. Tonne for tonne, rail freight produces 70% less CO<sub>2</sub> than road freight, up to fifteen times lower NO<sub>x</sub> emissions and nearly 90% lower PM<sub>10</sub> emissions. It also has de-congestion benefits – depending on its load, each freight train can remove between 43 and 77 HGVs from the road’.
344. Stage 3 states that a rail-led strategy would result in an additional average of 450 HGV movements on an average day and 900 on the busiest day. In comparison, a road-led strategy would result in 750 HGV movements on an average day, with 1500 on the busiest day. The rail-led strategy would restrict HGV operation from 0700-2300 and 10 train movements during day-time. The road-led strategy may also allow an extension of HGV operating hours beyond 0700-2300 and include four freight train movements during night time.
345. As per paragraph 5.11.5 of the NPS-EN1, the noise impact of ancillary activities associated with the development, such as increased road and rail traffic movements should be considered. Further information is required on the noise impacts of the rail- and road-led options, and whether additional mitigation is required.
346. The Councils are very concerned with the new road-led strategy, given the likely impacts on communities, including congestion, severance, air quality and noise, including during night time. It is important to note that without significant justification and evidence pursuance of this strategy is contrary to NPS EN-1.
347. NPPF paragraphs 108 and 109 provide guidance for reviewing planning applications on transport grounds:

'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.

348. 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.'
349. For a road-led strategy, and to some extent a rail-led strategy, the Councils are still considering the impacts of increased volumes of HGV, LGV (light goods vehicles) and car traffic on the wider road network and whether additional mitigation to what has been proposed will be required.
350. In particular, the Councils expect there will be significantly increased impact on the A12. There are likely to be increased cases of platoons caused by the increase in HGVs, buses and other traffic, including AILs. This will exacerbate the impact of Sizewell C traffic in terms of delay and road safety particularly on minor junctions on to the A12. The Councils therefore believe there will be further stress on a number of junctions as a result of the road led strategy. The Councils expect EDF Energy to mitigate the residual cumulative impacts of their development so that their development is not determined as having a severe highway impact.
351. Vol. 1 paragraph 5.4.34 of the Stage 3 consultation sets out proposals for limiting the number of HGV movements on any given day. The Councils welcome EDF Energy's commitment to achieving a high level of compliance with agreed project controls for HGV movements.
352. Paragraph 5.13.8 of NPS EN-1 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.'
353. In their Stage 3 documentation, EDF Energy are committing to control their HGV movements, which would result in capping the number of HGV movements to the site on an hourly, daily and quarterly basis. This is consistent with mitigation principles set out within NPS EN-1.

354. The Councils will require planning requirements to control:
- During peak construction, the absolute number of HGV movements for any given day as well as ensuring the average number of movements does not exceed that assessed within the modelling for any three-month period;
  - During early years construction, the absolute number of HGV movements for any given day as well as ensuring the average number of movements does not exceed that assessed within the modelling for any three-month period;
  - The routing of HGV traffic, to the routes modelled, including the 85% from the south and 15% from the north split of HGV traffic to ensure that the impacts on the road network do not exceed those assessed within the transport model.
  - The number of peak hour hourly HGV movements to those modelled as part of the Transport Assessment.
355. The Councils needs to work with EDF Energy to further understand whether managing HGVs through ANPR (automatic number plate recognition) or through RFID (radio-frequency identification) is preferable for controlling HGV routing to / from the site.
356. Vol. 1 paragraph 7.5.6 of the consultation sets out that the power station would take between nine and twelve years to construct. The Councils seek details on how the significant variance in time affects the number of forecast vehicle movements.
357. The Councils would welcome working with EDF Energy, as well as other relevant parties including Highways England and the police to put in place an appropriate incident management strategy for abnormal events that prevent access to the site.
358. The Councils would need to be confident that the residual cumulative impact on the A12 junctions would not result in a severe impact and that any significant impacts on the transport network have been cost effectively mitigated to an acceptable degree (e.g. through the provision of Park and Ride facilities, as well as through the proposed junction improvements).
359. We are concerned about any proposals to extend the operating hours beyond 0700-2300, as suggested for the road-led scenario. This could have significant adverse impacts on residents living in close proximity to the HGV route.
360. Further to the above, the Councils require far greater clarification on how the additional 2,300 construction workers and 100 associated development workers have been modelled within the assessment, including how this interrelates with the Gravity Model. We consider this to be a key matter that needs to be resolved as soon as possible.
361. All highway works will be required to be subjected to a Road Safety Audit as part of the detailed design stage.

### *Material quantities*

362. The Stage 3 documentation includes a general overview of the “material quantities” (Vol. 1 Table 5.2 & paragraph 5.4.23) including non-aggregate materials:
- Materials quantities to build power station 5.6 Mt;
  - Materials to build other specific elements such as site access road 2.9 Mt;
  - Imported fill quality material 2.2 Mt;
  - Material excavated within the site 7.7 Mt (of which 5.7 Mt would be useable); and
  - Off-site development i.e. park & ride, road and rail improvements 0.4 Mt.
363. In addition, rock for sea defences and rebuilding the Northern Mound have to be brought in, and it appears that this not included in above figures
364. To develop a full understanding of the spoil management proposals and their transport implications, we require an overview of the likely and worst-case scenario for the balance of materials, i.e. how much material would be used from borrow pits, how much additional material would need to be brought onto site, and how much surplus material would need to be taken offsite. EDF Energy are requested to provide this information, underpinned by their assumptions of the transport implications of materials being brought into and out of the site, i.e. assumptions as to the sources of materials, amounts that would need to be brought in / out and the likely modes of transport.
365. Construction materials sourcing is further discussed in the Environment section of this response (from paragraph 139 onwards), and the spoil management strategy in the stockpiling and borrow pits section of the Main Development Site section (from paragraph 610 onwards).

### *Abnormal Indivisible Loads (AIL)*

366. The Stage 3 consultation document indicates that wherever possible AILs are to be brought in by sea, using the BLF.
367. However, the information provided in the Stage 3 consultation regarding the delivery of AILs to site is unclear. The BLF allows ‘some’ AILs to use this facility (Vol. 1 paragraph 1.2.1) or that it will ‘remove heavy and oversized loads from the road network’ (Vol. 1 paragraph 5.6.1). Both the A12 / B1122 (Vol. 1 Fig 16.1) and the B1122 route (Vol. 1 paragraph 16.4.11) are noted as providing facilities for AILs, the latter in the operational phase. However, it is unclear in the consultation what proportion of AILs will be delivered via the beach landing facility and what via the highway network. For example, we are aware from Hinkley Point C that the accommodation campus units were delivered via a significant number of AIL road deliveries. Given the greater size of the accommodation campus proposed at Sizewell C, this could result in an even higher number of AILs from the campus construction.
368. Additional information is required before the Councils can comment on the effectiveness or otherwise of an AIL delivery strategy including information regarding the number and frequency of AILs using the highway network, the routes and whether this data has been included in the transport modelling or not. This is pertinent, as information from Hinkley Point C has suggested as many as 500 AILs in one annual quarter, which are likely to

lead to significant levels of unmodelled disruption, which needs to be minimised. The impacts of AILs regarding delay and congestion are not fully understood.

369. Clarity is also sought that EDF Energy comply with the Highways England Water preferred policy guidelines for the movement of abnormal indivisible loads (see [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/503107/WPP\\_guidelines\\_2012\\_HE\\_rebranding\\_v1.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/503107/WPP_guidelines_2012_HE_rebranding_v1.pdf)).

#### *Light Goods Vehicles*

370. The impact of LGVs has been assessed as part of the transport modelling. EDF Energy has set out that within their transport model, 700 LGV movements have been assessed. Unlike the HGV movements, it is not proposed to cap or control the routing of LGVs. The proposals include a Postal Consolidation Facility, which would reduce the number of LGVs travelling north beyond the Wickham Market Park and Ride. The Councils welcome this Postal Consolidation Facility and believe that EDF Energy need more fully to investigate the potential for more LGV trips to be consolidated, further mitigating these impacts, as set out as appropriate at paragraph 5.13.8 of the NPS EN-1.
371. The lack of control on the routing of LGVs means that additional pressures will be put on B and C class roads that provide alternative routes to Sizewell. This will result in impacts concerning severance, journey times, road safety, capacity, noise and potentially air quality on communities throughout east Suffolk.
372. EDF Energy has included proposals to address road safety impacts at six junctions, and as set out in detail below, we require further work to be done to determine the exact nature of impacts at a number of other locations to ensure that the residual cumulative impacts on the road network are not considered to be severe.



373. In summary, the Councils have significant concerns about the proposed Stage 3 strategy for moving materials, in that:

- The Councils do not support the dropping of a marine led-strategy, with the introduction of a road-led strategy alongside a rail-led option.
- The Councils are in favour of a marine-led transport strategy as a sustainable transport mode and have not yet seen convincing evidence that a marine-led strategy is not feasible or environmentally preferable to a rail-based (or road-based) strategy.
- If a marine strategy proves to be undeliverable, the Councils urge EDF Energy to focus on a rail-led strategy as the preferred option and welcome in principle proposed measures to upgrade the East Suffolk Line. However, further evidence is required to show that the proposed five additional rail paths are deliverable in the wider rail network. EDF Energy needs to identify and undertake the work that needs to be completed to ensure that the rail-led scenario is deliverable for both the early years and peak construction years and importantly to ensure that the road-led scenario does not become the default option due to deliverability;
- The Councils are not content with a road-led option, with the significant number of additional Heavy Goods Vehicles (HGVs) resulting in a detrimental effect on Suffolk's road network with very significant adverse impacts for Suffolk residents and road users.
- Within the road-led strategy, the Councils are not content with the possibility of a relaxation of HGV operating hours into the night-time.
- For the road-led scenario, EDF Energy needs also to provide evidence that the two proposed rail paths and any potential improvements to the East Suffolk Line are deliverable. We urge EDF Energy to ensure that a fully road-led scenario does not become the default option due to deliverability; however until such clear evidence is available, the Councils expect EDF Energy to base, at this stage, their transport assessments on a worst-case scenario where 100% of materials would be brought to site by road;

374. Notwithstanding the above and without prejudicing the requirement for a marine-led strategy to be reconsidered and the request for the road-led strategy to be discarded, the Councils provide comments on each of the traffic schemes put forward in EDF Energy's Stage 3 application.

375. The Councils request further information on material quantities, justification on the assumption of a split of 85% of materials coming from the South and 15% from the North, and clarification on the AIL strategy including an indication of the number of AILs arriving by road and by sea, to allow the Councils to fully assess the impact of freight movements as part of the scheme.

## **Comments on the differences in the proposals for the rail-led and road-led strategies**

376. Notwithstanding the above and without prejudicing the requirement for a marine-led strategy to be reconsidered and the request for the road-led strategy to be discarded, the Councils provide commentary on the differences in the mitigation proposals for the rail-led and road-led strategies. It can be assumed that in many cases, the comments on road mitigation for the rail-led strategy would also apply should a marine-led strategy be revisited. Details on each of the schemes are provided in the relevant chapters of this response.
377. There is some concern that there will be reciprocal issues between the schemes but no reciprocal mitigation. For example, the road-led scheme proposes no rail improvement measures despite the inclusion of two trains per day (four movements), with all rail movement at night. Similarly, the rail-led scheme still has a requirement for up to 450 HGV deliveries per day, but no freight management facility proposed. The lack of these mitigation strategies in each scheme will need to be justified and the impact adequately assessed; all impact assessments will need to take account of the worst-case scenario.

### *Rail improvements*

378. The rail-led strategy proposes up to five freight trains (ten movements) per day, during day-time, at peak construction directly into site, using the “Green Rail route”. This would necessitate refurbishment of the branch line and infrastructure works to improve the East Suffolk line including as a minimum a new rail loop north of Melton, rail crossing upgrades and rail crossing closures.
379. The road-led strategy proposes up to two freight trains (four movements) per day, during night-time. For both options, in the early years of construction, it is proposed to have up to two freight trains (four movements) per day to either the existing rail sidings east of Leiston or to a new rail-head to the north of the existing rail sidings.
380. The consultation documents contradict whether the improvements to the East Suffolk Line are equally required in a road-led strategy – for example Vol.1 paragraph 5.5.10 states that “EDF Energy does not expect that any upgrades to this line would be required under a road-led strategy”, while Vol. 1 paragraph 9.1.1 states that “a number of level crossings would need to be closed or upgraded (...) in both the rail-led and road-led strategies”. Clarification is required on this. The consultation document does not specify any requirements for upgrades on the wider rail network, and the Councils would seek further understanding on these impacts.
381. In both options, further consideration needs to be given to mitigation of noise and vibration impacts of freight trains to residents along the line, in particular in Woodbridge, Melton, Campsea Ashe, Saxmundham and Leiston.

### *Road improvements*

382. It is noted that the rail-led strategy would lead to an addition of 225 average HGVs a day and 450 HGVs busiest day (450 / 900 movements), while the road-led strategy would result in an additional 375 HGVs on an average day, with 750 on a busiest day, (750 / 1,500 movements). EDF Energy concludes in the Stage 3 consultation that this means that the road-led strategy requires additional road mitigation schemes.
383. We welcome that EDF Energy has recognised the need to provide increased mitigation

for the B1122. In the rail-led strategy, EDF Energy proposes a road bypass of the village of Theberton, while the road-led strategy proposes a new Sizewell Link Road from the A12 to the site (bypassing Middleton Moor and Theberton). The rail-led strategy does not propose any mitigation for Middleton Moor or Yoxford (other than the Yoxford roundabout), even though significant construction traffic noise will still be experienced by residents in the Middleton Moor and Yoxford area. The Councils require evidence why a Sizewell Link Road is required for the road-led strategy but not for the rail-led strategy. If this can be evidenced, EDF Energy will be expected to propose alternative mitigation measures for Middleton Moor and Yoxford in the rail-led strategy.

384. Both road- and rail-led strategies include the provision of a two-villages bypass for Stratford St Andrew and Farnham. This is welcome, as the Councils advised at Stage 2 that this was the minimum mitigation considered acceptable for a rail- or marine-led option. However, the proposal of a road-led strategy and the subsequent impact of additional HGVs on the highway network will significantly increase the ambient noise, air quality and vibration as well as community severance within the villages of Marlesford and Little Glemham. The proposal of the road-led option is a significant change from Stage 2 and further evidence needs to be provided on the impacts and resultant mitigation requirements, including consideration whether a four-villages bypass should be minimum mitigation for a road-led strategy.
385. The road-led strategy proposes a Freight Management Facility to be sited on land to the east of the Orwell Bridge to serve as a holding area for HGVs regulating the timing and flow of vehicles to the main development site. The Councils require justification why such a Freight Management Facility is only proposed for the road-led strategy, given the still significant number of HGVs generated in the rail-led strategy.
386. It is noted that the road-led strategy includes a potential for “extended hours” working, presumably beyond the 07:00-23:00 stated in the rail lead strategy. This will need to be accurately quantified and the impacts assessed to justify this extension, particularly as the road lead strategy has extra impacts such as the freight management facilities which would also have to be working extended hours and previously raised concerns regarding noise impacts on residents living close to the highway network.
387. The road-led strategy significantly increases the number of HGVs on the highway network and with extended hours. This could have a significant impact on locations such as Woodbridge. This may require additional mitigation. Additional road mitigation requirements are discussed in the Traffic Modelling chapter below.

388. In summary, the Councils question why a number of mitigation proposals are only proposed for either rail- or road-led strategies. The lack of these mitigation strategies in each scheme will need to be justified and the impact adequately assessed; all impact assessments will need to take account of the worst-case scenario.
389. In particular, EDF Energy needs to evidence whether the rail-led strategy may require additional road mitigation as proposed under the road-led strategy, including mitigation for Middleton Moor and the provision of a Freight Management Facility.

## Phasing

390. The consultation states that no mitigation work will start until work on the main site commences. Many mitigation schemes are indicated to be implemented during the first years of construction of the station and ancillary sites. This would mean the mitigation schemes would be constructed in a period when the construction activities on the main site are already ongoing, thus their construction are likely to exacerbate the detrimental traffic impacts on sensitive receptors.
391. Several of the associated development schemes cannot, in the Councils' opinion, be constructed off-line and will therefore impact the main haul route to the site. Generally, few suitable diversions are available and even temporary traffic signals are likely to have a severe impact on the reliability of deliveries to site. The Councils consider that many of the mitigations must be completed before significant numbers of vehicles begin accessing the site. This is especially important for all on-line highway mitigation works, for which the works themselves may lead to significant disruption if not phased appropriately.
392. While approximate build out times are provided for the separate mitigation measures the consultation does not provide a clear overall programme nor in most cases the timing of the start dates. There are inconsistencies in the details of the programme for some works, specifically the Park and Ride sites. Without an overall program it is difficult to comment in detail.
393. The Councils will seek to engage with EDF Energy to agree the timing of the associated developments and secure this through agreed regulations.
394. In summary, the Councils need greater clarity from EDF Energy on the phasing of implementing associated development schemes. The Councils expect the majority of transport schemes to be phased early, some in advance of commencement of construction of the power station, and with minimum additional detrimental traffic impact.

## Air quality, noise, vibration

395. NPS EN-1 states that "Development should avoid significant adverse impacts on health and quality of life from noise, mitigate any detrimental impacts and, where possible, contribute to improvements to health and quality of life through effective management of noise. Noise levels should not exceed any limits specified in the DCO."
396. The Stage 3 consultation refers to noise, air quality and other environmental impacts in a number of sections of the documentation. This section brings together all comments related to traffic air quality, noise and vibration impacts. General air quality and noise comments are made in the Environmental Health and Protection section, from paragraph 72 onwards.
397. Having regard to air quality, the accuracy of the figures presented under the traffic modelling is to be further assessed. The traffic figures are integral to the air quality modelling which will need to be undertaken. The traffic figures must be accepted by the Councils in order for the results of any air quality assessments to be recognised. This includes undertaking a cumulative assessment of other approved developments and this is claimed to have been undertaken, full detail of the committed development sites

included will be expected.

398. The consultation states that a large majority of the workforce will be located in and around the local town of Leiston and village of Knodishall. Even if workers' daily commute does not take them through these areas, then shopping and leisure trips will have an impact. The additional bus journeys within these areas in order to move the workforce to site will also impact on the road network. Air quality assessment within the local villages and towns is required, with particular reference to the town of Leiston.
399. Baseline noise and vibration surveys for the Sizewell Link Road, Theberton bypass, two-villages bypass, Freight Management Facility and other highway improvements have yet to be undertaken but a number of residential properties have already been identified as being likely to be noise impacted by site compound activities and construction works. Suitable working hours and noise mitigation measures shall be calculated and presented within the EIA.
400. Noise impact from the construction of the Northern Park and Ride facility has already been calculated for nearby residential properties and mitigation measures in the form of a 3m high bund is proposed and appears to be satisfactory. Baseline noise assessment for the Southern Park and Ride facility indicates no additional noise mitigation measures are necessary.
401. Baseline noise assessment for the new Yoxford Roundabout indicates a number of residential properties will be impacted by construction noise and some mitigation measures will be necessary, further information is expected within the EIA.
402. Cumulative impact of road transport noise from this and other major developments in the Sizewell vicinity must also be assessed and presented within the EIA.
403. As with the rail-led strategy the reverse is occurring in relation to mitigation measures and although there will still be a reliance on rail deliveries the mitigation associated with those deliveries is absent in the road led strategy, the impact of this needs to be adequately assessed in order to justify why they have not been included. It is also noted that the road led strategy includes a potential for "extended hours" working, presumably beyond the 07:00-23:00 referred to in the rail-led strategy. This will need to be accurately quantified and the impacts assessed to justify this extension, particularly as the road lead strategy has extra impacts such as the freight management facilities which would also have to be working extended hours.
404. Re-routing due to the A12 at Woodbridge has been suggested on the B1078. This route will also need considering for any air quality implications. The Southern Park and Ride at Wickham Market will have additional traffic from Sizewell C workforce and this must be considered in combination with the re-routed traffic. The Southern Park and Ride site is listed as a postal consolidation centre and Traffic Incident Management Area for HGVs. These items are not mentioned in the air quality section of the PEIR. They must be included in the Air Quality assessment work undertaken for this location.
405. The Councils expect the impact of noise from construction traffic to be included in the EIA. While it is recognised that the impacts of traffic generated by deliveries and workers travelling to the site are difficult to assess in detail beforehand, the Councils would expect at least informed assumptions to be included.
406. EDF Energy will be expected to agree a system of monitoring with the Councils prior to

the start of any construction and to agree a mechanism for EDF Energy to mitigate any more significant impacts than anticipated in the DCO.

407. In summary, the Councils expect EDF Energy to consider air quality, noise and vibration impacts on all significantly impacted transport routes and propose appropriate mitigation.

### **Maintenance**

408. The additional traffic resulting from construction of Sizewell C and the associated developments will have a significant impact in terms of the need for additional maintenance of the local road network. The consultation does not refer to this impact, nor does it consider the impacts of unavoidable routine highway maintenance in terms of disruption to Sizewell and local traffic.

409. The Councils are aware that EDF Energy contributed a proportionate sum towards structural maintenance of roads in Somerset during construction of Hinkley Point, such an agreement would be welcomed by the Councils although we do note that a significantly longer length of Suffolk's roads is affected compared to those in Somerset. The Councils accepts that the sums provided for structural maintenance should be justified by regular surveys of those roads mutually agreed as bearing the additional Sizewell C traffic.

### **Monitoring and Mitigation**

410. The uncertainties due to the lack of evidence in the consultation and inherent differences between modelling and the actual impacts mean that it is almost inevitable that there will be localised impacts unforeseen at this time. The consultation does not consider, nor can reasonably be expected to do so with a scheme of this complexity, a number of minor localised issues such as "fly-parking", location of bus stops, changes in traffic due to unplanned or speculative development associated with Sizewell. The Councils would expect EDF Energy to recognise these potential impacts and develop processes to work with the Councils and local residents to agree a mechanism of managing these impacts, providing mitigation when necessary.

411. In summary, the Councils expect a contribution from EDF Energy towards highways maintenance and wish to agree with EDF Energy an approach to monitor and mitigate transport impacts.

## TRAFFIC MODELLING

412. At Stage 1, the Councils commented on EDF Energy's traffic modelling that we considered the assumptions in the Gravity Model as optimistic and understating the volume of commuter traffic on the network. We felt insufficient information had been provided on material quantities or the development programme to assist the Councils in the assessment of the likely traffic impacts of the development. Further work was needed to provide a more realistic assessment of the transport implications upon which more robust decisions on appropriate measures can be taken.
413. At Stage 2 further information was provided, yet EDF Energy's traffic modelling still required further clarification and agreement with the Councils.
414. At Stage 3, further information has been provided, yet EDF Energy's traffic modelling still requires further clarification and agreement with the Councils. At this stage there are still a number of elements outstanding and assumptions to be justified in order for the Councils to have the right level of confidence.
415. The Stage 3 consultation highlights that the key purpose of the Sizewell C traffic modelling is to examine and assess the effects which would typically occur with the whole workforce present (Monday – Thursday) at peak construction. The traffic modelling takes into consideration HGV movements (which will be via a specified controlled route), LGV movements (those will equally be significant and not controlled) and other vehicle movements including buses and cars. The traffic modelling is heavily reliant on the outputs of the Gravity Model (see from paragraph 196 onwards), which has not been submitted to the Councils yet. This is especially important given that we understand the traffic modelling is based on the scenario of an increased park workforce of 7,900 (plus 600 at associated sites), which the Gravity Model needs to consider.
416. The Councils require EDF Energy's traffic modelling to be robust to ensure that the right mitigation measures at the right time are being proposed. The traffic modelling relies on assumptions, all of which will need to be evidenced and some of which will be subsequently controlled through planning requirements. The Councils have not seen all assumptions that have been fed into the gravity and traffic modelling. Some of the assumptions provided need further justification, including car sharing factors, non-work related and weekend travel by NHB, visitors to the site, amount of required material and the split of traffic.
417. The modelling work at Stage 3 includes the assessment of seven peak hours (which is an improvement to the four time periods modelled at Stage 2), which we would normally expect would include the network peak hours. Although this is very likely, given the hours that have been assessed, we would request that EDF Energy confirm the network peak hours have been assessed. We would welcome confirmation of the construction shift patterns that are being used at Hinkley Point C, to confirm that those used in the traffic model represent the patterns that are likely to be exhibited by staff. We welcome that, at our request, periodic Sizewell B outages and network seasonality have now been incorporated into the modelling.
418. The traffic model includes a base model (representing 2015 traffic conditions), a reference case traffic model (representing predicted future conditions at the time of the peak construction, currently assumed to be 2027).

419. Greater clarity is required on the peak impacts on communities, prior to the completion of the mitigation and how this has been assessed within the Early Years scenario. As an example, it would take 24 months to construct the Sizewell Link Road. During this time the workforce would gradually increase, and we would assume that the HGV numbers would gradually increase, potentially beyond what has been assessed within the Early Years assessment. As above, we will seek to control HGV movements and potentially employee numbers to ensure that the impacts of the development do not exceed what has been modelled. This would mean that the development would be locked to the impacts assessed within the Early Years assessment, until such time as mitigation has been completed. We will continue to engage with EDF Energy with regards to the transport modelling.
420. The car sharing factors used within the assessment are based on 1.1 persons per vehicle for the HB and 2.0 for the NHB. A review of the recent evidence provided in relation to Hinkley Point C confirms that they currently experience an average car sharing factor of 1.06 across both NHB and HB, so we are concerned that the estimates for Sizewell C may not be accurate. We would expect that the modelling is updated to reflect this or 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 significantly underestimated. We request that EDF Energy provide evidence how the visitor car sharing factor has been determined that support the transport modelling.
421. The report refers to traffic re-routing. Although the re-routed traffic is advised to be non-Sizewell C related traffic, it will be as a result of traffic related to the Sizewell C development, and so must be taken into consideration and impacts modelled accordingly. The results of the predicted re-routing in terms of the volumes of traffic on alternative routes must be detailed, together with any impact this will have on the road network and air quality. For example, re-routing from the A12 at Woodbridge is likely to cause additional traffic to use the B1438 and other local roads such as the A1152 to reach their destination. Section 6.6.25 of the Development Proposals document states that there could be significant re-routing on the B1069 at Tunstall as a result of existing congestion on the A12 in Woodbridge. This will thus also affect the A1152 and the B1438.
422. Within the Stage 3 consultation there is no location reference at the A12 at Martlesham showing the overall impacts there (the nearest point included is the A12 at Woodbridge), and there is no location reference for the B1438 through Woodbridge and for the A1152 which runs through Melton, Eyke, Rendlesham, Tunstall and Snape. We wish to see these as part of future evidence.
423. There is a declared Air Quality Management Area (AQMA) on the B1438 in Woodbridge at the junction with Lime Kiln Quay Road, Thoroughfare, St John's Street and Melton Hill for annual mean nitrogen dioxide. It is essential that air quality impacts of additional re-routed traffic through this AQMA are assessed.
424. There are a number of locations where the Councils expect sensitivity test on junction capacity to be undertaken (see below).
425. With any transport model there is an element of risk, and the more strategic a transport model is, the likelihood of it picking up specific localised issues becomes less probable.



This means that the transport model as it stands will not fully identify all of the issues. We would expect this to be reflected in future work, potentially resulting in further mitigation.

426. In summary, the Councils require further clarification in several areas of EDF Energy's traffic modelling and gravity model, and the sharing and justification of related assumptions, for the Councils to have the right level of confidence in the modelling and the resulting justification of mitigation proposals. In particular, the Councils expect:

- The sharing of the updated gravity model;
- A complete set of assumptions used in gravity and traffic modelling;
- Justification and / or clarification of a number of assumptions that have been provided, including realism of the proposed car sharing factors, assumed non-work related and weekend travel by non-home-based workers, number and travel mode of visitors to the site, amount of required material and the split of traffic coming from north and south;
- Greater clarity on the peak impacts on communities, prior to the completion of the mitigation measures and how this has been assessed within the Early Years scenario;
- Detailed assessment of the predicted re-routing in terms of the volumes of traffic on alternative routes;
- Assessment of air quality impacts of additional re-routed traffic on Air Quality Management Areas.

### **Traffic modelling of impacts on A12**

427. As indicated above, the Councils remain unconvinced that the proposed development and junction improvements will mitigate its significant impact on A12 junctions, and we are committed to working with EDF Energy to identify locations where localised junction modelling needs to be undertaken.

428. Vol 1 Chapter 6 of the consultation document indicates that the development will result in an additional 2,450 to 2,700 vehicles along the A12 at Woodbridge. Meanwhile, the consultation indicates a reduction in vehicle movements during the peak hours due to the section experiencing congestion and therefore light vehicle re-routeing. The traffic modelling predicts that the A12 bypass around Woodbridge, due to congestion, will cause a considerable amount of traffic re-routing – 4.4% (1,750 vehicles per day) in early construction rising to 4.7% (1,900 vehicles per day) after that time.

429. On a typical day under the rail strategy, the Stage 3 consultation indicates an additional 380 HGV movements, while the busiest day for the road-led strategy indicates an increase of 1,280 HGVs. This represents an HGV increase of between 31% and 102%. While EDF Energy argue that the increase in total vehicles is not significant, the Councils consider that the increase in the number of HGVs certainly is, especially given that these vehicles have a disproportionate impact on performance of the road network. In addition, slow moving HGVs would exacerbate the real and / or perceived congestion in the

Woodbridge area encouraging light traffic to divert to other, potentially less suitable routes, as stated in the consultation (Vol. 1 paragraph 5.7.10).

430. Vol. 1 paragraph 5.7.1 of the Stage 3 consultation refers to an existing congestion difficulty on the A12 at Woodbridge, the consultation refers to this as an existing issue unrelated to Sizewell C and therefore a matter for Suffolk County Council as highway authority.
431. As set out above, there will be traffic diverting to other routes such as the B1078 and B1069 (Vol. 1 paragraph 5.7.10, 6.4.7, 6.4.12) with up to 1,750 vehicles a day being diverted (Vol. 1 paragraph 6.6.4), partly because of this existing problem. EDF Energy states that this is a matter for Suffolk County Council as the Local Highway Authority. The statement quoted (A12 Suffolk Energy Gateway - Strategic Case; December 2017; B3553C02-JAC-XXX-00-REP-TR-0007) states that issues on the A12 single sections close to Woodbridge are 'more easily solved through lower cost largely online improvements utilising a wide range of current and future public and private funding options'.
432. Planning policies (e.g. NPPF) determine that development should mitigate its impact and therefore the Councils would seek a proportional contribution from the Sizewell C development to mitigate its impact both on the A12 and its traffic that diverts onto other parts of the highway network. While the proportion of traffic using the A12 at Woodbridge is a small proportion of the total traffic flow it is significant in terms of additional HGV trips i.e. up to 640 (52%) typical day (fig 6.6) or 1,280 (102%) peak period (fig 6.7) in the road-led option.
433. The Councils recognise that the A12 at Woodbridge would see some congestion without the development of Sizewell C, however, given the considerable impacts of the development on an already congested network, we would expect EDF Energy to contribute towards mitigating their significant impacts at the location. The most effective way to address the additional pressures on the alternative routes is likely to be improvements to the A12, reducing the potential for re-routing.
434. The consultation indicates that the exact impact on traffic on the A12 varies depending on the location on the route. However, in general there is a consistent significant impact on the route, especially when looking at the proportional increase in HGV movements.
435. Assuming that Sizewell C is demonstrated to have a significant impact for the county road network and especially on the A12, the Councils would expect EDF Energy to contribute towards mitigating their impact at any locations where there are either capacity issues or road safety issues, whether or not these issues are pre-existing.
436. The consultation does not include details on the exact origin of the 15% of HGVs from the north – specifically whether they would be travelling through Lowestoft and whether they would be using either of the Lake Lothing bridges. Suffolk County Council wishes it to be noted that, depending on the exact impacts of the development on the Lowestoft crossings, it may be appropriate for EDF Energy to mitigate their impacts through a proportionate contribution to the Third Lake Lothing Crossing, which is currently progressing through the DCO process and will create additional network capacity.
437. Further work needs to also be undertaken to determine what the impact is of the additional traffic on existing pedestrian and cycle movements that cross the A12,

especially those locations where the A12 crosses an existing public right of way (PROW). Severance of local communities and increased risks to pedestrians using footways adjacent to the road due to the increase in traffic should also be considered. Aside from the proposed two-villages bypass, there are currently no proposals to mitigate the impacts of severance on the A12, or any other location, apart from the B1122.

438. In summary, the Councils are concerned that EDF Energy have not provided assessments for other junctions or proposed any further improvements along the A12 (other than a few junctions suggested), as the Councils believe that there is a significant impact on the A12. Further assessments are required. The Councils expect that, to mitigate the transport impacts of the development, improvements are required for the A12 at Woodbridge, which EDF Energy would be expected to contribute towards, for several other junctions along the A12 and for PROW crossings over the A12.

### **Traffic modelling related to junction improvements**

439. EDF Energy suggests that, based on their traffic modelling, several additional junctions on the highway network will require improvements in order to facilitate additional traffic loads during construction. The Councils are considering whether there are any other pinch-points or stress-points on the highway network in addition to those proposed for improvement measures that may require mitigation. The proposals on the specific junction improvement proposals are discussed from paragraph 960 onwards. This section discusses other parts of the highways network which the Councils believe may require additional mitigation.
440. The Councils believe that there are several additional junctions to those proposed which may require mitigation as a result of the proposed development.
441. Due to the modelled movement of traffic these are generally located on the A12 between Seven Hills and the A0195 at Blythburgh and the minor routes carrying workers to the park and ride or traffic seeking alternative uncongested routes.
442. These include, but are not limited to, the following:
- A12 Seven Hills to B1126 Wangford
- A12 / B1126 (road safety)
  - A12 / A1095 (road safety)
  - A12 / A145
  - Blythburgh (severance, air quality, speeding)
  - A12 / B1387 (road safety)
  - A12 / A1120 Yoxford (road safety, capacity, air quality, speeding)
  - A12 / B1121 (road safety, capacity)
  - Little Glemham / Marlesford (severance, pedestrian safety, speeding, air quality)

- A12 / A1152 Woods Lane (road safety, capacity)
- A12 / B1079 (road safety, capacity)
- A12 / Seckford Hall roundabout (capacity)
- A12 / A1214 roundabout (road safety, capacity)
- B12/ BT roundabout (road safety, capacity)
- A12 / Foxhall Road (road safety, capacity)

#### B1078 between A14 and Wickham Market Park and Ride

- Coddendam (congestion, pedestrian safety, air quality)
- Hemingstone crossroads (road safety)
- B1078 / B1077 crossroads, Ashbocking (road safety)
- Charsfield (road safety, speeding)

#### A1120 between the A140 and Darsham Park and Ride

- A140/A1120 junction Earl Stonham (capacity, road safety)
- Stonham Aspal (severance, speeding)
- Pettaugh (road safety)
- Earl Stonham (road safety, pedestrian safety)
- Dennington (severance)
- Peasenhall / Sibton (severance, speeding)
- Yoxford (capacity, air quality, speeding, severance, pedestrian safety)

#### A1152 / B1069 between the A12 and Leiston

- Melton Crossroads (capacity)
- Eyke (severance, speeding)
- A1094 / B1069 Snape Crossroads (road safety)

#### Other locations

- Leiston crossroads (capacity)
- Saxmundham crossroads (capacity)
- B1125 / B1387 (road safety)

443. Sizewell C traffic travelling along the A1120 and the B1122 via the A12 at Yoxford could lead to congestion on the A12 in this location. Traffic waiting to turn right onto the A1120 from the A12 could cause queues along the A12. At this location there are properties situated close to the kerbside. The Councils will require the results from the air quality assessment at this location to determine whether this could cause exceedance of the Air Quality Objectives.

444. We would expect the applicant to review the accident history at the junctions to determine whether any accident patterns exist that may be exacerbated by the proposed

development to determine that there 'would not be an unacceptable impact on highway safety' as indicated as a transport reason for refusal within the NPPF.

445. To evidence that the 'residual cumulative impact on the road network would not be severe,' as indicated as the test within the NPPF to, EDF Energy are required to either:

- Evidence that the development impacts at these junctions are not material; or
- Undertake sensitivity testing to highlight that the junctions have sufficient capacity to accommodate the additional traffic.

446. In summary, the Councils believe that there are several additional junctions to those proposed, listed in paragraph 442, which may require mitigation by EDF Energy as a result of the proposed development.

## **MAIN DEVELOPMENT SITE**

447. The Main Development Site has been subdivided into four sections: the power station platform, the Sizewell B Relocated Facilities land, the Temporary Construction Area (TCA), and the LEEIE. The TCA incorporates the accommodation campus, and the construction laydown areas including borrow pits and spoil heaps. The power station platform area includes the beach landing facility and the sea defences, the Sizewell B relocated facilities land is to the rear of the Sizewell B station and includes relocation of facilities that are currently on the site of the power station platform.
448. The Councils welcome information provided in the Stage 3 consultation documents that have improved our understanding of the location and form of structures that have potential to interact with coastal processes over the development life and the current status of assessment of the potential effects of those interactions. Similarly, the proposed structures will have an impact on a range of other disciplines, most importantly ecology and landscape. We note that there are significant gaps that give us concern at the potential volume of material that will need to be assessed as part of the Environmental Statement and final DCO presentation package. We therefore require EDF Energy to engage with key consultees to provide updated information as soon as it becomes available prior to DCO stage.

### **Illustrative construction programme**

449. This round of public consultation includes some detailing on the construction phases of the development and includes an illustrative construction programme. This is useful in informing further discussion and requirements in relation to mitigation works and where they fall within the construction programme. In particular, the Councils would expect road schemes to be early in the programme to ensure they are available at an appropriate time in the programme. However, this could result in delays to provision of the accommodation campus and park and rides which we would also expect early on in the construction programme to provide maximum mitigation. This programme will need careful prioritisation to ensure the right mitigation is in place at the right time. Where there may be delays, alternative temporary proposals may need to be considered and planned for such as temporary accommodation sites or smaller temporary park and rides. During construction phases the SSSI crossing has an additional lane of traffic for the large earth moving vehicles to be kept separate from other vehicles. This will be removed and replaced with embankment and planting at the end of the construction phase.

### **Main development site – general flood and water comments**

450. An overview of soil conditions on the Main Development Site is provided (Vol. 1 paragraph 2.6.2 – 2.6.6). The soils are generally described as well drained other than low-lying areas which are comprised of deep clayey soils and deep peat.
451. Publicly available information on the geology of the main reactor site from the BGS suggests that the upper superficial deposits are of made ground and peat with sands beneath. Ground water levels were recorded close to the surface and dewatering will be necessary to excavate, particularly as many boreholes experience 'blowing' sand. The Councils are concerned about the impacts of the drainage necessary to enable construction both in terms of its impact on the surrounding hydrology and the method of disposal of the water.

452. SuDS must be incorporated into the design throughout the construction and operation phases. This is required to ensure surface water quantity and quality is controlled whilst simultaneously providing biodiversity benefits. The use of petrol / oil interceptors is not a SuDS approach and should only be used as a last resort or final protection measure (Vol. 2A paragraph 2.11.32). SuDS must be incorporated with sufficient clearance to groundwater.
453. All drainage infrastructure, temporary or permanent, should be designed to attenuate rainfall for the 1 in 100 + climate change event. Reference is made to attenuating the 1:30 event (Vol. 2A paragraph 2.12.52). It is unclear why the 1:30 year event is being used. There must be no increase in off-site flood risk in events up to and including 1:100 + climate change.
454. The Councils support the proposed additional mitigation measure of monitoring and adaptive management (Vol. 2A paragraph 2.11.46, .48, 2.12.144 & .116).
455. The proposals are not clear on whether sufficient surface water treatment has been provided prior to discharge of surface water (be that via infiltration or watercourse); this will need to be addressed by EDF Energy.
456. The Councils note that a Soil Management Plan will be included in the CEMP (Vol. 2A paragraph 2.6.14 - .16). We support the intention of this document to prevent stockpile erosion, control silt-laden run off and store materials in a manner designed to minimise any potential interaction between the material and potential pollutant pathways (watercourses & groundwater). However, without having sight of this document, it is not possible to comment on whether adequate mitigation is provided.
457. It is acknowledged that there is the potential for increased soil erosion and run-off with a high sediment load likely to impact local surface waters (Volume 2A, 2.9.30). All existing watercourses must be identified and mapped prior to commencement of construction. A maintenance regime must be put in place regularly to check these watercourses for siltation / blockage with remedial measures taken as necessary.
458. Storage areas for oils and hydrocarbon fuels are to be segregated from other drainage systems (Vol. 2A paragraph 2.10.27). We support this approach which is in line with national guidance.
459. Risk to groundwater from a breach in the cut-off wall is assessed in Volume 2A (paragraph 2.10.29 – 2.10.31). However, there is no assessment of the risk presented by the lack of groundwater recharge from the substantial surrounding areas converted to hardstanding, which, unless a SuDS approach is fully adopted, are assumed to discharge to sea.
460. Foul and surface water drainage is described in very limited detail. Proposals for construction stage foul water drainage are that this would be served by a dedicated sewage treatment plant prior to being discharged out to sea via the combined drainage outfall.
461. It is unclear how surface water will be dealt with for the Main Development Site. Volume 1 (paragraph 7.5.102 – 7.5.105) refers to both SuDS and a combined outfall to sea. The Councils would expect SuDS to be utilised where practicable. There is reference to the combined drainage outfall would discharge treated foul water, treated surface water run-off, treated groundwater and dewatering water from the main platform. The combined

outfall to sea is not mentioned in Volume 2. 'Six discreet drainage catchments' are described (Vol. 2A paragraph 2.12.52) but no further details are given. With two catchments said to be infiltrating and four utilising both infiltration and discharge to watercourse (Vol. 2A paragraph 2.12.53 & 2.11.22 – 2.11.25). It is apparent there is more detail behind the information provided in Stage 3, which we request EDF Energy to share with the Councils at the earliest opportunity. Questions that need to be addressed include: What are these catchments? Where do they drain to? How large are they? Why do some infiltrate and some discharge to watercourse? What's the proposed treatment?

462. Made ground and peat has been identified in certain parts of the main development site (Vol. 2A paragraph 2.9.2 & 2.9.13). The re-use of this material in borrow pits and elsewhere will fundamentally alter the sites future drainage characteristics with drainage rates most likely being reduced when compared to existing sands and gravels. It is unclear how any increase in run-off rate or reduction in infiltration will affect surrounding areas and the nearby marshes. The Councils note that overall, site-won materials are classed as suitable for re-use (Vol. 2A paragraph 2.9.19).
463. Stage 3 does not discuss potable water supply for the site, we are aware that Essex and Suffolk Water consider they have potential capacity in their systems to service the development. However, we seek confirmation from EDF Energy that they will be able to get potable water to their site without impacting on local potable water supply.
464. Lovers Lane, Leiston is identified in Vol. 1 paragraph 17.13.6 for improvements, specifically the construction of a new cycle route adjacent to the existing road. Lovers Lane intersects a critical surface water flow path from Leiston. The road acts as a weir with the current road level not resulting in any additional flood risk to properties before water levels reach sufficient depth to flow over the road towards the coast. We strongly object to any work that will result in a level increase along the identified flow path in the SWMP. This includes any temporary works such as bunding. We would encourage any reduction in levels to help reduce the depth of flood water to the west of Lovers Lane. However, the impacts of this would need to be considered.
465. Drainage arrangements for areas such as the emergency equipment store, electrical substation and helicopter landing pad are unknown.
466. Whilst it is clear that the main platform's surface water drainage infrastructure has the ability to deal with events far in exceedance of national development standards (Vol. 2A paragraph 2.12.72), it is unclear what extent this system will serve.

<p>467. In summary, to date, EDF Energy has provided insufficient information on its proposals to deal with surface water, groundwater, erosion, potable water supply, and inland flooding. EDF Energy needs to assess and address these issues in advance of submission of the DCO application.</p>
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## **The power station platform**

### *Power station design – overview*

468. The power station platform includes permanent development required for the Sizewell C nuclear power station and the majority of the requirements have to adhere to strict Office of Nuclear Regulation requirements. Since Stage 2 there has been ongoing refinement of the power station design and this consultation includes design changes in relation to the turbine halls, forebays, operational service centre, site offices, interim spent fuel store and electrical connections to the National Grid substation. Nuclear safety buildings remain unchanged since Stage 2. We understand with regret that it is not possible to clad or paint the external concrete finish to the nuclear critical buildings, and they will therefore be required to remain bare concrete. However, we still require more detail and guarantees on the quality of exterior finish on the nuclear buildings, as requested in Stage 2.

### *Main reactor buildings*

469. As in Stage 2, we remain concerned about the design of the main reactor buildings, given the location of Sizewell C in a landscape of national and international importance and sensitivity. We will still require more detail on the quality of the exterior finish on the nuclear buildings (which are a fixed part of the generic design). Further detail is also required regarding the requirement, height and finish of the stacks adjacent to the reactor domes. Where it is not possible to improve the design quality, we expect a compensation package due to the lasting residual impact on and damage to the AONB. Given the importance of the potential impact of the design of the structures on the purpose of the AONB and the importance given within the National Policy Statement assessment of the Sizewell site to this factor, the revised design should be subject to further consideration by The Design Council (previously known as CABE) who examined it as CABE at an earlier stage of development.

### *Turbine halls and Operational Service Centre (OSC)*

470. The turbine halls and operational service centre have been redesigned, as requested by our response to Stage 2, with some significant changes to the design of the main turbine and operational service centre buildings to reduce their adverse impacts, including notably the removal of sea facing glazing to prevent night time light spill into the AONB coast where dark skies are a valued and special quality.

471. EDF Energy has undertaken a full colour study of the area to inform cladding proposals for the Turbine Halls. It is expected that the detailed options for cladding and design details will be resolved over the coming months, but we would encourage EDF Energy to make due reference to the recently completed “Guidance on the selection and use of colour in development”, published by the AONB, in their decision on the final cladding colour choice.

472. The OSC, located between the two turbine halls centrally in the site, has been redesigned to incorporate the site office thus consolidating the number of buildings on site, reducing its height and reducing the extent of windows to the external façade, this would reduce light spill towards the coast and minimise the visual impact.

473. It is expected that these design proposals will be secured by the DCO process and protected from value engineering and other cost cutting measures.

### *Dry Fuel Storage*

474. At Stage 2, EDF Energy proposed ponds to provide interim fuel storage; at Stage 3, this has changed to dry fuel storage similar to the Sizewell B dry fuel store. The dry fuel storage building would increase in height and scale as there is a requirement for a greater distance between each cask for dry storage compared to wet storage. However, there is no requirement for a gaseous discharge stack with dry fuel store (this was going to be 55m tall on a wet storage building).
475. The change from storage ponds to dry fuel storage offers an opportunity to discuss and resolve improvements to the appearance of this building over the coming months. The Councils would expect to see consistency in style and appearance of the more substantial buildings within the development where the constraints of the Office for Nuclear Regulation are less restricting than those applied to the main reactor related buildings. Further detail on the lifetime of this building (in the absence of a nationwide Geological Disposal Facility) will be expected and the associated compensation for hosting such a building that is expected to be in place longer than the power station building.

### *Forebays*

476. There will be one forebay for each EPR reactor unit which receive water from the intake tunnels; these structures are now rectangular in shape rather than semi-circular as shown at previous rounds of consultation. This is consistent with a design change agreed for Hinkley Point C where this shape is found to be more resilient to silt deposits. These structures are not visible from public viewpoints.

### *Pylons*

477. At Stage 2, EDF Energy stated that electrical connections would be made via underground cables to a new substation, and that no additional pylons or overhead lines would be required. At Stage 3, the electrical connection to the National Grid Substation is now proposed to be via an overhead connection, with four new pylons on the main power station site.
478. The introduction at Stage 3 of four additional tall pylons and power connection lines on the power station site raises grave concerns for the Councils, bringing a significant detrimental addition to proposals in comparison to Stage 2. We understand that these pylons will be at least as high as the dome of the reactor buildings which is higher than existing pylons linking Sizewell B to the National Grid. No alternative to these pylons is presented at Stage 3. With these pylons, the residual landscape and visual impacts of the operational site would significantly increase, with very significant additional adverse impacts on the AONB. Both local and more distant viewpoints around the site would be adversely affected, with the pylons adding additional visual clutter to the skyline.
479. NPS for Electricity Networks Infrastructure (EN-5) states that 'at particularly sensitive locations the potential adverse landscape and visual impacts of an overhead line proposal may make it unacceptable in planning terms, taking account of the specific local environment and context.' (EN 5 paragraph 2.8.2) It continues that 'The IPC should, however, only refuse consent for overhead line proposals in favour of an underground or sub-sea line if it is satisfied that the benefits from the non-overhead line alternative will clearly outweigh any extra economic, social and environmental impacts and the

technical difficulties are surmountable. In this context it should consider: - the landscape in which the proposed line will be set, (in particular, the impact on residential areas, and those of natural beauty or historic importance such as National Parks, AONBs and the Broads) (...)’ (EN5 paragraph 2.8.9). It is accepted that EN5 does not apply as such, but the principles set out in this NPS should be equally valid.

480. The Councils are therefore very disappointed that this change has been made notwithstanding a previous commitment from EDF Energy that undergrounding was the preferred option. It is anticipated that their adverse visual impacts cannot be otherwise satisfactorily mitigated. It is expected that the inclusion of pylons in the main site proposal will be fully assessed as part of the LVIA process; further comments can be made following the outcome of that assessment.
481. EDF Energy will need to provide evidence that demonstrates that there will be no significant interaction from the new pylons and overhead lines with birds (resident or migrating). Data for bird movements across and around this area will be required to establish potential issues.
482. The Councils are not content with the introduction of pylons and urge EDF Energy to pursue alternative options. The Councils are not convinced that the technical difficulties for undergrounding are insurmountable at this stage and believe the benefits of underground the cables in comparison to overhead cabling could be significant. The Councils urge EDF Energy to look again at any potential option to underground the cabling. If this is not possible, EDF Energy is at least asked to find solutions that reduce the number and height of pylons. Ultimately, it is considered that the pylons will have a significant impact on the landscape, and this will need to be considered under the mitigation hierarchy.
483. Furthermore, the Councils note that since the Stage 2 consultation the baseline conditions around the development site have changed. EN6 Vol II identified that Sizewell C alone posed a risk to the purposes of the AONB designation. The addition of pylons (as well as the proposals for Goose Hill – see below) add to this risk, but more significantly, the likely in-combination effects of the proposal with the offshore elements of the East Anglia Two windfarm add significantly to the potential to damage the purposes of designation. The Section 42 consultation by Scottish Power Renewables for this windfarm identifies that that project will have significant impacts both visually, and on the character and special qualities of the AONB.
484. The Councils concur with the conclusion in the PEIR that there will be significant residual effects on landscape character and the special qualities of the AONB resulting from the main reactor site.
485. Notwithstanding the improved layout and design of permanent operational buildings on the main site, we remain of the view that the proposal, sited as it is in a landscape of national importance and sensitivity, will have significant residual effects on the character of that landscape and the special qualities for which it is designated as an AONB and in doing so will undermine the purpose of that designation.
486. The introduction of tall pylons further exacerbates this impact. Given the importance of the potential impact of the design of the structures on the purpose of the AONB and the importance given within the NPS assessment of the Sizewell site to this factor, we will

continue to insist on the highest possible standard of design for Sizewell C, and note that the revised design should be subject to further consideration by The Design Council.

487. Even with improved design, there will be significant residual impacts, and we expect a substantial compensation package to be needed over the lifetime of the facility in recognition of its lasting impact on and damage to the AONB and the wider landscape around the development. It should be stressed that compensation should only be considered after having exhausted options to avoid or mitigate impacts.

*Power station platform – drainage and ecology*

488. The Councils remain concerned about the potential impact of the platform construction on the hydrology of the adjacent SSSI and associated drainage, despite the assertion in the PEIR that modelling suggests that with an appropriate control structure this will not be significant. It is notable that significant changes in groundwater flows and levels did occur during the construction of the B station resulting in adverse ecological and landscape effects including the die-off of trees within the Sizewell belts, which is still visible today.
489. We expect the design of all non-prescribed operational and ancillary buildings to incorporate features for wildlife, such as bat bricks, swift bricks and for other features to be considered that will encourage and support wildlife across the site.

*Power station platform - Historic Environment*

490. With regards to historic environment aspects of the main reactor site, adequate historic environment information has been provided for this location in the Stage 3 consultation documentation. There is the potential for waterlogged prehistoric settlement, potentially of major significance. The spatial extent is unknown, but potential settlement and riverine areas are indicated by resistivity tomography. This will need testing through evaluation. EDF Energy is asked to undertake trenching for high potential areas plus further sampling, in line with the Peat Strategy (updated version still outstanding). Further mitigation is to be decided pending results of evaluation.
491. Also, offshore works will require input from Historic England regarding palaeo-environmental potential, and appropriate research and mitigation strategies.

492. In summary, while the Councils welcome some of the changes to design elements of the non-nuclear buildings on the main site, these changes do not outweigh the significant additional harm the power connection and additional developments of training facilities and outage car park cause in the AONB setting.
493. The Councils are not content with the addition of pylons and overhead cabling to the main development site. The Councils consider that national policy requires EDF Energy to exhaust any alternative option in the light of the location within the AONB. The Councils urge EDF Energy to look at any potential option to underground the cabling. If undergrounding was proven not to be possible, EDF Energy would be expected at least to find solutions that reduce the number and height of pylons. Ultimately, it is considered that the pylons will have a significant impact on the landscape, and this will need to be considered under the mitigation hierarchy.
494. The Councils remain concerned about the design of the main reactor buildings, EDF Energy is required to provide more detail on the quality of the exterior finish on the nuclear buildings. Given the importance of the potential impact of the design of the structures on the purpose of the AONB and the importance given within the NPS assessment of the Sizewell site to this factor, the revised design should be subject to further consideration by The Design Council who examined it at an earlier stage of development. The Councils note the unavoidable residual impacts of the nuclear buildings given the requirements of the generic design agreed by the Nuclear Regulation Authority which will therefore need to be compensated.
495. Where it is not possible to improve the design quality, for reasons including the constraints of the generic design, we expect a compensation package due to the lasting residual impact on and damage to the AONB.
496. The Councils expect full assessment and, where required, mitigation with regard to potential impacts of the platform on the hydrology in the area.

### **Sizewell B Relocated Facilities**

497. The Sizewell B Relocated Facilities have been included as part of the DCO proposals, although an application under the Town and Country Planning Act (TCPA) is expected to be submitted in 2019 for determination by the new East Suffolk Council.
498. The relocated facilities include an outage car park, a training centre, a visitor's centre for the B and C stations and additional car parking and laydown area for during outages. The full detail of the visitor centre and the training centre has not yet been designed. The relocated facilities will primarily be in Pillbox Field (outage car park) and on Coronation Wood which is to be felled. These proposals have been discussed with the Councils during a pre-planning application process and subject to final design detailing are generally considered to be acceptable, subject to the considerations raised in this section.
499. There is a missed opportunity to consolidate outage parking and training centre between Sizewell B and C (see comments regarding Goose Hill below) as part of this scheme.
500. The determination of any application in relation to relocation of Sizewell B facilities needs to ensure that the outcome for the ongoing consenting process for Sizewell C is not

prejudiced or pre-determined by default. All the land affected by the proposed relocation of Sizewell B facilities is within the AONB and therefore subject to a need to clearly demonstrate that there are not alternatives outside of the AONB as required by NPS EN-1 paragraph 5.9.10. If outline consent is granted under TCPA then this should be in a way that enables future amendment if required to secure a more acceptable outcome for Sizewell C as well as Sizewell B.

501. There is currently no survey information provided on which to base an assessment of the ecological impacts of the impact of the loss of Coronation Wood. This will need to be provided. Further information and assessment is required to determine what the ecological interest of the Wood is, and particularly any presence of bats. If felling is accepted, this would need to take place during the appropriate season. The proposals are likely to be acceptable in landscape terms, subject to effective detailed design and mitigation, and notwithstanding comments above about concerns of its location within the AONB.
502. It is unclear how the relocated facilities will be drained. This concern is mirrored for the identified flood volume from Sizewell B that will be displaced by the construction of Sizewell C (Vol. 2A paragraph 2.12.43). It is noted that Sizewell B and Sizewell C will not have interconnecting drainage systems (Vol. 2A paragraph 2.12.74). The LLFA is conscious that groundwater at this location is likely going to cause problems with clearance to groundwater for any infiltration (Vol. 2A paragraph 2.9.13).
503. With regards to historic environment aspects, the Stage 3 consultation documentation for the Sizewell B relocated facilities does not fully consider impacts upon below ground archaeology and does not provide a heritage strategy. Medieval archaeology was recorded during an evaluation at Pillbox field. A mitigation strategy will need to be confirmed for this site, likely to involve a combination of excavation and strip, map and record, subject to an agreed WSI.
504. Coronation Wood has the potential for both upstanding earthworks and below ground archaeological remains. Metal detecting, walkover earthwork survey and trial trenching will be required for Coronation Wood. To be viable this will need to follow tree felling, but occur ahead of any de-stumping.
505. It is not acceptable for the access to the outage car park to incorporate 60m of the south end of Sandy Lane - public bridleway 19 - as a two-way, tarmac road to the car park. For the safety of the PROW users the vehicle access must be segregated from the bridleway. This is likely to require the route to be formally diverted. A safe crossing point across the Sizewell Gap road will be required in the vicinity of the bridleway.
506. The relocated facilities works will be undertaken by the generating arm of EDF Energy, it is hoped that they can be carried out under a planning permission under the TCPA, but in order to ensure these critical elements to facilitate the construction of Sizewell C are carried out, EDF Energy are including them in the DCO for the project.

507. In summary, final design proposals of the Sizewell B relocated facilities are still required. This includes full ecological assessments, drainage proposals, archaeological assessments, and improved design for public bridleway 19.
508. All the land affected by the proposed relocation of Sizewell B facilities is within the AONB and therefore EDF Energy is expected to clearly demonstrate that there are no alternative sites outside of the AONB. The Councils ask EDF Energy to further consider consolidation of outage parking and training centre between Sizewell B and C (see comments regarding Goose Hill below) as part of this scheme.
509. The Councils note that the determination of any application in relation to relocation of Sizewell B facilities needs to ensure that the outcome for the ongoing consenting process for Sizewell C is not prejudiced or pre-determined by default.

### **Developments on Goose Hill**

510. At Stage 3, EDF Energy is proposing additional permanent development for the operational phase of the power station on Goose Hill, to the North of the main platform location. In addition to an operational staff car park of 1,000 places (which was already included in the Stage 2 proposals), training facilities with car parking, and an outage car park are now proposed.
511. These proposals at Goose Hill would add significantly to the land take and footprint of development at a site within the AONB, adding further harm to the landscape fabric of the AONB. The Councils do not accept any additional development within the AONB unless the location is absolutely essential. It is not considered that at this stage EDF Energy have provided the necessary justification for additional permanent development in the AONB. NPS EN-1 requires promoters to demonstrate exceptional circumstances for locating development in the AONB and requires the promotor consider alternatives. It is not clear that EDF Energy have done this from the Stage 3 documentation. The Councils are equally concerned about the considerable potential impacts of permanent developments on Goose Hill upon biodiversity, including European Protected Species (such as bats and otters), and any development in this location would need to address these.
512. With reference to the Sizewell B relocated facilities; the Councils consider it unnecessary for there to be a second outage car park proposed within the AONB. It is unlikely that outages at the B Station and C Station would take place at the same time and therefore one outage car park should suffice for both power stations use. The Councils wish to see a joint outage car park for Sizewell B and C on Pillbox Field (as part of the proposals of relocated facilities from Sizewell B). On the rare occasion that there may be a planned and unplanned outage taking place concurrently, there could be a contingency plan in place for parking elsewhere in the vicinity but outside of the AONB, with bus transfers for the workers to the site; this could be a site within Leiston.
513. The Councils consider that a training building could be combined with the Sizewell B requirement, and do not feel EDF Energy have provided sufficient evidence that this is not possible, and the Councils request alternative options to be considered in more detail. Equally, the Councils are not convinced that a training centre could not be

provided off-site, outside of the AONB, in the town of Leiston, which would still be easily accessible by minibus to the power station.

514. The Councils do not support the outage car parking or the training facility on Goose Hill as proposed in this consultation, due to the unjustified adverse impact on the AONB.
515. The operational car park was always proposed for this location. While it would be preferable to have this car park elsewhere outside of the AONB as well, it is considered that an appropriate low-key car parking provision of this scale with minimum lighting and appropriate landscaping could be assimilated into the landscape; certainly more acceptable than together with the proposed addition of outage car parking and training building.
516. Notwithstanding the comments above, further discussion would be needed to clarify design details for the car parking and training centre in order to minimise the impact of this proposal which is a detached satellite of the main development. The Councils also wish to note that the car park and training centre have an identified drainage strategy using infiltration (Vol. 2A paragraph 2.12.80). The Councils would query whether this strategy allows for sufficient clearance between the base of infiltration and groundwater given the location of the car park and building in the lowest point of the site (Vol. 1 paragraph 7.4.45) and with the surrounding marshes. They would also query the infiltration properties of the natural strata at this location (Vol. 2A paragraph 2.12.11).

517. In summary, as a principle, the Councils do not accept any additional development within the AONB unless the location is absolutely essential. Thus, the Councils are not content with the proposed additional development at Goose Hill. The Councils:

- Are not satisfied with the explanation as to why the training facility building must be (a) separate from Sizewell B's requirements, and (b) in immediate proximity to the new nuclear power station, rather than at a location offsite in Leiston.
- Are not satisfied with the requirement of an outage car park at this location within the AONB in addition to the relocated Sizewell B outage car park in another location within the AONB.
- Are equally concerned about the considerable potential impacts of permanent developments on Goose Hill upon biodiversity, including European Protected Species (such as bats and otters), and any development in this location would need to address these.



## SSSI Crossing

518. At Stage 2 the Council's commented on the permanent loss of land from the Sizewell Marshes SSSI that would result from the footprint of the main platform area and access to it. The Councils supported at that stage a three-span bridge option for crossing the SSSI as this involved the minimum land take from the SSSI and there was no justification for a causeway option put forward at that time. Again, the responsibility is on EDF Energy to justify any loss of SSSI land as identified in NPS EN-1 paragraph 5.3.11.
519. At Stage 3, EDF Energy are now proposing a causeway as the main access across the SSSI with little justification as to why this has been preferred over a bridge option except to say that a causeway with culvert option has the potential to be adapted in relation to climate change. There is no indication whether this adaptation will be necessary in the lifetime of the project. Further information is required as to how this proposal will be achieved without future landscape harm. Given the lifetime of the development it would be more appropriate to incorporate these works into the DCO.
520. The causeway option would result in the higher end estimate of SSSI land take of just over 6 hectares. There is also an increase in the estimated temporary use of SSSI land during construction.
521. The Councils are disappointed that EDF Energy have not at this stage pursued our preferred option of a three-span bridge to cross the SSSI. This would have reduced the area of SSSI land lost permanently as well as mitigated the likely impact of the crossing as a barrier to the movement of species such as water vole, otter and bats. EDF Energy propose maximising the size of the culvert through a causeway to minimise the impact on ecological connectivity. We do not consider that this will support connectivity in the same way that a 3-span bridge would. The functionality of the culvert as an ecological corridor needs to be appropriately assessed including by the Suffolk Wildlife Trust, Natural England, the Environment Agency and our own ecologists and at this stage we are not confident that the appropriate assessments have been carried out and that the right mitigation is available or included. The priority for the Councils with regard to the SSSI crossing is to minimise landtake of the SSSI and ensure minimum disruption to the sensitive ecosystem of this location.
522. Further details are required for the surface water drainage of the SSSI crossing. Given the sensitive location of this infrastructure it is vital that polluted water does not flow into the adjacent marshes without sufficient treatment. A direct infiltration swale adjacent to the SSSI crossing and access road would, on the face of it, appear to be insufficient (Vol. 2A paragraph 2.12.79).
523. In landscape terms, the proposals for the SSSI crossing are considered to be acceptable not least because of the opportunities it presents for mitigation planting that will help to integrate it into the adjacent landscape areas. However, it is notable that it is now proposed that this crossing will be integrated into the remodelled northern mound with its embedded BLF trackway and the consequences of this are yet to be identified.
524. With regards to historic environment aspects of the SSSI crossing, the Stage 3 consultation documentation do not fully consider impacts upon below ground archaeology and do not provide a heritage strategy. There is the potential for buried surface archaeological deposits in this location, including wet-zone activity, as well as palaeo-environmental remains. There is also the potential for waterlogged prehistoric

settlement, potentially of major significance. The spatial extent is unknown. This will need testing through evaluation.

525. EDF Energy is required to undertake, for surface archaeology, a trial trenched evaluation and palaeo-environmental assessment, subject to an agreed WSI, with mitigation as appropriate based upon the results. For deeper deposits, an assessment is required in line with the peat strategy (updated version still outstanding). Further mitigation will be decided in the light of the results of the evaluation.
526. The amount of Sizewell Marshes SSSI that is to be lost permanently remains at 6.06ha. There is work being undertaken with Natural England to provide replacement SSSI habitat. Land at Aldhurst Farm is being proposed to replace reed bed and ditch habitats and has been established in advance by EDF Energy. In our Stage 2 response we welcomed the creation of Aldhurst Farm to the west of the main site as part compensation for the loss of SSSI habitats but made clear that this did not provide sufficient compensation for all of that loss or for the impact of the proposals on other habitats and species. This remains our view at Stage 3, given the irreplaceability of some of those habitats and the increased impact of EDF Energy's revised proposals. It is particularly alarming that there are still no substantive proposals as to how EDF Energy intend to replace the fen meadow habitat that will be lost, or how they intend to replace wet woodland habitat.
527. During the construction phase there is some additional temporary use of SSSI land which could result in long-lasting if not permanent impacts on SSSI features and habitats. This must be effectively mitigated and the short and long-term disruption to the SSSI compensated for. Overall, the detailed breakdown of specific SSSI habitats and features lost or temporarily affected, and how they will be compensated for or the effects mitigated, is still lacking.

528. In summary, the Councils require further evidence to show why EDF Energy have chosen the causeway with culvert as their proposed scheme above the three-span bridge, which had been the Councils' preference at Stage 2. A full assessment of the impacts needs to be provided, including further detail on the SSSI features lost due to the development. The Councils also require further detail on proposed mitigation and compensation proposals, as the creation of Aldhurst Farm, whilst welcome, does not provide sufficient compensation for all of that loss or for the impact of the proposals on other habitats and species.

### **Northern Mound**

529. To the east of the power station along the coast, it is now proposed to rebuild the northern mound as it is not considered to be structurally sound. The Stage 3 proposals suggest that the northern mound will need to be removed and rebuilt during the construction phase in order to be structurally sound and be able to help protect the power station. There are various options for heights of rebuilding the northern mound, given its existing height and landscaping, it is suggested that EDF Energy seek to rebuild at an appropriate height, given as 14.2m (in their documentation), to provide screening of lower power station structures within the main platform, a lower mound would not provide an appropriate level of screening. The access road to the beach landing facility

(discussed below) will be incorporated into the northern mound so this would need to be undertaken in the earlier stages of the construction programme.

530. The proposed remodelling of the northern mound appears to present significant challenges to the timely delivery of mitigation for this part of the main site. It is disappointing that the existing tree and scrub cover that has taken so long to become established such that it can contribute to the mitigation of visual impacts arising from the existing power station, is to be removed. Detailed discussions are required at the next stage to understand how mitigation can be achieved, both in terms of the timing of this work and the development of a reinstatement strategy to promote tree growth in this difficult and exposed location.
531. It is also important that the design and impact of the smaller buildings in the northern part of the main site be reviewed in considering these proposals, such that they present as low and unobtrusive a profile as possible.

532. In summary, EDF Energy needs to provide further detail and impact assessment of the proposed redevelopment of the Northern Mound for the Councils to comment fully.
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### **Sea Defences and coastal processes**

533. A new sea defence is required along the coastline to protect the power station from flooding during storm surges and high waves. It would consist of a large earth embankment with rock armour under the surface and along its length to provide extra strength and help protect it from erosion. Details of sea defence proposals have progressed since the previous round of public consultation. It is proposed that the first phase of the Sizewell C sea defence is provided early in the construction phase and would coincide with the removal of the current Sizewell B coastal earth mounds. This would include the installation of a 7m AOD sea defence and provision of a temporary construction route for heavy earthmoving plant only along the eastern edge of the main platform. The footprint of the new sea defence is proposed to be located closer to the shoreline than the current earth mounds. At this stage EDF Energy's assessments is not yet sufficient for what will become the Environmental Statement having reference to NPS EN-1 paragraph 5.5.7.
534. The Suffolk Coast Path and Sandlings Walk is proposed to be diverted towards the 5m bund while the initial sea defence is being constructed. The second phase of sea defence works would be carried out later on in the main construction programme. The sea defence has been designed to allow it to be increased in height in the future should it be required as a result of sea level rises.
535. There is proposed to be an inland diversion for the Suffolk Coast Path, Sandlings Walk and England Coast Path, during essential construction works and for large deliveries – further detail of this will be required as it needs to be a plausible and usable alternative route in order to avoid unacceptable disruption to visitors to the local area (see Rights of Way section from paragraph 988 onwards).
536. The Councils are concerned that the defences proposed are not a complete design and that the rock armour proposed will have to be increased in length. The illustrations included show a seaward extent (toe) detail that the Councils believe is incomplete and gives a misleading impression of the seaward extent of the hard coastal defence feature

(HCDF) which is critical to consideration of the timing and nature of its impacts from exposure of the HCDF. The toe detail shows a rock slope ending at a level that is not compliant with current design standards for coastal structures intended to be resilient after exposure by coastal erosion.

537. This is a significant matter in the context of the life of the development which we assume to be the Operational phase to 2100 plus a further 50+ years to final full site removal after decommissioning. We also note that Vol. 2 paragraph 2.14.36 recognises the risk of exposure by 'mid to late operational life' and a potential need for mitigation of negative effects by recycling or nourishment. We believe that for the toe design to be stable and effective after exposure by erosion, a greater extent of works is essential and that those works will probably involve a seaward extension of the HCDF which will bring forward the timing of exposure and impact-management actions.
538. Rock armour is provided to the front (seaward) face and part of the crest whilst part of the crest and rear slope are not protected. As a result, the overtopping discharge that the structure could tolerate would be reduced. The Councils require an assessment as to whether a more complete armour coverage would lessen the height requirement for the defence. Section 1-1 shows the toe of the 1:3 revetment slope abutting the landwards edge of the BLF access road. The road would appear to be in a vulnerable position sandwiched between an apparently minimal coast protection on the one side and the sea defence proper on the other. In Vol. 2 Fig 7.50, the last sketch shows the main development site being protected from the action of the sea by a narrow crested 1:1 side sloped unarmoured mound. There is a significant width of elevated "landscape restoration" between the mound and the shore, and the Councils require clarification regarding the impact of this design both on coast protection and geotechnical viewpoints.
539. The Councils therefore require EDF Energy to urgently produce further information that provides details of a HCDF feature toe design that is resilient to potential coastal change over the life of the hard defence. It is anticipated that this will extend beyond the life of the proposed development and its decommissioning. This needs to be clarified. This point is critically linked to our concerns at the seaward position of the defence as currently illustrated and the implications of exposure on coastal evolution.
540. The soft coastal defence feature is designed to provide a sacrificial source of beach replenishment as it erodes under shoreline retreat and storms. We require clarification on if / how it will be managed through the station life, i.e. will it be replenished after storm losses to sustain a design profile. This point is also relevant to the long-term viability of the Coastal Path that will run along the soft coastal defence feature.
541. The Councils welcome EDF Energy's recognition that the HCDF may be exposed by coastal change within the station operational life and that potential management of the impact has been considered by nourishment and / or recycling to be assessed as part of a monitoring plan. We require more information in both plan and cross section format, to illustrate how the shoreline may change with and without the Sizewell C development and how the key shoreline features, such as High Water Mark, Low Water Mark, Inner Sand Bar, and Outer Sand Bar, will be affected by the exposed HCDF over the life of the hard defences until removal.

542. We note that in Vol. 2 paragraph 2.14 the potential impacts of HCDF exposure and response actions are identified in terms of long-term net drift (north to south). The Councils believe that under variable gross alongshore sediment movement trends there is potential for an exposed defence to cause impacts that may be significant to both north (Minsmere) and south (towards Thorpeness) of the exposed defences. We require EDF Energy to consider credible gross sediment movement impacts in both impact and in monitoring and mitigation assessments.
543. At Stage 2 we raised concerns regarding the seaward extent of the HCDF and this concern remains. EDF Energy states in Vol. 2 paragraph 2.14.19 that ‘the HCDF positioning is as far as practical away from the shore (eastern flank) and the erosion hotspot to the north of Sizewell C (northern flank) to increase its duration as a terrestrial feature that would have no influence on coastal geomorphology and hydrodynamics,’ however, no evidence has been provided to demonstrate how this decision was reached and what judgements were made of the consequences of alternatives.
544. It is noted that at the northern extent, in the area of the beach landing facility, the HCDF line moves further seaward than the remainder of the hard defence frontage. We require an explanation for this together with an assessment of options for it to be set back on a similar line to that of the remainder of the hard defence.
545. Over the lifetime of the development, the HCDF has potential to cause disruption to coastal processes that may not be practically and effectively managed by recycling or nourishment. Hence it is not reasonable to suggest in tables Vol. 2 paragraph 2.14.2 that Embedded and Additional mitigation is an effective response and there will be no significant residual risks to address. It is therefore important for subsequent detailed technical reporting to fully explain and demonstrate the coastal process interactions (hydro-dynamics – structure – sediment movement – shoreline response) and how the shoreline is predicted to evolve in the future (short, medium, long term) and the uncertainties / risks thus pertaining. In addition, an exposure of the HCDF around 2070 may create a hazard for persons walking along the frontage – further detail is required on how this potential hazard will be managed.
546. The Councils request EDF Energy to look again at the platform location (as we did at Stage 2), in light of the risks and uncertainties associated with the HCDF over its lifetime and with regard to additional concerns raised in this response. Of particular concern is the lack of consideration of whole-life timescales when discussing potential impacts. Exposure of the HCDF is recognised to potentially occur by mid operation life (assumed 2070). However, as the station lifetime to removal may be up to 2150, this implies 80 years of exposure causing increasing interference and requiring increasing mitigation effort by EDF Energy.
547. This assessment should be made public to demonstrate the decision-making process by EDF Energy.

*Monitoring and mitigation – coastal processes*

548. At Stage 2 we advised of the need to develop a robust monitoring and impact assessment process with agreed triggers for intervention as a framework for the identification and effective management of negative effects on coastal processes that have potential to arise over the life of the development. More detailed proposals for this are required including cost estimates for potential mitigation actions over the station

lifetime and assurances on the availability of funding by EDF Energy both to implement an independent monitoring process and for mitigation of foreseeable impacts to be delivered.

549. The monitoring and mitigation process needs to be objective and flexible in its scope to allow for currently unforeseen impacts to be identified and managed. We recognise that this process will be required to separate impacts caused by natural baseline change (those that would have occurred without Sizewell C) from those linked to Sizewell C, which will be complex. We also require more information on the intended role and powers of stakeholders with a statutory role in coastal management (Suffolk Coastal District Council and the Environment Agency (EA)) in the decision-making process. A governance structure should include a technical group reporting to a decision-making Board with membership including senior offices of the EA, Suffolk Coastal District Council and community representatives.

#### *Impact Assessments – coastal processes*

550. The statements summarising the results of assessments which identify the potential for significant negative effects are helpful. However, EDF Energy need to disclose the detailed information that underpins these conclusions. Consultees must be given access to this data to have an opportunity to scrutinise and challenge outputs particularly where a residual effect is classified as Acceptable or Low.

#### *Impact of climate change and sea level rise on erosion and flood risk assessment*

551. The Councils welcome the use of an adaptive approach that includes ongoing review of climate change trends and may involve future major works to raise the standard of flood protection. In recognition of uncertainty over future trends in climate change and sea level rise, and their impacts on the nature and rate of coastal change, we require EDF Energy to demonstrate that all elements of the development that have potential to be exposed to coastal erosion or flood risk over the site life, are designed either with an element of fail-safe capacity or are capable of future adaptation to cope with unforeseen pressure. This is to include the seaward-facing hard coastal defence feature, the rebuilt northern mound and the SSSI crossing.

#### *Impact on Coralline Crag*

552. The Councils note that the previous EIA Scoping has identified Coralline Crag as a key receptor that requires impact assessment. We require more information to demonstrate what has been done to assess if and how the development will affect the Crag and what monitoring and mitigation is proposed to assess and respond to actual impacts through the development life.

#### *External influences from coastal management actions by others*

553. It is agreed that changes in management of the coastline and floodplain to the north of the development site, including the control point at Minsmere Sluice have potential to significantly alter the baseline coastal process environment within which Sizewell C must function over the development lifetime.
554. We require EDF Energy to demonstrate that the design and long-term management plan for the site has the capability and flexibility to respond to a range of potentially viable scenarios arising from management decisions by the organisations with control over

those assets. EDF Energy need to demonstrate that the monitoring and mitigation plan takes account of these matters.

#### *Coastal processes - Decommissioning*

555. The Councils require EDF Energy to provide more information on proposals for management of the Sizewell C site after the Operation phase ceases, of greatest significance from a coastal process view point is the date at which the HCDF can be either fully removed or set back to a more landward location.
556. A further issue is the potential for decommissioning of Sizewell A and B to have an impact on coastal processes that alters baseline assumptions. The most likely source of a significant impact is the Sizewell B outfall that may result in the loss of a mini control point at the shoreline.
557. Clarification needs to be provided how and when the piles for the BLF and the rock in the HCDF will be fully removed. When the site ceases to operate and is decommissioned leaving only a spent fuel facility, we expect confirmation and commitment from EDF Energy that the HCDF will be moved landward to minimise the negative effects of exposure.

#### *Sea defences and coastal erosion – impact on access*

558. The Councils are very concerned that the beach will be vulnerable to erosion as a result of the position of the C site and accompanying defences. This could 'squeeze' the recreational corridor of the public footpath and proposed route of the England Coast Path, potentially resulting in the path being lost to erosion or regularly inundated.
559. Vol. 1 figure 7.21 does not show the location of the public footpath and coast path nor does it show the width of the beach. Figure 7.22 gives a positive yet potentially misleading impression of the width of the corridor and beach to mean high water (MHW).
560. We seek reassurance that in the longer term, the location and design of the defences and beach landing facility will not reduce the width of the recreation corridor; subject the public footpath to erosion or inundation or place walkers at risk from high tides.
561. As mitigation for this possibility, we request that EDF Energy provide an additional permanent PROW on the top of the proposed main sea defence mound linking to the public footpath that runs in front of the B site.

#### *Sea defences – impact on access during construction phase*

562. We welcome the commitment to retaining open access to the coastline (Vol. 1 paragraph 7.5.82) and to keeping a footpath route accessible during construction (Vol. 1 paragraph 7.5.84). However, Vol. 1 paragraph 7.5.88 states that there would be closure of the coastal footpath for essential construction works, contradicting Vol. 1 paragraph 7.5.84 and we seek clarity on this point.
563. We expect the coast path to remain open during construction of the defences, and that, should any closures be required, these to be properly justified and managed with an alternative route agreed in advance by the Councils. The Councils consider that the alternative routes should be safe and suitable for all users, clearly signed and well maintained.

564. Vol. 1 paragraph 17.12.6 states that the alternative routes along the beach would be above MHW mark. However, this could put walkers at risk on spring tides and we require that any alternative route should be above the high spring tide mark.
565. EDF Energy needs to clarify the timescale for the construction of the sea defences including the length of time that the coast footpath would have to be closed. The alternative route proposed for the coast footpath is a very poor-quality route in comparison to the Coast Paths, so any closures must be minimised. The inland alternative route must be fully available prior to any closure of the coast footpath. EDF Energy must provide advance information to the public including on site signage for any temporary closure. The Councils requests serious consideration be given by EDF Energy to providing a transit service during closure periods to transfer walkers between the points of closure as an alternative to a very long and unattractive diversion. Due weight must be given to the National Trail status of the coastal path.

#### *Cooling water infrastructure*

566. The cooling water infrastructure requirements are included with limited detail along with the fish recovery return systems required. There is limited detail on these systems but there are offshore experts such as the Marine Management Organisation (MMO) and EA who can focus on the detail of these structures. The Councils main concern is that they do not have any adverse impact on coastal processes on the coastline.

#### *Combined construction outfall (CCO) and Fish recovery return (FRR)*

567. The Councils note that further assessments are planned to assess the impact in the Operational phase of the CCO and FRR discharge points that are identified as having potential to alter the natural evolution of the outer sand bar which in turn may affect alongshore sediment movement at the shore. We note that this is based on observations of the potential impact of the Sizewell B outfall on the shoreline. We note that that mitigation is recognised as being potentially required that will be based upon monitoring.



568. In summary, the Councils continue to have significant concerns about the potential impacts of the development and its sea defences on coastal processes.

569. The Councils have highlighted already at Stage 2 that the proposed footprint is further seaward than Sizewell B, which gives the Councils significant concerns around the impact on coastal processes and coastline and may make this design unacceptable. The Councils need to see a full assessment of the coastal process impacts and an assessment of alternatives (such as moving the platform back inland or redesigning the layout).

570. In particular, EDF Energy must:

- Urgently produce further information that provides details of a HCDF toe design that is resilient to potential coastal change over the life of the hard defence.
- Provide clarification how the sea defence will be managed through the station life, and after the operation phase ceases;
- Provide detailed technical reporting to fully explain and demonstrate the coastal process interactions and how the shoreline is predicted to evolve in the future (short, medium, long term) - with and without the Sizewell C development - and the uncertainties / risks thus pertaining;
- Demonstrate that all elements of the development that have potential to be exposed to coastal erosion or flood risk over the site life, are designed either with an element of fail-safe capacity or are capable of future adaptation to cope with unforeseen pressure;
- Assess the impact on Coralline Crag;
- Establish with the Councils a robust process for ongoing monitoring of coastal change and Sizewell C impacts, with an obligation for EDF Energy to provide mitigation if actual change departs from anticipated baseline change;
- Include mitigation that ensures that a Coast Path is accessible throughout the station life;
- Minimise the closure of the beach during construction of the sea defence; and provide appropriate mitigation for periods of closure.

### **Beach landing facility**

571. As stated in our Stage 2 response, the Councils principally support sustainable transport modes to the site, i.e. sea-based and rail-based transport. EDF Energy need still to evidence why a jetty as part of a marine-based transport strategy is not possible (see paragraphs 331 to 334). Regardless of the outcome of the review of the jetty option, we welcome EDF Energy's proposal to bring in AILs via the sea to a BLF, and request EDF Energy to make maximum use of such a facility.

572. As discussed under transport strategy there are still questions as to why the full marine-max strategy is not being pursued that need to be answered by EDF Energy. EDF Energy suggest that the beach landing facility will have a more limited impact on shipping

and navigation activities compared with other jetty options previously presented, but it will require dredging and the localised impacts of that have not yet been fully demonstrated.

573. The BLF has been developed since Stage 2 and is now proposed as a permanent feature during construction and operation with some elements to be demountable during inclement months and when not in use during the operation phase. The implication of the structures left on the beach when the BLF is not in operation needs further explanation and detailing.
574. It is likely that beach closures will take place whilst the BLF is in use and this could be disruptive to tourists and beach users. The Stage 3 consultation does not provide adequate detail as to the likely use (timing and duration) of the BLF. It states that the BLF could be used for a few weeks at a time every 5-10 years (Vol. 1 paragraph 7.5.98). However, the Councils understand that during construction the BLF is likely to be used on a much more frequent basis, with several deliveries between April and October for a number of years. We assume that for each delivery, the beach would need to be closed at least for a 12-hour period between high water levels. The Councils seek clarity as to the timing and duration of any closure due to usage of the BLF, as well as information about the timescale for the construction of the beach landing facility and what provision will be made for the coastal footpath during construction.
575. Frequent closures of the beach and the England Coast Path could have significant impacts on tourism during the peak summer months. The Councils expect any closures to be kept to a minimum, and that any closures to this path will need to be properly justified and managed with an alternative route agreed in advance by the Councils and supported by EDF Energy if required.
576. As mentioned above (see paragraph 565), as the alternative route proposed for the coast footpath is a very poor-quality route in comparison, any closures must be minimised, and further mitigation be considered.
577. We note that further assessments are planned to assess the impact of construction (e.g. temporary rock platform to construct the BLF) and operation (dredging for vessel access to the modified BLF) that may lead to a negative effect from interruption to sediment movement.
578. We require more information on proposals for management of dredging arisings.
579. We note that that mitigation is recognised as being potentially required, based upon monitoring. However, no information has yet been provided as to how and in what circumstances such mitigation will be delivered. We will require further detail in relation to the BLF piles and how they will be managed when not in use and what measures are planned to ensure the safety of beach users and seafarers.
580. As an additional permanent feature of the operational site, the Councils expect the impacts of the beach landing facility structure to be assessed as part of the LVIA within the DCO application. This should include assessing the impacts arising from the retention of permanent elements of the BLF throughout the operational life of the station. The Councils are very concerned that permanent structures are now proposed across the beach area where none currently exist and where none were previously proposed. Further erosion of the special qualities of the AONB is a particular concern.

581. With regards to historic environment aspects of the BLF, there is a potential for submerged archaeological landscapes and palaeo-environmental remains, and for archaeological finds to be recorded during dredging. Offshore works will require input from Historic England regarding palaeo-environmental potential, and appropriate research and mitigation strategies. Dredging should include the use of a screen to collect archaeological finds.

582. In summary, while the Councils support the principle of a BLF to allow deliveries of large items via sea, EDF Energy needs to provide appropriate levels of detail and evidence on the impacts and practicalities of such a facility, addressing concerns including impacts on coastal processes, ecology, landscape and access to the beach and the England Coast Path.

583. The Councils expect any closures of the beach to be kept to a minimum, well publicised and alternative routes maintained during that time.

584. The concerns around the Beach Landing Facilities are closely aligned to those raised above under the sea defences section.

### **Helipad**

585. A helipad is proposed as part of the DCO to serve Sizewell B and C but no detail is provided other than the location on Broom Covert. There is no detail of the helipad proposed and the Councils have concerns that this should not be a hard feature in the AONB. The outage car park to the north of Sizewell B is currently used for infrequent helicopter landings. It is not clear why the proposed outage car park at B or the new operational car park at C cannot serve as temporary helipads if required in an emergency. There is no justification provided for additional development within the AONB and therefore we do not support a helipad in the area proposed.

586. With regards to historic environment aspects, the Stage 3 consultation documentation does not fully consider impacts upon below-ground archaeology and does not provide a heritage strategy. There is the potential for archaeology of all periods due to recorded cropmarks, finds scatters and results of archaeological investigations in the immediate vicinity. There is a particularly high potential for medieval archaeology adjacent to Lovers Lane, given the results of trial trenching east of the LEEIE and geophysical survey results for part of this area. Prehistoric and Roman archaeology has been recorded on the Galloper substation site. Both the helipad and service route will require a scheme of trial trenched archaeological investigation, followed by mitigation as required, subject to an agreed WSI. An Evaluation would need to identify areas requiring preservation in situ or full excavation prior to development.

587. In summary, the Councils do not support a helipad in the location proposed, as there is no justification provided for this additional development in the AONB.

## **Land east of Eastlands Industrial Estate (LEEIE)**

588. The LEEIE is proposed to play an important role during the construction phase by enabling the delivery of bulk materials by rail and providing caravan accommodation for up to 400 workers. There are two rail options provided for the LEEIE, one utilising the existing rail head which requires crossing of King Georges Avenue, and a second, that provides a new rail siding north of King Georges Avenue. For a rail-led strategy the LEEIE rail option would be utilised during the early years of construction only until the Green Rail route into site is available. For the road-led option the LEEIE would be used for rail purposes during the whole of the construction period. The new rail terminal would provide a material laydown area with storage for topsoil, sand and gravel, plus caravan pitches, a logistics compound and a small Park and Ride site. Following completion of the construction period the LEEIE would be cleared and reinstated.
589. Although the Councils are generally supportive of use of the LEEIE during construction and in particular use of the rail head, we require further detailing on the proposals. The rail head and stockpiling will be close to residential property in Valley Road. Further detail is required on potential impacts on and mitigation for these residential properties arising from noise and dust. In order to assess the impact in full, we will need details on the hours of operation of the site, the lighting proposed, accesses to and from the site, and the landscape and visual impact of the proposals.
590. There is a proposed option for reconfiguring the current rail head at Sizewell Halt and moving materials by an overhead conveyor to the new terminal on the other side of King Georges Avenue. Whilst this provides greater space for deliveries, we are concerned that it causes double handling of materials and far greater likelihood of noise disturbance to nearby residents. Noise mitigation is always problematical for elevated plant and given the complaints raised at this location during the construction of Sizewell B Power Station, we consider this option should be discounted and preference given to Option 2 which utilises a new rail siding at the LEEIE.
591. In relation to stockpiling on LEEIE, Stage 3 refers to topsoil storage in the north-west corner of the site of 3.5m in height. The aggregates stockpiles would be 15m in height (Vol. 1 paragraph 7.5.59). The aggregates would then be transferred to main stockpile area. These stockpiles are located very close to residential dwellings and significant mitigation in terms of visual impact, noise and dust will be required. These proposals have the potential to create significant localised effects on public amenity and adverse visual effects during construction. The proximity of topsoil storage to residential property whilst on the one hand provides visual and acoustic screening, on the other hand is a substantial change in outlook that will have an extended impact on residential amenity. (Further comments about the spoil management strategy and stockpiling can be found below).
592. In the light of these proposals it would be prudent to review agreed viewpoints in this area to adequately capture the impacts of these proposals in order that they can be fully understood and mitigated where possible.
593. Computer-generated imagery presented during consultation indicated that parking for the caravan site is integral within this specific part of the site. The assumed parking area for the caravan park is a lorry park, with a Park and Ride for cars in the southeast corner adjacent to Lovers Lane. EDF Energy need to confirm the detailed layout of the LEEIE

and its proposed function before meaningful responses can be provided. It is assumed that the lorry parking demonstrated on the LEEIE is to enable transfer of materials from the rail head to the main construction site but confirmation of this is required.

594. Vol. 1 figure 2.8 includes a Park and Ride site on LEEIE site. Clarification is required of the use of the site and whether this is proposed for early years use only or throughout the build. Further details are needed on how the proposed early years Park and Ride facility will operate, including parking operation, bus operation and expected levels of demand.
595. In principle the access arrangements for the LEEIE are considered acceptable, with the principle of a priority junction, with right turn ghost island, as access into the site. However, further details and evidence are required over the operation of the proposed access arrangements, including whether it has sufficient capacity to cater for demand and swept path analysis will also be required to show that the proposed layout is appropriate.
596. A significant increase in vehicle movements is predicted for Lover's Lane including HGVs travelling in the early years to Sizewell Gap and from the railhead. Although it is envisaged that there is capacity to accommodate the traffic, we remain concerned that this will have significant detrimental impact on severance and road safety, especially for vulnerable road users. Hence, we encourage EDF Energy to further investigate how to promote sustainable travel between the LEEIE, the main site and the surrounding communities. This is important for minimising the traffic impact of the development as well as mitigating the impacts on PROW and potentially providing a significant legacy benefit for the community.
597. We commented in the socio-economic section (see from paragraph 229 onwards) about the proposed caravan site and the unrealistic number of proposed pitches.
598. With regards to historic environment aspects, adequate historic environment information has been provided for this location in the Stage 3 consultation documentation. The archaeological evaluation has now been completed and has identified multi-period heritage assets of local and regional significance which will require mitigation prior to development. The mitigation strategy needs to be confirmed but is likely to involve a combination of excavation and strip, map and record, subject to an agreed WSI.
599. The SWMP which identifies detailed surface water flow paths and flood volumes has not been assessed for the LEEIE site. Instead, reference is made to the Suffolk and Waveney Strategic Flood Risk Assessment (SFRA) (Volume 2A paragraph 2.12.24). The SWMP must be comprehensively assessed and used as a primary resource for assessing flood risk in Leiston. One of the areas identified at risk of flooding is Valley Road, adjacent to LEEIE.
600. Whilst a drainage strategy has not been finalised, the only potential option is to infiltrate surface water. Infiltration testing should be completed as soon as possible to establish an infiltration rate. Failed testing would likely result in this site being unsuitable for its proposed purpose. The proposal of a drainage system designed to the 1 in 30 year rainfall event is not acceptable (Volume 2A paragraph 2.12.58) given the identified risk in the SWMP. The critical event should be 1 in 100 + climate change.

601. Reference is made to the potential use of tanks (Volume 2A paragraph 2.12.58). This would not be an acceptable method given the site's use (aggregate storage with silt laden run-off) and the potential risk of failure of the surface water drainage system. Any infiltration system for this site will need to reduce the infiltration rate by a factor of 10, as per national and local guidance.
602. A small basin is shown on the northwest of the site, but no details of drainage or water treatment have been provided. The lack of available space for SuDS on this site is confirmed by Table 7.8 (Volume 1).
603. Any residual benefit to prevent surface water runoff from the reinstated site reaching Valley Road would be welcomed (Volume 2A paragraph 2.12.61).
604. It is also unclear from the Stage 3 documentation how the site will deal with sewage.
605. In summary, while the Councils are content with the principle of operational construction use of the LEEIE, the Councils have concerns regarding the number of different uses proposed and the relationship between these. EDF Energy need to provide detailed proposals for all the different uses of the site.
606. EDF Energy need to provide a significant amount of further evidence and detail, including evidence that:
- The site can be appropriately drained from a surface water perspective,
  - Does not include overdevelopment of the caravan site
  - Can provide mitigation for potential detrimental environmental health impacts on neighbouring residents.

## **Temporary construction area**

### *General AONB and ecological impacts*

607. Given the extent of the construction lay-down area and the estimated construction period of 10-12 years, the proposals will have significant adverse effects on the nationally designated AONB and on both designated and undesignated habitats and wildlife species that live, use and move through this area. The Councils expect to be fully involved in the development of a CEMP for the main site and campus to minimise impacts to landscape, wildlife and amenity during construction of the project. We remain concerned that the necessary ecological survey work to establish the baseline situation for the whole of the area affected by the construction lay-down requirements have not been undertaken and / or shared with us and other consultees. We continue to seek assurances and evidence from EDF Energy that this work has been completed or is underway so that we can effectively engage with them in developing an effective CEMP.
608. Given the detail and context of the proposals shown at Stage 3 have evolved since the operational masterplan was first developed, we suggest it would be appropriate to revisit this in detail prior to formal DCO submission to ensure that all opportunities to maximise the landscape, ecological and public amenity benefits of the scheme are phased and realised fully. There also appear to be additional opportunities to deliver greater improvements for local access and amenity within and adjacent to the estate as part of the operational phase which should be developed before submission of the DCO.

609. We noted at Stage 2 that the Appraisal of Sustainability (paragraph 4.5.6) for the nomination of the site states that 'The Countryside Agency and Campaign to Protect Rural England (CPRE) County tranquillity map identifies the nominated site as lying within a tranquil part of the East of England region' and identifies tranquillity as an issue under the theme of landscape in Table 1.1: Sustainable Development Themes and Appraisal of Sustainability / Strategic Environmental Assessment Objectives. At Stage 3 we are disappointed not to see a clear assessment of the impact of the construction and operation of the site against this baseline tranquillity, particularly given it is one of the Natural Beauty indicators for the AONB. We note some passing references to impacts on relative tranquillity in the Amenity and Recreation section of the PEIR and a commitment to a full amenity and recreational impact assessment as part of the EIA. We expect this to present evidence of impacts of proposals on tranquillity and planned mitigation measures.

### **Temporary construction area: Borrow pits and stockpiles / spoil management**

#### *Spoil management strategy*

610. At Stage 2 the Councils were very concerned about the possible severe environmental impacts from the location of the proposed borrow pits and spoil mounds within or adjacent to the AONB. We did not consider these proposals were acceptable without evidence that a) alternative options had been fully considered, including the option of moving spoil off-site by sea, and b) it was proven that the approach does not have an unacceptable impact on the AONB and that any impacts can be appropriately mitigated or compensated for.
611. Stage 3 further refines proposals for borrow pits and stockpiles at the northern edge of the construction land, they are now all to be sited east of the Eastbridge Road and three fields remain in contention. The submitted documents indicate that only two fields are likely to be required but EDF Energy are retaining three field options in the DCO to ensure that sufficient material is available for the main platform.
612. The Councils accept the advantages of borrow pits and stockpiling in that they reduce the number of vehicles required to bring material in / take material out of the site, thus being from a transport perspective a more sustainable option.
613. In the light of lack of detailed information, there are many open questions in relation to the practicalities EDF Energy's spoil management strategy. We would like to stress that detailed assessments are required for us to provide an informed response to your proposals. To develop a full understanding of the spoil management proposals and their transport implications, we request an overview of the likely and worst-case scenario for the balance of materials, i.e. how much materials would be used from borrow pits, how much additional material would need to be brought onto site, and how much surplus material would need to be taken offsite.
614. Due to a lack of further evidence and information at this stage, we remain concerned that the borrow pits and spoil mounds may have an unacceptable impact on the AONB.
615. The impact of noise, light and wider disturbance on wildlife during a very lengthy construction period is of major concern, particularly in respect of bats, nesting birds and the foraging area available for marsh harriers.

616. The aim of the spoil management strategy should be to reduce double handling as well as dealing with other environmental matters. It would be helpful to understand the proposed material flow as part of the spoil management. It is noted that the movement of excavated material within the site from the borrow pit and from the power station is not progressive and so a very large stockpile is required. EDF Energy should review their material movement strategy on site in order to reduce the volume of stockpiled material as far as possible
617. The following spoil management strategy issues need to be addressed and evidenced in order for the Councils to come to an informed view on the acceptability of proposals and the required mitigation:
- a) Timescales and phasing of all the stockpiles and borrow pits, including height profiles;
  - b) Operating hours;
  - c) Overall materials balance – clarification on how much additional material is required to be brought in in the worst-case scenario, whether borrow pits will be enough for the materials or whether there will be surplus materials, and what will happen with any spare materials;
  - d) Materials handling: Clarification of how and where materials would be separated and if there is enough space to store or dispose of materials;
  - e) Borrow pits: Confirmation of the depths of the borrow pits, its materials balance of borrow pit, whether the borrow pits take time to settle, whether they will need to be domed, whether it will be lined to keep air and water out. Evidenced assurance that the borrow pits will be stable;
  - f) Stockpiles: Details on the process of getting materials up the stockpiles and angle of stockpiles; confirmation of the stockpile width in a worst-case scenario;
  - g) Stockpile stabilisation: Details of how stockpiles will be stabilised if they are to be in place for several years to ensure that run-off does not lead to spoil being spread elsewhere and possibly to watercourses;
  - h) Noise, vibration, air quality, lighting impacts: Impact on residential properties and on accommodation campus;
  - i) Dewatering of main construction site: Clarification how EDF Energy will deal with the dewatering of the main construction site excavation and likely silts;
  - j) Ecological monitoring approach for topsoil stockpiles – confirmation / assessment whether these can form a useful (even if temporary) part of any ecological network at any stage of their existence; and
  - k) Transport implications of materials being brought into site – clarification of likely / potential sources, amounts and expected modes of transport.

#### *Borrow pits*

618. We note that the revised proposals do not take any account of our previous comments on borrow pit locations: At Stage 2, the Councils' preference were Fields 1 and 2 as Field 3 was too close to RSPB Minsmere and the proposed marsh harrier mitigation



areas; at Stage 3, Field 1 has been discarded. These concerns about Field 3 remain valid at Stage 3.

619. Given the sensitive location of the borrow pits within the AONB and close to RSPB Minsmere and the marsh harrier mitigation area, and the need to minimise harm to public amenity, we would expect:
- A sensitive restoration which minimises or eliminates permanent residual landscape and visual impacts;
  - That restoration is delivered in a timely and progressive fashion with a phased approach required in order to minimise the duration and extent of harm arising from the operation of the pits;
  - It is expected that further discussion to design and agree an operational strategy and an appropriate outline scheme of restoration will take place before submission of the DCO; and
  - Specific requirements will be required to control the operation and restoration of the borrow pits.
620. There is a residential property, the Round House, that sits in the middle of the fields proposed for borrow pits, we would expect that property to be offered suitable alternative accommodation by EDF Energy during the construction build and to be compensated for having to move out during the construction period. EDF Energy owns the other properties within the temporary construction area. There are, however, others nearby, including a residential home that will need to be assessed to ensure appropriate mitigation is in place during the construction period.
621. It is also noted that it is proposed to erect an acoustic fence around the borrow pit site, even though there are soils and overburden materials in abundance that might be used to construct a bund in line with conventional mineral working practice.

### *Stockpiling*

622. The main stockpile area will be on land to the east of Bridleway 19 and at its maximum will be up to 35 metres high – it is likely to reach this peak a few years into construction and will then reduce. It would have access ramps of 1:8 and a plateau working area on top.
623. Other stockpiles will be between 3.5m - 11m – 15m at peak height. The stockpile on the LEEIE may be up to 15m, HGVs will transport material from the LEEIE to the main construction site. There will be landscaping of the borrow pit and stockpile areas.
624. The Councils are concerned about the proposed height and potential impact of stockpiles on adjacent uses including potential dust transfer – particularly the impacts of the main stock piling area on the proposed accommodation campus and the stockpiling to the LEEIE on adjacent residential areas. There is no detail on how this is to be managed so we would expect an appropriate management schedule for the borrow pits and stockpiles to minimise adverse effects during the construction period.
625. The stockpiles are likely to create significant visual impacts when at their maximum height and extent during construction. It is also unclear at this stage how lighting and operation of the construction site will impact on the wider landscape and local amenity

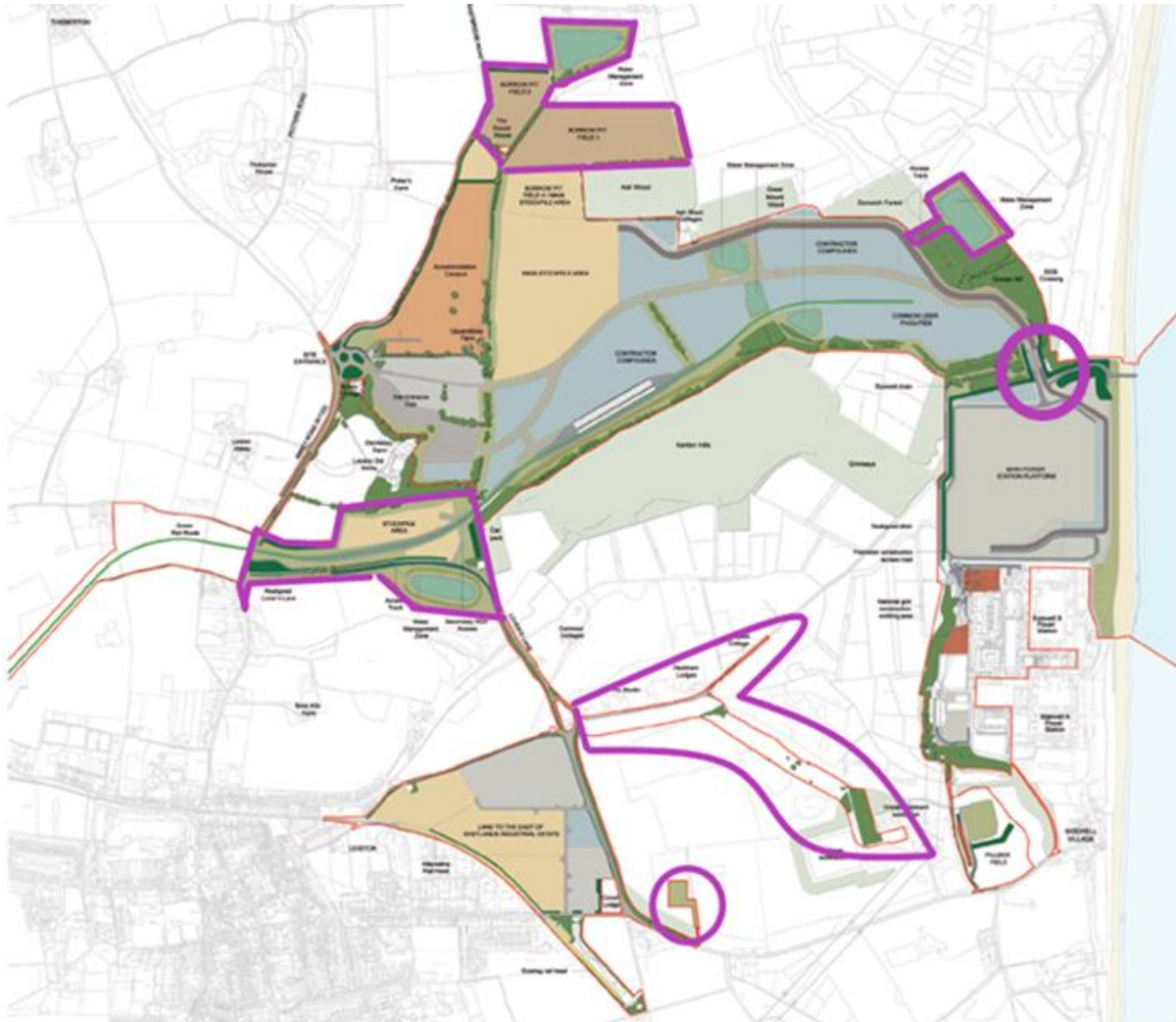
and the degree to which these effects can be contained. Representation and assessment of effects is not fully resolved and requires further discussion and clarification. We expect that these aspects of the construction programme are fully assessed under the LVIA process, and that a fuller understanding can be given as to how the maximum impact of the stockpiles will combine with anticipated main site construction progress. The temporal phasing of operations also needs to be better understood in order to give a full and comprehensive understanding of all likely impacts.

626. The current spoil management plan remains of significant concern as is the stockpiling of other friable materials such as topsoil, sand and aggregates. Some of the areas for these activities are close to a number of residential properties (particularly the Round House, Eastbridge and Valley Road / Carr Avenue, Leiston), commercial property (particularly Eastlands Industrial Estate), as well as sensitive sites like Minsmere and Sizewell Marshes SSSI. The report states that residential and ecological receptors are not expected to be sensitive to dust deposition and mitigation measures will be introduced. These include; the formation of hard surfaced roadways, a 5 metre seeded bund on the site boundaries, water suppression sprays, dampening of work areas, together with a construction site dust management plan.
627. However, wind entrainment of large quantities of top soil is commonly seen in the Suffolk Sandling areas and presents a major risk to both residential and ecological receptors, particularly when considering the vast quantities of materials to be moved, the heights of the stockpiles and the sensitivity of the area to dust and surface water run-off.
628. The design of the stockpiles will require tipping and material handling from an elevated position on top of the stockpiles which will need to be considered in mitigation, and site working on the stockpiles at night is also likely to cause noise and light impact which will adversely affect nearby sensitive receptors.
629. Further noise, dust and light mitigation measures will need to be outlined within the EIA, in order to safeguard; the residential amenity, delicate ecological marshland and tranquillity of the SSSI area, particularly if night work is anticipated.
630. Further to the above it is noted there will be at least one concrete batching plant which will require permit(s) under the Environmental Permitting (England and Wales) Regulations 2016.

631. In summary, the Councils require a significant amount of additional information and evidence to convince them that the proposed borrow pits and stockpiling will not have an unacceptable impact on the sensitive local environment (including on the AONB and RSPB Minsmere) and on neighbouring land uses.
632. Detailed assessments are required for the Councils to provide an informed response to EDF Energy's proposals. To develop a full understanding of the spoil management proposals and their transport implications, we require:
- An overview of the likely and worst-case scenario for the balance of materials, i.e. how much materials would be used from borrow pits, how much additional material would need to be brought onto site, and how much surplus material would need to be taken offsite
  - A comprehensive assessment and appropriate mitigation proposals regarding the potential impact of stockpiles on adjacent uses – particularly the impacts of the main stock piling area on the proposed accommodation campus and the stockpiling to the LEEIE on adjacent residential areas.
  - Clarification in several other areas, including operating hours, depths of borrow pits, noise, vibration, air quality, lighting, stabilisation of stockpiles, groundwater movements (see detailed queries particularly in paragraph 617 above).

*Temporary construction areas – historic environment comments*

633. With regards to historic environment aspects, adequate historic environment information has been provided for this location in the Stage 3 consultation documentation. Various potential sites have been identified through cropmarks, light detecting and ranging (LIDAR) and geophysical surveys. There is generally a moderate to high potential for settlement of all periods, with some damage likely though agriculture and forestry. Upstanding earthworks may have survived within woodland areas. Some multi-period archaeology of local and regional significance has already been identified within the majority of fields which have already been subject to trenched evaluation, predominantly of medieval date. The fields surrounding Old Abbey Farm are part of a surviving area of early (pre 18<sup>th</sup> century) enclosed landscape as identified through Historic Landscape Characterisation (HLC) data.
634. A trial trenching programme is already designed for agricultural areas, however, the red line boundary has since changed, and additional land parcels will also require assessment through geophysical survey and trial trenching. Trenching has commenced in some fields, but evaluation of the full area should be completed pre DCO. EDF Energy is required to undertake metal detecting, walkover earthwork survey and trial trenching for forestry areas. To be viable this will need to follow tree felling but occur ahead of any de-stumping. The evaluation will need to identify areas requiring preservation in situ or full excavation prior to development. A number of mitigation areas can already be defined on the basis of completed areas of trenching. Loss of historic boundaries and other historic landscape features should be avoided.
635. There are additional areas which will require archaeological assessment and are not covered by the existing WSI. These are highlighted in purple on the map below.



636. In summary, additional trenching will be required for some other areas, and additional areas require archaeological assessment which have not been covered so far.

*Other construction site area features*

- 637. A new site entrance hub is proposed to include visitor parking, freight security, bus drop-off and a site office and induction area at the entrance of the site close to the B1122. This area will operate outside of the main security fence to allow flexibility in operation. This will be the main access to and from the site.
- 638. In principle, subject to detailed design, swept path assessment, road safety audit and capacity assessment, the proposed access arrangements for the main site are considered acceptable.
- 639. There will be a secondary access to connect the main development site from Lovers Lane to the LEEIE. This access will also serve as an emergency access point in the event of an obstruction at the main site entrance. This is accepted as necessary but further detail on the use of this secondary access and its relationship with road and pedestrian safety is required.
- 640. There is limited detail provided on lighting in this round of public consultation, during the construction phase EDF Energy state that lighting will be required to provide a safe

working environment and they will target lighting where it is required and avoid over illumination. They recognise the need to provide a sensitive balance between safety requirements and the potential impacts of light spill on habitats and wider landscape. The Councils will expect further detail of this to emerge as the construction plans develop. During operation we will expect external lighting to be kept to a minimum.

#### *Upper Abbey Farmhouse*

641. Additional detail proposed at this round of consultation is some works in the curtilage of Upper Abbey Farmhouse, a Grade II Listed building that is owned by and has been restored following a fire by EDF Energy. The Farmhouse and its complex of farm buildings are sited within the temporary construction area to the south east of the temporary accommodation campus site. An emergency equipment store is required close to the power station to enable a rapid response in the event of an emergency. This is proposed within the complex of farm buildings around Upper Abbey Farm and will be designed to be in keeping with the complex – possibly a contemporary barn structure. The store will be sited to the immediate north-west of the Grade II listed Upper Abbey Farmhouse. It is considered that the setting of the listed building will be impacted by the proposal. However, this impact need not be adverse if the building's form, design and materials reflect those of a modern agricultural barn, a feature that would not be unexpected or alien within the setting of an historic farmhouse.
642. From the position and approximate scale and design given in the Stage 3 documents, it is considered that the setting impacts will need to be properly addressed and full commentary will be reserved until an assessment of the setting impact has been provided alongside a more detailed design. However, the Councils do not foresee this proposal being unacceptable.
643. In addition, a back-up generator is proposed at Upper Abbey Farmhouse in lieu of an existing modern agricultural open-sided shed to the west of the listed farmhouse. Although more industrial in character, the generator taking the place of the existing shed is unlikely to cause any significant harmful impact on the setting of the farmhouse subject to its detailed design. The backup generator will replace a combined heat and power (CHP) plant that will be required for the lifetime of the accommodation campus. Post-construction the CHP plant would be used as a back-up power source to the emergency equipment store. Having regard to the CHP system – it is important that the impact of emissions of NOx and particulates (PM10 and PM2.5) on relevant receptor locations are modelled in combination with other nearby emission sources.
644. South of Upper Abbey Farm an electrical substation is proposed to provide an electrical supply during the construction phase. It will be retained during the operational phase to complete the electrical connection between the Leiston substation at Sizewell Wents, the emergency equipment store and other ancillary buildings. Its position does not yet appear to have been mapped from the detail provided. Its location will be in a field to the south of the farmhouse west of the bridleway that runs north-south to the immediate east of the farmhouse. Setting impacts of this will need to be assessed. The principal façade of the listed building faces south to this site and the site will likely fall within its setting. There is potential for high impact effects arising of an adverse nature from this. We expect this to be fully considered, assessed and where appropriate, mitigated by use of design, layout, and screening.

## **Restoration of the construction laydown area**

645. Proposals for the operational site and the wider EDF Energy estate have continued to develop with the addition of Aldhurst Farm, an area of semi-natural habitat creation comprising mostly acid grassland and new reed beds (although it remains to be seen whether the latter can be seen as a substitute for proper compensation of all the impacts on the SSSI – it does not replace Fen Meadow).
646. The Councils request EDF Energy to revisit the operational masterplan ('vision') in detail prior to DCO submission to ensure that all opportunities to maximise the landscape, ecological and public amenity benefits of the scheme have been exploited.
647. Given the sensitive location of the construction laydown areas both within the AONB, and in its setting, and the need to minimise harm to public amenity, we would expect an approach to restoration that generally:
- minimises or eliminates permanent residual landscape and visual impact;
  - is delivered in a timely and progressive fashion with a phased approach required in order to minimise the duration and extent of harm arising from the construction phase; and
  - involves further discussion with us and other stakeholders to design and agree an operational strategy and an appropriate outline scheme of restoration before submission of the DCO.
648. There appear to be additional opportunities to deliver greater improvements for local access and amenity within and adjacent to the estate as part of the operational phase which should be developed and fully considered before submission of the DCO.
649. In summary, the Councils request EDF Energy to revisit the operational masterplan ('vision') in detail prior to DCO submission to ensure that all opportunities to maximise the landscape, ecological and public amenity benefits of the scheme have been exploited.

## **Accommodation campus**

650. The accommodation campus is included as part of the temporary construction area. At Stage 3 the campus is proposed to be on the main construction site but is sited to the east of the Eastbridge Road, with off-site sports facilities proposed to be sited in Leiston. The campus would have, unchanged from Stage 2, 2400 bed spaces and is proposed to be in blocks three to four storeys in height. The proposed layout includes a double deck car park for residents on the northern edge of the site, and communal servicing areas to the south. EDF Energy's proposals include a landscape buffer zone around the campus and a security strip which could be used as a running track by residents. The campus will be securely fenced with access only available at the southern end close to the main access. Off-site facilities to be located at Alde Valley Academy / Leiston Sports Centre include a full size 3G artificial football pitch and 1 – 2 MUGAs (see comments in the socio-economic chapter, paragraphs 290-296, of this response).
651. At Stage 2, the Councils noted the operational advantages for EDF Energy to have an accommodation campus on site, and that this would have some advantages in terms of

reduced bus journeys to site. The Councils raised concerns about the environmental impacts of the proposed site location, which may cause an overload on the sensitive environment of the AONB, and the lack of legacy benefits. The Councils concluded: 'Whilst it may well be concluded that there are no credible alternative accommodation campus sites, the Councils cannot come to a final view on this matter either way until all other options in proximity to the construction site have been considered and fully evaluated, including the option of split sites. Further information on the business case for a campus in this location will be expected to be provided and EDF Energy will be expected to provide details on alternative sites that have been considered during the pre-application process as well as a detailed justification of the proposed size of the campus, in terms of maximum numbers but also the ability to increase and reduce its size during the build appropriate to the employee numbers on site.'

652. The Stage 3 documentation does not include an appraisal of alternative sites, although the Councils are aware that such an appraisal has taken place, which also looked at the options put forward in the Boyer / Cannon report commissioned by Suffolk County Council. The Councils note that they have not seen detailed justification of the proposed size of the campus, in terms of maximum numbers but also the ability to increase and reduce its size during the build appropriate to the employee numbers on site. In addition, the Councils expect EDF Energy to have a clear mitigation strategy for any potential increase of the workforce numbers, as modelled in the sensitivity testing, which may need to include an increase in campus accommodation.
653. Suffolk County Council makes the following points with regards to the proposed site:
- The development is adjacent to the AONB and in an area of Special Landscape Value – while this is no longer to be shown in the Local Plan, this doesn't change its intrinsic quality. As stated in Stage 2, there are concerns that a campus in this location may cause an overload on the sensitive environment in this area, and would absorb what would otherwise be a strong ecological buffer and landscape boundary along the existing bridleway;
  - The constrained site leads to significant massing of buildings, which adds strong urban pressure on the area, adding to impact of construction site;
  - There is a particular impact on local communities, specifically Theberton and Eastbridge, already having consequences of traffic and borrow pits / stockpiles;
  - A significant number of receptors pass very close to this substantial development – this is the main route into and out of Eastbridge and Eels Foot Public House, and a proportion of Minsmere traffic currently use route. In addition, as a result of the proposed diversion route of the England Coast Path via Eastbridge Road, England Coast Path walkers will be key receptors;
  - Both this site and the proposed caravan location on the land East of Eastlands Industrial Estate are on very tight sites with no room for flexibility in event of pressure for higher employment numbers (see discussion above around EDF Energy's sensitivity testing of a potential increase from 5,400 to 7,900 workers).
654. The Councils ask EDF Energy to consider the following alternative options, and provide full justification why the proposed site is chosen over and above these:

- A campus located in a more urban area such as Lowestoft or Ipswich. There may well be justification for not siting the campus in these locations but we wish to consider the business case as there would be legacy potential in Ipswich or Lowestoft that is not available in Leiston or small towns in the vicinity. Other sites in Leiston and Saxmundham with legacy potential have been considered but these are required to meet Local Plan requirements over the next 10-15 years, so the District Council do not want them to be used by EDF Energy.
- Suffolk County Council additionally requires EDF Energy to reconsider the nearby Leiston Airfield site as an alternative site for the campus. We are aware that EDF Energy has some criticisms of Boyer / Cannon's assessment of this potential site, but Suffolk County Council considers that these points do not necessarily outweigh the advantages of this site. While this site does not have a legacy potential, the size of the site would allow for a reduced height of campus accommodation, reducing the urban pressure in terms of visual impacts, and allowing the campus site to be largely hidden behind earth bunds. The site appears to have less receptors. It would also provide flexibility to increase the number of workers that could be accommodated, if such an increase occurred – including allowing for a combination of caravan and campus accommodation. The additional journey time and highways impact of this site compared to the proposed site would be minimal, if a new link road from the airfield to the B1122 was built. The currently proposed site of the campus could become a natural environment buffer.

655. Notwithstanding the requirement of justification of the proposed campus site, we provide comments on the proposed site below. If the currently proposed accommodation campus is taken forward by EDF Energy, the Councils expect that appropriate mitigation measures in relation to the range of issues related to the site will be developed and implemented.

656. We welcome EDF Energy's proposals to locate the associated sports facilities in Leiston, as well as the proposal of a Housing Fund to mitigate adverse impacts created by additional workers in this location and to hopefully enable regeneration in Leiston and other affected areas.

657. The Councils expect to be further involved in the design and detailing of a campus. The Councils request that the double deck car park be re-considered as these can be noisy in a residential environment. We also need to understand further the relationship between the campus and the borrow pits / stockpiles to ensure they will not have any adverse impacts on workers' amenity.

658. The accommodation campus will need to be treated as a sensitive receptor in its own right and the impact of noise, dust and light need to be adequately assessed. The site needs to be subject to phase 1 and where applicable phase 2 contaminated land survey as the site will be regarded as sensitive to the presence of contamination, being residential.

659. The accommodation campus appears to have associated plant. There is a CHP on site to provide heat and power during the construction phase and to be retained thereafter as backup power during the operational phase. There is also a large kitchen facility that we assume will have a significant associated extract ventilation and refrigeration plant.



It is unknown if any of the services on site will have air conditioning or other similar plant. The impact and potential mitigation of these activities on the accommodation and local residential dwellings will need to be considered.

660. The proposed accommodation campus will result in the loss of one of two existing pits (the other is in the spoil management area) in the area that possess good habitat structure and evidence potential to provide valuable connectivity for foraging species such as bats. This northern pit has evidence of considerable rabbit activity, which will be invaluable in terms of future grazing of restored heathland-mosaic habitat post-construction. The Councils request EDF Energy to consider preserving this pit in their evolving site design. EDF Energy also need to consider the wider impact of the campus on the local ecology, including from lighting.
661. From a landscape perspective, the campus site can be accommodated in this location although the reduction in area has resulted in an increase in the height of the accommodation blocks. The revised proposals do increase the separation from some local receptors such as Leiston Abbey. The proposed campus has an impact on amenity and recreation, particularly as the diversion route for the England Coast Path is proposed to be routed via Eastbridge Road, immediately adjacent to the urban structures of the campus.
662. Further work is needed before the DCO to refine the design of the campus including consideration of external finishes and lighting, together with planting in order to maximise embedded mitigation. Opportunities for mitigation planting that can remain as a legacy contribution to landscape character should be taken.
663. The proposed design of a realignment of the bridleway at the Campus site is of some concern to the Councils and need further work – this is covered in the Rights of Way section in paragraph 1005.
664. The accommodation campus, although temporary, in the proposed location would have high impacts on Upper Abbey Farmhouse and, potentially, Leiston Abbey (Second Site) within their setting. These are likely to be harmful. Although the harm will be time-limited, it will nonetheless be harm (for its duration) and must not be discounted. Mitigation measures may be proposed in respect of aspects of design, landscape screening for example. We would expect mitigation to include physical conservation benefits to the Upper Abbey Farm site including a comprehensive strategy for its complete repair, refurbishment and re-use.
665. Several of the curtilage listed buildings at this site are in a state of dereliction, vacancy or slow decay and the least we would expect is for this site to improve these in conservation terms (re-use and refurbishment) as a form of compensation for the duration of harm that will arise from the construction of multiple large scale three and four-storey accommodation blocks within its immediate setting. This site and its heritage assets have been largely ignored for a long time, and the Councils are considering placing some of these heritage assets on our Buildings at Risk register:  
<http://www.eastsuffolk.gov.uk/planning/design-and-conservation/buildings-at-risk>.
666. It needs to be considered that screening options will take longer to come into effect than the laydown period. The loss of historic boundaries and other historic landscape features should be avoided.

667. With regards to below ground historic environment aspects, adequate historic environment information has been provided for this location in the Stage 3 consultation documentation. Various potential sites can be identified through cropmarks, LIDAR and geophysical survey. There is generally a moderate / high potential for settlement of all periods, with some damage likely though agriculture. Multi-period archaeology of local and regional significance has already been identified within most fields which have already been subject to trenched evaluation.

668. A trial trenching programme is already designed for agricultural areas. The trenching has commenced in some fields, but evaluation of the full area should be completed pre DCO. An evaluation is required to identify areas requiring preservation in situ or full excavation prior to development. Several mitigation areas can already be defined based on completed areas of trenching.

669. In summary, the location of the accommodation campus remains a local concern. EDF Energy are requested to provide further evidence to demonstrate why they consider their favoured location to be the optimal location:

- The Councils would like to see the evidence behind not choosing either Ipswich or Lowestoft for an accommodation campus.
- Suffolk County Council asks EDF Energy also to reconsider the nearby Leiston airfield site as an alternative location for the campus.

670. As part of the business case, EDF Energy will also be expected to:

- provide a detailed justification of the proposed size of the campus, in terms of its maximum numbers;
- provide options for an approach to enable an increase and reduction of its size during the build appropriate to the employee numbers on site.

671. Subject to receipt of that justification, whatever accommodation campus site is chosen will need to prove that environmental impacts can be sufficiently mitigated and compensated for. This needs to include:

- Ecological impacts within and adjacent to the site;
- Landscape and visual impact
- Quality of life and health and safety of the occupiers.

## RAIL

672. The merits of a rail-led strategy, as well as the need to consider the impacts of the proposals on the wider rail network and concerns around the deliverability of rail deliveries, have been discussed earlier with regards to the transport strategy proposed by EDF Energy (see from paragraph 331 onwards). Notwithstanding our comments about the transport strategy, this section provides comments on the specific proposals.
673. Specifics of the rail-led proposals include two freight deliveries by rail a day in the early years to the LEEIE, with five freight trains a day (ten rail movements) during the main construction phase to a new rail route, the “green rail route”, straight into the main construction site. The Green Rail route extension into the Main Construction Site would be removed once construction is complete.
674. The rail-led strategy requires a passing loop between Ipswich and Saxmundham and additional signalling along the East Suffolk line. The passing loop would enable the five train paths under the rail-led strategy to operate during the daytime, thus have less impact overnight on residential properties than the road-led strategy (which would utilise two train paths per night). The passing loop would not be constructed under a road-led strategy. As raised under the Transport Strategy chapter (see paragraph 337), we would ask for further clarification on whether the location of the passing loop presents the greatest legacy benefit for achieving additional future passenger services along the line and would like to work with EDF Energy to ensure that the greatest legacy benefit is achieved.
675. 45 level crossings along the route from Ipswich to Saxmundham will require updating or closure – these are discussed in the next chapter of this response. Strengthening works to up to six bridges may also be required. It is noted that strengthening of the rail bridges on the East Suffolk Line may be necessary. The Councils note that two bridges; Bramford Road and Norwich Road span busy arterial routes and that any significant work will have an impact on the highway network.
676. Rail improvements to the existing line would be maintained as a legacy of the development. It is unclear whether some of or all these improvements would equally be required in a road-led strategy.
677. The two freight trains in the early years would be run on the East Suffolk line outside of the passenger timetable (between approximately 2300 – 0600), these trains would be held on the Saxmundham to Leiston branch line and only allowed to depart along the branch line between 0600 – 2300. For a road-led strategy, it is proposed that these arrangements would continue throughout the construction phase.
678. There are environmental implications of these proposals. Holding trains in the proposed location of the branch line as well as the timing of the train movements is likely to have adverse impacts on residential properties close to the train line in Saxmundham as a result of noise and vibration, with particularly adverse impact at night time. In addition, there are many residential properties along the East Suffolk line between Ipswich and Leiston in close proximity to the existing rail line, in locations including Ipswich, Woodbridge, Melton and Saxmundham. These would be adversely affected by noise and vibrations impacts of freight train movements particularly at night time. Further detail on the proposals is required in order to balance and compare the proposals with the alternatives and discuss mitigation requirements. The EIA should detail the degree of

noise and vibration which might be caused to properties which are within 50 metres from the rail line should night time movements be required. In particular noise mitigation measures for the four crossing and gateway cottages should be detailed in full.

679. Within the 'Other Rail Improvements' section, information is provided regarding traffic queuing at level crossings. The Councils expect to see air quality assessments of any new or increased areas of queuing traffic at level crossings. Information is presented with regard to nitrogen dioxide (NO<sub>2</sub>) and results obtained from a District Council monitoring site (WBG12). This site is 110m from the track with a NO<sub>2</sub> concentration of 22µg/m<sup>3</sup> in 2016. There is a declared Air Quality Management Area (AQMA) next to this monitoring site, only 190m from the track with a monitoring site reading 37µg/m<sup>3</sup> in 2016. The predominant wind direction in this locality is from the rail track towards the AQMA. The Councils need further information to advise on the predicted impact of emissions from increased rail movements associated with Sizewell C on the AQMA.
680. HGV routes for the construction of the passing loop would need to be agreed with the Councils, to ensure they avoid the AQMA in Woodbridge.
681. Should the option for movement of material from Sizewell halt via a conveyor belt across King George's Avenue in Leiston be chosen, it must be fully covered in order to minimise fugitive particulate matter emissions arising. Further comments on the LEEIE have been provided above, from paragraph 588 onwards.
682. Complaints of freight train idling at sidings, crossovers and passing loops is also of concern and consideration should be given to minimise train waiting times during unloading of materials or passing manoeuvres.
683. In landscape terms, the proposed rail works appear to be capable of being made acceptable subject to further detailed discussion regarding design, layout and mitigation.
684. EDF Energy should be aware of sites identified in the emerging local plan which may be affected by the Saxmundham crossover proposal: Policy SCLP12.30: Land North-East of Street Farm, Saxmundham - 2.18ha of land north-east of Street Farm, Saxmundham, as shown on the Policies Map, is identified for residential use for approximately 40 units.
685. There is very limited baseline environmental information provided in relation these proposed works and a detailed assessment of impacts and how they will be mitigated will be required.
686. With regards to historic environment aspects, the Stage 3 consultation does not fully consider impacts of rail improvement works upon below ground archaeology and does not provide a heritage strategy. The passing loop compound locations and new land take areas have high potential for archaeology of all periods based upon topographic location and recorded finds scatters. The Saxmundham crossover compound locations and new land take areas have high potential for archaeology of all periods based upon recent archaeological excavations of the western end of the compound, in connection with a housing scheme, which identified prehistoric and Saxon settlement. The extent of either is unknown but should be established through evaluation (trial trenching) before next stage if this becomes the preferred option, subject to an agreed WSI. The evaluation would also need to identify areas requiring preservation in situ or full excavation prior to development.

687. In summary, notwithstanding the Councils' overall concern that the marine-led strategy has been dropped, the Councils support the principle of improvements to the East Suffolk Line including a proposed passing loop, subject to further understanding of the timings of proposed movement of trains and the related environmental impacts and the legacy potential of the proposals.

### **Green Rail Route**

688. The Councils are content with the principle and broad routing of the Green Rail Route but have some concern about its impact on the setting of Leiston Abbey and require additional information with regards to flood and water management.
689. In previous rounds of public consultation, Historic England, has already expressed concern about the proposed Green Rail route due to its potential impact on the setting of Leiston Abbey, we are aware of this although their comments have not been published. The Leiston Abbey site consists of a very large area that is a designated Scheduled Monument; the Grade I listed St Mary's Abbey; the Grade II listed Retreat House; the Grade II listed Abbey Farm barn; and Grade II listed Guesten Hall. The site has high significance and heritage value and houses an important music school (ProCorda) and visitor facility. The setting issues arising at this site from the proposed rail route to its south will be addressed by Historic England, which is the competent body in respect of archaeology and a statutory consultee in respect of development affecting the setting of a Grade I listed building, as here. The issues arising will apply equally to the Grade II listed buildings at this site.
690. Suffolk Coastal District Council, as local planning authority, engaged the issue of the setting of the Abbey when defending its reason for refusal of residential development at Abbey View in 2016, directly to the south of the Abbey site and on the northern edge of the settlement, i.e. harm arising. That appeal decision is relevant as the Inspector identifies that "the tranquil rural land between the appeal site and Abbey ruins is an important part of the setting which adds to the significance of the listed building". It is this very site that is proposed for the Green Rail route and associated automated level crossing (adjacent). The Appeal decision reference is APP/J3530/W/15/3026060 and it should be referenced for guidance. The Appeal was allowed with the Inspector commenting that 'in my judgement the very small likely changes that the proposal would bring about when viewed from the Abbey would not have any negative effects on the peaceful and rural character of the intervening land as it provides a setting for the Abbey'.
691. EDF Energy needs to consider the impacts of the proposed Green Rail route on the setting of Leiston Abbey in terms of this identified peaceful and rural character and tranquillity. When not in use, the rail route may not be contrary to this character, although its installation will partly (but not extensively) industrialise this area of the setting. EDF Energy needs to consider whether additional impacts arise on the experience of visitors to the Abbey and the music school when the route is in use.
692. With regards to other historic environment assets, there is a high potential for medieval and earlier activity; the extent of which is unknown but should be established through evaluation before submission if this is the preferred option. An evaluation (geophysics and trial trenching) will be required if this becomes preferred option (including compound

- area), subject to an agreed WSI, pre-DCO. This would also need to identify areas requiring preservation in situ or full excavation prior to development.
693. Fields through which the rail route passes are a surviving area of early (pre 18<sup>th</sup> century) enclosed landscape as identified through HLC data. Loss of historic boundaries and other historic landscape features should be avoided where possible.
694. Subject to robust assessment and mitigation measures secured by the DCO with an associated CEMP and LEMP, these proposals are likely to be acceptable in landscape terms. However, the Councils ask EDF Energy to fully consider all options and requirements for mitigation both within and beyond the red line of this scheme. The Councils have concerns over the introduction of a proposed new footbridge as part of a PROW diversion, and the associated visual impacts such structures bring in a relatively open landscape. The justification for such a requirement needs to be fully understood.
695. The Green Rail route proposal does not currently make provisions for surface water and flood management. Volume 2A paragraph 3.9.3, identifies a watercourse on the Green Rail route and a high risk of flooding at the location of the Abbey Road crossing. This risk of flooding is also identified in the SWMP. The drainage will be designed to intercept run-off from adjacent areas (Volume 2A paragraph 3.10.30). As the Green Rail route follows the line of a notable surface water flow path, consideration needs to be given to how the two impact one another. EDF Energy will need to assess, and if required mitigate, whether the Green Rail route would contribute to flood flows, and / or whether it would intercept the flood flow and direct it further into the Sizewell C Main Development Site. The flood flow currently passes through the constructed Aldhurst Farm mitigation area. The potential ecological impact of altering this flow has not been assessed.
696. SuDS must be incorporated into the design throughout the construction and operation phases. This is required to ensure surface water quantity and quality is controlled whilst simultaneously providing biodiversity benefits. The use of petrol / oil interceptors is not a SuDS approach and should only be used as a last resort or final protection measure (Volume 2A paragraph 3.9.13 & 3.10.18 - .19). SuDS must be incorporated with enough clearance to groundwater.
697. The post operational phase identifies potential soil remediation methods, one of which is capping (Volume 2A paragraph 3.9.14). This would alter the site's long-term drainage characteristics and due consideration must be given to the issues raised in the Inland Flood and Water Management section of this response (paragraph 132) regarding this.
698. Table 3.10.1 (Volume 2A) shows recorded maximum groundwater levels. Without knowing the location of these and the ground levels at the location of testing it is not possible to make any further comment or assessment.
699. A range of infiltration results across the Green Rail route have been provided in Table 3.10.2 (Volume 2A). These tests demonstrate that a wide range of results were achieved in the areas where testing was completed. Without knowing the location of these tests and details (were they to full BRE 365 methodology?) it is not possible to make any further comment or assessment.
700. In summary, the Councils are content with the principle and broad routing of the Green Rail Route but some concerns need to be addressed, in particular regarding its impact on the setting of Leiston Abbey, and with regards to flood and water management.

## LEVEL CROSSINGS

701. Network Rail, working with EDF Energy, has identified several level crossings that would need to be closed or upgraded as part of EDF Energy's use of rail. The proposed rail led upgrades includes twelve closures and diversions of existing PROW. These closures will help to achieve the required 40mph line speed for freight traffic.
702. There are inconsistencies in the consultation document as to whether these upgrades would be required in the rail-led strategy only, or in both the rail-led and road-led strategies. Where the proposed works to a level crossing require diversion of a PROW, a plan has been included that shows the existing and proposed route or routes.
703. The Councils support a rail-led strategy and will be happy to work with EDF Energy and Network Rail to make the implementation of such a strategy feasible. In principle, the Councils support the improvements to the PROW crossings and, provided acceptable alternative routes can be provided, can accept the closure of a limited number of crossing points. We will constructively enter discussions about possible improvements and / or closures. However, closures of PROW are of concern to the Councils and the public. Further site-specific comments are given below.
704. The proposed changes to the local rail network impact significantly on the PROW network and proposed closures and new routes will need to be assessed for safety and convenience, using Suffolk County Council's guiding principles. Please read from paragraph 988 onwards for wider PROW considerations.
705. For these discussions, the Councils' initial position is:
- To maintain public access, it is preferable for all level crossings for PROW to be kept open with additional safety measures installed such as miniature stop lights;
  - When closure is considered, permanent closure may be acceptable if the alternative is no worse than the existing access network, although temporary closure for the period of construction remains the Councils' preference unless there is a beneficial legacy for the rail and / or PROW network;
  - For any temporarily closed PROW, an alternative route must be provided; location, establishment works and ongoing maintenance of the alternative route to be undertaken by EDF Energy prior to closure would need to be agreed with the Councils.
706. The natural environment and wider amenity impact of closing and / or carrying out works at level crossings does not appear to have been considered in any detail and we expect there to be a full explanation of potential disturbance (and any other impacts) of closures or re-routing on areas that have, historically, been 'quiet'.
707. The Councils welcome the proposals for safety upgrades on some of the PROW crossings of the East Suffolk Line.
708. The Councils believe that EDF Energy has not evidenced their stated safety case that necessitates the closure of the 12 PROW crossings. In previous discussions, Network Rail has indicated that each of these crossings could be made acceptable with the use of miniature stop lights. The ALCRAM scores should be included for the current use and the proposed use of the line.

709. The Councils question the accuracy of the usage figures given in Vol 1 table 9.2. We are concerned that the information is based on an underestimation of the daily usage of these crossings. It appears that the data is based on Census Data, which, assuming it is origin-destination data for journey to work, would not pick up journeys for several other purposes, and so is likely to significantly underestimate usage. For example, vehicle crossing numbers at Westerfield station has been given as 118 per day whereas a Suffolk County Council survey recorded over 4000 per day. Also, table 9.2 shows 561 vehicles use the Melton Station level crossing (SWC24) daily; a recent survey of through-movements at the Melton crossroads approximately 650m to the west indicated over 1,000 vehicle movements using Wilford Bridge Road in a single hour. While not all these movements would use the level crossing, this still indicates significant discrepancy. The actual usage figures may thus possibly change the required / preferred solution for some of the crossings.
710. Further to the above, the traffic data provided for the following crossings in Table 9.2 are not considered to be correct based on other evidence within the consultation documents:
- SWC02 Westerfield Station
  - SWC08 Bealings
  - SW24 Melton Station
  - SWC52 Saxmundham Road
  - SWC55 Leiston
  - SWC56 Sizewell
711. The Councils are unable to provide meaningful comment on many of the alternative PROW route options as they cross private land to which the Councils do not have access. We request EDF Energy to facilitate access to these routes to enable the Councils to provide constructive comments about potential diversion routes.
712. From the local knowledge the Councils have, they question whether EDF Energy has surveyed some of the proposed diversion route options on the ground to assess the physical viability of their proposed options before inclusion in the consultation.
713. The PEIR has concluded that the effect of closures is not significant due to the existing low footfall and the short diversion distance. (Vol 2 paragraph 4.2.4). The Councils question this conclusion; the survey figures for current usage are questionable (underestimating usage) and the shortest diversion distance may not be safe or able to be made safe or be physically accessible. The Councils suggest that the EIA will need to consider the safety, accessibility and amenity of the proposed options as the rationale for assessing impact and not what appears to be a desk-based exercise of measuring distance.
714. It is noticeable that EDF Energy are proposing providing miniature stoplights or other upgrades on private crossings rather than seeking closure despite what appears to be very light use. The Councils seek clarification for the rationale behind seeking to close crossings to the detriment of the public whilst installing safety features on lightly used private crossings.
715. For the Councils to accept a proposal for permanent closure:



- An alternative route for a permanent closure must be agreed with the Councils in advance of the DCO submission. The views of local users, parish council and user groups will assist in determining the most suitable alternative;
- The proposed alternative route must be subject to a site survey and assessment of works jointly by the Councils and EDF Energy prior to the DCO submission;
- Design and specification of an alternative route should be agreed with the Councils prior to DCO submission;
- Establishment works are to be undertaken by EDF Energy;
- For any proposal that will divert walkers onto a road, there must be a road safety audit undertaken and proposals amended to retain the crossing with safety measures or mitigation proposed to enable public safety to the satisfaction of the Councils, prior to DCO submission;
- New alternative PROWs will be subject to a Section 278 agreement and process including the provision of commuted sums for any new PROW asset, a period of maintenance and final certification.

716. The Councils have the following comments on individual PROW crossings:

- Lacys SWC03, Stennets 1 SWC04, Martlesham SWC09, Pettistree SWC 30, Orchard SWC 31, Wickham Market SWC 32 and Saxmundham SWC 47 - the Councils could accept a permanent diversion subject to the principles outlined above for permanent closures.
- Westerfield SWC01 – the Councils do not support the closure of this crossing. This is a key link from Ipswich to the wider countryside and part of the promoted Fonnereau Way. The Councils wish to note that an application for planning permission for large scale residential development of the site to the north of the rail line west of the footway crossing is being considered by Ipswich Borough Council. This will significantly add to the numbers of users which has resulted in the agreement that this development will fund a new footbridge at this location enabling closure of this crossing.
- Stennets 2 SWC 05 & Gamekeepers SWC06 – the Councils do not support the closure of these crossings if no better alternative is found to the proposed alternative routes which place walkers onto Butts Road with no footways, restricted visibility and no / limited step off area.
- Melton Bromeswell SWC 27 - the Councils do not support the closure of this crossing unless a suitable alternative route is found and agreed. This footpath is a well-used local amenity and the five options for alternative routes require site visits (private land) to assess actual accessibility and safety.
- Blaxhall SWC 37 - the Councils do not support Option 1 as it removes a path with high amenity value, which is easy to use and promoted as an East Suffolk line walk. The Councils do not support Option 2 as it places walkers on land used as the car park and competitor's area for the nearby motorbike scrambling track. The Councils would be happy to work with EDF Energy to seek a solution at this crossing.

717. From a highway perspective, the proposed improvements to the level crossings are generally supported, although technical details remain to be agreed during preparation of the DCO. Most matters relate to safe and suitable access to site compounds although it is recommended that the proposals for Blackstock Crossing Road SWC33 & SWC34 and Brick Kiln level crossing SWC43 are reassessed, as they can be used by vehicles on the public highway.
718. The following comments are made for individual crossings;
- Fig 9.15 is incorrect as it does not show Martlesham level crossing SWC09.
  - At the Westerfield Crossing SWC02, the location of temporary compound facilities could obstruct the proposed SWC01 diversion route.
  - The site compound SWC08 at The Street, Bealings (Fig 9.40) will obstruct FW17.
  - Ferry Quay SWC15 (Fig 9.40) is a private road not public highway.
  - Haywards / Tide Mill Way SWC16 is a private road and not public highway.
  - While Lime Kiln Quay SWC17 and Sun Wharf SWC18 are both private roads a footway (FW04) crosses Lime Kiln Quay crossing. The temporary compound from west is within the district council car park and no access would be allowed from Lime Kiln Quay Road.
  - Blackstock Crossing Road SWC33 & SWC34 is an unclassified road U3189 and not a public footpath. Although vehicle numbers are likely to be low. Similarly, the Brick Kiln level crossing SWC43 is an unclassified road U2203 and not a footway. Both roads are narrow and difficult for anything other than light vehicles to traverse.
  - Blaxhall 1 SWC36 Fig 9.53 shows access for a construction compound off Blaxhall Bridleway 3, also known as Hoo Lane. This is a narrow private road and access for anything other than small vehicles is difficult.
  - Beversham level crossing SWC, the Councils are concerned that visibility for an access into the temporary compound shown in Fig 9.55 is not adequate. Farnham Road is narrow and only suitable for low volumes of light vehicles.
  - The access to the temporary compound at the Knodishall crossing SWC49 (Fig 9.77) is via the rail line.
  - The access layout to the site compound at the Saxmundham Crossing SWC52 (Fig 9.81) will need to ensure suitable visibility for safe use.
719. Regarding level crossings along the Green Rail Route, it is noted that there will be a low number of train movements (five in / out per day) at low speeds, and design could ensure good line visibility. The Councils believe that EDF Energy has not made the safety case for closing any of these crossings. There is the very real possibility of misuse if a crossing is not provided; the low frequency of trains and low speeds will foster a sense of security for the public to informally cross the line. An easily accessible, well designed level crossing would ameliorate this.

720. The Councils welcome that the PEI (Vol. 2 paragraph 3.4.8) recognises the significant effect on users and will include this in the recreation and amenity impact assessment in the Environmental Statement.
721. The Councils welcome the provision of a safe crossing point for users of FP3 and support the proposal for level crossing rather than an overbridge.
722. It is unacceptable for safety reasons to divert FP6 and FP10 to Abbey Road level crossing and then along Abbey Lane as it adds over 900m to the onward journey for a walker using FP10 and places walkers on Abbey Lane, a narrow single-lane road with high banked hedges and no room for stepping off the road or a segregated footway.
723. The link between public footpath no. 6 and no. 10 along the south side of the railway is welcomed.
724. In summary, in principle the Councils support upgrades of PROW crossings along the East Suffolk Line and, provided acceptable alternative routes can be provided, can accept the closure of a limited number of crossing points. However, further work and detailed assessments are required to ensure that alternative routes are indeed acceptable.
725. EDF Energy has not made the safety case to close any of the crossings on the Green Rail Route.

## **SIZEWELL LINK ROAD**

726. At Stage 1, the Councils were concerned about the potential significant impact on the communities along the B1122, particularly Theberton and Middleton Moor, and asked for serious proposals to be presented for consideration and assessment. We stated that improvements to and provision of footways and safety measures within the villages along the B1122 should be considered; impact of traffic growth on Yoxford would need greater consideration including the junction of the A12 and B1122.
727. At Stage 2, the Councils expressed significant concerns that the proposals for the B1122 from the A12 to the site were not adequate for the level of traffic proposed in relation to the construction of the Sizewell C project. EDF Energy was requested to look further at the main route from the A12 to the site and propose mitigation measures that meet the impacts created by their development proposal.
728. The impact on local communities of the anticipated increase in traffic volumes in particular of HGVs and buses along the B1122 has been highlighted in the Accent report (May 2016) commissioned by Suffolk County Council. This report stressed the concerns of local residents about the increase in traffic volume, speed, and proportion of HGVs, and the related impacts of noise, vibration, accident risk, and extra time added to car / bus journeys. This report has provided further evidence towards the need for more significant mitigation along the B1122.
729. The Councils are pleased that at Stage 3, EDF Energy is looking to address our concerns around the traffic impacts for the B1122 and recognise the impacts on local communities associated with noise, vibration and severance.
730. As part of the road-led scenario the mitigation proposed is a new link road between the A12 and B1122 east of Theberton. The new link road would allow traffic to bypass both Theberton and Middleton Moor. EDF Energy state they would instruct construction workers, park and ride buses and HGVs to use the Sizewell Link Road to reach the main development site. The Sizewell Link Road option includes a drop-down link from the B1122 to the new road to enable abnormal indivisible loads travelling from the north to access the B1122 at the new Yoxford roundabout and then drop onto the Sizewell Link Road thus avoiding having to travel through Yoxford. This would mean that the majority of traffic related to Sizewell C would be taken away from the centre of Yoxford.
731. EDF Energy state that 'the main driver is to encourage the use of the road was to make it the most direct route to the site as that would encourage more people to use it'. EDF Energy state they have considered several different routes from south of Saxmundham to south of Yoxford. EDF Energy suggest that the chosen route, route Z south, is considered to be least impactful having consideration to environmental designations in the area including agricultural land classification, listed buildings, conservation areas, scheduled monuments, the AONB and the PROW network.
732. The Councils are aware that a high-level environmental assessment has been undertaken which resulted in EDF Energy selecting the B1122 parallel route. However, no detailed appraisal of the options and justification of the route selection has been provided to the Councils. An appraisal should include transport, heritage and ecological information. The Councils require this to be provided. The route selection is further discussed below, in separate sections for Suffolk County Council and Suffolk Coastal District Council.

733. The Councils are concerned that only high-level environmental studies (10.5.1) have been undertaken on this route or any other option, and that there is a risk that a mitigation scheme may not be deliverable for not yet considered factors. If an acceptable alternative mitigation scheme is not provided, the Councils consider that in their view the impacts of the traffic on the B1122 in the road-led scenario would be severe and unacceptable.
734. The Stage 3 consultation sets out that: 'In Middleton Moor, the noise impacts under the road-led strategy would also be significant at times. The Sizewell Link Road, which bypasses both Theberton and Middleton Moor and continues to the A12, would provide mitigation. Traffic to and from the south would access the new road from the A12 and re-join the B1122 east of Theberton. Traffic to and from the north would join the Sizewell Link Road west of Middleton Moor and also avoid the village.' This highlights that the Sizewell Link Road would provide positive mitigation for Middleton Moor residents.
735. The Stage 3 consultation concludes that for a rail-led strategy, Sizewell C would continue to use the existing B1122 through Middleton Moor. It states that under the rail-led strategy, the traffic flow on the B1122 through Middleton Moor would total 6,250 vehicles per day (compared with 6,550 vehicles under a road-led strategy without the Sizewell Link Road), however the difference of HGV movements would be more considerable, with 450 HGVs per day (compared with 750 HGVs in a road-led strategy without the Link Road). EDF Energy conclude that the resultant noise impacts for Middleton Moor, in a rail-led strategy, "are not significant". Based on the information available, the Councils are not convinced of this conclusion. We note that that the figures associated with bus movements along the B1122 are not included in the above figures and request further detail how the likely impacts have been assessed. We also note that the peak rail-led day comfortably exceeds the typical road-led day which has been deemed by EDF Energy to necessitate mitigation. Further detail is needed, including related to the noise analysis, to understand why mitigation for Middleton Moor is only required in the road-led scenario.
736. As set out in the paragraphs above, there is a predicted traffic difference between Theberton and Middleton Moor: In the reference case without Sizewell C, traffic passing through Theberton (6,800) is approximately 50% greater than that passing through Middleton Moor (4,200). Between the two points, the only real alternative option for travel are the routes to Westleton. Suffolk County Council has a traffic count from 2017, which broadly correlates with this split; however, we would expect this change in traffic flow to be evidenced, as this may represent the difference in noise analysis between mitigating the impacts at Middleton Moor. The quoted figures suggest an impact in Westleton which has not been considered in the consultation.
737. No modelling has been included of the proposed new junctions within the Stage 3 consultation; this will be required as part of any future Transport Assessment even though we would not expect junction capacity to be an issue.
738. Although it is expected that the proposed link road would have enough capacity to cater for demand, this should be evidenced. Vol. 1 paragraph 10.2.3 of the Stage 3 Consultation sets out EDF Energy's justification for suggesting a single carriageway based on their analysis and referenced the DMRB. However, these figures are based on economic and operational assessment rather than capacity. Nevertheless, subject

to adequate assessment, the Councils accept that a single carriageway is appropriate in principle.

739. Unless otherwise agreed, we would expect the route to be designed to standards set out within the DMRB. The Stage 3 consultation document (Vol. 1 paragraph 10.7.2) states that the road will be designed to a speed of 50mph. Without a speed restriction this would not be acceptable to the Councils.
740. It is noted that 45,000 tonnes of fill are required to be brought into site. No details of total quantities or requirement to dispose of unsuitable fill off site are included (Vol. 1 paragraph 10.7.7). The Councils estimate that the road construction alone will require over 150,000 tonnes of material.
741. Significant lengths of the proposed route are on Glacial Till (Lowestoft Formation). The Councils express concern whether infiltration is a viable option (Vol. 1 paragraph 10.7.9) and if sufficient land has been set aside for attenuation and water treatment.
742. Wherever practical crossing points for PROW shall be provided without physical barriers such as gates, stiles or steps. Diversion of PROW (Vol. 1 paragraph 10.7.12) would only be acceptable when all other options have been shown to be impractical.
743. The Councils concur that street lighting should only be provided when justified for road safety reasons (Vol. 1 paragraph 10.7.13). The estimated construction time is stated as two years (Vol. 1 paragraph 10.8.2). The Councils are concerned that this will result in significant volumes of traffic passing through Yoxford and communities on the B1122 until this mitigation is completed.
744. Regardless of its use by a significant number of HGVs the proposed design speed of 50mph (Vol. 1 paragraph 10.7.2) would not be acceptable to the Councils.
745. The comment in Vol. 1 paragraph 10.7.4 that the rail line is in a 6m cutting does not appear to be correct based on a site visit.
746. It is stated in the consultation that some of the construction works associated with the Sizewell Link Road, specifically the new A12 roundabout could be completed off-line. The Councils consider that this cannot be achieved in practice. It would not be tolerable for HGVs associated with site traffic to also be on the A12 network being disrupted by construction of the A12 / B1122 and other roundabouts. Therefore, all on-line works associated with the bypass should be completed prior to work starting on-site.
747. The proposals to improve the visibility at Mill Street are welcome, and in order to minimise the impact on the B1122 these should be completed at the beginning of the construction programme. It is considered that this cannot be constructed without causing serious disruption to the main haul route and therefore this improvement should be completed in advance of any HGV movements associated with the site.
748. There are some concerns that the considerations did not include assessments in relation to air quality or impact on residential properties and these needs to be looked at in more detail.
749. In terms of landscape impacts, the schemes presented at Stage 3 are no more than a preliminary outline, therefore further design work appears to be required before an assessment of the landscape effects can be completed. In due course mitigation measures and design details should be secured by the DCO, with an associated CEMP

and LEMP also being required. The Councils require EDF Energy to ensure at the DCO that all options for mitigation both within and beyond the red line of this scheme have been fully considered.

750. The proposed use of embankments with culverts to cross watercourses are likely to have unacceptable impacts on ecology as well as on drainage and water quality and this needs to be explored and assessed further.
751. Principles around public rights of way impacts of the two-villages bypass, Theberton Bypass and Sizewell Link Road are covered in the Rights of Way section in paragraph 1008.
752. With regards to the historic environment, there is, at this stage, very little information from which we can assess the impacts of the proposal. A full settings assessment is required; this should outline the contribution the assets' setting makes to their significance, whether there would be a material impact on the setting as a result of the proposal and whether the impact on the setting would result in harm to the significance of the listed buildings. After the harm has been identified then mitigation can be discussed.
753. The road originates off the A12 between Yoxford and Kelsale, at a new roundabout. The introduction of further highway infrastructure of this scale on the A12 would have an urbanising affect that has the potential to impact the setting of listed buildings in the vicinity. There are three designated heritage assets with the potential to be impacted although existing screening could potentially mitigate the impacts. This should be explored in the setting assessment. A further roundabout is proposed on the B1122 to facilitate a link road between the B1122 and the new Sizewell Link Road. This would be located to the west of Middleton Moor and is unlikely to impact any designated heritage assets.
754. Hill Farmhouse, Valley Farmhouse and the farm buildings east of Valley Farmhouse are all Grade II listed buildings. The new road will run close to the B1122 near these buildings. This will impact the setting of these buildings; they will face onto a narrow patch of land between two roads instead of open farmland. As historic farmhouses it is important that their relationship with the surrounding agricultural land can be read in order to appreciate their significance. Past Anneson's Corner the road would curve around Theberton village. This would mean that Grade II listed Theberton Hall is surrounded on all sides by roads at relatively close proximity. There are eight designated heritage assets within the village centre of Theberton; the new road would remove some traffic that currently travels through the village which would be a conservation benefit to the buildings that sit close to the road in terms of noise and vibration. It is unlikely that the new road would be visible from within the village centre as the existing buildings and vegetation would block views, but this should be assessed in the EIA.
755. The new road re-joins the B1122 adjacent to Theberton House. The house itself is Grade II\* listed and there are several listed structures within the grounds including the only designated heritage asset to fall within the red line site: Theberton House gate and gate piers (Grade II listed). There is fairly substantial existing screening to the south and west of the house but the Grade II\* listing indicates the high significance of this asset and therefore the impact on its setting needs to be very carefully considered.

756. The proposed route passes through the middle of the original extent of a historic parkland and will impact upon the setting of Theberton Hall and several other listed buildings. It also passes through areas of early (pre 18th century) enclosure and has the potential to impact upon the wider historic landscape as identified through HLC data. It is likely to impact upon surviving parkland features in the Theberton area. The loss of historic boundaries and other historic landscape features should be avoided. The long-term impacts upon the parkland, setting of listed buildings and historic landscape will need to be taken into consideration. The above ground heritage and landscape impacts need further assessment and setting impacts and mitigation options need to be discussed with Historic England, Suffolk Coastal District Council's conservation officer and landscape officers.
757. Regarding below ground historic environment aspects, no previous archaeological investigation has been undertaken in the vicinity. Therefore, we currently have insufficient information to judge potential and impacts without seeing further assessments. We expect an archaeological evaluation in the form of geophysical survey and trenched evaluation (including any compounds, water management areas, planting, landscaping etc), subject to an agreed WSI, pre-DCO, which should then identify areas requiring preservation in situ or full excavation prior to development.
758. The Sizewell Link Road development would result in a minimum increased impermeable area of 6.324ha (Volume 1 paragraph 2.5.2), not including connections to existing roads (based on provided widths and lengths). It is noted that surface water / agricultural drainage will be reinstated 'as close as possible to pre-construction condition' (Volume 2A paragraph 5.6.12), the condition and function of the existing drainage is unknown. If betterment is feasible, especially any potential for water re-use then this should be explored.
759. SuDS must be incorporated into the design throughout the construction and operation phases. This is required to ensure surface water quantity and quality is controlled whilst simultaneously providing biodiversity benefits. The use of petrol / oil interceptors is not a SuDS approach and should only be used as a last resort or final protection measure (Volume 2A paragraph 5.9.12). SuDS must be incorporated with sufficient clearance to groundwater.
760. Stockpiling material adjacent to the proposed road during construction will result in consolidation of the existing soils, ultimately altering its natural infiltration rate (Volume 2A paragraph 5.9.16). Consideration must be given to remediation of the soils to return them to their natural state or the provision of alternative drainage measures to account for the increased run-off rate and volumes.
761. It is acknowledged that the proposed road alignment intersects three ordinary watercourses, two main rivers and two surface water flow paths (Volume 2A paragraph 5.12.13) The associated flood risk of these rivers and watercourses and how the proposed road will intersect them is clearly shown in Volume 3 Figure 5.12.2. We're pleased to see that EDF Energy propose to contact the LLFA to discuss the 'sizing and form' of new culverts (Volume 2A paragraph 5.11.13). EDF Energy should take note of our local guidance which clearly details a preference for clear span bridges as opposed to culverts. Any proposed bunding should not impact natural flow paths or increase flood risk off site (Volume 2A paragraph 5.12.15). It is noted that further assessments relating



to flood risk will be undertaken. The results of this will further inform our position (Volume 2A paragraph 5.12.20).

762. A SuDS approach of infiltrating where possible and discharging to watercourse where infiltration is not possible has been proposed (Volume 2A paragraph 5.11.11 & .12). We support this approach providing that the surface water undergoes sufficient treatment prior to discharge.

763. In summary, with regard to the route of the proposed Sizewell Link Road from the A12 to the development site in the road-led strategy, the Councils consider the provision of a relief road for the B1122 is welcome, but the route proposed is yet to be supported by sufficient evidence. The case to justify the best possible route must revisit the routes considered by the promoter, with a comprehensive highways analysis and be mindful of any impact on allocations in the District Council's Local Plan and any other potential developments.

764. At the moment, there are many unresolved issues and a lack of assessments of the impacts of the proposed route, as highlighted above, in areas including:

- Traffic modelling;
- Detailed road design;
- Landscape and visual assessments;
- Ecological assessments;
- Assessments of impacts on the Historic Environment;
- Archaeology evaluation including trenched evaluation;
- Surface water and flood assessments and provision of SuDS.

#### **Additional Suffolk County Council comments regarding the Sizewell Link Road**

765. In the opinion of Suffolk County Council, as the Local Highway Authority (LHA), the selection of the route has not been justified in transport terms through modelling of capacity, road safety and journey times. The County Council is mindful that the transport benefits of any route must also be balanced against other factors such as heritage, ecology and the developing Local Plan.

766. There appears to be particular merit in re-considering the Southern route W as an alternative to the proposed route Z. The County Council requests that the Southern route is revisited as a potential superior alternative route with regards to transport benefits, legacy potential and scheme impacts. Further evidence for each of the options is required for the County Council to come to a view of the benefits of each of the options.

767. Whilst the proposed Link Road does address our concerns regarding use of the B1122, it creates a new road which runs almost parallel to the existing road, thus the legacy benefit is minimal. Our previous study that examined perceptions of the construction traffic on occupants of dwellings on the B1122 highlighted construction traffic as a big concern, which is now being addressed by the Sizewell Link Road.

768. It is considered that for a road-led strategy, the Sizewell Link Road is likely to provide more benefits than negative impacts, but this will need to be demonstrated formally

through the EIA, with comments raised below needing to be addressed. However, EDF Energy needs to provide further evidence that the proposed route is the best possible option, over and above other routes considered by EDF Energy, with particular reference to route “W”.

769. Whilst it is recognised that the proposed route is the shortest between the A12 at Yoxford and Sizewell C (10.2.1), it does not represent the shortest route for the majority of traffic, particularly HGVs, with the greatest proportion forecasted by EDF Energy to approach from the south.

770. EDF Energy provides insufficient justification for the decision to select route Z, but in transport terms the following comments can be made regarding each route option outlined in the consultation document:

a) Route W: This route has both significant benefits and disbenefits. It provides the shortest overall route for most of the traffic which originates from the south. It also provides the greatest transport legacy, removing through traffic from the centre of Saxmundham and providing good access to the south and east of Leiston. If considered cumulatively with the Scottish Power Renewables NSIPs, this route could provide significant benefits to these projects during the construction phase. The northern W route would also enable access to land around Leiston Airfield, which would be beneficial if this site was considered as an alternative location for the accommodation campus.

The comparative disbenefits are the need to cross the Sizewell branch line (although this could be at grade i.e. level crossing), the crossing of the River Fromus valley and the impact on Hurts Hall some 600m away from the route. Route W south also passes close to Leiston Abbey. It would require traffic from the north to either use the B1122 or pass through Yoxford. The connection point to the A12 would need to be designed to avoid compromising a housing site in the developing local plan.

b) Route X: It is recognised that this route is severely constrained at its western end around Kelsale and concur with EDF Energy that this is not a viable option.

c) Route Y: This option does not provide as direct a route to Sizewell as W or Z. While not as built up as the eastern part of route X it does pass close to several scattered settlements to the north of Kelsale.

d) Route Z: This route avoids significant settlement and is shorter than route W, with less structures to construct. It offers less benefit in terms of shortening journey times for most of the traffic and offers no significant legacy compared to route W, although it does provide mitigation for Yoxford for any traffic coming from the North.

e) D2 Route: In their comments EDF Energy refer (10.6.2) to the D2 route having any disadvantages compared to the “other two proposals in the SCC report”. EDF Energy have not in this instance compared the D2 route to their proposals. This is considered a misleading comment and its use in supporting selection of route Z flawed.

771. If EDF Energy was to pursue the proposed Sizewell Link Road route (route Z), Suffolk County Council will need to consider whether it would wish to adopt the full route as part of the public highway network following completion of construction of the nuclear power station (see Vol. 1 paragraph 10.1.6). However, much of the route parallels the existing

B1122 resulting in the County Council maintaining at public expense two parallel routes performing the same function. The County Council will need to consider whether the additional benefits of this proposed route would justify the additional financial burden of maintaining the road. Notwithstanding this comment there may be advantages in the Council adopting some parts of this route, such as the Theberton bypass element, where beneficial to the public.

772. If appropriate, this financial burden could be ameliorated through appropriate commuted sum payments.

773. In summary, Suffolk County Council as the Local Highways Authority requests that EDF Energy revisit the southern route (route W) as a potential superior alternative route to the proposed northern route (route Z), with regards to transport benefits, legacy potential and scheme impacts. Transport benefits should be evidenced through modelling of capacity, road safety and journey times. The County Council further requires much more detailed evidence for each of these options to come to a view of their comparative benefits.

774. If EDF Energy was to pursue the proposed Sizewell Link Road route (route Z), Suffolk County Council will need to consider whether it would wish to adopt the full route as part of the public highway network following completion of construction of the nuclear power station.

#### **Additional Suffolk Coastal District Council comments regarding the Sizewell Link Road**

775. This submission has previously established that we do not support the road-led strategy above a marine or rail-led strategy. However, the District Council consider that, should a road-led strategy be identified and evidenced by EDF Energy, the route demonstrated may be acceptable subject to further detailed studies and assessments as identified.

776. The route identified ensures that HGV movements will be taken out of the centre of Yoxford which is a benefit; the route will also encourage other non-HGV vehicles from the south to use the new road thus avoiding the centre of Yoxford. The only vehicles that are likely to continue through Yoxford are those from the west of the District (not HGV traffic which will be mandated by EDF Energy to use the new Link Road).

777. The District Council has a proposed Local Plan allocation south of Saxmundham that would be impacted by a southern alignment for a Sizewell Link Road so we would not support such a route going ahead due to the potentially significant adverse effect on our housing numbers.

778. As such, the District Council is content with the Sizewell Link Road on the route Z proposed in the Stage 3 consultation (not withstanding the preference for a marine / rail led proposal).

779. The District Council considers that for a road-led strategy, the Sizewell Link Road is likely to provide more benefits than negative impacts but this will need to be demonstrated formally through the EIA, with comments raised above needing to be addressed.

780. Suffolk Coastal District Council are concerned that there could be adverse environmental impacts of removal of a Link Road post the 10 to 12 year construction

phase for the C station. We would therefore urge EDF Energy to work with the local highway authority on evidencing the potential legacy benefit of retaining the Link Road. As local planning authority, we consider a separate HGV route to serve the existing A and B stations as well as the new C station to be a legacy of the development.

781. In summary, it is Suffolk Coastal District Council's opinion that the reduction in use of the former B1122 by HGV and other vehicles resulting from the new Sizewell Link Road taking the majority of the traffic will be a legacy benefit to local communities.

## THEBERTON BYPASS

782. As noted in the section above, the Councils are pleased that EDF Energy are looking to address our and the local communities' concerns around the traffic impacts for the B1122 (see also paragraph 726 onwards). As part of the rail-led scenario the mitigation proposed is a bypass of Theberton (for the road-led scenario a full Sizewell Link Road is proposed).
783. The bypass of Theberton is proposed to loop to the west of the village; EDF Energy would require all Park and Ride buses and HGVs to use the Theberton bypass to reach the main development site. The bypass would slightly reduce journey times compared with use of the B1122 through Theberton and therefore EDF Energy expects construction workers to prefer to use the bypass to more speedily access the site. The Theberton bypass follows the same alignment as the southern end of the Sizewell Link Road; the route would be a new single carriageway road with a 50mph design speed.
784. The proposed route would start at Anneson's Corner, near to Coronation Cottages; a new ghost island junction would be formed with an extension of the B1125 to encourage drivers using the B1125 to drop onto the new bypass road. The new road would re-join the B1122 on a low embankment adjacent to Brown's Plantation. The only lighting proposed on the new road would be at the road junctions. The bypass would take approximately 12 months to build and would be constructed to be open and ready to be used before construction traffic reaches its peak. The Theberton Bypass is proposed to be retained post-construction and could therefore provide a legacy benefit for the village.
785. The Stage 3 consultation sets out that the primary justification for a Theberton Bypass is the noise impacts from increased traffic volumes in Theberton, which EDF Energy state would, at times, be significant.
786. The consultation indicates for a typical day at peak construction a 34% increase in vehicles in the rail-led scenario and a 40% increase in the road-led scenario, with a 387% increase in HGVs and buses in the rail-led and 522% in the road-led scenario. This is clearly a very significant increase and will have associated impacts on air quality, noise, journey times and severance, and thus requires mitigation.
787. The Councils support proposals for mitigating the impacts on the community of Theberton and the principle of providing a bypass in the rail-led option is acceptable; further details and justification is needed that the proposed route in the best solution and is deliverable. The Stage 3 consultation does not include any traffic modelling for the proposed new junctions, which will be required as part of any future Transport Assessment. While the Councils would not envisage junction capacity to be an issue, we agree that there will be significant environmental impact in Theberton.
788. Vol. 1 paragraph 11.2.2 of the Stage 3 consultation sets out that a single carriageway is proposed for the Theberton Bypass. Subject to adequate assessment of capacity and safety, the Councils in principle accept that a single carriageway is appropriate. However, the Councils are concerned that insufficient information has been provided to justify the route selection and its deliverability.
789. Unless otherwise agreed, we would expect the route to be designed to standards set out within the DMRB. The Stage 3 consultation document states that the road will be designed to a speed of 50mph. A speed restriction is essential for the Councils. The

Theberton Bypass is considered by the Councils to offer a transport legacy benefit in offering a long-term alternative route to the B1122 through Theberton and removing future traffic from the village.

790. As stated above (see paragraph 383), the Councils expect further justification to evidence that a full Sizewell Link Road is not required for the construction period in the rail-led strategy.
791. A 2.5m wide verge (Vol. 1 paragraph 11.5.1) would not accommodate the vehicle restraint systems which require a 5m setback (Vol. 1 paragraph 11.5.11). It is unclear whether the eastern junction with the existing B1122 will be provided with a right-hand turn lane (Vol. 1 paragraph 11.5.3). The Councils concur that street lighting should only be provided when justified for road safety reasons (Vol. 1 paragraph 11.5.13).
792. The estimated construction time is stated as a year (Vol. 1 paragraph 11.6.2) starting in the 'early years'. The Councils are concerned that this will result in significant volumes of HGV traffic passing through Theberton until this mitigation is completed. Clarification and further discussion on the timescales and phasing is required.
793. The consultation states that there is likely to be 25,900 tonnes of surplus fill (Vol. 1 paragraph 11.5.7). In addition, it is anticipated that the road construction on its own will require at least 23,000 tonnes of material to be imported.
794. Parts of the proposed route are on Glacial Till (Lowestoft Formation). The Councils express concern that infiltration is a viable option (Vol. 1 paragraph 11.5.9) and that enough land has been set aside for attenuation and water treatment.
795. With regards to historic environment aspects, as commented on under the Sizewell Link Road section above (from paragraph 726 onwards) but repeated here for ease of reference, the proposed route passes through the middle of the original extent of historic parkland and will impact upon the setting of Theberton Hall and other listed buildings. Past Anneson's Corner the road would curve around Theberton village. As stated above, this would mean that Grade II listed Theberton Hall is surrounded on all sides by roads at relatively close proximity. There are eight designated heritage assets within the village centre of Theberton; the new road would remove some traffic that currently travels through the village which would be a conservation benefit to the buildings that sit close to the road in terms of noise and vibration. It is unlikely that the new road would be visible from within the village centre as the existing buildings and vegetation would block views, but this should be assessed in the EIA.
796. The new road re-joins the B1122 adjacent to Theberton House. The house itself is Grade II\* listed and there are a number of listed structures within the grounds including the only designated heritage asset to fall within the red line site: Theberton House gate and gate piers (Grade II listed). There is fairly substantial existing screening to the south and west of the house but the Grade II\* listing indicates the high significance of this asset and therefore the impact on its setting needs to be very carefully considered.
797. It also passes through areas of early (pre 18<sup>th</sup> century) enclosure and has the potential to impact upon the wider historic landscape as identified through HLC data and is likely to impact upon surviving parkland features. The loss of historic boundaries and other historic landscape features should be avoided. The long-term impacts upon the parkland, setting of listed buildings and historic landscape will need to be taken into

consideration. The above ground heritage and landscape impacts need further assessment and setting impacts and mitigation options need to be discussed with Historic England, Suffolk Coastal District Council's conservation officer and landscape officers.

798. No previous archaeological investigation has been undertaken in the vicinity; therefore, we currently have insufficient information to judge potential and impacts without seeing further assessments. We expect an archaeological evaluation in the form of geophysical survey and trenched evaluation (including any compounds, water management areas, planting, landscaping etc), subject to an agreed WSI, pre-DCO, which should then identify areas requiring preservation in situ or full excavation prior to development.
799. With regard to flood and water, this development will result in a minimum increased impermeable area of 2.418ha (Vol. 1 paragraph 2.6.2), not including connections to existing roads (based on provided widths and lengths). For completeness, the Theberton bypass will follow largely the same alignment as the Sizewell Link Road around the village of Theberton. All of the points listed above to Sizewell Link Road are applicable to Theberton bypass (albeit less watercourses are intersected). There are no issues specific to Theberton bypass that are not relevant to Sizewell Link Road.
800. In terms of landscape impacts, the schemes presented at Stage 3 are no more than a preliminary outline therefore further design work appears to be required before an assessment of the landscape effects can be completed. The Councils would wish to ensure before the DCO submission that all options for mitigation both within and beyond the red line of this scheme have been fully considered. In due course mitigation measures and design details should be secured by the DCO with an associated CEMP and LEMP will also be required. The Councils would also wish to ensure at the next stage that all option for mitigation both within and beyond the red line of this scheme have been fully considered prior to DCO submission.
801. The proposed use of embankments with culverts to cross watercourses are likely to have unacceptable impacts on ecology as well as on drainage and water quality so this needs to be explored and assessed further.
802. Principles around public rights of way impacts of two-villages bypass, Theberton Bypass and Sizewell Link Road are covered in the Rights of Way section under paragraph 1008.

803. In summary, with regard to proposed Theberton bypass in the rail-led scenario, the principle of mitigation for the B1122 is welcome. However, as referred to in relation to the Sizewell Link Road, at the moment, there are many unresolved issues and a lack of assessments of the impacts of the proposed route, as highlighted above, in areas including:

- Traffic modelling;
- Detailed road design;
- Landscape and visual assessments;
- Ecological assessments;
- Assessments of impacts on the Historic Environment;
- Archaeology evaluation including trenched evaluation;
- Surface water and flood assessments and provision of SuDS.



## TWO-VILLAGES BYPASS

804. At Stage 2, the Councils very clearly stated that we considered a two-villages bypass of Stratford St Andrew and Farnham to be the minimum necessary mitigation for the Sizewell C construction traffic to reach the construction site. EDF Energy accepted this and in the current stage of consultation is proposing a two-villages bypass as their minimum mitigation in a rail and a road-led strategy.
805. The Councils welcome that EDF Energy is committed to fund and deliver a two-villages bypass at Stratford St Andrew and Farnham.
806. For the road-based strategy, the Councils need to consider further whether additional mitigation may be required for Marlesford and Little Glemham due to the increase in HGV numbers, particularly if operating hours are extended. While the Councils in their Stage 2 response recognised EDF Energy's concerns that funding of a four-villages bypass was disproportionate to the impact of Sizewell C traffic this was prior to the emergence of a road-led strategy. Consideration should therefore be given to whether a four-villages bypass is required mitigation for the road led strategy because of the additional adverse impact from noise and vibration and HGVs travelling at night time on residents of Marlesford and Little Glemham. The Councils welcome EDF Energy's position as stated in the consultation that the need for mitigation is not solely related to capacity but the environmental impacts of traffic also carry weight in their considerations.
807. As part of their consultation EDF Energy indicates that the four-villages bypass is neither necessary nor required to mitigate the impact of Sizewell C traffic. Even if there is evidence that it is not justified for EDF Energy to fund a four-villages bypass, there remains an aspiration and plans to convert the proposed two-villages bypass into a sizeable developer contribution towards a four-villages bypass.
808. The consultation document sets out that for peak construction there would be an impact at A12 Marlesford of 1,850 (rail-led) and 2,100 (road-led) additional movements. This includes an HGV increase of between 60% and 148% depending on the scenarios. It is not evidenced within the consultation document that there is not a capacity issue through the two communities of Marlesford and Little Glemham nor that the impacts on severance will not be significant., There are a number of properties within the villages that are within very close proximity to the A12, and that are likely to suffer negative noise and air quality impacts as a result of the additional traffic, in particular from the significant increase in HGVs and buses. We would expect the significant impact on these communities and individual properties to be evidenced and mitigated where appropriate.
809. It is likely that some of the construction works associated with the two-villages bypass could be completed off-line, however, we are unconvinced that the roundabouts can be built without significant disruption to the A12 and A1094, and it would not be tolerable for HGVs associated with site traffic to also be on the network causing further delays and disruption. Therefore, all on-line works associated with the bypass should be completed prior to work starting on-site, specifically the roundabouts at the southern and northern ends.
810. As set out previously, EDF Energy have used the DMRB to justify the provision of a single carriageway for the Sizewell Link Road and Theberton Bypass. The assessment method used is taken from TA 46/97 of the DMRB, which sets out that for a single carriageway road the opening year Annual Average Daily Traffic should be up to 13,000

vehicles. The flows provided within the document are for economic assessment, and importantly the flow ranges aim to ensure that those economically and operationally acceptable proposals are assessed locally. The ranges do not provide any indication of the ultimate flow which a road can carry.

811. Based on Location AE 'Two Villages Bypass' within EDF Energy's Stage C Consultation, the opening year traffic for the carriageway would have a usage of just over 22,000 vehicles on a typical day. This not only exceeds the maximum economically and operationally acceptable flow for a single carriageway road (7.3m) as set out within DMRB, but also for a wide single carriageway road (10m), which is set at 21,000 vehicles. Based on EDF Energy's method of assessment the mitigation should be a Dual two-lane all-purpose road and we would request further justification from EDF Energy for the proposed single carriageway bypass.
812. It is acknowledged that the alignment of the two-villages bypass needs further work and assessment to ensure mitigation measures are in place for occupiers of properties close to the new route. The optimum routing needs to be examined and micro-sited to ensure impacts on ancient woodland and residents are minimised and that environmental sensitivities are minimised.
813. There is an existing AQMA situated in Stratford St Andrew and the two-villages bypass would have a positive impact by the reduction of nitrogen dioxide concentrations within the village such that it would then be possible to revoke the AQMA
814. The Suffolk County Council Local Transport Plan 2011 sets out that:

'There are also long-standing issues of traffic volume through the villages of Marlesford, Little Glemham, Stratford St Andrew, and Farnham on the A12. Suffolk County Council strongly supports the provision of proper relief for these communities by the provision of a relief road and will work with the nuclear industry to secure its provision alongside any new power station at Sizewell'
815. The Stage 3 consultation documents sets out EDF Energy's calculated impact on the A12 south of the proposed two-villages bypass (location AB). The estimated Sizewell C opening year flow is just over 23,000 vehicles.
  - On a typical day in the **rail-led** scenario there would be an additional 1,850 vehicle movements, which represents an 8 to 9% increase in total vehicle flows. This includes an additional 380 HGV movements and 220 bus movements, which represents a 60% increase in bus / HGV movements. On a peak day the number of additional HGV movements would broadly double.
  - On a typical day in the **road-led** scenario there would be an additional 2,100 vehicle movements, which represents a 9 to 10% increase in total vehicle flows. This includes an additional 640 HGV movements and 220 bus movements, which represents an 85% increase in bus / HGV movements. On a peak day the number of additional HGV movements would broadly double.
816. As set out above, the Sizewell C opening year flow would exceed the opening year economic flow range for a single carriageway and wide single carriageway road, as set out within DMRB. Whilst this does not necessarily mean that the carriageway will be at capacity, it is indicative of a location which will experience high traffic flows for a single carriageway road.

817. As stated above, as a result of Sizewell C traffic, there are likely to be additional impacts on severance, noise and air quality, and potentially further impacts on local junctions regarding capacity / safety, which would require some form of mitigation, through the villages of Little Glemham and Marlesford. Vol. 2 paragraph 13.6.5 of the PEIR refers to the need to assess the likelihood of significant adverse noise or air quality effects in relation to carrying capacities of roads. Based on the information provided within the consultation document, it is reasonable to assume that work still needs to be undertaken to determine the exact impact on air quality and noise, which given the traffic numbers quotes, is likely to be significant, with mitigation also required to address the impacts on severance and further work needed to assess any significant impact on junction capacity. It is expected that some form of mitigation for the communities will be necessary.
818. Whilst the Councils are cautious about the comments made in Vol. 1 paragraph 12.1.13 that EDF Energy believe there is no evidence that the two-villages bypass results in increased traffic at Yoxford; they have requested EDF Energy to provide data and modelling of the A12 / A1120 junction in Yoxford so that the requirement for any mitigation can be assessed. Even if the Sizewell Link Road comes forward, existing A12 traffic and light traffic accessing the Darsham Park and Ride will pass through this junction.
819. The Councils agree that in principle improvements to the A12 / A1094 junction (Vol. 1 paragraph 12.3.15) are justified by historical data and that a roundabout would be the preferred option.
820. The northern parts of the proposed route are on Glacial Till (Lowestoft Formation). The Councils express concern that infiltration is a viable option (Vol. 1 paragraph 12.3.20) on this part of the road and that enough land has been set aside for attenuation and water treatment. Presumably the highway drainage on embankments (Vol. 1 paragraph 12.5.16) is linked by a piped system to the swales.
821. The Councils are concerned that the bridge near Pond Farm Cottages and the underpass leading to Farnham Hall have been removed from the scheme without adequate justification (Vol. 1 paragraph 12.5.3).
822. A 2.5m wide verge (Vol. 1 paragraph 12.5.5) would not accommodate the vehicle restraint systems which require a 5m setback as stated elsewhere in the consultation and likely to be required adjacent to the river bridge and embankments.
823. The proposals for the two-villages bypass do not extend as far as the staggered crossroads north of Parkgate Farm (Vol. 1 paragraph 12.5.8). The Councils express concerns regarding the proximity of the junction to the southern roundabout and the severance that additional traffic will cause as this is the point at which national cycle route 41 crosses the A12.
824. The Councils concur that street lighting should only be provided when justified for road safety reasons (Vol. 1 paragraph 12.5.12).
825. The estimated construction time is stated as between 20 months and two years (Vol. 1 paragraph 12.5.17) starting in the 'early years'. The Councils are concerned that this will result in significant volumes of traffic passing through Stratford St Andrew and Farnham until this mitigation is completed. EDF Energy will be encouraged to complete this

mitigation as early as possible in the program and, as set out above, in the interim regulations agreed to limit such traffic.

826. The consultation states that there is a shortfall in fill of 33,700 tonnes (Vol. 1 paragraph 12.5.19). To this should be added a minimum of 21,000 tonnes for road construction excluding structures and unacceptable material from the river valley requiring disposal, potentially off site.
827. No design speed is stated in the consultation document.
828. In terms of landscape impacts, the scheme as presented at Stage 3 appears to be a reasonably complete outline which includes the expected areas of flood attenuation. Subject to robust assessment, particularly concerning the river crossing and lighting requirements at junctions, and suitable mitigation measures secured by the DCO with an associated CEMP and LEMP, these proposals are likely to be acceptable in landscape terms. However, the Councils would wish to ensure at the next stage that all options for mitigation both within and beyond the red line of this scheme have been fully considered.
829. From a heritage perspective, this bypass is to avoid the villages of Stratford St Andrew and Farnham, there is no conservation area in either village. It would require two new roundabouts – one to the west near Parkgate Farm and one to the east at Friday Street. This new road would be open for public use alongside construction traffic and would substantially reduce traffic in Stratford St Andrew and Farnham. After the construction phase is completed the road would be retained, any impacts would therefore be permanent. There are concerns about the impact of the new road on the historic landscape, field patterns and ancient woodland (Foxburrow Wood); these issues will need to be addressed in the EIA.
830. At this stage there is very little information provided within which to assess the conservation impacts of the proposal. A full settings assessment is required; this should outline the contribution the designated assets' setting makes to its significance, whether there would be a material impact on the setting as a result of the proposals and whether the impact on the setting would result in harm to the significance of the asset. After the harm has been identified then mitigation can be discussed.
831. The western roundabout would sit just to the east of Little Glemham Hall's Grade II listed parkland falling within the setting of this designated heritage asset. The western roundabout would be situated in the setting of Benhall Lodge Park which is a locally listed parkland. The introduction of further highway infrastructure would have an urbanising effect in these sensitive locations; this impact and any potential mitigation should be carefully considered in the EIA. Little Glemham Hall is a Grade I listed building and falls just outside the study area. Due to the significance of this asset we consider that Little Glemham Hall and its associated buildings should be included within the setting assessment, if only to conclusively rule out any impact on its setting.
832. Grade II listed Ducks Paddle Cottage and Benhall Lodge Stable are situated to the north of the proposed Friday Street roundabout. There is a significant amount of existing screening along the southern edge of Benhall Lodge Park which may prevent any impact on the setting of these listed buildings. Grade II listed 54 / 55 Benhallstock Cottages sit immediately adjacent to the A12 just to the east of these buildings. there is little existing

screening to the east therefore the new roundabout would be very visible; mitigation may be required if harm is identified in the settings assessment.

833. The proposed road would pass between Grade II listed Farnham Manor and Foxburrow Wood, an ancient woodland. The list description for Farnham Manor dates it to 1602 and ancient woodland has to date to at least 1600. Therefore, there is a longstanding historic relationship between Farnham Manor and Foxburrow Wood that would be impacted by the introduction of the new road. This and other potential setting impacts on Farnham Manor should be considered as part of the EIA. Just to the south of the proposed new road lies Pond Farm and its associated outbuildings, this has been identified as a non-designated heritage asset by Suffolk Coastal District Council and therefore impacts on its setting need to be considered.
834. There are several listed buildings within both villages, including a Grade II\* listed church in each village (Stratford St Andrew's church now being in residential use). There is little existing screening to the south of the villages therefore it is likely that the new road would be visible from some of the listed buildings, potentially impacting their setting. Mitigation is likely to be necessary. The bypass would provide a conservation benefit to the listed buildings within the village centres by reducing the traffic using the existing road resulting in a reduction in noise, vibration, pollution within the immediate vicinity of the listed buildings.
835. The roundabout will affect the corner of the Grade II registered parkland surrounding Glemham Hall. The new road will also have a settings impact upon the Grade II Farnham Manor. Suffolk Coastal District Council conservation officers and Historic England will need to be consulted. Long term impacts upon the parkland, setting of listed buildings and historic landscape will need to be taken into consideration. Above ground heritage impacts need further assessment.
836. The proposed road route passes through areas of early (pre 18<sup>th</sup> century) enclosure and riverside grassland and has the potential to impact upon the wider historic landscape as identified through HLC data. Loss of historic boundaries and other historic landscape features should be avoided.
837. With regards to below-ground historic environment aspects, adequate historic environment information has been provided for this location in the Stage 3 consultation documentation. There is a high potential for palaeo-environmental remains adjacent to rivers, and potential for archaeological activity on higher ground adjacent to the floodplain. Various potential sites have been identified through cropmarks and finds scatters, particularly of prehistoric and medieval date. EDF Energy are required to undertake a Palaeo-environmental assessment, alongside archaeological evaluation in the form of geophysical survey and trenched evaluation (including any compounds, flood compensation areas, water management, planting or landscaping areas), subject to an agreed WSI, pre DCO. The evaluation would identify areas requiring preservation in situ or full excavation prior to development.
838. With regards to flood and water impact, this development will result in a minimum increased impermeable area of 2.232ha (Vol. 1 paragraph 2.7.2 & 2.7.3), not including connections to existing roads (based on provided widths and lengths). It is unclear why EDF Energy determine this bypass as 'not a significant increase in impermeable area' (Vol. 2B paragraph 7.10.30).

839. Whilst part of the site is identified as freely draining (Vol. 2B paragraph 7.6.3), part of the site is located in the flood plain where soils are less permeable and seasonally waterlogged (Vol. 2B paragraph 7.6.5).
840. The proposed road is identified as crossing the River Alde (Volume 2B, 7.9.3). This is a Main River, managed by the Environment Agency. As such, they will comment on matters relating to the River Alde, including displacement of flood volumes and compensatory flood storage (Vol. 2B paragraph 7.12.17).
841. SuDS must be incorporated into the design throughout the construction and operation phases. This is required to ensure surface water quantity and quality is controlled whilst simultaneously providing biodiversity benefits. The use of petrol / oil interceptors is not a SuDS approach and should only be used as a last resort or final protection measure (Vol. 2B paragraph 7.10.20, .21 & 7.11). SuDS must be incorporated with sufficient clearance to groundwater.
842. The presence of groundwater when in cutting has been highlighted elsewhere in this response. However, given the proximity to the River Alde, it is worth reiterating that cutting along the alignment of the two-villages bypass increases the risk of encountering groundwater during construction. It also increases the risk to groundwater during operation and the clearance between any base of infiltration and groundwater levels, the risk of which hasn't been sufficiently considered (Vol. 2B paragraph 7.10.29).
843. An attenuation basin is shown as being located in the contractor's compound (Vol. 1 Figure 2.12). It is unclear how surface water will be managed during construction given the basin cannot be constructed until after construction of the bypass, if this is where contractors will be located. Further consideration will also need to be given to locating an attenuation basin in what may be contaminated ground after use as a contractor's compound.
844. Principles around public rights of way impacts of two-villages bypass, Theberton Bypass and Sizewell Link Road are covered in the Rights of Way section in paragraph 1008.

845. In summary, the Councils welcome that EDF Energy is committed, for both rail-led and road-led strategies, to fund a two-villages bypass at Stratford St Andrew and Farnham or make a proportionate contribution to the more desirable SEGWay scheme should it go ahead.
846. The Councils are now considering whether additional mitigation from EDF Energy may be required for Marlesford and especially Little Glemham, in particular for the road-led strategy at Stage 3 with more HGV movements and relaxed working hour restrictions.
847. Further design detail is required, including assessments of the impact on conservation, archaeology, ecology and flood and water, and the selection of the final route will need to be evidenced.

## **NORTHERN PARK AND RIDE**

848. The Stage 3 consultation confirms Darsham as the location for the Northern Park and Ride. At Stage 2 the Councils were generally content with this location and we remain of this opinion. The site is to the east of Darsham railway station and there remains the potential opportunity in the future for a portion of the site to be retained for legacy car parking for the railway station. The mechanism for this would be discussed in the future. Unless the Councils seek retention of any part of this site, it will be removed post-construction; the site will be cleaned and returned to agricultural use.
849. The size of the Park and Ride site has remained the same as previously shown, but it will be laid out to accommodate up to 1,250 cars. Following feedback at Stage 2 on the impracticalities of the proposed access arrangements, a revised access further north is shown. The new access from the A12 is from a new roundabout to the north of Willow Marsh Lane. In principle the proposed access arrangements are considered acceptable, subject to detailed design, swept path assessment, road safety audits and junction modelling. However, the Stage 3 Consultation has not evidenced that the proposed roundabout junction could cater for the traffic demand. In principle, the pedestrian access arrangements are accepted, however, the proposals should encourage sustainable modes of transport to / from Yoxford and Darsham.
850. The Stage 3 consultation has not evidenced that the proposed level of car parking provision is sufficient to meet the calculated demand. Specifically, the Councils have not been provided with data to justify the total number of spaces in each Park and Ride nor the distribution between the two facilities, which is informed by the Gravity Model.
851. The proposed number of 20 cycle spaces (Vol. 1 paragraph 13.2.3) needs to be evidenced as it may be too few to maximise opportunities for workers to travel sustainably to the Park and Ride site. Electric vehicle charging has not been considered yet but sufficient facilities should be provided.
852. It is likely that some of the construction works associated with the roundabout could be completed off-line, however, we are unconvinced that the roundabout can be built without significant disruption to the A12, and it would not be tolerable for HGVs associated with site traffic to also be on the network causing further delays and disruption. Therefore, all on-line works associated with the roundabout should be completed prior to work starting on-site or an alternative suitable works programme that substantially limits any impact on the A12 should be identified.
853. The construction timescales for the Park and Ride facility is based on incrementally providing additional car parking spaces to meet demand. The Councils request further details as to how this process would be managed to minimise any potential impacts on the community and to ensure that the Park and Ride facilities capture all demand of the workforce prior to it being needed.
854. Further detail of the bus transport arrangement is required before the Councils can comment on the acceptability of the facilities provided for the Park and Ride buses. The Councils are concerned that EDF Energy have not evidenced where surplus buses will be located during off peak times and adequately assessed the number of trips this could generate.

855. It is unclear if the roundabout will remain as a legacy (Vol. 1 paragraph 15.5.29). It is presumed that Willow Marsh Lane between the access road to the Park and Ride and the A12 will be closed to vehicular traffic, but the consultation does not confirm this.
856. The Councils express concern that a viable drainage strategy for this site has not been evidenced. Such information that has been provided (Vol. 1 paragraph 13.5.15, 13.5.17) states that swales will be used as part of a SUDs system. However, it is stated (Vol. 1 paragraph 13.3.5) that the site is on rolling clay lands and therefore infiltration likely to be poor.
857. The Councils support retention of the layby north of the level crossing (Vol. 1 paragraph 13.5.10) and would have resisted its removal as its primary purpose is to allow large vehicles to stop and inform Network Rail that the load has cleared the level crossing.
858. The Councils concur that street lighting should only be provided when justified for road safety reasons.
859. Further detail will still be required of the specific layout of the site, the lighting proposed and the landscaping in order to minimise the impact on the nearest residential properties to the north. Archaeological assessment of the site is being undertaken.
860. The proposed 3-metre high bunds along the southern, eastern and northern edges of the facility will have a landscape impact and these may affect the setting of nearby designated heritage assets including the Grade II listed Darsham Old Hall which is a former manor house of mid-to-late C16th origin which lies over 500m to the east of the Park and Ride site; and the Grade II listed late C16th Oak Hall on London Road. A heritage asset assessment should be undertaken in terms of the setting of designated heritage assets (identified within the 1km study area) and any impacts arising from the site, including the use of bunds and the change in landscape character across this large area.
861. In terms of landscape and ecology considerations, the scheme as presented at Stage 3 appears to be a reasonably complete outline. Subject to robust assessment, mitigation measures and design details should be secured by the DCO with an associated CEMP and LEMP; these proposals are likely to be acceptable in landscape terms. However, the Councils expect that all options for mitigation both within and beyond the red line of this scheme have been fully considered prior to DCO submission.
862. We strongly encourage any mitigation tree and / or hedge planting to be sited in such a way that it may remain in place after post-construction site clearance so there is a permanent enhancement of landscape character.
863. We await evidence that there will be no impacts on otters, bats and Great Crested Newts (GCN), the site having records for the latter. A detailed assessment of the impacts of construction and operation of the site on these species and the wider ecology and how they will be mitigated will be required.
864. With regards to historic environment aspects, adequate historic environment information has been provided for this location in the Stage 3 consultation documentation. The archaeological evaluation has identified medieval activity fronting the A12 and scattered prehistoric and Roman features of local and regional significance which will require mitigation prior to development. A mitigation strategy needs to be confirmed but is likely



to involve a combination of excavation and strip, map and record, subject to an agreed WSI.

865. From a flood and water perspective, the Stage 3 documentation states that 'The soils on site are, slowly permeable, seasonally wet, loamy and clayey soils. Drainage is impeded' (Volume 2B paragraph 8.6.3). The report goes on to describe the clay as 'generally relatively heavy, comprising medium to heavy clay loams and clays' (Volume 2B paragraph 8.6.8). This would suggest that infiltration rates are likely to be low, if feasible. Nonetheless, infiltration is the only identified method of surface water drainage. Surface water treatment prior to discharge is critical given the proposed use of the site.
866. SuDS must be incorporated into the design throughout the construction and operation phases. This is required to ensure surface water quantity and quality is controlled whilst simultaneously providing biodiversity benefits. The use of petrol / oil interceptors is not a SuDS approach and should only be used as a last resort or final protection measure (Volume 2B paragraph 8.10.18, 8.10.19 and 8.11.13). SuDS must be incorporated with sufficient clearance to groundwater.
867. An unnamed watercourse is identified along the site's western boundary (Volume 2B paragraph 8.11.13). This watercourse is not identified on Ordnance Survey maps. The presence of the watercourse would suggest that the site is impermeable and run off is currently discharged from the site via the watercourse.
868. A pond is identified on site (Volume 2B paragraph 8.11.4). This is likely to be fed by over-ground flows. Whilst it is noted that the pond is to remain (Volume 2B paragraph 8.11.11), the alteration of over-ground flows (no longer entering the watercourse due to proposed infiltration) may result in a deterioration of the pond whilst the park and ride site is in operation, ultimately having an impact on local ecology.
869. The design of the four swales and two retention ponds will be critical to ensure they provide pollution treatment.
870. In summary, the Councils are in principle content with the location of the Northern Park and Ride, subject to further detail, assessments and, where required, mitigation, in particular with regard to ecology, landscape and surface water.

## **SOUTHERN PARK AND RIDE**

871. The southern Park and Ride is proposed to be located at Wickham Market, in the parish of Hacheston, which was already EDF Energy's preferred location at Stage 2. At Stage 2, the Councils had asked EDF Energy to look for an alternative Park and Ride site further south along the A12. EDF Energy have not done so as their gravity modelling (which we have yet to see the updated version of) demonstrates that the Wickham Market site is the optimal location for capturing workers coming from the south on the highway network. The southern Park and Ride site includes a postal consolidation building and a Traffic Incident Management Area.
872. The Stage 3 document confirms that there is a likely adverse impact on Wickham Market from workers travelling through the village to the Park and Ride site – EDF Energy proposes mitigation measures for this issue; these are discussed below.
873. The proposals for the southern Park and Ride include 1,250 parking spaces. The Stage 3 Consultation has not evidenced that the proposed level of car parking provision is appropriate to meet the demand. Specifically, the Councils have not been provided with data to justify the total number of spaces in each Park and Ride nor the distribution between the two facilities, including the Gravity Model.
874. The proposed access to the Park and Ride is from a new priority junction on the B1078 slip road which joins the A12. The arrangements also include the following:
- Reduction of the A12 northbound dual carriageway to one lane in advance of the B1078 on-slip, and
  - Reduction of the speed limit on the B1078 overbridge.
875. In principle the new site access and reduction of the A12 northbound dual carriageway to one lane in advance of the B1078 on-slip, pending relevant detailed design, swept path assessment, capacity assessment and road safety audit, would be acceptable.
876. The proposed reduction of the current de-restricted part of the B1078 between the B1078 / B1116 roundabout to 30mph is accepted in principle, however, the Councils have concerns that a compliance with a 30mph limit would be poor due to the lack of street frontage or other highway infrastructure and that a 40mph or 50mph limit may be more appropriate. Clarity will be required regarding whether this is delivered as part of the DCO or through a separate legal process.
877. Paragraph 14.5.34 states that the Wickham Market Park and Ride will be available throughout the construction period and that 12 to 18 months are required for construction (14.5.22). The Councils are concerned about the delivery of the Park and Ride site, as the earliest that it would appear that the scheme could become operational is considerably later than commencement of work on the main and other associated sites. The Councils need EDF Energy to confirm timescales, and ensure that appropriate Park and Ride options, even if interim, are available early during the construction period.
878. The construction timescales for the Park and Ride facility are based on incrementally providing additional car parking spaces to meet demand. The Councils request further details as to how this process would be managed to minimise any potential impacts on the community and to ensure that the Park and Ride facilities can accommodate the full demand of the Sizewell C construction workforce.

879. It is unclear how the Traffic Incident Management Area would function in practice, what impact this would have on the day-day movement of cars and Park and Ride buses, and what the potential HGV storage area would be.
880. The proposed number of 20 cycle spaces (Vol. 1 paragraph 13.2.3) needs to be evidenced as it may be too few to maximise opportunities for workers to travel sustainably to the Park and Ride site. Electric vehicle charging has not been considered yet, but sufficient facilities should be provided.
890. The postal consolidation facility is a welcome feature although the consolidation from 88 LGV trips (176 movements) to just two LGVs forwarded to Sizewell (Vol. 1 paragraph 14.5.28) does not appear realistic without evidence. Consideration should be given to how to further mitigate the development's impacts through management, as indicated as appropriate in the NPS EN-1.
891. Wickham Market and Marlesford both have a conservation area and numerous listed buildings and it can be argued that their village setting will be affected by this development within their setting, changing its landscape character in this one part of it. This will be accentuated by the introduction of extensive length of bunding as proposed mitigation, which is an alien landscape feature. There are several buildings designated as heritage assets within the vicinity of the site that will be affected directly by this proposal. A heritage asset assessment will need to be undertaken in terms of the setting of these designated heritage assets and any impacts arising from the site, including the use of bunds and the change in landscape character across this large area.
892. The identified 1km study area illustrated in the Vol. 3 Figure 9.5.1 fails to identify and illustrate the Marlesford conservation area. This is a designated heritage asset that is closer to the Park and Ride site than the Wickham Market conservation area and which almost entirely falls within the study area. It is essential that is included in the future settings assessment.
893. In terms of landscape and ecology, the scheme as presented at Stage 3 appears to be a reasonably complete outline, although modified from that presented at Stage 2. Subject to robust assessment and mitigation measures secured by the DCO with an associated CEMP and LEMP, these proposals are likely to be acceptable in landscape terms. However, the Councils would wish to ensure prior to DCO submission that all options for mitigation both within and beyond the red line of this scheme have been fully considered.
894. We would strongly encourage any mitigation tree and / or hedge planting to be sited in such a way that it may remain in place after post-construction site clearance so that there is a permanent enhancement of landscape character.
895. A detailed assessment of the impacts of construction and operation of the site on the ecology and how they will be mitigated will be required. This will need to include the use of lighting outside of operational hours. Ponds will need to be assessed for, inter alia, great crested newts, and an appropriate mitigation strategy agreed with Natural England.
896. With regards to historic environment aspects, adequate historic environment information has been provided for this location in the Stage 3 consultation documentation. The proposal would have a direct impact on part of the site of known Roman small town at Hacheston; the evaluation has already confirmed important archaeological remains

associated with this site, as well as other phases of activity, are present across the development area. The level of archaeological preservation, particularly to the south-west of Whin Belt, is very good. The site is arguably of national importance but has suffered considerable damage (A12 construction, intensive agriculture, metal detecting rallies). Evaluation has confirmed that the part of the site impacted upon by this development is not of schedulable quality; however, it will need full and thorough mitigation prior to development.

897. A mitigation strategy needs to be confirmed but is likely to involve a combination of excavation and strip, map and record, subject to an agreed WSI. It should be noted that a full excavation will be required which is likely to be costly and, more importantly, a significant time frame will be required.
898. From a flood and water perspective, soils are described as clayey with impeded drainage (Vol. 2B paragraph 9.6.3). Some made ground may be found which has the potential to be contaminated (Vol. 2B paragraph 9.9.1). This is disputed in Vol. 2B paragraph 9.10.11 but no justification has been provided. The sites soils are identified as having an intermediate leaching potential (Vol. 2B paragraph 9.9.3). The site is located within a Source Protection Zone, Zone 3 (Vol. 2B paragraph 9.10.4). The site is entirely reliant on infiltration (Vol. 2B paragraph 9.12.11) despite this method of surface water discharge not yet being proven.
899. Assessing BGS data, the site is clearly located on variable ground with the nearby soil conditions mentioned in Vol. 2B paragraph 9.9.2 not necessarily representative of the site's characteristics.
900. SuDS must be incorporated into the design throughout the construction and operation phases. This is required to ensure surface water quantity and quality is controlled whilst simultaneously providing biodiversity benefits. The use of petrol / oil interceptors is not a SuDS approach and should only be used as a last resort or final protection measure (Vol. 2B paragraph 9.9.11, 9.10.18 & .19). SuDS must be incorporated with sufficient clearance to groundwater.
901. Existing ponds have been identified on the site (Vol. 2B paragraph 9.11.4), although it is unclear whether these ponds are proposed to be kept throughout construction and operation. Any alteration in overland flows that may feed these ponds may result in the ecological deterioration of the ponds due to the lack of water supply.
902. The Traffic Incident Management Area will be used for lorry management and will thus have a higher pollution hazard as per the CIRIA SuDS Manual Simple Index Approach. Surface water generated in this area will require further treatment compared to surface water generated from other areas of the site.
903. At this stage the Councils think that the detail of the design of the Park and Ride site can be achieved satisfactorily and that its location south of the two-villages bypass is acceptable, as this may maximise the number of individual cars from the workforce taken off the highway network.
904. In summary, the Councils are in principle content with the location of the Southern Park and Ride, subject to further detail, assessments and where required mitigation, in particular with regard to ecology, landscape and surface water.

## **Associated Mitigation for the Southern Park and Ride**

905. EDF Energy have set out that their assessment indicates that the southern Park and Ride development may lead to congestion on the B1078 between Border Cot Lane and the River Deben Bridge in Wickham Market, and propose two mitigation options:

Option 1: Removal of approximately 40 on-street car parking spaces on the B1078, with alternative provision of the parking spaces in close proximity to the lost parking (but a location is yet to be defined);

Option 2: Improvements to Valley Road and Easton Road.

906. Both mitigation options include the following:

- Reduction of the A12 northbound dual carriageway to one lane in advance of the B1078 on-slip
- Reduction of the speed limit on the B1078 overbridge

### Removal of the parking on the High Street, Wickham Market

907. Removal of the parking on the High Street between Border Cot Lane and the River Deben would be considered a potential solution to the bottleneck at this location. However, the Councils are mindful of the impact on residents, some of whom have no off-street parking and the potential speed and severance issues related to the extra traffic forecast to use the B1078. This may make this an unrealistic option. The proposal of alternative parking areas would be welcomed, but suitable nearby areas appear to be limited.

### Valley Road and Easton Road

908. This option involves a diversion route for Wickham Market via Valley Road and Easton Road and is proposed to mitigate traffic travelling from the west to the southern Park and Ride site. A new Valley Road alignment is proposed to the east of the existing road to provide a wider 6m road, there may need to be some localised widening north of the bridge but EDF Energy anticipate that such works would be limited. The Easton Road junction with the B1116 Hacheston Road does not provide good visibility in either direction so the junction would be moved north in order to improve visibility. EDF Energy expects traffic volumes to be less than 100 vehicles per hour on this route.

909. The Councils have significant reservations regarding the practicality of this proposal. The proposed route is approximately 500m longer than the existing route and would require three right-hand and two left-hand turns at priority junctions compared to a single current manoeuvre. Glevering Bridge is a listed structure restricted to a single lane and in an area known to flood. The proximity of the junction south of the bridge to the bridge provides limited stacking space and this could lead to congestion at the priority junction.

910. Glevering Bridge is Grade II listed (1777), and it is not clear what are the potential structural implications for the listed bridge in terms of increased vehicle use. The informal, unaltered rural character of the roads around this historic bridge is attractive and distinctive and this should be retained and preserved. This character may also be impacted by proposals to formalise the adjoining road junction to the south with a new road surface, road markings and signage. Measures to avoid damage to the listed Glevering Bridge must be put in place during works. Works at Valley Road have equally the potential to impact upon the setting of a number of Grade II listed structures. Above

ground heritage impacts need further assessment, with setting impact and mitigation options to be discussed with Historic England and the Suffolk Coastal District Council conservation officer

911. No details of how the improved roads are to be drained are included in the consultation. In addition to flooding at Glevering Bridge the road between Easton Road and the B1116 (the 'Tank Road') suffers from minor surface water flooding during heavy rain.
912. With regards to below-ground historic environment aspects, the Stage 3 consultation documentation does not fully consider impacts upon below-ground archaeology and does not provide a heritage strategy. There is an extremely high potential for Roman settlement remains at the eastern end of Easton Road adjacent to Hacheston Roman settlement as indicated through geophysical survey results in the adjacent field. Roman, medieval and Anglo Saxon finds scatters are recorded close to Valley Road, indicative of a potential for multi-period below-ground heritage assets
913. An early evaluation is strongly recommended, with trial trenching evaluation and metal detecting required before DCO (including any compounds), subject to an agreed WSI, to identify areas requiring preservation in situ or full excavation prior to development. However, it is noted that preservation in situ may be an issue adjacent to the Hacheston Roman settlement.

914. In summary, while the Councils support the principle of mitigating traffic impacts on Wickham Market, they do not consider the proposed solutions to be feasible or realistic. The Councils have significant concerns in each of the two options:

- For Option 1, restricting parking through Wickham Market High Street raises concerns.
- For Option 2, the use of a narrow, weight restricted, listed bridge (Glevering Bridge) appears unrealistic.

915. We expect EDF Energy to revisit this issue and establish alternative solutions for Wickham Market.

## **FREIGHT MANAGEMENT FACILITIES**

916. At Stage 2 EDF Energy did not propose a Freight Management Facility. The Councils responded that they would strongly encourage EDF Energy to re-incorporate a Freight Management Facility in their proposals, as had been included during Stage 1.
917. The Councils welcome inclusion of a proposed Freight Management Facility for the road-led scenario. However, EDF Energy need to evidence why a Freight Management Facility is not required for the rail-led scenario, given that the HGV numbers for the busiest day for the rail-led scenario exceeds the typical day for the road-led scenario (road-led scenario: typical daily HGV traffic 750 movements / busiest 1,500; rail-led scenario: typical daily HGV traffic 450 movements / busiest 900). Full justification is expected if no Freight Management Facility is put forward for the rail-led scenario.
918. Stage 3 consults on two site options for the Freight Management Facility – one at Innocence Farm, Trimley St Martin and the other off the Levington Road at Nacton. Further details on the access arrangements need to be determined.
919. The Councils are concerned about both of the proposed locations of the Freight Management Facility. Either is, from a transport perspective, in an undesirable location, as each vehicle would be undertaking an additional turning movement at the A14 junction 58 and involve additional transport movements at Seven Hills junction. Either option involves additional traffic movements through the Seven Hills Interchange and will have an impact on areas used for Operation Stack. A location east of the Orwell Bridge does not provide resilience if the Orwell Bridge is closed. The Councils expect that EDF Energy considers alternative locations for their Freight Management Facility that can minimise traffic impacts on the network, preferably to the west of the Orwell Bridge.
920. Option 1, at Seven Hills, would result in an increase in vehicle movements to / from Old Felixstowe Road, which could lead to impacts on congestion and delay in close proximity to A14 junction 58.
921. The access from this site impacts on an area used for Operation Stack and consideration would need to be given to management of traffic on these occasions.
922. The emerging Local Plan has a B1 business use to the north of the site, on the land to the east of the A1156 between Seven Hills and Felixstowe Road. This would require a new access onto the A1156. The combined impact of the additional traffic from the Freight Management Facility using the existing junction, the new junction associated with the Local Plan site and the existing access to the cemetery causes concerns with respect to capacity and road safety.
923. For Option 2, at Innocence Farm, the layout in the consultation document only shows a left-in-left-out to the site from the A14. This will result in all traffic having to use either A14 Junction 59 Trimley or Junction 60 Dock Spur Felixstowe. The Trimley roundabout option is likely to have a significant adverse impact on nearby residents, primarily from noise.
924. We also have concerns over how the Freight Management Facility has been modelled, within the strategic assessment, and whether the impacts at Junction 58 have been fully assessed.

925. Independent of its location, the Freight Management Facility is proposed to have a capacity for 150 HGVs to park; this equates to 20% of the daily one-way trips (peak) or 33% (average daily). The Councils need to be satisfied that other measures are provided to prevent the requirement to stack HGVs during an incident exceeding capacity at the Freight Management Facility.
926. Both options presented for the Freight Management Facility have relevant receptor locations nearby whose air quality will be impacted negatively to some extent by their use. An air quality assessment will be required for both sites in order to determine the impacts. Both site locations will have relatively high background noise levels due to the proximity of the A14. However, Option 2 at Innocence Farm has a residential property immediately adjacent to the proposed Freight Management Facility and is likely to require greater levels of noise mitigation.
927. As both proposed Freight Management Facility sites will be returned to their existing layout, neither site is currently considered to offer a legacy benefit.
928. Both options require further work related to landscape and ecology. Although there is awareness of potential impacts upon bats, a detailed understanding of what is there and assessment of impacts upon biodiversity and a suitable mitigation and compensation strategy will be required.
929. Subject to further detailed discussion regarding design, layout and mitigation these works appear to be capable of being made acceptable in landscape terms. We would strongly encourage any mitigation tree and / or hedge planting to be sited in such a way that it may remain in place after post-construction site clearance such that it may remain as a permanent enhancement of landscape character.
930. From an archaeological perspective, Option 1 at Seven Hills is the less preferable option, as the Councils have particular concerns about the impact upon the scheduled barrow group setting. Due to extensive cropmarks and finds evidence in the vicinity, we consider that the site has high potential for prehistoric remains, due to two previously excavated Bronze Age barrows within the site, as well as for further associated prehistoric and later funerary remains, plus other archaeological remains from all periods. The extent of these is unknown at this point, but needs to be established through evaluation (geophysics and trial trenching), subject to an agreed WSI, before DCO, if this becomes the preferred option. The evaluation to identify areas requiring preservation in situ or full excavation prior to development. The setting impact and mitigation options need to be discussed with Historic England and require assessment.
931. Option 2 at Innocence Farm option also has high potential archaeological remains from all periods, due to extensive cropmarks and finds evidence in the vicinity. The extent of these is unknown at this point, but needs to be established through evaluation (geophysics and trial trenching), subject to an agreed WSI, before DCO, if this becomes the preferred option. The evaluation to identify areas requiring preservation in situ or full excavation prior to development.
932. Both sites are identified as being well draining and generally granular in nature (Vol. 2B paragraph 10.6.3), and have the potential of the ground being underlain by soil with a high leaching potential (Vol. 2B paragraph 10.9.1 & .3). The implication of a spill is assessed as being low impact (Vol. 2B paragraph 10.10.20), despite the identification of a high leaching potential and connectivity between superficial and bedrock aquifers



(Vol. 2B paragraph 10.10.5). The assessment of this potential impact is not supported by the evidence. SuDS must be incorporated into the design throughout the construction and operation phases. This is required to ensure surface water quantity and quality is controlled whilst simultaneously providing biodiversity benefits. The use of petrol / oil interceptors is not a SuDS approach and should only be used as a last resort or final protection measure (Vol. 2B paragraph 10.10.15 & .16). SuDS must be incorporated with sufficient clearance to groundwater.

933. Infiltration is proposed where possible, given the identified soil characteristics this should be feasible (Vol. 2B paragraph 10.11.5). Permeable paving has been proposed as a primary method of surface water treatment (Vol. 1 paragraph 15.4.11). It should be noted that this mitigation measure alone will not be sufficient to meet the identified pollution hazard indices as per the CIRIA SuDS Manual.
934. For option 1, an existing attenuation basin has been identified in the northern area of the site (Vol. 2B paragraph 10.2.2) which will be retained (Vol. 2B paragraph 10.3.24). This is identified as a balancing pond for the A14. It is unclear from Google maps where the raised reservoir and pond are located 'in the vicinity of the site' (v 10.11.1). The balancing ponds north of the site may present a flood risk in an exceedance event. The design standard of these ponds should be assessed to establish the potential risk to the site (v 10.12.5).

935. In summary, while the Councils welcome the principle of the Freight Management Facility, there are concerns for each option regarding the impacts on traffic flows at Seven Hills, and how to connect either site to the A14. The Stage 3 consultation material does not include sufficient traffic modelling information for the Councils to come to firm view which of the options is preferable. The Councils expect EDF Energy to consider alternative sites to the west of the Orwell Bridge which would be a better location from a strategic transport strategic point of view.

## YOXFORD ROUNDABOUT

936. At Stage 2 two options were presented in the consultation by EDF Energy for the A12 / B1122 junction north of Yoxford - a roundabout or a signalised junction.
937. In their Stage 2 response, the Councils stated that they preferred the roundabout option, as we assumed that this layout would result in less queuing and thus less air quality and noise impact. However we requested further information and assessments of the junction layouts and their operation, so that an informed response could be provided. We asked for this assessment to include details of the junction's relationship with the nearby A12 / A1120 junction, including the potential for queuing between the two junctions.
938. The Stage 3 consultation confirms that EDF Energy proposes a three-arm roundabout to replace the existing A12 / B1122 junction at Yoxford, for both a rail-led and road-led strategy. As in Stage 2, the Councils continue to support the principle of a roundabout in this location subject to design detailing.
939. The roundabout would be sited approximately 100 metres north of the existing ghost island junction in Yoxford. The proposed junction improvement is proposed to be retained post-construction as a legacy of the development and to enable future abnormal indivisible loads (AILs) to access the site during operation. The precise design detail of the roundabout will be progressed further post Stage 3.
940. The consultation does not include any modelling of the roundabout junction, and therefore EDF Energy still need to evidence that the junction can accommodate the traffic demand. This includes taking due regard to the proximity of the A12 / A1120 junction and its operation, and understanding the potential impacts on air quality, severance as a result of increased delay.
941. Vol. 1 paragraph 16.5.2 indicates that the proposed roundabout would take six to nine months to construct and that work would start during the early years' construction phase. It is likely that some of the construction works associated with the roundabout could be completed off-line, however, we are unconvinced that the roundabout can be built without significant disruption to the A12, and it would not be tolerable for HGVs associated with site traffic to also be on the network causing further delays and disruption. Therefore, the Councils strongly argue all on-line works associated with the roundabout should be completed prior to work starting on-site.
942. Further information will be required for the Councils and Police to understand how AILs will use the proposed lane across the centre of the new roundabout.
943. The Councils are not convinced that the highway drainage can be included within the site boundary. The A12 / A1120 have long standing drainage issues as evidenced by the kerb drains. Infiltration has yet to be shown as a practical option, as no ground investigation data has been provided and the drainage lagoon appears to be located above the roundabout, as the latter is in an area of cut. We would encourage EDF Energy to begin in-depth discussions with the Councils regarding drainage as soon as possible.
944. The proposed roundabout will be located in cut due to constraints of existing ground levels (Vol. 1 paragraph 16.5.10). It is unclear how this will impact the sites drainage and whether the detention basin would also be located in cut. The masterplan shown in

Volume 1, Figure 16.1 and the fish tail lines on the embankments would indicate that the detention basin is located on land higher than the roundabout. This is not feasible.

945. There is an existing drainage issue on A12 between A1120 and B1122. This is the existing low point. The proposed roundabout would need to consider any potential overland flows contributing to the proposed drainage system from the existing low point. However, it must not contribute and exacerbate the existing drainage problem. The existing system should not be utilised given it is known to be insufficient (Vol. 2B paragraph 11.11.8 & 11.11.14).
946. The soils are described as being freely draining (Vol. 2B paragraph 11.6.3) however this has not been supported by infiltration testing to full Building Research Establishment 365 methodology or borehole results. Despite this, the site is solely reliant on infiltration as a means of surface water drainage (Vol. 1 paragraph 16.5.8 & Volume 2B, 11.10.16).
947. Vol. 2B paragraph 11.10.17 assumes that 'surface water run-off would be clean run-off and not contaminative in nature'. This is against industry guidance set out in the CIRIA SuDS Manual and the DMRB. Surface water run-off is deemed to contain multiple pollutants and as such, must be treated prior to discharge. SuDS must be incorporated into the design throughout the construction and operation phases. This is required to ensure surface water quantity and quality is controlled whilst simultaneously providing biodiversity benefits. The use of petrol / oil interceptors is not a SuDS approach and should only be used as a last resort or final protection measure (Vol. 2B paragraph 11.10.17 & 11.11.9). SuDS must be incorporated with sufficient clearance to groundwater.
948. Given the roundabout is in cut and the detention basin will need to be lower than this, it is assumed that excavation depths will be greater than what would ordinarily be deemed 'shallow' (Vol. 2B paragraph 11.10.18). As such, risks to groundwater should be further assessed if necessary, once proposed ground levels have been finalised.
949. For a historic environment perspective, the roundabout option is considered to be the least impactful option on the conservation area in Yoxford which is subject to a current proposition to be extended, although appropriate assessment of this is required.
950. The proposal is to optimise the distances to the A1120 junction to the south and the Grade II listed Satis House access to the west and to minimise any impact on protected trees screening Satis House on the western side of the A12. The grounds of Satis House are identified in the adopted Conservation Area Appraisal SPD (2010) as an 'Important Open/Green/Tree space'.
951. The roundabout proposed would be cut into the existing landscape and includes an attenuation basin, abnormal indivisible load route, and repositioned field boundaries alongside street lighting columns. It is assumed that there will be extensive removal of existing roadside hedgerows along the east of the A12; a general urbanising effect from the engineering of such a feature plus associated lighting, signage, road marking, scale and design; and the loss of an historic road junction configuration (compare the 1840 tithe map for example).
952. There is potential for high impacts arising from the realignment of the A12 and the B1122 and the new roundabout on the Yoxford conservation area; on the setting of the conservation area; on the village entrance; on the setting of multiple listed buildings and

positive unlisted buildings within the conservation area; and on the locally listed parklands at Cockfield Hall and Rookery Park.

953. Positive unlisted buildings within the conservation area are identified in the new conservation area appraisal for Yoxford that is undergoing public consultation since 1 February 2019 and which can be viewed at <http://eastsuffolk.gov.uk/yoxfordconservation>. The significance of designated heritage assets will need to be assessed including any contribution that their setting makes to them and the impacts arising from the proposal identified, measured, justified and mitigated where harm arises. The public consultation includes a proposal to extend the conservation area to include the three locally-listed parklands which means that, if approved, the conservation area boundary would extend eastwards along the B1122 and northwards along the A12. The implication is a more extensive area of conservation setting potentially being affected by the roundabout proposal.
954. An archaeological assessment is referred to in the documents that would include a 'settings assessment'. Any assessment should include direct effects upon the designated heritage asset that is Yoxford conservation area for that part of the development proposal that falls within the conservation area by reference to the new appraisal. It is, thus, not only a settings assessment. The assessment should not form part of an archaeological assessment but be a standalone exercise to recognise its importance. Conservation areas and listed buildings are not archaeology and are not a subset of archaeology. This work – and all similar such work throughout the EIA and presented Environmental Statement – should be undertaken by a heritage professional with experience in dealing with heritage assets that are buildings and conservation areas and not necessarily by an archaeologist.
955. There is the potential for archaeology of all periods due to the topographic location of the site. EDF Energy will be required to undertake trial trenched archaeological evaluation (including compound area and attenuation areas), subject to an agreed WSI, pre-DCO. The evaluation would need to identify areas requiring preservation in situ or full excavation prior to development
956. Fields to east of A12 are part of surviving area of early (pre 18th century) enclosed landscape as identified through HLC data. Loss of historic boundaries and other historic landscape features should be avoided.

957. In summary, the Councils support the principle of a roundabout to improve the junction of the A12 / B1122 at Yoxford. Further assessments are required with regard to traffic flow (including in relation to the nearby A12 / A1120 junction), flood and water design and the historic environment.

958. As the Councils do not accept that the roundabout could be constructed off-line, we expect that all on-line works associated with the roundabout should be completed prior to work starting on-site.

## **HIGHWAYS IMPROVEMENTS, CYCLING, AND RIGHTS OF WAY**

959. This section of the Stage 3 consultation clusters proposals related to a range of highway improvements, cycling and rights of way.

### **Highway Improvements**

960. EDF Energy suggests that, based on their traffic modelling, several additional junctions on the highway network will require improvements in order to facilitate additional traffic loads during construction. The Councils are considering whether there are any other pinch- or stress-points on the highway network in addition to those reflected in this chapter of the consultation that may require mitigation. This section only comments on the junction improvement schemes proposed by EDF Energy. Paragraphs 427 to 446 above highlight other parts of the Highways network which the Councils believe may require additional mitigation.

961. Subject to further detailed discussion regarding design, layout and mitigation the proposed highway works are capable of being made acceptable in landscape terms. However, the applicant should be aware of local sensitivities such as historic parkland at Glevering and the expanding conservation area and adjacent historic parklands at Yoxford. These historic parklands are locally listed and subject to their own Supplementary Planning Guidance. It is of concern that there appears to be no reference to this designation in the Stage 3 documentation.

962. Although some of these works are relatively minor, cutting visibility splays and realigning junctions can have significant local impacts. The potential ecological impacts will need to be fully assessed for each site and any necessary mitigation, compensation or enhancement identified.

#### *A140 / B1078 west of Coddendam (Vol. 1 section 17.3)*

963. The Stage 3 consultation sets out that road safety analysis has been undertaken for this junction which concluded that a higher than expected number of certain types of collision have occurred. EDF Energy states that the junction will be at capacity in 2022, and by 2027 delays will cause vehicles to divert. The assessment indicates an increase in traffic by 7% by 2027 and that the increase in traffic could exacerbate the identified road safety issue.

964. This junction has received localised improvements including reduction of the speed limit to 50mph and installation of a speed camera. Some minor mitigation measures are proposed by EDF Energy aimed at improving safety, but not improving capacity. The Councils welcome EDF Energy's commitment to mitigating their safety impact at the junction.

965. The Councils note that EDF Energy expects the Councils to monitor the junction (17.3.8), but it does not explain how this monitoring will be used to determine what improvements may be necessary nor how these would be implemented. Further discussions need to be undertaken over how monitoring will be undertaken, such as through a Transport Review Group.

966. The Councils note that the proposed changes to the junction result in a misalignment in the B1078 either side of the A140 (Vol. 1 Fig. 7.2).

*B1078 / B1079 east of Easton & Otley College (Vol. 1 section 17.4)*

967. The Stage 3 consultation sets out that road safety analysis has been undertaken for this junction and identified the occurrence of a higher than expected number of collisions. EDF Energy states that the junction will be at capacity in 2022 and 2027 without Sizewell C, with nearly all vehicles turning right onto the B1079. The assessment indicates an increase in traffic of 8% by 2027 and that the increase in traffic could exacerbate the identified road safety issue.
968. The proposals are restricted to vegetation clearance and some additional bend signs. The consultation states (Vol. 1 paragraph 17.4.3) that the limited visibility at this junction has little influence on delays. The Councils would argue that delays for northbound traffic are likely to lead to drivers taking risks due to the presence of fewer, shorter gaps enabling them to turn right onto the B1079.
969. The Councils welcome EDF Energy's commitment to mitigating their road safety impact at this junction. However, EDF Energy is strongly encouraged to seek a more effective solution to the issues. It is noted that EDF Energy suggests (Vol. 1 paragraph 17.4.7) that the Councils monitor the junction and liaise with EDF Energy as part of a monitor and review process. Further discussions are needed over this process.

*A12 / B1119 Saxmundham (Vol. 1 section 17.5)*

970. Junction priorities at the A12 / B1119 junction have been altered several times previously, highlighting the risks associated with two stage manoeuvres across a busy high-speed road.
971. The Stage 3 consultation states that road safety analysis has been undertaken for this junction and identified the occurrence of a higher than expected number of collisions. EDF Energy suggests that the junction would still operate with spare capacity in the future scenario. The assessment indicates an increase in traffic of 8% by 2027 and that the increase in traffic could exacerbate the identified road safety issue.
972. EDF Energy have proposed minor road marking and sign improvements with vegetation removal, which appears to be in third party land. It is noted that EDF Energy suggests (Vol. 1 paragraph 17.4.7) that the Councils monitor the junction and liaise with EDF Energy as part of a monitor and review process. Further discussion is needed over this process. The Councils welcome EDF Energy's commitment to mitigating their road safety impact at the junction.
973. Further evidence would need to be provided to evidence that the junction would continue to function within capacity within all of the Sizewell C scenarios.

*A1094 / B1069 south of Knodishall (Vol. 1 section 17.6)*

974. The Stage 3 consultation sets out that road safety analysis has been undertaken and identified the occurrence of a higher than expected number of collisions. EDF Energy states that the junction would still operate with spare capacity in the future scenario. The assessment indicates an increase in traffic of 12% by 2027 and that the increase in traffic could exacerbate the identified road safety issue.
975. EDF Energy accepts that while the junction operates within capacity in 2027, there are road safety concerns (Vol. 1 paragraph 17.6.7). A reduction of the speed limit to 40mph is likely to be acceptable to the Councils although the limits will need to be agreed during

the detailed design stage. The Councils welcome EDF Energy's commitment to mitigating their road safety impact at the junction.

976. Although constrained by a ditch there is a reasonable area of public highway adjacent to the junction and EDF Energy are encouraged to take this into consideration as they further develop their proposals.
977. Further evidence would need to be provided to evidence that the junction would continue to function within capacity within all of the Sizewell C scenarios.

*A12 / A1094 Friday Street (Vol. 1 section 17.7)*

978. EDF Energy indicates that there is a higher than expected accident record for the traffic flows present and proposes to mitigate Sizewell C impacts through provision of a roundabout junction. The roundabout junction forms the northern arm of the proposed two-villages bypass and would be in operation prior to the opening of the two-villages bypass.
979. The Councils welcome improvements on the A12 to mitigate Sizewell C's impact. However, evidence would need to be provided that the proposed junction layout would sufficiently increase capacity to mitigate the development impacts. Specifically, the Councils are concerned that the proposals do not appear to include a two-lane approach to the roundabout on the two-villages bypass approach, A12 southbound and A1094.
980. It is likely that some of the construction works associated with the roundabout could be completed off-line, however, we are unconvinced that the roundabout can be built without significant disruption to the A12, and it would not be tolerable for HGVs associated with site traffic to also be on the network causing further delays and disruption. Therefore, all on-line works associated with the roundabout should be completed prior to work starting on-site.

*A12 / A144 south of Bramfield (Vol. 1 section 17.8)*

981. EDF Energy states that there is not a safety issue at the A12 / A144 junction however, traffic associated with Sizewell C would exacerbate queuing on the A144 arm. In order to increase capacity for right turn movements EDF Energy proposes to include a physical central reservation area and waiting facility.
982. The Councils welcome improvements on the A12 to mitigate Sizewell C's impact. However, evidence would need to be provided that the proposed junction layout would sufficiently increase capacity to mitigate the development impacts. The Councils express concern that a two-stage manoeuvre as set out in the consultation (Vol. 1 paragraph 17.8.7) is not practical or safe for large or long vehicles. The gaps in traffic would also be fewer and shorter due to additional traffic using the A12. The Councils note that the proportion of traffic, specifically HGVs (Vol. 1 paragraph 17.8.5) is based on a 85% from south / 15% from north split, which has not been evidenced nor has the split between traffic continuing on the A12 or leaving / joining the A144.
983. Thus the Councils remain to be convinced by evidence that the proposals will significantly increase capacity and improve road safety.

*Mill Street (Vol. 1 section 17.10)*

984. Should a rail-led strategy be implemented, EDF Energy proposes improvements at Mill Street on the B1122. The proposal is to increase forward visibility for westbound traffic and give traffic exiting Mill Street better visibility of approaching traffic. This improvement is only for the rail-led proposal; it would not be required for the road-led strategy as the Sizewell Link Road would provide an alternative route to Mill Street.
985. With regards to historic environment aspects of the Mill Street proposal, the Stage 3 consultation documentation does not fully consider impacts upon below ground archaeology and does not provide a heritage strategy. No previous archaeological investigation of the compound has been undertaken; therefore, we have currently insufficient information to judge potential and impacts without further assessment. The compound will require a scheme of trial-trenched archaeological investigation, followed by mitigation as required, subject to an agreed WSI. The evaluation will need to identify areas requiring preservation in situ or full excavation prior to development.
986. In summary, the Councils welcome recognition by EDF Energy that the impact of their development requires mitigation at several road junctions. However, EDF Energy need to undertake further work for the proposed schemes, as outlined above.
987. As stated under the transport modelling chapter, additional mitigation for other junctions is likely to be required.

**Public Rights of Way (PROW)**

988. EDF Energy proposes to develop a Sizewell C Rights of Way and Open Access Strategy. The Strategy is referred to in Stage 3 but is still being developed. Such a strategy will be welcome given that the Sizewell C proposals will have an impact on various rights of way, including closures and diversions.
989. EDF Energy states that during construction the strategy is designed to minimise physical disturbance of existing rights of way and open access areas including the beach, open access land, the permissive networks and promoted cycle routes. The strategy is stated to ensure that any necessary alternative routes meet the best interests of the user in respect if directness, safety and quality and to retain connectivity where possible. The strategy should minimise disturbance to the Suffolk Coast Path, Sandlings Walk, the future England Coast Path and open access on the coast. There will need to be appropriate temporary diversion routes and where possible and reasonable mitigation to rights of way, open-access land and promoted cycle routes to minimise effects on their amenity.
990. During the operational phase the proposal is to restore any rights of way within the main development site and to open any access to the coast that were closed or diverted during construction. EDF Energy will at this stage seek opportunities for enhancement, this will need to be programmed and required through the DCO process.
991. The Councils need to have confidence that the proposed closures or diversions will not have an adverse impact on users of the local networks including residents and visitors to the region. The various rights of way highlighted can be a draw to tourists in their own right. The Councils seek to avoid, minimise and mitigate adverse impacts and ensure



that pathways are maintained where safely able to do so. If closures take place appropriate diversions will be required, particularly during the extended summer months.

992. The NPPF (MHCLG 2018, page 28, paragraph 98) states that 'planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails'.
993. The Councils expect this principle to be followed during both the construction and operational phase.
994. The development of Sizewell C will severely impact the quality and amenity value of the access network. Existing public rights of way including the Suffolk Coast Path and the Sandlings Walk will be severed, in some cases for the full duration of the construction phase (10-12 years). The alternative route being proposed is a poor substitute; much longer, indirect, set well away from the coast, shadowing, and crossing the main access roads in four locations including the main site entrance.
995. The closure of Bridleway 19 and the intermittent closures of the public footpath along the coast, including the proposed England Coast Path National Trail and the Sandlings Walk, are a significant loss of amenity which is only partly mitigated by the provision of an alternative route. The Councils expect further mitigation for this and will also seek compensatory measures by way of additional enhancements to the access network.
996. Permissive access at Goose Hill will be lost and that retained at Kenton Hills will be compromised by the proximity of the construction site and the traffic using Lovers Lane and the secondary HGV entrance associated with the LEEIE.
997. The increased volume of traffic on the road network near the site, on proposed bypasses and further afield on linking roads and the A12 will impact on the users of the PROW network and promoted cycle routes, causing severance and displacement. We expect all PROW crossings will be subject to Road Safety Audits and appropriate measures taken.
998. The proposed changes to the local rail network impact significantly on the PROW network and proposed closures and new routes will need to be assessed for safety and convenience, using the County Council's guiding principles. Please see from paragraph 701 onwards above for specific comments on the rail level crossing proposals.
999. Further consideration must be given to the overall impact of the development on the travel and recreational habits of residents and visitors and the consequent impact on other access routes and sites.
1000. The diversion of PROW or other access routes in connection with any of the additional development works could have unintentional disturbance issues on other areas which have historically been "quiet". A full assessment of the ecological implications will be required along with appropriate proposals for mitigation, compensation or enhancement.

*Comments on the specific proposals in Vol.1 section 17*

1001. Clarification is needed as the proposed strategies related to recreation and access as there are several strategies referred to in different sections of the documents, which may be one and the same:
  - An access strategy (Vol. 1 paragraph 17.11.1)

- A rights of way improvement strategy (Vol. 1 paragraph 17.12.17)
- A rights of way & open access strategy (Vol. 1 paragraph 2.4.31 i)

1002. We look forward to working with EDF Energy on all the above and the Amenity and Recreation Impact Assessment.

1003. Any rights of way proposals should follow these general principles:

- All temporary and permanent new access should be barrier free and easy to use, compliant with British standards and the Equality Act;
- Where rights of way cross proposed new roads or existing roads that will be affected by traffic from this development, these must be included in the Road Safety Audit Stage 1 and measures put in place to ensure safe crossing points;
- EDF Energy must fund and maintain all new temporary rights of way assets;
- EDF Energy must fund new permanent rights of way assets and provide a commuted sum for ongoing maintenance except where the County Council agrees to waive such sum;
- Specification for any temporary or permanent PROW route and asset must be agreed with the Councils;
- Where PROW rail crossings are affected, the Councils expect the crossing to remain open with appropriate mitigation. Where closure is the only option, this should be temporary for the duration required by construction. Permanent diversions will be countenanced only where the alternative route included public benefit over the existing route;
- EDF Energy must fund and maintain temporary alternative accesses;
- The Councils will be seeking significant post-construction improvements to the local green access network to mitigate against the impact of the new power station, by enhancing access to the countryside and connectivity between communities and destinations and promoting green access.

1004. Please note that the impacts on access to the beach and the England Coast Path, including impacts regarding the diversion route, as a result of sea defence construction and the use of the beach landing facility during construction and operation of Sizewell C, as well as impacts from long term coastal erosion, are discussed above under Sea Defences and Beach Landing Facilities.

*Construction phase - impact on access*

1005. The Councils welcome the revised construction phase strategy Vol. 1 paragraph 17.11.2, however the provision of the inland alternative route is a poor substitute for the coastal footpath and bridleway 19. We look forward to working with EDF to improve this proposal. We will also be seeking further mitigation and compensation than is currently proposed. The Councils require:

- Clarity as to the construction specification, timescale and legal status of the new off-road combined bridleway, cycleway and footpath from the Sizewell Gap road, to Aldhurst Farm, Abbey Road and alongside the Eastbridge Road. Further

information is needed on whether this is intended to be public highway or a permissive path;

- The alternative route to be within a green corridor, with a separation and screening from the adjacent roads;
- A maintenance programme for this new route must be put in place and works undertaken by EDF Energy during the construction period;
- This new route must be constructed and fully available before any closure of BR19 and the coast footpath;
- The number of road crossings on the proposed alternative route will significantly discourage use of this route by workers, local residents and those PROW users diverted from closed or interrupted routes. Further consideration is needed to minimise the number of road crossings, for example continuing the new route on the south side of the realigned Lovers Lane would remove one crossing point;
- An uncontrolled crossing is under consideration for the northern part of Lovers Lane (Vol. 1 paragraph 17.12.9). Lovers Lane will experience higher traffic volume and it is likely to be unacceptable to have an uncontrolled crossing. The Councils consider that controlled crossings are a necessity for all the road crossings on the alternative route for the duration of construction;
- An additional crossing point is required on the Sizewell Gap / south end of Lovers Lane to enable walkers, cyclists and horse riders coming from the south or King Georges Avenue to cross onto the proposed new route;
- We welcome provision of public access in Aldhurst Farm (Vol. 1 paragraph 17.12.14), but request that some routes are created as public rights of way and not as permissive access, which can be removed without notice;
- We welcome proposals for works to improve and mitigate the impact of the increased footfall on existing rights of ways (Vol. 1 paragraph 17.12.17) and expect the rights of way improvement strategy to be agreed with the Councils and any other relevant authority before the DCO submission;
- Campus site - the realigned bridleway is shown between the Eastbridge Road and the internal campus access road. There is a 10m wide security strip with fencing and planting. The bridleway must not be canalised between fences and hedges as this significantly discourages its use;
- Campus site – realigned bridleway – an off-road bridleway should be provided alongside the Eastbridge Road from the end of the campus site to the public footpath at the south end of Eastbridge village to avoid conflict between pedestrians, cyclist and equestrians with vehicles. This bridleway will be the alternative route for any coast path closure and hence the additional use will increase the risks to users and should be an off-road route in its entirety;
- Campus site – realigned bridleway - Vol. 1 Fig 17.17 shows this route ending at the end of the campus site and Fig 17.18 (operational phase) shows it extending as an off-road route beyond the end of the campus site connecting to bridleway 19 – clarification is sought whether this is an error;

- No proposals have been put forward to provide improved pedestrian and cycle links between either the main campus or the LEEIE and the centre of Leiston. While footways are present, they are narrow in places and facilities for cyclists lacking. Crossing points need to be considered in respect to their safety considering the increase levels of traffic. Without such facilities it is unlikely that HB and NHB workers in the local area will consider using sustainable modes of transport for employment and recreational purposes as assumed in the transport modelling. This severely compromises the assumptions made in the sensitivity test that the additional workers will use sustainable transport and not drive;
- No consideration has been made to enhance the existing PROW network around the site and areas where significant numbers of workers are expected to stay. An improved recreational PROW network can provide significant health benefits for workers, attract walkers displaced from the Sizewell area and maintain the areas attractiveness to tourists. These routes can also form a beneficial legacy to the project; and
- Small but significant numbers of workers are likely to reside in Yoxford and Wickham Market. Therefore, the Councils advise that improvements should be made in the pedestrian and cycle links from these communities to the nearby Park and Rides to maximise the use of sustainable transport modes.

The PEI Vol 2 recognises in 2.4.69 that the effects of construction on users of footpath 20 are likely to be significant and mitigation will be required. Therefore, the Councils question as to why Area 4 North, containing this footpath, has been omitted from Table 2.4.1 'Summary of effects of construction phase'.

#### *Operational - impact on access*

1006. The Councils welcome the statements made by EDF Energy in Vol. 1 paragraph 17.11.2 Operational phase, but seek:

- A firm commitment to the provision of a north-south public bridleway link east of Lovers Lane that connects the Sandy Lane bridleway to Kenton Hills and the remainder of BR 19 to the Round House. This would give a direct, off-road bridleway link without a succession of road crossings. The proposed route within Aldhurst Farm inland to Abbey Road will not meet the same need;
- A safe crossing point to take users from the Aldhurst Farm route across Lovers Lane into Kenton Hills – this crossing point is shown as under consideration in Fig 17.18 but will be required if the bridleway link is not provided to the east of Lovers Lane as described in the point above. EDF Energy would be expected to consider the scale of traffic using this road during the operational phase so that the benefits of retaining signalised crossings can be evaluated against landscape and visual impacts and long-term maintenance costs;
- Clarity as to the legal status of this permanent new route from the Sizewell Gap road, to Aldhurst Farm, Abbey Road and alongside the Eastbridge Road. The Councils require this to be public highway;
- The Councils will continue to seek permanent public rights of way on the EDF Energy estate as legacy benefit and not permissive routes that can be taken

away. This includes a north-south bridleway link as mentioned above, and an east-west link through Kenton and Goose Hills to restore the Sandlings Walk;

- Dedication of open access land across the estate;
- Restoration of all rights of way to original alignments and if this is not possible, for the relevant legal process to be included in the Rights of Way improvement strategy; and
- A safe crossing point on the access road where it dissects public bridleway 19.

#### *Traffic Issues – Impact on access*

1007. The impact of increased traffic volumes on non-motorised users of the road network beyond the site and the proposed bypasses has not been considered in Stage 3. The increased traffic volumes are likely to cause difficulty for pedestrians, cyclists and horse riders crossing roads whilst using the PROW network, resulting in safety issues. This must be considered.

- All affected crossing points for public rights of way and promoted cycle routes should be identified including their legal status and hence likely users, such as horse riders;
- All crossing points for public rights of way must be included in the Road Safety Audit Stage 1 and measures put in place to ensure safe crossing points; and
- A sustainable transport strategy should be developed & implemented to enable non-motorised access to the site for any workers living in the immediate area (Leiston, proposed caravan park and villages to east of A12). This should be covered in a Travel Plan.

#### *PROW impacts of proposed bypasses*

1008. These principles apply for the two-villages bypass, Theberton Bypass and Sizewell Link Road:

- Vol. 1 paragraph 12.3.21 proposes assessing demand from vulnerable users (walkers, cyclists, horseriders) and appropriate solutions identified. However, the level of current usage must not dictate whether a safe crossing point should or should not be provided. We do accept that demand might influence the design of the safe crossing point that is provided;
- Vol. 1 paragraph 12.3.21 (and also 11.5.12 & 10.7.12) states that solutions to PROW road crossings would be identified with the assistance of the Councils;
- Where public rights of way meet any new road, there must be safe, well-designed crossing points with no fences, barriers, stiles or gates obstructing the PROW access;
- Where PROW meets the road in a cutting or on an embankment, there must be easy access, such as graded level entry and ramps;
- Permanent PROW diversions would only be considered if this improved the access network for users and enabled the provision of safe crossing points;

- Temporary diversions during construction must be kept to a minimum (as stated in Stage 3) but alternative routes must be provided that continues the connectivity of the network;
- The Councils welcome the statement that designs for PROW crossings will be undertaken prior to the DCO submission (Vol. 2 paragraph 6.4.6, 5.4.6, Vol. 1 paragraph 12.3.21);
- Stage 3 states that temporary and permanent diversions of the PROW network would be agreed with the Councils.

1009. If a permanent diversion is proposed, then:

- The diversion route must be agreed with the Councils in advance of the DCO submission. The views of local users, parish council and user groups must be canvassed in determining the most suitable alternative;
- The proposed diversion route must be subject to a site survey and assessment of works jointly by the Councils and EDF Energy prior to the DCO submission;
- Design & specification of the route to be agreed with the Councils prior to DCO submission; and
- Establishment works to be undertaken by EDF Energy and a commuted sum provided for any new PROW asset.

1010. Promotion to the public of construction impacts: The Councils believe that it is essential that changes to PROW and other access affected by construction should be promoted by EDF Energy both on site and through a dedicated website or page. The content will need to be agreed between EDF Energy and the Councils, but should include affected PROW, permissive access, open access land, closure dates and alternative routes, as well as transport alternatives. This can of course be part of the wider communication strategy.

1011. In summary, the Councils need to have confidence that the proposed PROW closures or diversions will not have an adverse impact on users of the local networks including residents and visitors to the region. The Councils seek to avoid, minimise and mitigate adverse impacts and ensure that pathways are maintained where safely able to do so. If closures take place appropriate diversions will be required, particularly during the extended summer period.

1012. Detailed comments on the specific PROW and access proposals can be found above. The Councils have particular concerns about the closure of Bridleway 19 and the intermittent closures of the public footpath along the coast, including the proposed England Coast Path National Trail and the Sandlings Walk, a significant loss of amenity which is only partly mitigated by the provision of an alternative route. The Councils will seek to minimise the time paths are to be closed, improvements to the diversion routes, as well as compensatory measures by way of additional enhancements to the access network.

## Cycling

1013. Cycling has been introduced in the Stage 3 consultation although it emphasises that all impact assessments have been based on maximum car-usage expectations. However, it is expected that some workers, particularly those living closer to the site, will cycle to the main construction site. As many of the local roads and routes to site will be used by construction vehicles and some by HGVs a cycling strategy is proposed to encourage safe cycle routes in the vicinity.
1014. Proposed improvements include an off-road shared footway and cycleway on the B1122 Abbey Road from the Sizewell C site entrance to Lover's Lane, this includes a signalised toucan crossing north of the level crossing (under the rail—led strategy) to allow safe passage between the two sides of the road. On Lovers Lane a new off-road cycle track and bridleway is proposed to run within and adjacent to the SSSI proposed compensation land at Aldhurst Farm. On Sandy Lane a new off-road cycle track and bridleway is proposed running within and adjacent to the SSSI proposed compensation land in Aldhurst Farm. At Sizewell Gap a new informal crossing point is to be provided.
1015. At Buckleswood Road there are two options proposed, either Option 1: a temporary closure of Buckleswood Road to vehicles with a new footbridge providing pedestrian and cycle connection or Option 2: a new level crossing on Buckleswood Road. The Councils have no opinion at this stage on a preference between Options 1 and 2 and would prefer that EDF Energy take guidance primarily from the local people who use Buckleswood Road and Leiston Town Council.
1016. As set out above at Vol. 1 paragraph 5.13.9 of the NPS-EN1 the IPC should have regard to the aim to secure more sustainable patterns of transport when considering the mitigation measures. In principle, the Councils agree with the provision of the new cycleway as part of the mitigation on the impacts on pedestrians and cyclists. However, whilst the proposals may go some way to mitigating the impact on pedestrian and cycle movements along Lovers Lane, it is unlikely to lead to more sustainable patterns of transport for the area.
1017. While a combined footway / cycleway linking King George Avenue to Abbey Road is welcomed, consideration should be given to minimising the number of crossings to make it more attractive to pedestrians and cyclists. More information is required regarding the types of crossing, for example one is shown as a Pegasus Crossing on the computer-generated imagery. The crossing facilities at the junction of Lovers Lane / King George Avenue need to be clarified as none appear to be provided at this critical point.
1018. The Councils are aware that Leiston Town Council have expressed concerns that little improvement to pedestrian or cycle access is proposed between the LEEIE and the town centre nor between the Abbey Road / Lovers Lane junction and the town centre. The Councils concur with this observation and believe a far more overarching sustainable transport package is required for the area. As discussed before this should include options for cycle hire for workers, a shuttle-bus between various EDF Energy sites, the town centre and the sports centre, and safe opportunities to walk.
1019. At peak construction, there would be an additional 3,000 residents in the Leiston area at the Campus and the caravan park, assuming full take up, with additional employees likely to be living in the immediate area. The Councils would like to see a more developed sustainable transport strategy and network linking the site with the

surrounding area, so that as many trips as possible can be undertaken by sustainable modes, as well as helping to mitigate the impacts on the PROW network. This could include new cycle links linking the site with LEEIE and Leiston, improved walking routes into the local area and an electric bike rental scheme, which would link to the site and Park and Ride sites. We expect commitments aiming to achieve as high an uptake of sustainable transport modes, including walking and cycling, as possible as part of the Travel Plan.

1020. In summary, the Councils welcome that cycling has been introduced as part of the Stage 3 proposal but request a more developed sustainable transport and cycling strategy for the wider Leiston area.



## IN-COMBINATION EFFECTS

1021. As EDF Energy is aware, the Suffolk coast is subject to proposals not only for Sizewell C, but also for four phases of the East Anglia Offshore Wind Array (by Scottish Power Renewables), two interconnectors to Belgium and the Netherlands by National Grid Ventures, possible extensions to the Galloper and Greater Gabbard windfarms and a further Round 4 of offshore windfarm proposals by the Crown Estates. We expect that most, if not all, of these proposals would have land-based development in the Sizewell area. These are likely to have a considerable adverse impact on the communities, environment and businesses of the area. In addition, some major housing developments are proposed in the area, most notably at Adastral Park in Martlesham that will have in-combination impacts on highways.
1022. In several sections of this response, the Councils stress the need for EDF Energy to consider the in-combination effects of Sizewell C and other energy developments in the area. If Sizewell C was seen in isolation, this would limit the ability for the consequences of all proposals to be seen as a whole and for wider economies of scale to be achieved and would be likely to result in greater damage to the environment.
1023. The Councils are continuing to discuss with Government whether a Government department, or one of its agencies, could be charged with taking the lead on the coordination of all the energy projects in a way that enables their overall impact to be assessed before commitments are made to initial schemes and that allows for the efficiencies now afforded by developing offshore transmission technology to be locked into the process for the long-term benefit of the consumer.
1024. The Councils urge EDF Energy to work closely with other developers, including Scottish Power Renewables and National Grid Ventures, to consider how mitigation across the schemes can be combined or at least aligned to minimise the impact of the totality of developments on the local area.
1025. In-combination effects to be considered by EDF Energy include, but are not limited to:
- Natural environment impacts: The likely in-combination effects of the Sizewell C proposal with the offshore elements of the Scottish Power Renewables offshore windfarms and the emerging proposals of National Grid Ventures add significantly to the potential damage to the purposes of designation of the AONB. Equally, the in-combination effects on the local terrestrial and marine ecology need to be assessed. These in-combination effects need to be thoroughly assessed and reflected in avoidance, mitigation and compensation strategies.
  - Transport impacts: The Sizewell C transport modelling needs to include, as far as this is possible, transport assumptions of the other emerging developments, including the SPR and NGV proposals and the housing development at Adastral Park. Consideration should be given to a potential joint approach in highways mitigation.
  - Skills, education and employment outcomes: Although there are some specific skills required in each sector, a large proportion of the workforce across the energy industry are required to have a common foundation of skills with specific sector-based competency top-ups. By assessing the skills and competency requirements of all energy projects in the area, promoters and the Councils can

ensure that we are training local residents seamlessly to transfer from one sector as it demobilises into another sector as it mobilises, avoiding a boom and bust employment market. EDF Energy is asked to work with the other promoters, alongside the Councils and other business and skills stakeholders, to develop a comprehensive strategy across the projects.

1026. The Councils continue to aim to work with all the promoters and Government to consider mitigation for these projects in a combined way and expects to discuss these matters further with EDF Energy, and other promoters, in the coming months.

1027. In summary, the Councils expect EDF Energy to consider the in-combination effects of their proposal and that of other developments in the area, most notably the proposals by Scottish Power Renewables and National Grid Ventures and the Adastral Park housing development, and to consider mitigation for these projects in a combined way.

## NEXT STEPS

1028. It has been two years since the Stage 2 consultation and it is clear from the contents of this Stage 3 consultation that the project has not sufficiently moved forward in terms of the detail that is publicly available. This has frustrated many communities and indeed the Councils who are keen to understand how the project is going to affect Suffolk with the realisation that there is still a significant amount of work for EDF Energy to undertake.
1029. The Councils are disappointed that the Stage 3 proposals have not evolved more considerably since Stage 2, particularly given that this is expected to be the last round of public consultation. There remain a considerable number of issues to be addressed between Stage 3 and submission of the DCO. At this stage there are still a number of areas where the Councils are not content, cannot come to a clear view or have been unable to update our response since Stage 2.
1030. Based on the new information put forward in the Stage 3 Consultation, the Councils are still not able to support all the specific proposals put forward by EDF Energy and the impacts of the proposed development are still not yet fully developed or evidenced. Indeed, in our Executive Summary, the list of topic areas is extensive where, due to a lack of further detail and / or enough evidence, the Councils are not yet able to come to a considered view. This includes a number of crucial topic areas that may determine the acceptability of the proposals, including ecological impacts, coastal processes and transport.
1031. We understand that EDF Energy intend to submit the DCO application in early 2020. This would mean very limited time available for you to produce and share the substantial amount of assessments, evidence and detail highlighted as required by the Councils in this response. The Councils are very concerned that, by the time of submission, there may still not be sufficient evidence for the Councils to come to an informed view on many topic areas, including whether the proposed mitigation (or compensation) would be appropriate.
1032. We welcome that EDF Energy have indicated a comprehensive engagement programme with the Councils for the coming months and urge EDF Energy to discuss with the Councils at the earliest opportunity how to address and prioritise the evidence gaps and concerns highlighted by the Councils in this response.
1033. The Councils expect that EDF Energy will work with other statutory and non-statutory bodies, as required, alongside the Councils. EDF Energy should:
- Work with the Councils, Government, Suffolk Chamber of Commerce, the New Anglia Local Economic Partnership and other relevant organisations on maximising skills and employment opportunities in Suffolk and the region, including on the implementation of a Nuclear Sector Deal for the region;
  - Work with the Councils to persuade Government to offer a “Sizewell Deal” to secure additional Government funding to support the infrastructure development in the area, and to agree the maximum level of community benefits for Suffolk; and
  - Continue to work on the environmental impact of the development with the Councils and key environmental government bodies, including the Environment

Agency and Natural England, and with non-governmental organisations such as the National Trust, the RSPB and the Suffolk Wildlife Trust.

1034. The Councils expect to work with EDF Energy towards a position where the Councils can be satisfied that on balance the advantages of EDF Energy's proposals outweigh the disadvantages. We expect to work closely and pro-actively with EDF Energy in order to enable you to address the issues we have identified in this response and to further develop your proposals, including seeking mutually to resolve the necessary mitigation and compensation.

1035. In summary, a substantial amount of evidence, assessments and detail is still required at this, likely to be final, stage of public consultation. The Councils are very concerned that by the time of EDF Energy's submission of a DCO application, due to the expected short time scale, there may still not be sufficient evidence for the Councils to come to an informed view on many topic areas. The Councils expect EDF Energy to discuss with the Councils at the earliest opportunity how to address and prioritise the evidence gaps and concerns highlighted by the Councils in this response.

1036. The Councils expect to work with EDF Energy towards a position where the Councils can determine that on balance the advantages of EDF Energy's proposals outweigh the disadvantages. We will work closely and pro-actively with EDF Energy to help them address the issues the Councils identify in this response and develop their proposals, including seeking mutually to resolve the necessary mitigation and compensation.