



**JOINT RESPONSE TO  
EDF ENERGY'S STAGE  
2 PUBLIC  
CONSULTATION  
PROCESS**

FEBRUARY 2017

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## ACRONYMS GLOSSARY

AONB	Suffolk Coast and Heaths Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BBC	British Broadcasting Corporation
BEEMS	Building European Environmental and Maritime Skills
BLF	Beach Landing Facility
CLEA	Guidance on soil concentrations
DCO	Development Consent Order
DEFRA	Department of the Environment and Rural Affairs
DMO	Destination Management Organisation
EA	Environment Agency
EEEGR	East of England Energy Group
EFT	Emission Factors Toolkit
EIA	Environmental Impact Assessment
EPR	European Pressurised Reactor
HE	Historic England
HGV	Heavy Goods Vehicle
HIA	Health Impact Assessment
HLC	Historic Landscape Characteristics
HRA	Habitat Regulation Assessment
IAN	Interim Advice Note
ILW	Intermediate Level Waste (nuclear)
ISFS	Interim Fuel Storage Store
LAQM	Local Air Quality Management
LGV	Light Goods Vehicle
LIDAR	Light Detection and Ranging
LOAEL	Lowest Observed Adverse Effect Level

LVIA	Landscape and Visual Impact Assessment
MASHA	Multi-Agency Strategic Holding Area
MLSG	Minsmere Levels Stakeholder Group
MMO	Marine Management Organisation
MOX	Mixed Oxide Fuels
NE	Natural England
NR	Network Rail
PINS	Planning Inspectorate
PRS	Private Rented Sector
pSAC	Proposed Special Area Conservation
REPIR	Radiation (Emergency Preparedness and Public Information)
RSPB	Royal Society for the Protection of Birds
SAC	Special Area for Conservation
SCC	Suffolk County Council
SCDC	Suffolk Coastal District Council
SEGway	Suffolk Energy Gateway (A12 Suffolk)
SFRM	Suffolk Flood Risk Management (Strategy/Partnership)
SLA	Special Landscape Area
SOAEL	Significant Observed Adverse Effect Level
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
STEMC	Science, technology, Engineering, Maths and Construction
SuDS	Sustainable Drainage Systems
TEMPRO	Trip End Model Presentation Program
VISUM	Traffic modelling software
WDC	Waveney District Council
WSI	Archaeological Written Scheme of Evaluation





## Part 1: Overall representation

1. Suffolk Coastal District Council and Suffolk County Council (referred to below as “the Councils”) recognise the significant scale of the proposals being developed by EDF Energy, as the largest infrastructure project in the East of England, and its importance at a local, sub-regional and national level. The contribution to the nation’s energy resources and the economic opportunities it could afford locally are acknowledged to be positive benefits. These benefits have to be balanced against the impacts on the environment, the pressures on our communities and the transport network. The Councils see their role as maximising the potential benefits whilst minimising the inevitable negative impacts of a project of this magnitude.
2. The Councils continue to support the principle of a new nuclear power station at Sizewell C, recognising the significant benefit that such a development would bring to Suffolk. However, based on the information put forward in the Stage 2 Consultation, the Councils are not yet able to fully support the specific proposals by EDF Energy, as the impacts of the proposed development are not yet fully developed or evidenced. As such it is not possible to confirm a definitive position on many aspects of the emerging scheme nor comment fully as to whether the impacts have been appropriately mitigated. Therefore, the Councils are not yet fully convinced that the benefits of EDF Energy’s proposals are considered greater than the impacts. We will welcome the opportunity to further engage with EDF Energy to help them develop their proposals, including seeking to mutually resolve the necessary mitigation and compensation.
3. To be able to support the development in full, the Councils expect to see significantly more detail and information in the next stages of consultation in order to be able to consider and review and advise on the appropriate mitigation or compensation for the significant negative impacts of the development. The Stage 2 consultation documentation does not provide sufficiently detailed information or sufficiently robust and evidenced mitigation proposals as well as still considering a number of different options for aspects of the scheme. This includes a lack of detail around the modal split, which has significant consequential impacts on many of the proposals. Significant further work will be required before a Stage 3 consultation to satisfy the Councils’ requirements. We will seek the opportunity to further engage with EDF Energy to help them develop their proposals, including seeking to mutually resolve the necessary mitigation and compensation, and welcome the opportunity indicated by EDF Energy in their documents that there may be additional consultation ahead of Stage 3 on specific elements to help them develop their scheme.

## OVERVIEW OF KEY REPRESENTATIONS

4. The Councils consider the following areas to be our highest priority at this stage of consultation. Further technical detail is provided in the detailed report in the second part of this response.

### Environment

5. **On environmental impacts**, the Councils note that the nominated site lies on the Suffolk Heritage Coast, wholly within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) National Designations, and the laydown area during construction phase will cross the entire width of the AONB. As a result, mitigation and compensation is very challenging, and EDF Energy needs to pay great attention to the detail. Given this high environmental sensitivity, Sizewell C should be an environmental exemplar in the way that it is executed. The mitigation hierarchy must be followed and residual environment impacts compensated for through a Section 106 legal agreement. The fund established to compensate for the impact of the Dry Fuel Store is a welcome model which the Councils would like to explore further with EDF Energy.
6. The Stage 2 consultation is disappointing in that it fails 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. Some environmental issues are hardly covered at all, for example, some ecological surveys appear to have been overlooked. There needs to be further significant work to seek to survey, understand, quantify and qualify these impacts. As such is it difficult to comment in any real detail on many aspects of EDF Energy's proposals and their ecological impacts.
7. 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 as such are not satisfied that the Stage 2 consultation adequately recognises the status of, or the likely impacts of the proposal on, this nationally designated landscape.
8. With regard to specific proposals, key points related to environmental considerations that the Councils wish to highlight include:
  - We remain deeply concerned about **design of the main reactor site**, given that Sizewell C will be sited in a landscape of national and international importance and sensitivity, given its location within an AONB and on a designated Heritage Coast. The circumstances are unique in relation to new nuclear build, thus Hinkley Point C is of limited relevance in this respect. As not much further detailed information has been provided, we will still require more detail and guarantees on the quality of exterior finish on the nuclear buildings (which are a fixed part of the generic approved design), and a more

innovative approach from EDF Energy to the design of the non-nuclear buildings. The design of Sizewell C should be an environmental exemplar, and we expect improvement in the design and, where it is not possible to improve the design quality, a compensation package due to the lasting impact on and damage to the Area of Outstanding Natural Beauty.

- The Councils believe that the proposed **compensation for the loss of SSSI land at Aldhurst Farm** is welcome but not sufficient, and additional compensation will be required. We have stated previously that Aldhurst Farm can only be seen as part-compensation for this proposed SSSI loss, given the irreplaceability of some of the habitats involved; that Aldhurst Farm will not contain any wet woodland; and that reed bed and ditch habitats created will not be mature at the time of SSSI loss, should the Sizewell C proposal go ahead as currently presented.
- With regard to the **SSSI crossing options**, based on the information available at this point, and notwithstanding further evidence changing this view, the Councils consider that their preferred crossing option would be Option 3 (three-span bridges), as the option with likely least ecological impact on the SSSI. Option 1 may need to be revisited should further information relating to flood defence be forthcoming that demonstrates a causeway would be required.
- The Councils have significant concerns about EDF Energy's **spoil management strategy**. We are concerned about the possible severe environmental impacts from the proposed borrow pits in their location within or adjacent to the AONB, by changes to groundwater levels, and noise and vibration disturbance on the local wildlife. Equally, we are concerned about the visual and environmental health impacts of stockpiling at the proposed scale. Due to a lack of further information on the proposals and an absence of assessments of alternative options, it is recommended that the Councils do not support borrow pits and the proposed level of stockpiling due to its impact on the sensitive environment of the AONB, unless there is evidence that a) alternative options have been fully considered, including whether the option of moving soil to the RSPB site at Wallasea Island, which EDF Energy refer to as a fall back option, remains possible (see reference to Court of Appeal judgement in paragraph 79), and b) it is proven that the preferred approach does not have an unacceptable impact on the AONB, and any impacts can be appropriately mitigated or compensated for.
- There is a lack of information on the use and the visual impacts of the **contractor compounds**. The Councils would expect further clarification on parameters / restrictions on the use of the compounds.

- Regarding the **post-construction masterplan**, little or no modification to the proposals for this since Stage 1 has been included. Formal discussion with the Councils about the post-construction master plan is increasingly important in order to better determine phased restoration of construction sites, and best integration of wildlife habitat with historic landscape features.
- We remain concerned about the impact of the proposed development on **coastal processes and the marine environment**, including the impacts of the proposed marine facilities. We note that the proposed new defences do not appear to provide an adequate safety margin. There is concern about the impact of the development on the coast north and south of the site, including the need to assess the flood risk of the development proposal, including forecasting of future climate change of water levels. The Councils expect to establish with EDF Energy a robust process for ongoing monitoring of coastal change and Sizewell C's impacts. There should also be an obligation on EDF Energy to provide mitigation if actual change departs from anticipated baseline change. This will be difficult to achieve and will need to be backed by a strong legal document.
- In particular, we are concerned that the **proposed footprint of Sizewell C** is much further seaward than Sizewell B, which may have a significant impact on coastal processes and coastlines. No alternatives to this footprint have been provided. We recognise that pushing the footprint further inland would lead to further loss of the SSSI which would be significant and may be unacceptable, however we have not been presented with a full assessment of this alternative to consider. However, given the potentially severe impact on our coastlines and/or on the SSSI, the Councils may find that neither of these options are acceptable. We urge EDF Energy to consider further whether the layout of the site could be further condensed to reduce the land take, and thus avoiding the footprint of Sizewell C to be neither further seaward nor taking up further SSSI land.

Detailed suggestions are contained in paragraphs 20 - 198 of Part 2 of this response.

## **Transport**

9. Whilst the Stage 2 consultation provides detail on the potential transport elements of the proposal, there is limited evidence to support the analysis that has been undertaken. Further clarification is required in a number of areas related to EDF Energy's traffic modelling and gravity model. With regard to transport, the draft response to EDF Energy highlights information that needs to be provided to the Councils in order for a more informed response to be made, along with providing comments in regards to the proposed elements, and setting out the Councils' current position regarding the proposed mitigation.

10. With regard to the proposals in Stage 2, key points related to transport that the Councils wish to highlight include:

- The Councils remain supportive of a marine and/or rail maximised construction programme. It appears that the consultation offers either a rail or a marine maximised scenario. The Councils would urge EDF Energy to also fully investigate the option of a both **rail and marine maximised scenario**, and to indicate if that way the use of rail and marine transport could be further increased.
- The Stage 2 consultation does not provide assurances that either of these modes (marine or rail) will ultimately be used, and as a result, the Councils remain unconvinced that the development's impacts on the highway network will not be significantly greater than those identified in the Stage 2 Consultation, meaning that the impacts on the highway network may be grossly understated within their document. No evidence or supporting information has been provided that the transportation of 60% of construction materials by rail/marine will be achieved. As a result of this lack of evidence, the Councils will continue to assume that a **worst case** of 90 to 100% will be transported by road as a basis for testing and assessment at this stage.
- While the Councils support the principle of Park and Ride sites to transport workers to the development site, there is not enough evidence to determine whether the **total number of car park spaces** across the different sites (Park and Ride, on-site and at accommodation campus) is required.
- EDF Energy currently propose not to have a **Freight Management Facility**, but instead have a traffic incident management facility at its southern Park and Ride site at Wickham Market (Hacheston). The Councils strongly encourage EDF Energy to reconsider the establishment of a Freight Management Facility at a different location along the A14, as was proposed at Stage 1, and not to proceed with the traffic incident management facility at Wickham Market (Hacheston).
- Regarding the **road improvements at Farnham**, EDF Energy's options 1, 2 and 3 are unacceptable (no change / Farnham bend road widening / Farnham bypass – a one village bypass). Option 4, a 2 village bypass past Farnham and Stratford St Andrew, is seen by the Councils as the **minimum** mitigation required.
- Regarding the two options for **junction improvements at the A12/B1122 junction at Yoxford** put forward in the consultation, it is not evidenced that either proposed option (signalised junction or

roundabout) would work effectively, and there are some environmental and design concerns, so the Councils have not concluded on their preferred option and would like to engage further with EDF Energy on this.

- The **current proposals for the B1122** are in the Councils' view not appropriate to mitigate the impact of increased traffic volumes. We recognise that the B1122 has a relatively light traffic load for being a 'B' road, but it is the significant change in traffic volume and composition that gives rise to the extent of concerns, particularly for the residents of Yoxford, Middleton and Theberton. By contrast, the Stage 2 proposals from EDF Energy make very modest changes to the road, consisting of speed limits, pedestrian facilities and some road alignment. The Councils consider that, for the B1122 to work as the main access route to the site, significant further measures need to be undertaken to mitigate the impact on communities. EDF Energy is urged to look at alternatives, including those put forward in the AECOM report, and to reconsider the Accent report.

EDF Energy do not refer to **any further highway improvements in other locations**. The Councils recognise that the development may have wider impacts on the A12, the A14 and the cross-country routes, and further work is required to consider what impact the construction phase is likely to have on parts of these roads and how it might be mitigated. This may need to look at capacity and the impact of larger numbers of slow moving vehicles. Examples include the section of the A12 from its junction with the A14 northward through to the A1214, the single carriageway section of the Woodbridge bypass, and the single carriageway section between Woods Lane and the Wickham Market bypass. Improvements may also be needed on rural roads, and roads and public rights of way in and around Leiston, and mitigation for the impacts on the villages of Yoxford, Marlesford and Little Glemham need to be considered. Detailed representations are contained in paragraphs 199 - 379 of Part 2 of this response.

## **Socio-Economic**

11. We welcome EDF Energy's aims, objectives and aspirations around socio-economics, aspiring to limit any significant adverse economic and social impacts, while creating significant business, training and job opportunities for local and regional communities during construction and operational stage.
12. In all socio-economic areas, the Stage 2 consultation indicates generally appropriate aspirations, but there is not enough detail on delivery mechanisms to determine whether the aspirations are achievable. We are committed to

continue working with EDF Energy over the coming months, in advance of the Stage 3 consultation, to provide further input to their evolving proposals.

13. It is essential that any package of community impact mitigation proposed by EDF Energy delivers positive, sustainable local community legacy benefits that alleviate the disruption associated with the build and operation of Sizewell C, and that look at all issues holistically, given the intrinsic relationship between community impact and the accommodation, transport and environmental aspects of the Sizewell C proposal.

14. The Councils consider that:

- In order to maximise the **opportunities for local businesses** to win a significant share of the contracts for Sizewell C and other nuclear projects, and for the local economy to thrive as a result of the development, a local supply chain plan should aim to engage with businesses in the area and build local capacity.
- On **skills development and employment opportunities**, EDF Energy's commitment to local skills development is welcomed. While we are encouraged to see an increase of the proportion of expected homebased workers compared to Stage 1, this increase is only from 34% at Stage 1 to 36% in Stage 2; we would urge more ambition to increase this proportion further. Similarly, we would like to see the higher skilled categories of jobs with a much larger proportion for local workers, as at the moment the projected proportion of home-based workers in higher skilled jobs is disappointingly low.
- We note the 500 staff working at the offsite associated developments, which are in addition to the 5,400 working on the Sizewell C development itself. We would request clarity on whether and where these additional 500 staff have been included in the impact assessments. We also would like to see a breakdown of the different occupational roles required in the construction in relation to the labour demand curve and the total number of job roles of 25,000.
- We request further work on the **adverse economic impacts** of the proposal. This includes more robust modelling on the impact of skills displacement and suitable mitigations to reduce the effects of labour market displacement. This should include assessing and mitigating against impacts on key sectors such as tourism and other service industries, on 'key workers' such as on call firefighters, the police workforce and carers, and impacts on the available construction and technical workforce for other major infrastructural projects and established businesses in Suffolk.

- We do not feel that **the effect on tourism** is adequately addressed in the Stage 2 consultation. The whole visitor economy will be negatively affected and EDF Energy needs to consider the effects on a much wider basis.
- On **community cohesion**, the Councils welcome the specific actions/approaches to manage community effects of Sizewell C during both build and operational phases identified by EDF Energy in its Stage 2 consultation document, many of which build on learning from the Sizewell B build process. The Councils are committed to be involved in any conversations about how the community liaison/relations function would work, particularly given the concerns raised by local communities and partners about the impact of Sizewell C on community relations.
- Further detail is required to determine and mitigate the **impact of the proposal on public services**, to ensure that Councils and partners can effectively deliver their services to this increased population alongside Suffolk's current residents. This includes full assessment and mitigation of the impacts of Sizewell C on **demand for services** at GP practices, dentists and hospitals, and on school places.
- On **Blue Light/Emergency Services**, the Stage 2 consultation does not provide much detail on impacts on Blue Light/emergency services. Further discussion and work are required, particularly in relation to impacts on response times, safety aspects and workforce.
- As part of EDF Energy's **accommodation strategy** we expect robust measures to mitigate any impacts on the wider housing market and local services, and facilities associated with the demands of EDF Energy workers. We will look to explore opportunities for the Councils to work with EDF Energy around these impacts.
- The Councils need to be involved in relevant discussions about the enhancement of **local community amenities and facilities**.
- The Sizewell C development will have a significant impact on the **Leiston Household Waste Recycling Centre** (Lover's Lane IP16 4UJ) by increasing congestion, leading to increased risk of queuing along Lover's Lane. The County Council will seek early discussions about how the impact can be mitigated so that Leiston and the surrounding area can continue to receive a good recycling service.

The Councils would ask EDF Energy to recognise that there will be many individuals and communities impacted by Sizewell C who do not directly benefit from it. Our position is therefore that EDF Energy should provide



a **Community Impact Fund** in Suffolk. Detailed suggestions are contained in paragraphs 380 - 465 of Part 2 of this response.

### **Associated developments**

15. The Councils wish to highlight the following key points related to the associated developments (the proposed accommodation campus, temporary caravan accommodation, two Park and Ride facilities, a new temporary rail terminal and jetty and beach landing facility):

- While the Councils understand the rationale of an **accommodation campus** located at or close to the construction site, we remain concerned about the environmental impacts of the proposed site location, which may cause an overload on the sensitive environment of the AONB. The Councils expect a review of potential alternative sites for the accommodation campus, to consider whether or not there are credible alternative sites in proximity to the development site, which may be considered to have less environmental impact, more legacy potential and/or better community integration. The review should also consider alternative site layouts for the currently proposed site, such as a layout that spreads the development to the whole of the site area of option 1 without the sports facilities, to achieve lower level accommodation units.
- Whilst it may well be concluded that there are no credible alternative 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 therefore, on the business case for a campus in this location, will be expected to be provided. In such a business case, EDF Energy will be expected to provide details on alternative sites that have been considered during the pre-application process and a detailed justification of the proposed size of the campus, in terms of its maximum numbers. Proposals should also be provided to enable an increase and reduction of its size during the build, appropriate to the employee numbers on site.
- For any accommodation campus site, the Councils believe that sports facilities for campus residents should be provided at a site in Leiston, in order to provide benefit and legacy to the local community. The Councils propose that there are significant cumulative benefits with coordinating these development opportunities in the town to make the town more vibrant and strong. The Councils will welcome positive engagement with EDF Energy and others to embed the opportunities arising.
- Regarding the **temporary caravan accommodation site** to the East of Eastlands Industrial Estate, the Councils support the principle of caravan

accommodation, but require further information on the assessment of alternative sites, and the proposed site design.

- The Councils are content with the proposed **Northern Park and Ride site** at Darsham, subject to satisfactory access arrangements, with a useful location next to the railway station with potential legacy opportunities.
- For the **Southern Park and Ride Site**, the Councils would request consideration of sites further south of Woodbridge, closer to Ipswich, to reduce the number of cars on the road in the Woodbridge area. If EDF Energy considers the Wickham Market (Hacheston) site further, there may need to be improvements to the A12 between the dualled sections of the Wickham Market and Martlesham bypasses. As referred to above, the Councils also ask EDF Energy to revisit the establishment of a freight management facility at a different site instead of an incident management area co-located at the Southern Park and Ride Site, which would reduce the scale of development at this site.
- Regarding EDF Energy's two options for **rail access** to the development site, the Councils' current preference is for the green route, as this will reduce traffic through Leiston and on Lover's Lane.
- With regard to EDF Energy's three options for marine landing facilities, the Stage 2 consultation provides inadequate information in order for the Councils to give a preference. Further assessments around the impacts on coastal processes, landscape and marine ecology are required, as well confirmation of modal split.
- As to a **visitor centre**, no new information has been presented in respect of a new visitor centre. There is a suggestion that the visitor centre for Sizewell C could be accommodated with that for Sizewell B in a revised location not yet determined. The Councils are still supportive of visitor centre provision and consider that it should be available during and post-construction of Sizewell C. We await further details on any new proposals prior to commenting anymore.

Detailed representations are contained in paragraphs 466 - 553 of Part 2 of this response.

### **Consultation process and Stage 3 consultation**

16. The Councils wish to note the short consultation period of the Stage 2 consultation, which made it challenging for the Councils to coordinate this response.

17. The Councils urge EDF Energy to allow significantly more time for the Stage 3 consultation. Given the large amount of material expected to be submitted at Stage 3, the Councils feel they would need a significantly longer period than 8-12 weeks in order to be able to provide EDF Energy with a response of a quality that will help EDF Energy to move their proposals forward.

**EDF Energy’s Consultation Questionnaire questions**

18. Given their significant and wide ranging interests, the Councils did not wish to limit their response to the questions that EDF Energy raised in their Consultation Questionnaire, and accordingly did not structure their response in the same way as the questionnaire.

19. To provide EDF Energy an easy reference back to their Questionnaire questions, the table below cross references which paragraphs of the detailed response address each of the questions from the Questionnaire.

Consultation Questionnaire questions	Cross reference to paragraphs of the response
<p><b>1. Sizewell C Proposals: Overall</b></p> <p>What are your overall views on EDF Energy's proposals to build a new nuclear power station, Sizewell C, and associated development?</p>	<p>Paras. 1 - 3</p>
<p><b>2. Main Development Site: Environment</b></p> <p>What are your views on the proposed environmental impacts and proposed mitigation at the main development site?</p>	<p>Paras. 5 – 8 Paras. 20 - 98</p>
<p><b>3. Main Development Site: New access road Options to cross Sizewell Marshes SSSI</b></p>	<p>Paras. 61 - 69</p>
<p><b>4. Main Development Site: Managing Construction Materials, options for borrow pits, stockpiling</b></p>	<p>Paras. 70 – 80 Paras. 135 - 162</p>
<p><b>5. Accommodation: Overall Strategy</b></p> <p>What are your views on our overall Accommodation strategy for home-based and non home-based workers?</p>	<p>Paras. 419 – 429 Paras. 472 – 480 Paras. 545 - 551</p>

<p><b>6.Accommodation:</b> Campus Layout</p> <p>Three layout options</p>	Paras. 481 - 493
<p><b>7.Transport:</b> Overall Strategy What are your views on our overall transport strategy?</p>	Paras. 199 – 208 Paras. 265 – 296 Paras. 348 - 379
<p><b>8.Transport:</b> Rail Options of temporary rail extensions or new temporary rail terminal</p>	Paras. 250 – 264 Paras. 531 - 538
<p><b>9.Transport:</b> Sea  Options of wide jetty, narrow jetty and beach landing facility</p>	Paras. 127 - 133 Para. 235 Paras. 247 – 249 Paras. 539 - 544
<p><b>10.Transport:</b> Park and Ride  Southern Park and Ride site – Wickham Market (Hacheston) Northern Park and Ride site - Darsham</p>	Paras. 213 – 222 Paras. 494 – 499 Paras. 500 – 530
<p><b>11.Transport:</b> Road improvements – A12  Four options of mitigation at Farnham</p>	Paras. 297 - 336
<p><b>12.Transport:</b> Road improvements – Yoxford/B1122  Two options for junction of B1122/A12 at Yoxford Other B1122 road improvement proposals</p>	Paras. 338 – 343 Paras. 344 - 347
<p><b>13.People and Economy</b>  Do you have any comments on our people and economy proposals, including our approach to education, training and local supply chain opportunities?</p>	Paras. 380 - 465
<p><b>14.Consultation process</b>  Please let us know if you have any comments or suggestions about the consultation process?</p>	Paras. 16 - 19

## **Part 2: DETAILED RESPONSE OF THE COUNCILS**

### **Environment**

#### **Context**

20. The National Policy Statement EN6 and its Appendix EN6 Vol II, are very clear on the potential for environmental impacts from new nuclear development. Furthermore, EN6 Vol II, the Habitats Regulation Assessment and Appraisal of Sustainability paint the picture of significant environmental challenges at Sizewell with the need for avoidance and mitigation but also, probable, residual impacts, given the environment sensitivity of the area. Residual environmental impacts cover a number of areas of work, including on the national and internationally designated sites surrounding the development and national designated landscape within which the proposed development wholly sits. These likelihoods are clearly presented in the aforementioned DECC documents.

21. Government assessments in EN6 Vol II, include:

- a. 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. This could have an effect on the purpose of the designation.
- b. 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 land take from Sizewell Marshes SSSI that could lead to direct impacts.
- c. 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.

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

#### **Overview**

23. At Stage 1 the Councils commented that the nominated site lies on the Suffolk Heritage Coast, wholly within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) National Designations, and the laydown area during

construction phase will cross the entire width of the AONB. As a result, there is also limited scope for mitigation. The Councils noted:

- a. potential adverse effects on a number of nature conservation sites of European and UK importance (European Sites and Sites of Special Scientific Interest (SSSIs);
- b. potential 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;
- c. potential for significant adverse impacts on European Protected Species particularly bats; and
- d. a significant and long lasting visual impact on the natural beauty and special qualities of the AONB

24. There are a high number of nationally designated archaeological sites and listed buildings, and sites of high archaeological significance and potential. Proposals will have a direct impact upon surviving below-ground archaeological remains and a setting/visual impact upon above-ground heritage assets. 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. As such the Councils are not satisfied that the Stage 2 consultation adequately recognises the status of, or the likely impacts of the proposal on, the nationally designated landscape or wildlife.

25. With reference to the NPS and our previous comments at Stage 1, the Stage 2 consultation is disappointing in that it fails 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. There needs to be further work to seek to survey, understand, quantify and qualify these impacts.

26. The challenge is perhaps most appropriately summarised in the “Appraisal of Sustainability: Site Report for Sizewell” (Department of Energy and Climate Change, 2010), in Table 6.1 (see below). This table shows ‘double-negatives’ for both biodiversity and ecosystems, and landscape, given the known sustainability issues and that mitigation/negotiation will be difficult and expensive given the effects are considered to be of regional, national and international importance. This same table shows the challenges in delivering a project of this scale and the potential impacts at Sizewell in a number of other work areas, with all but communities and health receiving negative scores for all, or parts, of the project. This is a real sustainability challenge for the development.

27. The Councils will continue to work with EDF Energy as they develop their proposals to ensure the project is acceptable locally. However, a clearer and more open narrative on the environmental challenge and the likelihood of residual impacts in the Stage 2 consultation document would have been helpful, as work in most areas is still only provisional, and it feels that this Stage 2 consultation is underplaying the importance of the environment, which we are sure is not EDF Energy's intention.
28. The Councils have been working with EDF Energy and are aware that there is work in progress, however both ecology and landscape impacts are only very lightly referred to in the Stage 2 documentation. The Councils note a number of cases where the need for an ecological survey appears to have been overlooked. The nature and extent of likely impacts, both landscape and visual, have yet to be fully described, with little new information available at Stage 2. In the light of the sensitivity of the receiving landscape, this assessment should now be regarded as of highest priority going forward.
29. **As such it is difficult to comment in any real detail on many aspects of EDF Energy's proposals and their environmental impacts.**
30. Whilst we acknowledge that this consultation was always going to be a public consultation, providing information about the development, but with inadequate information about the environmental context and landscape within which the development sits, and challenges it will face, does not help the public understand the scale, or undoubted impacts, of the development. As such the Councils are very disappointed that EDF Energy did not choose to include the AONB Natural Beauty and Special Qualities document, which EDF Energy commissioned and developed in consultation with local councils and the AONB Partnership.
31. Understanding the full extent of impacts will be vital in agreeing that EDF Energy have made full and proper use of the mitigation hierarchy and at this stage the Councils have insufficient information to state whether EDF Energy's proposals look acceptable in ecological or landscape terms, for either local, regional, national or international features.
32. It is noted throughout the Stage 2 consultation documents that there is an extensive amount of seasonal ecological fieldwork to be carried out by EDF Energy in order to fully inform their EIA.

**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 '?'		

DECC, 2010, Appraisal of Sustainability: Site Report for Sizewell.

### Local Principles and the mitigation hierarchy

33. To reflect the importance the Councils and partner agencies place on the environment locally, and following the Stage 1 consultation, we have developed (with local partners) 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 here.



34. We consider these to be important documents that will frame our approach to whether The Councils feel that environmental proposals, particularly in the context of the mitigation hierarchy, including compensation and enhancement, are adequate in relation to the Sizewell C project.
35. Where mitigation falls short of our expectations of what should be expected in such a sensitive location, the Councils will be expecting robust and open discussions with EDF Energy about mechanisms for compensating and enhancing the local area. We will continue in our considerable efforts to work with EDF Energy and other local stakeholders to avoid and minimise impacts as far as possible and mitigate impacts where needed. However, honesty about the probability and extent of residual impacts from this development is fundamental, particularly given clear statements to this effect in DECC documents and the Councils' principle documents, aforementioned.
36. EDF Energy's design principles, as set out in Table 7.1, do not include offsetting as part of the principles for biodiversity. This has been previously raised by the Councils and is required to demonstrate that EDF Energy will follow the mitigation hierarchy, particularly in light of statements in DECC documents aforementioned, about the likelihood of residual impacts.
37. We note that construction is now predicted to be 10-12 years, rather than the 9-10 years set out in Stage 1. This will of course require consideration in terms of ecological and landscape impacts and the need to ensure that mitigation and compensation measures for construction impacts are even more robust. We look forward to seeing EDF Energy's work on many areas that appear to still be in progress.
38. We ask EDF Energy to note, for the record, 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 scale of these residual impacts is not comparable with Sizewell C proposals, the mechanism is one that the Councils would note is working successfully.

### **Design / Main reactor site**

- 39. We remain deeply concerned about design of the main reactor site, given that Sizewell C will be sited in a landscape of national and international importance and sensitivity, given its location within an AONB and on a designated Heritage Coast. The circumstances are unique in relation to new nuclear build, thus Hinkley Point C is of limited relevance in this respect. As not much further detailed information has been provided, we will still require more detail and guarantees on the quality of exterior finish on the nuclear buildings (which are a fixed part of the generic approved design), and a more innovative approach from EDF Energy to**

**the design of the non-nuclear buildings. The design of Sizewell C should be an environmental exemplar, and we expect improvement in the design and, where it is not possible to improve the design quality, a compensation package due to the lasting impact on and damage to the Area of Outstanding Natural Beauty.**

40. The general layout of this part of the development has been known since Stage 1 consultation. At that stage the Councils commented that the site lies within an AONB and on designated Heritage Coast, and therefore the highest standards of design and layout should be expected. Proposals could have a more dominant impact on the landscape than Sizewell B; the final scheme must be acceptable in the AONB. The amount of SSSI land taken for the permanent site must be minimised.
41. From an archaeological perspective, the reactor will have a direct impact upon any surviving below ground archaeological remains. There is potential for waterlogged prehistoric settlement, potentially of major significance. The spatial extent of surviving below ground archaeological remains is unknown, but potential settlement and riverine areas have been indicated by resistivity tomography; this needs testing through evaluation. Trenching is proposed for high potential areas. A mitigation strategy will need to be decided pending the results of evaluation. Further environmental sampling is also required in association with the Peat Strategy. Offshore works will require input from Historic England regarding palaeo-environmental potential and appropriate research and mitigation strategies.
42. In assessing the Stage 2 consultation and using the adjacent Sizewell B station as a benchmark we can better understand the scale of the development. A Landscape and Visual Impact Assessment (LVIA) process is ongoing and will be reported as part of the EIA. Once completed by EDF Energy, we will be in a position to fully understand the visual impacts of the development as well as the impacts on the character of the landscape and its special qualities. The current document confirms that the appearance of the reactor domes is a fixed part of the generic approved design and is not open for discussion or negotiation. However, given these will be a prominent feature in the protected landscape and there is no scope to alter nuclear building design, we will not only expect appropriate embedded mitigation (such as through innovative design of turbine halls and operational service centre), but that despite this the scale of residual impact on the AONB and Heritage Coast will rise, compared to what might have been achievable by mitigating reactor design, such as through Sizewell B style cladding of the dome. If this cannot be achieved satisfactorily (which we consider likely), appropriate compensation will need to be discussed and determined.

43. However, there is confirmation that the appearance and finish of the turbine halls and administration block is still open but limited detail is provided in this consultation for comment. It is expected that the Councils will be involved in the future evolution of design for these buildings and that a clear pathway for achieving good design for this project is set out including issues such as a design unity or hierarchy of elements. The turbine halls and operational service centre (administration block) at Flamanville (a European Pressurised Reactor (EPR) site under construction by EDF Energy in France), are innovative and well designed and we will expect a similar high standard of design and innovation at Sizewell C, particularly given its sensitive landscape location.
44. Part of the design success of the Sizewell B station is that the main visual components (the dome and the blue 'box') are principally all that is seen across the surrounding landscape. There is a notable absence of visible clutter from all the low level surrounding built infrastructure. This clutter only becomes apparent when one drives onto the site. The Sizewell C Stage 2 documents cite this as a key ambition: It states that landscape mitigation measures will aim to screen, as much as possible, low level infrastructure clutter, and this is welcomed. Landscaping will need to be suitably robust and lighting should be shielded and screened in order to minimise sky glow and impact on bats.
45. In addition to the LVIA, a seascape assessment will be expected to help to understand the likely impacts of any marine landing infrastructure as well as the design of turbine halls and operational service centre as seen from the sea. The Councils would ask that EDF Energy avoid light emission from inside the turbine halls towards the sea. The Sizewell C Design Principles: the local perspective, last updated and published in March 2014, were led by SCC and SCDC in collaboration and discussion with National Trust, RSPB, Suffolk Wildlife Trust and the AONB. It can be found [here](#).
46. EDF Energy needs to give further regard to the overarching theme of retaining public access to the beach and to the Suffolk Coast Path and Sandlings Walk, minimising the impact on the character or the AONB and people's enjoyment of it. Recreational access is a key element in this area of the AONB, it supports tourism and recreation for local residents. There is a risk that closure of permissive and designated paths within the network around the development site and the main construction zone, and the imposition of diversions and route closures, may result in the displacement of recreational users to other protected areas on the Suffolk coast creating undue pressure on the wider protected landscape.

#### **Impact on the SSSI and compensation at Aldhurst Farm**

- 47. The Councils believe that the proposed compensation for the loss of SSSI land at Aldhurst Farm is welcome but not sufficient, and additional**

**compensation will be required. We have stated previously that Aldhurst Farm can only be seen as part-compensation for this proposed SSSI loss, given the irreplaceability of some of the habitats involved; that Aldhurst farm will not contain any wet woodland; and that reed bed and ditch habitats created will not be mature at the time of SSSI loss, should the Sizewell C proposal go ahead as currently presented.**

48. At Stage 1, the Councils commented on the loss of 4.6ha of nationally designated Sizewell Marshes SSSI, and stated:

- a. The need to identify minimum width for the remaining SSSI corridor to function ecologically and to ensure that at least this width is provided.
- b. The need for replacement habitat to compensate for both direct and indirect impacts on SSSI features.
- c. Offsetting proposals are likely to be required for residual impacts.
- d. The need to reflect other designations and protected species likely to be affected by the proposal.
- e. The need for an ecological mitigation and management plan to minimise the impacts.

49. Since Stage 1 a comprehensive set of principles on ecological and other aspects (including hydrological matters) has been developed by the Councils, working in collaboration with National Trust, the AONB, Suffolk Preservation Society, Suffolk Wildlife Trust and the Woodland Trust, and can be found [here](#).

50. Stage 2 documents state a loss of up to 5.55ha of SSSI (depending on crossing options). We note that EDF Energy states that this presents a smaller area than set out in Stage 1. We would remind EDF Energy of section 3.2.11 in the Initial Proposals and Options Stage 1 document which clearly states only 4.6ha would be permanently lost (with 6.4 ha disturbed). We now have 5.55 ha permanently lost, versus 4.6 ha in Stage 1. An increase in area lost. Furthermore, some of that proposed now to be lost is much harder to replace, notably the Fen Meadow to the west of the main platform.

51. The Councils do not accept that Aldhurst Farm provides compensation for this loss, as stated in a number of places in the consultation. Aldhurst Farm was considered under the Town and Country Planning Act regime as an independent habitat creation project. The consideration of that planning application by SCDC (as the local planning authority) determined that the application was not being considered as compensation for the Sizewell C construction project but as an independent habitat creation scheme considered on its own merits. Having previously been involved in the design and evolution of the Aldhurst Farm habitat creation scheme it is considered that it only has

potential to be considered for part SSSI loss (Natural England will have to be involved in determining this) due to:

- a. the irreplaceability of some of the habitats involved in the SSSI;
- b. it not containing any wet woodland; and
- c. the reed bed and ditch habitats created will not be mature at the time of SSSI loss, should the Sizewell C proposal go ahead as currently presented in a reasonable timescale.

52. Furthermore, pending constructability and groundwater modelling for the main platform, we are yet to be convinced that further impacts on the SSSI, particularly from changes to groundwater, which may result in loss of features, can be ruled out.

53. 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.

54. The modelling should identify habitats and features including tree belts at risk of death or damage from changes in water levels, so that this can be included in the reasonable worst case for the Environmental Statement.

55. No map showing the SSSI boundary superimposed with the nuclear platform has yet been supplied, so we can see the exact extent of loss and where it is. Indeed the quality of all maps is poor with keys missing and detail of protected site and landscape boundaries missing. Again, this fails to give the public proper project context.

56. In addition, the Councils feel that the Stage 2 consultation underplays the importance of the SSSI, and its component parts, suggesting that Aldhurst Farm can compensate for habitat loss, on a habitat by habitat approach, rather than seeing the SSSI as being greater than the sum of its parts. The importance of the SSSI is, in significant part, due to the juxtaposition of its component wetland parts. EDF Energy must provide for further means of compensation for the loss of the SSSI proposed, and the Councils, alongside Natural England, will expect to be involved in this process. It is for this reason that the crossing footprint is such an important consideration.

57. To wrap up SSSI issues from the main platform development (pp141) in the groundwater section tells only half the story. Clearly ground water changes, however slight on this site, will have a profound impact on the ecological features. This needs to be modelled and assessed further.

58. The Councils note a number of cases, out with the SSSI, where the need for ecological survey appears to have been overlooked. As a statutory undertaker, EDF Energy clearly have a duty, as does the Secretary of State, to consider priority habitats and species, under sections 40 and 41 of the Natural Environment and Rural Communities Act 2006, as well as protected species and habitats protected by other legislation. These have generally been covered in the appropriate sections below.
59. We would like to highlight at this point that there is very little information on reptile mitigation in the consultation document. However we are broadly satisfied with EDF Energy's work in this regard, at this stage. Further detail will be required at Stage 3 but the Councils are working with EDF Energy on acceptable mitigation proposals. We are however aware that reptiles are already colonising intended receptor sites, negating EDF Energy's ability to claim these sites as mitigation for lost habitat. It is vital that EDF Energy keep reptile receptor sites clear of reptiles, lest available habitat is colonised and other receptor sites have to be found. If this colonisation continues, the longer the period between receptor site establishment and start of construction, the more likely the requirement for EDF Energy to have to find new receptor sites as existing receptor sites will have been naturally colonised.
60. The Councils have some concern that bats do not get a mention in section 7.9, which summarises main development site environmental information. 7.9.5 mentions some reptiles' works, but not bats or what is currently proposed. As EDF Energy are aware, there are significant populations of rare bat species using the main construction area and associated woodland and hedgerows, and this remains a key ecological concern for the Councils. 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.

### **SSSI crossings**

61. **Based on the information available at this point, and notwithstanding further evidence changing this view, the Councils consider that their preferred SSSI crossing option would be Option 3 (three-span bridge), as the option with least likely ecological impact on the SSSI. Option 1 may need to be revisited should further information relating to flood defence be forthcoming that demonstrates a causeway would be required.**
62. Four options for the SSSI crossing are proposed, two are causeway based and two are bridge structures. The options need to be considered from an ecological, landscape and flood defence perspective.

63. The SSSI land take is the key ecological constraint. Given the importance of the SSSI, and the importance of the SSSI corridor, across which the bridge or causeway must pass, the information as currently set out in Stage 2, appears to suggest a bridge option, most likely Option 3 (three span bridge) as being best suited due to the lower level of land take from the SSSI. Information on ecological permeability of the crossings does not clearly point to either bridge or causeway, albeit the causeway does appear to be less ecologically functional for some species, such as water vole. It would appear that groundwater levels will be slightly increased with a causeway.
64. EDF Energy has not provided any details regarding potential flood defence issues in relation to these options. In order to fully determine which option would be preferable, clarification with regard to potential for flood defence to be incorporated or required as part of the SSSI crossing is required prior to the next stage of consultation.
65. We are very mindful of the possible need for potential sea-level rise adaptation, which we believe could be a factor in EDF Energy's favouring of a causeway option (Option 1). However, if current arrangements to protect the power station from flood risk are robust, as stated in 7.4.77, building a causeway to insure against the possible future risk, to as yet unknown or undefined requirements, should not be considered a valid argument to build a causeway, which would take more land from the SSSI than currently required.
66. From a coastal processes perspective it is possible that the northern boundary of the site will need to be significantly robust and resilient should this northern area adapt to change and potentially become an open sea environment during the lifetime of the development. The SSSI crossing will be outside of the main platform site footprint, and so foundations for it may need to resist the potential open to sea environment that may develop within the overall site life, not just the development and operating life.
67. From a landscape perspective, a causeway may be least harmful in terms of impact on the landscape, taking into account better options for mitigation planting. However, while opportunities to enhance causeway banks from a local landscape perspective are notable, either structure would sit in the shadow of a much more significant landscape detractor (the main site itself), and as such the Councils' view is that the SSSI land-take minimisation is a key determining factor.
68. Thus, based on the information available at this point, and notwithstanding further evidence changing this view, the Councils consider that their preferred crossing option would be Option 3, with Option 1 to be revisited should further information relating to flood defence be forthcoming that demonstrates a causeway would be required. SSSI land-take should be minimised, and Option 3, as the option with least SSSI land-take should be the preferred option. EDF

Energy should note that crossing decisions should not be based on cost. Advice in relation to potential damage caused by entering the SSSI to construct and then to partially take away structures will be led by Natural England.

69. From an archaeological perspective, all proposals will have a direct impact upon any surviving below ground archaeological remains. For any of the SSSI crossing options, there is potential for waterlogged prehistoric settlement, potentially of major significance. The spatial extent of surviving below ground archaeological remains is unknown, but potential settlement and riverine areas have been indicated by resistivity tomography; this needs testing through evaluation. Trenching is proposed for high potential areas. A mitigation strategy will need to be decided pending the results of evaluation. Further environmental sampling is also required in association with the Peat Strategy. Offshore works will require input from Historic England regarding palaeo-environmental potential and appropriate research and mitigation strategies.

### **Spoil management / borrow pits**

70. **The Councils have significant concerns about EDF Energy's spoil management strategy. We are concerned about the possible severe environmental impacts from the proposed borrow pits in their location within or adjacent to the AONB, by changes to groundwater levels, and noise and vibration disturbance, on the local wildlife. Equally, we are concerned about the visual and environmental health impacts of stockpiling at the proposed scale. Due to a lack of further information on the proposals and an absence of assessments of alternative options, it is recommended that the Councils do not support borrow pits and the proposed level of stockpiling due to its impact on the sensitive environment of the AONB, unless there is evidence that a) alternative options have been fully considered, including whether the option of moving soil to the RSPB site at Wallasea Island, which EDF Energy refer to as a fall back option, remains possible (see reference to Court of Appeal judgement in paragraph 79), and b) it is proven that the preferred approach does not have an unacceptable impact on the AONB and any impacts can be appropriately mitigated or compensated for.**
71. The Stage 2 consultation introduces a significant change to the management of spoil material (this being material which is unsuitable for re-use within the construction site and consisting primarily of peat and clay excavated from the location of the Sizewell C station platform). Previous indication at the Stage 1 consultation was that this material was likely to be transported by sea to Wallasea Island in the Crouch Estuary. The latest consultation indicates a preference to dispose of this spoil material into borrow pits which will be excavated to source backfill material for the Sizewell C station site.



72. The location of the proposed borrow pits is of significant concern as they are very close to a number of residential properties in Eastbridge and actually surround the Round House, Eastbridge (which is not currently owned by EDF Energy). The movement of vast quantities of spoil and backfill materials will be extremely difficult without having significant noise and dust impact on nearby residential property.
73. Borrow pit and stock pile locations also have the potential to surround Ash Wood, an important site for bats. Shading, noise and light, may well drive bats out of Ash Wood, further compounding the bat challenge across the whole site.
74. In addition, pumping the borrow pit workings may result in significant increases in water discharged from the construction site to Sizewell Marshes and subsequently onto the Minsmere Levels and could raise water levels, damage habitats and compromise the integrity of the Leiston drain. The Minsmere Levels Stakeholder Group (MLSG) are also concerned that, conversely, if water draining onto the Minsmere Levels is reduced as a result of excess 'run-off' being pumped directly to the sea, then sensitive habitats could be compromised as water levels fall. EDF Energy needs to provide details on their ability to mitigate should actual changes deviate from the baseline – a monitoring regime will be required.
75. A number of options are described for borrow pit spoil movements but either way the land northwards towards Eastbridge will be very disturbed for at least a decade. The impact and scale of impacts arising from the area of activity needs to be fully explained and therefore understood. There is no preference for the combination for the borrow pits as we would prefer materials to be moved elsewhere. However, should borrow pits be considered, there needs to be consideration given to the following:
- a. Options for any achievable advanced screen planting should be realised as early as possible.
  - b. In order to fully understand likely impacts, the temporal phasing of operations will need to be described.
  - c. The visual and noise impact of the borrow pit sites cannot be underestimated;
  - d. The scale and duration of the spoil management needs clarity
  - e. Clearly terrestrial ecology goes beyond the need to mitigate SPA impacts. The site itself needs to be properly surveyed for priority and protected species, particularly given the proximity to known bat corridors and roosts. Both SPA and wider ecological issues should have been reflected in Table 7.7.

- f. Below ground archaeological implications must be considered as well as proposed assessment/mitigation strategies. The visual and settings impacts upon above ground designated heritage assets must be assessed and considered.
- g. The potential for the use of conveyor belts across the site for the movement of spoil.
- h. Safety implications for having a borrow pit configuration that necessitates crossing the Eastbridge Road.

76. Of the options presented, the Councils' slight preference is Fields 1 & 2, as 3 is too close to Minsmere and proposed marsh harrier mitigation areas. However, the Councils have concerns that the borrow pit scenario/options put forward are not acceptable given the supporting (or lack of) information currently provided. In the absence of full details on the assessment of the borrow pits and their locations as proposed, the Councils do not consider themselves to be in a position to support the borrow pit and stockpiling strategy as included in the Stage 2 documentation. It is considered that alternatives should be considered such as sites further away from the AONB boundary and Eastbridge.

77. This plan also indicates the use of a site stockpile which will be used for the storage of a variety of excavated material. The current scenario indicates this stockpile will grow to a height of at least 20 metres, and up to 35 metres, above ground level and will present a significant environmental challenge in preventing wind-blown dust to nearby residential property in Eastbridge. Site working on the stockpile at night is also likely to cause noise and light impact on nearby residential property which will be extremely difficult to mitigate. The potential relationship of the stockpile, with the accommodation campus proposed immediately to the west, is not given any consideration in this consultation by EDF Energy. The Councils consider that there may be alternative phased methods of working, which would not result in such substantial volumes of material in stockpiles at any one time. Furthermore, the alternative for stockpile arrangements linked to the accommodation campus (e.g. reduce height of the stockpile by moving the campus westwards with facilities off site) does not appear to have been given consideration, and the Councils would expect full consideration of all options to reduce the height of this stockpile, and minimise landscape and visual impact considerations of this element of the construction site.

78. The stockpile and borrow pit options, as currently set out, will most likely have significant residual impacts on landscape character and views across this part of the AONB, particularly from Whin Hill, the BBC Springwatch studio location, and also from Dunwich Heath. In addition, outside of the AONB there will be a

significant impact on residents in the locality and the setting of the AONB to be considered in full.

79. Whilst the reuse of local material is desirable, the current spoil management plan presents considerable concern and for this reason the Councils consider the original plan of moving spoil material by sea to Wallasea Island is preferable. This was referred to in our Stage 1 response where we also commented on what would happen to any remaining surplus material, the answer to which has yet to be clarified. However, this needs to be considered alongside the options for jetties, as proposed in the associated development section of this response. Due to a lack of further information on the proposals, and an absence of assessments of alternative options, the Councils cannot support borrow pits and the proposed level of stockpiling due to its impact on the sensitive environment of the AONB, unless there is evidence that a) alternative options, including the option of moving soil to the RSPB site at Wallasea Island which EDF Energy refer to as a fall back option, have been fully considered, and b) it is proven that the preferred approach does not have an unacceptable impact on the AONB, and any impacts can be appropriately mitigated or compensated for. We would ask EDF Energy to clarify whether the option of shipping excavated material to Wallasea Island remains possible in the light of the judgement that was made in the Court of Appeal on 17 November 2015 (R (Tarmac Aggregates Ltd) v Secretary of State for Environment, Food and Rural Affairs).

80. We would also draw your attention to the environmental protection comments at: para. 135 in relation to this area.

### **Main site laydown areas**

81. At Stage 1 the Councils commented that the area of land required for the laydown area – 140 hectares, extending 1.8km in from the coast across the width of the AONB – is a large area. We also raised the following concerns at Stage 1:

- a. The potential use of Pillbox Field given its visibility in the landscape.
- b. The proposed use of Coronation Wood should not destroy the current function of this woodland as a screen to the B Station complex.
- c. The use of land to the north of Abbey Wood that will overlook the Minsmere Valley to the north.
- d. The use of the land north of the possible Eastbridge Road Campus site (Option 1 in the Stage 1 consultation).

- e. The impact on the bridleway to the west of the main laydown area during the construction phase, as a key link in the network of north-south leisure routes along the Suffolk Coast and AONB.
- f. Objection to the laydown area north of Lover's Lane adjacent to the B1122 which would adversely affect the setting of Leiston Abbey, an important heritage asset.
- g. Whilst not objecting in principle to the use of the land east of the Eastlands Industrial Estate on the edge of Leiston, more work needed to be undertaken, both to aid the understanding of impacts on nearby residential properties from freight movements and transhipments, and from the use of Lover's Lane to move freight.
- h. A phasing plan for release of land and its restoration at the earliest opportunity should be developed.

82. At Stage 2 there is still limited detail about the landscape and visual impacts from the associated construction areas. The reality of these areas is that the scale of their impacts, and the likely impacts arising, will be in a state of flux depending on the stage of the progress in construction. However, we would note that 10-12 years' construction is "long term" in LVIA terms. There is an indication of worst case scenarios for stockpile heights but the true scale (mass and form) of these is yet to be revealed. It is clear that the landscape, visual and historic landscape and ecological impacts of the construction phase of the project are likely to be considerable. In particular, the setting's impact upon Leiston Abbey (a Historic England scheduled monument), and listed buildings in the vicinity, must be thoroughly assessed and given careful consideration.

83. The use of the construction laydown area although not permanent, is of a length of time that the duration will be long-term in relation to landscape visual impacts. The extent and magnitude of the landscape and visual effects may be even greater than those from the permanent development. The extent of impact on local visual amenity and tranquillity will be very substantial.

84. It is notable that the Appraisal of Sustainability, (AoS) at para. 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 the AoS identifies tranquillity as an issue under the theme of landscape in Table 1.1: Sustainable Development Themes and AoS/SEA Objectives. We have asked EDF Energy to undertake a tranquillity baseline, construction and operation modelling and would again reiterate the need for this work.

85. It would be possible to mitigate some of the visual effects with offsite advance planting in addition to the measures outlined in the consultation, although this

will do little to ameliorate the other effects on local amenity. Furthermore, the construction site will significantly change the fabric of the landscape over a large area, with loss of boundary features and woodlands over a wide area. Additional detail and assessment is required for options of advanced planting outside of the estate, a phased approach to restoration and in addition, the potential for the use of conveyor systems for the movement of bulk materials around the site to reduce the impacts of on-site plant movements on local tranquillity and air quality.

86. In general archaeological terms, various potential archaeological sites have been identified through cropmarks, LIDAR and geophysical survey across the areas covered by all elements of the main laydown area, including contractor compounds and the new site entrance, car park and access road. There is general moderate/high potential for settlement of all periods and multi-period archaeology of local and regional significance has been identified within all fields which have already been subject to trenched evaluation. An archaeological assessment in the form of geophysical survey and trial trenched evaluation has already been designed for agricultural areas, but the red outline has changed since Stage 1, so further amendments to existing WSI's will be required to include additional areas presented in the Stage 2 documentation. Metal detecting, walkover earthwork survey and trial trenching will be required for forestry areas (timing will be critical as the walkover earthwork survey will need to follow tree felling but occur ahead of any de-stumping). A methodology for de-stumping, ahead of metal detecting and trenched evaluation, must be agreed that will minimise ground disturbance, the use of stump-grinders is suggested. Stumps must not be mechanically lifted. Following evaluation, archaeological mitigation strategies will need to be designed for all areas.
87. 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 Character (HLC) data, and therefore proposals will have a direct impact. The loss of historic boundaries and other historic landscape features should be avoided.
88. It would appear from the map provided that the water management zone to the north east of the construction area is partially within the SSSI. This would not be considered appropriate particularly due to the existence of natterjack toads (an European Protected Species) in this SSSI. A map of the construction site with the SSSI and other designations clearly mapped would be beneficial and required in addressing concerns such as this.

## **Contractor compounds**

89. **There is a lack of information on the use and the visual impacts of the contractor compounds. The Councils would expect further clarification on parameters/restrictions on the use of the compounds.**
90. Clarification is particularly needed in relation to height, scale and massing of contractor office space. In addition, clarification on maximum height parameters for cranes on the site, and concrete batching plants, will be expected to be provided as well as information on any associated lighting and security fencing.
91. Below ground archaeological assessment, in the form of geophysical survey and trial trenching, will be required for all areas where contractors' compounds are proposed. The listed approach to dealing with archaeological surveys in woodland areas is acceptable as a first stage of assessment, however, we will require these areas to be subject to a programme of trial trenching following felling and de-stumping (using an appropriate methodology such as stump grinding) to assess for any surviving below ground archaeological remains and to develop appropriate mitigation strategies. Following evaluation, archaeological mitigation strategies will need to be designed for all areas.

## **Site entrance / access road / operations car park**

92. For the site access and entrance hub (p.156), the need to survey for priority habitats and species, as well as protected species, appears to have been overlooked. This is particularly concerning given its proximity to known bat corridors and roosts, so lighting will be a key consideration. There is also no mention of ecology and any effects of lighting from the operations car park (p.129), for example on bats or other features of the nearby SSSI.
93. For the site access and entrance hub (p.156) further detail regarding the archaeological screening proposals is required, and visual/setting impact upon all designated heritage assets in the vicinity must be carefully considered. Below ground archaeological assessment, in the form of geophysical survey and trial trenching, will be required for the new roundabout, the entire length of access road, and the new operational car park. Any areas affected by these proposals, which are new additions since Stage 1, need to be included in amended WSI's. Following evaluation, archaeological mitigation strategies will need to be designed for all areas.

## **Historic Environment**

94. Comments specifically relate to designated heritage assets that are scheduled ancient monuments (Leiston Abbey), listed buildings and conservation areas and their settings. Involvement to date from a historic environment perspective

has been limited to identifying viewpoints and settings of potentially affected designated heritage assets.

95. EDF Energy design principle no. 11 (p.109): *The design of the development will consider potential effects on designated and non-designated heritage assets, including buried archaeology and historic landscape character.*

96. Heritage asset sites that have the potential to suffer harm or significant harm to their setting directly from specific proposals presented:

<b>Heritage Asset (Listing)</b>	<b>Specific proposal</b>
Upper Abbey Farm, Leiston	Accommodation campus, administration building, buses, car parking, access arrangements
Group: Theberton House (II*), Abbey Cottage (II), Potter's Farmhouse (II), Bob's Cottage(II), Flash Corner Cottage (II), No's 1&2 Flash Cottages (II), Theberton	Accommodation campus, administration building, buses, car parking, access arrangements
Leiston Abbey (3 no. II; I) and a scheduled ancient monument	Accommodation campus, administration building, buses, car parking, access arrangements, green rail route
Fisher's Farmhouse, Leiston (II)	Green rail route
Darsham Old Hall (II), Darsham Conservation Area and buildings within, Darsham House (II*), All Saints Church, Darsham (I)	Northern Park and Ride
Old Post Office Stores, Farnham (II)	A12 Option 2 Farnham bend widening
Turret House (II), Turret Cottage (II), Elm Tree Cottage (II), Elm Tree Farm (II), St Mary's Church (II*) [all Farnham], St Andrew's Church (II*), 1-4 Corner Cottages (Grade II) [all Stratford St Andrew]	A12 Option 3 (or Option 2a according to Fig 4.9, p.31) Farnham bypass
Little Glemham Hall (I), Hill Farmhouse (II), Farnham Hall (II), Farnham Manor (II), St Mary's Church (II*) [all Farnham], Benhallstock Cottages, Benhall (II), Glemham Hall parkland – registered park and garden.	A12 Option 4 Stratford St Andrew and Farnham bypass.

97. The impacts arising include: lighting, landscape setting, noise, and introduction of vehicle movements, intensification of vehicle movements, new built forms and their scale, design and proximity, and boundaries.

98. The next stage of consultation is expected to be more detailed and as such, impact assessments will be needed that define the significance of affected heritage assets; what constitutes the setting of these heritage assets, what aspects and features of the setting contribute to the significance of the heritage assets; what effects will arise from changes to these features arising from the development proposals; and in what way these effects will impact upon the significance of the heritage assets. The effect of the temporary nature of some of the proposals should also be taken into account, their reversibility, and their permanence.
99. Sustainability criteria for Cultural Heritage and Landscape included at Table 12.1 (p.302) is agreed as appropriate.
100. Specific historic environment comments in relation to transport works have been included in the Transport section of this response.
101. With regards to the historic environment more generally, from an archaeological perspective the overall approach to above and below ground heritage throughout the document is reasonable. All elements of the proposal which involve groundworks should be scoped in for archaeological assessment, however, there are a number of areas included within the Stage 2 plans which are not currently covered by a WSI. Whilst archaeological evaluation has now commenced for some proposed development areas, there is still an extensive amount of archaeological assessment required and as such, the full impact of the development upon below ground archaeology cannot yet be fully ascertained. Following archaeological assessment, archaeological mitigation strategies will need to be developed for all elements of the proposal, however, this will need to be designed around detailed plans.
102. There are a number of areas of surviving early (pre 18th Century) enclosed landscape, as identified through Historic Landscape Character (HLC) data, across the development areas and therefore proposals will have a direct impact. The loss of historic boundaries and other historic landscape features should be avoided.
103. Further information regarding landscape enhancement schemes associated with the proposal is also required and SCC Archaeology should be consulted regarding planned works as part of these schemes, including any areas of proposed tree planting.

#### **Post-construction restoration**

104. **Little or no modification to the proposals for this since Stage 1 has been included. Formal discussion with the Councils about the post-construction master plan is increasingly important in order to better**



**determine phased restoration of construction sites, and best integration of wildlife habitat with historic landscape features.**

105. As set out in para. 7.4.9, EDF Energy intends to develop this vision further for Stage 3. In order to create a suite of locally characteristic and robust habitats that are capable of being managed sustainably (para. 7.9.9), a great deal of effective engagement is needed with consultees such as the Councils. Historic landscape features and habitats within and adjacent to the site that should be retained and incorporated into the post-construction landscape should be identified, and principles for their protection during construction agreed. In addition, a review and updating of the post-construction vision for the estate and restoration of the construction site, including development of the design and layout details for the operational phase access road, Goose Hill car parking, and relocated helipad, will be required.
106. The potential for the estate to be an improved habitat for wildlife post-construction is set out in the consultation documentation and is welcome. Given the current agricultural use of much of the area, a return to semi-natural habitat would be beneficial to support conservation efforts to conserve, enhance and improve ecological networks on this part of the Suffolk coast. It is possible that a return to semi-natural habitat across the estate could also improve tranquillity from the current baseline. This was our view at Stage 1 and remains our view now. However, this post-construction enhancement should not be seen as mitigating ecological impacts as stated in 7.4.6. Ecological impacts of construction must be mitigated or compensated for before or during the construction phase. The reason for this being that should (pre) construction-stage mitigation not take place, such as for bats, post-construction enhancement may be superfluous if construction impacts have damaged populations in the longer term.
107. The masterplan should not be solely ecologically led, albeit it will be a vital part of the Suffolk coast wildlife jigsaw. A principles document which can be found here was developed by SCC and SCDC in collaboration and discussion with the AONB and Suffolk Wildlife Trust and published in January 2014.
108. The potential for impact of habitat creation schemes on non-designated heritage assets, including buried archaeology, must be properly assessed. This may include a programme of archaeological investigation for sites not archaeologically assessed as part of the construction programme.

**Coastal and Marine**

109. **The Councils remain concerned about the impact of the proposed development on coastal processes and the marine environment, including the impacts of the proposed marine facilities. We note that the proposed new defences do not appear to provide an adequate safety**

**margin. There is concern about the impact of the development on the coast to the north and south of the site, including the need to assess the flood risk of the development proposal, including forecasting of future climate change of water levels. The Councils expect to establish with EDF Energy a robust process for ongoing monitoring of coastal change and Sizewell C's impacts. There should also be an obligation for EDF Energy to provide mitigation if actual change departs from anticipated baseline change. This will be difficult to achieve and will need to be backed by a strong legal document.**

110. At Stage 1, the councils commented that there was little detail on proposed works that may impact upon the coastal zone. Concerns were raised:
- a. about the temporary use of a jetty;
  - b. around the need for a robust monitoring and impact assessment process; and
  - c. that any structures must be designed to minimise impact on the wider coast, not just the frontage of the power station itself. The long-term implications on coastal processes of any development at Sizewell, its potential impact on others, and the potential impact of others actions or non-action (e.g. future of Minsmere Sluice), requires a coastal strategy to be developed. This should cover the future management of not only the entire Southwold to Thorpeness bay but also south to include the communities at Thorpeness and Aldeburgh and the features of Slaughden and Orfordness.
111. At Stage 2 we commented that coastal processes are much more unpredictable than implied in the documents as the Suffolk coast is very dynamic. There is not enough information provided in the Stage 2 documents to allow SCDC or coastal community representatives to understand how the potential impacts of the proposed works have been assessed nor what assumptions have been made on the extent or significance of potential impacts nor whether/what mitigation is proposed.
112. There is concern about the potential impact of the development on the adjacent coast, including sensitive sites at Minsmere, Thorpeness and Aldeburgh. There is a need to assess the flood risk to the development proposal, including forecasting the impact of future climate change on water levels. For a development of such a long life such as this, present day tools for prediction of marine environmental impacts have limited range and accuracy therefore it is essential that there is a rigorous, extensive and flexible programme of ongoing monitoring that is followed by intelligent and independent assessment, with power to require appropriate mitigation. A present day assessment of potential

impacts and mitigation is valuable, however it is probably limited to a period of 20 years hence.

113. It needs to be recognised that, with respect to marine processes, it will not be possible at the outset to identify all the mitigation potentially required over station life and post-decommissioning. There is a need for a guaranteed funding source to be used for future mitigation together with an obligation upon EDF Energy to respond to all future mitigation that may arise. This must be framed within a robust process that clearly allocates the roles and responsibilities of all parties, i.e. a Marine Monitoring and Mitigation Plan.
114. The transport modal split decision is key to completion of the design of marine structures so at this stage it is not possible to assess the form and potential impact of the jetty and BLF options. When the modal split decision is made and marine structure designs are known there should be a further period of interim consultation on those details in advance of Stage 3. It is expected that commercial fisheries would be included in these consultations and discussions.
115. EDF Energy's interest is limited to the site, the construction and the operating period. However, the council, in particular SCDC as coastal protection authority, must take into account for both unintended consequences of construction, and it becoming a permanent feature, and its anticipated increasing impact on coastal processes exacerbated by climate change on the coastline and local communities.

### **Platform location**

116. **The Councils are particularly concerned that the proposed footprint of Sizewell C is much further seaward than Sizewell B, which may have a significant impact on coastal processes and coastlines. No alternatives to this footprint have been provided. We recognise that pushing the footprint further inland would lead to further loss of the SSSI, which would be significant and may be unacceptable, however we have not been presented with a full assessment of this alternative to consider. However, given the potentially severe impact on our coastlines and/or on the SSSI, the Councils may find that neither of these options are acceptable. We urge EDF Energy to consider further whether the layout of the site could be further condensed to reduce the land take, thus avoiding the footprint of Sizewell C to be neither further seaward nor taking up further SSSI land.**
117. The footprint of the site is appreciably further seaward than that of Sizewell B, this will increase the risk of the main defence being exposed by coastal change and will lead to a requirement for earlier coastal interventions by EDF Energy or others than would otherwise be the case. These interventions may be of detriment to the adjacent coastline especially to the north but also potentially to the south. Further justification is needed, having regard to demonstrate that the

proposed area and location of the defences and the platform has included a detailed assessment of impacts on both the shoreline to seaward and the SSSI to landward, and that the proposed option is on balance the most appropriate choice. The Councils are mindful of the east-west position of the main platform and the degree to which additional requirements for additional security perimeter is pushing the footprint to the east. However, it is not evidenced why this could not be accommodated at the back of the sea defences, negating the requirement for additional footprint. Clearly sea defence matters are important, as are the impacts that any hard frontage at Sizewell could have on Minsmere to the north. We have some concern that in the operational life of the station, the beach in front of Sizewell C could roll back to the Sizewell C defence itself, exposing the hard defences. We are also concerned that design attempts to align the frontages of Sizewell A, Sizewell B and Sizewell C has ramifications for the SSSI. We would welcome further discussion of these points.

118. 7.4.59 states that the northern boundary of the site would become more maritime over time, as the Minsmere frontage is allowed to retreat in response to natural coastal processes. The MLSG in their recent newsletter (December 2016) consider that a great deal more evidence and analysis is needed to be provided to support EDF Energy's assertion of minimal impact on the Minsmere coastal frontage resulting from the extension seaward of the platform and sea defences beyond the frontage of Sizewell A and B. This could put greater pressure on the area south of the sluice and north of the Sizewell C site, thus significantly advancing the embayment process which will ultimately lead to the SSSI south of the Minsmere New Cut become estuarine earlier. The permanent beach landing facility and its armouring may exacerbate the situation further and there is very little said about the impact of dredging that may be required to keep the beach landing facility operational.
119. An additional concern of the MLSG is that of the 800 metre jetty which would be in place for the 10-12 years development phase. The likelihood of erosion resulting from the slowing of sediment movement is acknowledged but no information is given as to what an appropriate contingency arrangement might be. There is very little said about the potential impact of dredging that may be required to keep the jetty operational. There is no reference to the effect the jetty may have on navigation.
120. The statement regarding the northern boundary of the site becoming more maritime over time gives the Councils some concern, given the protected nature of Minsmere reserve and that any appropriate compensatory habitats for its loss, as an internationally important wetland, are far from being considered. The Councils have real concerns about the impacts of Sizewell C defences on erosion, particularly to the north, and statements such as those in this section of the consultation, do not give us confidence that EDF Energy are ensuring that their defences have no impacts to the north, or to the south. Furthermore,

information is required on what mitigation measures are potentially required in response to potentially credible shoreline change scenarios over the structure lifetime, in order to sustain the site.

121. EDF Energy need to be careful that their proposals do not inappropriately or inadvertently pre-determine future conservation policy or coastal management interventions. The future trajectory of the Shoreline Management Plan, and in particular Minsmere, should not be determined by Sizewell C.
122. Additional detailed information is required, including a properly researched baseline map, for the offshore seabed that shows the variations that have been observed over the past 5-10 years. Predicted models of the same area will be required, giving the various potential changes as a result of the construction of the proposed permanent and temporary structures associated with the development of Sizewell C. Having reference to these, EDF Energy would then be expected to be explicit about their mitigation should the actual changes deviate significantly from the baseline.
123. There is additional local concern about the safety of the Sizewell C site from coastal surges / tsunami risk. EDF Energy state that they have reviewed this but there is insufficient supporting information to clarify or address this concern.

#### **Impact of sea defences on public access**

124. There will be impacts on coastal access during construction and will hopefully be considered in more detail at Stage 3.
125. The design of the sea defence works caters for public access at a higher level than present, however in the longer term (post-construction) access along the shoreline to seaward of the defence may be affected by coastal change. The potential for this increases with a more seaward sea defence line, rock armour defences will be buried in year 1 but risk of exposure increases with its migration towards a more seaward location. The relationship of this with the jetties and beach landing facility (BLF) design is not complete and therefore cannot be assessed at this stage. In addition, the knock-on impact of the development will impact on access to the north and south of the site and this will need to be planned for.
126. 7.4.66 states the loss of coastal grassland of high value during construction, yet points to mitigation taking place post-construction. For mitigation to be effective it needs to be in place at the time the loss occurs, such as via translocation or improvements to management of the same habitat elsewhere, otherwise it is clearly not mitigating the loss, but rather replacing it after the event.

## **Beach landing facility (BLF)**

127. There is little if any assessment of likely landscape /seascape impacts arising from the beach landing facility. (See Associated development for reference to the jetties. LVIA will be necessary with particular regard to any cumulative impacts that may arise from other offshore developments (windfarms). Foreshore works (pp144) – ecological and HRA issues need to include the Southern North Sea proposed Special Area for Conservation (pSAC) for Harbour Porpoise, which appears omitted from 12.3.2. It is our understanding that a pSAC should be treated in the same way as a confirmed SAC.
128. It is assumed that the footprint of the main platform has influenced the positioning of the BLF – the jetty at the northern end of the site that will receive sea-delivered abnormal loads during the operational phase. There is potential that it could be used during construction subject to unresolved rail / sea / road options currently. The BLF is likely to be the first structure to impact on coastal processes when exposed by erosion, so there are benefits to it being as far landward as possible. This is a fundamental decision that has yet to be made as it impacts on many other aspects of the development. In addition, there is a long-term post-operation issue to be considered as it is unlikely that any defences installed will ever be removed. This effectively creates a permanent ‘hard point’ in an eroding coastline that will both have to be permanently maintained and will have an impact that increases into the future.
129. The temporary jetty is assumed likely to incorporate many large piles. Evidence is required to demonstrate: the potential impact of the structure on coastal process and the impact on the marine environment of installation and removal actions and that there will be no negative legacy issues.
130. There is an additional concern about marine water quality impacts during construction / dredging which has not as yet been satisfactorily addressed. It is appreciated that there is a Marine Management Organisation (MMO) licencing process but additional reassurance is requested by the Councils.
131. Whilst the proposed modifications to the sea defences will cause significant disruption, in terms of landscape effects, it has been demonstrated at the B Station that in the medium to long term a satisfactorily naturalistic sea defence can be constructed. The early phased approach to restoration of this area (para 7.5.35) is welcome and should be applied to other areas of the construction site to achieve a timely restoration and reasonably minimise the adverse impacts of the development.
132. Foreshore works (pp144) – ecological and HRA issues need to include the Southern North Sea proposed Special Area of Conservation (pSAC) for Harbour Porpoise, which appears omitted from 12.3.2.

133. In addition, there is potential for submerged archaeological landscapes and palaeo-environmental remains and there will be direct impact. The likely mitigation is that offshore works will require input from Historic England regarding palaeo-environmental potential and appropriate research and mitigation strategies.

### **Community engagement**

134. The Councils believe that knowledge and understanding on coastal issues, developed by EDF Energy through the BEEMS programme, should be shared with accredited coastal community representatives in a phased approach and under a controlled process to be agreed, in advance of Stage 3, in order to enable reasonable time for full scrutiny of this work and interpretations drawn from it. This will increase transparency and raise public confidence in outputs.

### **Environmental Protection Issues**

135. Having regard to the proposal it is known that a full Environmental Impact Assessment (EIA) and a 'safety case' will need to be presented to demonstrate that the presence of two nuclear reactors in this location on the Suffolk Coast can be positioned without presenting a health risk to the local community. A full and detailed framework will need to be provided (as referenced in the previous Scoping Opinion advice given to the Planning Inspectorate in 2014), detailing the following information:

- i. Site design and offsite facilities (i.e. marine landing point, rail head, road network improvements) once the various options have been determined;
- ii. Security;
- iii. Frequency and details of outages;
- iv. Waste storage facilities for the life of the site (i.e. Interim Spent Fuel, Intermediate Level Waste and Low Level Waste);
- v. Adverse impacts on existing Noise and Vibration and Air Quality parameters; and
- vi. Protection against flood risk.

### **Construction of the development site**

136. An EIA will need to detail the programme of civil engineering works to be undertaken during the constructional phase of the development and will need to include the following information:

- a. 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, and construction of new buildings);
  - b. The likely timing of these tasks (e.g. start and end dates where possible);
  - c. 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;
  - d. 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;
  - e. Full details of transportation infrastructure including the construction of any jetty or beach landing facility, new rail line and rail head, haul and access roads; and
  - f. Where multiple forms of material transportation are to be used; the proportions of materials to be moved via each route should also be indicated.
137. Hours of working will need to be detailed in the EIA for both on-site and 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 will need to be given to mitigating noise from night time and weekend works, in particular coastal operations, piling, rail and road movements.
138. The Councils asked for more information on sources of potable water in our Stage 1 response, on the basis of the limited information presented in Stage 1 consultation (s2.8.6 Stage 1 Environment Report), which simply states that EDF Energy will discuss with statutory undertakers (i.e. utility companies) the utility requirements for construction and operation. Details of potable water supply to service the construction site and any associated development in the vicinity, as well as the operational lifespan of the power plant, are still required including where it is coming from, how much will be required and any potential impact on the locality resulting from the supply. This information is still lacking in EDF Energy's Stage 2 consultation, despite the Councils repeatedly asking for clarification on this matter. The Councils note EN-1 Energy 5.15.3 which refers to: '.... existing water resources affected by the proposed project and the impacts of the proposed project on water resources, noting any relevant existing abstraction rates, proposed new abstraction rates and proposed changes to abstraction rates (including any impact on or use of mains supplies and reference to Catchment Abstraction Management Strategies).' The



consultation documents do not refer to how much potable water supply is needed during construction or operation of the power station. This could be extensive in what is one of the driest regions of the UK. EDF Energy are therefore urged to share their requirements and proposals for potable water supply as soon as possible post Stage 2 (including efficiency measures to reduce such requirement) with the Councils and Environment Agency to enable assessment to be undertaken. It is the Councils opinion that given the wording in EN-1 (above) this matter may be a matter for the DCO, rather than simply a matter between EDF Energy and utility companies, as stated in EDF Energy's Stage 1 consultation documents.

139. Details of potable water supply to service the construction site and any associated development in the vicinity will be required including where it is coming from, how much will be required and any potential impact on the locality resulting from the supply.
140. The construction site will be expected to operate within an agreed code and an element of this that links to para. 136 is the inclusion of water efficiency measures across the construction site and including associated development proposals.

### **Noise and vibration**

141. The consultation documents do not provide any specific noise or vibration data and this will need to be presented in a tabulated and mapped form in full within the EIA. Background noise surveys will need to be undertaken both at locations surrounding the development site and at various road traffic measurement points and the findings incorporated into the baseline for the EIA. Noise and vibration measurements shall be in line with the National Policy Statements (EN1 and EN6) and the current British Standards. A noise impact assessment, methodology and criteria should be agreed with our technical experts prior to the EIA.
142. Due to the length of the construction period, construction noise impacts are considered to be permanent rather than temporary. The noise impact assessment methodology and criteria should be agreed with our technical experts prior to being included in the EIA.
143. In line with the Noise Policy Statement for England the concept of LOAEL or SOAEL thresholds should be established for noise and vibration generating activities. The required action above a LOAEL is mitigate and reduce to a minimum, above a SOAEL is avoid.
144. The noise assessment shall consider all activities likely to generate noise and vibration. Predicted noise levels from activities associated with construction works shall be calculated and reported in line with appropriate national policy

and guidance. Reporting shall include receptor noise levels and magnitude of change. Noise contour maps shall be presented showing noise levels and noise change.

145. Where noise or vibration activities during the construction phase are predicted to be above LOAEL or SOAEL thresholds at noise sensitive receptors; the EIA shall detail all such construction methods and demolition works (e.g. coastal dredging and piling, access and haul road development, bridgeworks, earthworks, jetty or beach landing facility construction, rail line and rail head construction). 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) shall be presented together with appropriate noise mitigation measures to be taken either:
  - a. At source,
  - b. By way of barrier or shielding,
  - c. Any other form of mitigation.
146. 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'.
147. All transportation movements by road, rail or sea or essential construction works (e.g. dewatering, dredging, marine landing operations) which may be undertaken during the evening or at night should be particularly highlighted as these may cause sleep loss. Mitigation will be particularly important in these circumstances and should be detailed in the EIA. If mitigation is not possible, compensation may be considered appropriate.
148. 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.
149. Cumulative impacts should be considered, i.e. from simultaneous activities and across environmental disciplines.
150. A programme of monitoring should be implemented to ensure that agreed limits are not exceeded and that all the relevant conditions are met. The programme should be agreed with the Councils and written into Contractors Requirements.

151. It is possible that the local authority (SCDC) may 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**

152. The Stage 2 consultation does not provide any additional information to that presented within the Stage 1 document. Previous site surveys, including samples from some 150 locations across the Sizewell C site, have been undertaken for the presence of Contaminated Material. These surveys have 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.
153. Details of all material (e.g. soil, peat, contaminated material) removed from site for disposal purposes or safely encapsulated on site shall be notified to both the Environmental Protection Team at SCDC and the Environment Agency. Validation shall be required following this remediation action to indicate the site is suitable for its new specified use.
154. 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.

### **Air quality and dust**

155. In terms of assessing vehicle emissions during the construction phase and the potential impacts to local air quality at sensitive receptors and designated sites, the comments included in the below section (Air Quality During Site Operation) are applicable.
156. The Stage 2 document summarises some of the potential construction site works which may give rise to dust. The EIA should detail all potential construction site works and likely locations, risks and potential impacts associated with dust deposition and sensitive receptor exposure to particulates, specified together with the particular methods of dust suppression to be used for each specific activity.
157. The EIA should include details of any baseline dust deposition monitoring undertaken throughout the study area and identify the most susceptible receptors to dust deposition, including designated ecological sites. This data should be used to derive a suitable deposition threshold(s) as part of the dust management and monitoring plan for the proposed development. This will enable the effectiveness of proposed mitigation measures and construction

activity programming to be monitored throughout construction and updated as necessary.

158. The Stage 2 document states 'The assessment of air quality impacts from the construction and operational phases will inform the identification of mitigation measures, where necessary.' There is no additional assessment detail provided. At the next stage (or before if appropriate), we will need to see the results of detailed Air Quality Assessment and any suggested mitigation in order to determine whether there are any predicted exceedances of the Air Quality Objectives set in the Air Quality Standards Regulations 2010 for the pollutants included in the 'Local Air Quality Management Regime' namely; carbon monoxide; nitrogen dioxide; benzene; lead; sulphur dioxide; and particulate matter (PM10 and PM2.5). (Note: for these purposes Sizewell Beach should be included as a relevant receptor location for pollutants objectives with averaging times of 15 minutes and 1 hour).
159. We would strongly recommend the adoption of a minimum Euro VI emissions standard for all construction vehicles associated with the site. Stage 2 advises that in some areas of the road network (B1122 Yoxford – location R) there is a predicted increase in HGV and bus flows of 722%. This will have an impact on the air quality that residents along these routes are exposed to and adoption of Euro VI emissions standards would be a way to provide mitigation for all traffic routes.
160. Atmospheric concentrations of particulate matter (PM10 and PM2.5) arising from all potential construction works, loading operations and vehicle movements including shipping, which may give rise to particulate matter emissions, 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 limit values included in the Air Quality Standards Regulations 2010.
161. If at any time any of the Air Quality Objectives are predicted to be exceeded by the above mentioned activities, more detailed assessment will be required. This may include monitoring at relevant receptor locations, detailed computer modelling and investigations of mitigation options and solutions to reduce pollutant concentrations.

## **Lighting**

162. The Stage 2 consultation does not provide any additional information to that presented within the Stage 1 Pre-Application document. The EIA shall detail: the location, height, design, sensors and luminance of all construction site floodlighting and all mitigation measures used to;
  - a. Limit obtrusive glare to nearby residential properties; and

- b. Minimise sky-glow.
- c. The mitigation measures shall also indicate the extent of light reduction likely to be achieved. Representations have been made to the local authorities by the DASH Astro Society (Darsham and Surrounding Hamlets Astronomical Society who have gained Dark Sky Discovery Status for Westleton Common and are therefore concerned regarding potential use of security lighting at the northern Park and Ride at Darsham and the accommodation campus at the construction site. It is important that local concerns such as this are taken into consideration prior to Stage 3 of public consultation.
- d. Table 10.2 (pp235) – we would expect to see the same ecological mitigation measures for lighting at the southern Park and Ride site (particularly given Whin Belt is known to support bats), as EDF Energy have proposed at the northern Park and Ride site, given the proximity of woodland on both sites, both with records of bats.

### **Health and safety**

- 163. The EIA shall detail a health and safety risk analysis for site workers and members of the public, this should be provided for the constructional phase of the works.

### **Site operation**

#### **Noise and vibration**

- 164. The noise impact assessment methodology and criteria should be agreed with our technical experts prior to the EIA. In line with the Noise Policy Statement for England, the concept of LOAEL or SOAEL thresholds should be established for noise and vibration generating activities. The required action above a LOAEL is to mitigate and reduce noise and vibration to a minimum. Noise and vibration above a SOAEL is to be avoided.
- 165. The noise assessment shall consider all activities likely to generate noise and vibration. Predicted noise levels from activities associated with site operation shall be calculated and reported in line with appropriate national policy and guidance. Reporting shall include receptor noise levels and magnitude of change. Noise contour maps shall be presented showing noise levels and noise change.
- 166. For operational noise, e.g. general activities, planned maintenance, grid reconnection, stand-by generator noise levels shall be reported as LAeq(15min) during both day and the night-time. Where noise or vibration activities during the site operation are predicted to be above LOAEL or SOAEL thresholds at noise sensitive receptors, the EIA shall identify the activities /

processes and present potential mitigation measures. The effectiveness of proposed mitigation shall be reported including resultant magnitude of change. Proposed mitigation should achieve Best Environmental Practice.

167. Activities which may be undertaken during the evening or at night should be highlighted. Mitigation will be particularly important in these circumstances and should be detailed in the EIA. If mitigation is not possible, compensation may be considered appropriate.
168. Any other relevant acoustic or vibration data, e.g. tonal and /or impulsive characteristics low frequency noise, which may impact on noise sensitive receptors should also be made available within the EIA.
169. Cumulative impacts should be considered, i.e. from simultaneous activities and across environmental disciplines.
170. 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. A liaison committee for dialogue with local members of the public should also be considered.
171. Noise is a big problem for some of the SPA features, such as marsh harrier, yet little information has been presented. Also percussive noise from marine piling may be a significant concern for harbour porpoise and other cetaceans.

### **Air quality and dust**

172. The Stage 2 consultation document (para. 6.8.11) states that traffic emissions modelling for the purposes of assessing air quality is based on peak traffic scenario, which also assumes that:

“6.8.11...not all of the improvements in air quality anticipated to take place by the Government would actually occur. As such, two future air quality scenarios have been considered.

6.8.12. in the first future air quality scenario, background air quality is not assumed to improve from 2014. In the second scenario, the improvements in vehicle emissions anticipated by 2024 are also achieved. The first future air quality scenario is more conservative than the second future air quality scenario”.

The statements in para 6.8.12 are unclear. Further information is required from EDF Energy as to the assumption made in the first scenario with respect to the vehicle emissions factors to be included in this model scenario (i.e. choice of year prior to 2024 to make this a conservative scenario). In addition,

confirmation of the year of pollutant backgrounds to be used in the second scenario is required.

173. As an added layer of conservatism, the use of Highways England's Interim Advice Note (IAN) 170/12v31 guidance (Highways England, 2013, Updated air quality advice on the assessment of future NO<sub>x</sub> and NO<sub>2</sub> projections for users of DMRB Volume 11, Section 3, Part 1 Air Quality) should be considered as part of the EIA assessment. The IAN which provides a methodology to uplift future projections of NO<sub>2</sub>, given that real world improvements in NO<sub>2</sub> have not been realised near to roads, as had been expected. This is mainly attributed to an increased proportion of diesel vehicles and the disparity between laboratory and real-world emissions testing. Future versions of Defra's emission factors toolkit (EFT) are expected to address this disparity as real driving emissions testing is increased.
174. The EIA should include predicted cumulative concentrations of the respective air pollutants at the relevant sensitive receptors and designated sites, without and with the proposed development in operation. These values should include background levels, vehicle emissions contributions, and process contributions from combustion plant and other committed development, with a comparison versus the respective pollutant limit values. The significance of any changes to local air pollutant levels as a result of the proposed development should be reported in accordance with EIA Directive requirements incorporating professional judgement where necessary.
175. As stated in the Stage 2 consultation document, pollutants to be addressed include, but may not be limited to, NO<sub>x</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> with respect to vehicle emissions, with the addition of SO<sub>2</sub> and CO from operational combustion plant. Furthermore, nutrient enrichment of sensitive habitats within designated ecological sites (e.g. nitrogen deposition) should be considered in relation to both vehicle and operational plant emissions.
176. The EIA shall detail the atmospheric concentration of the set pollutants in the Local Air Quality Management Regime namely; carbon monoxide; nitrogen dioxide; benzene; Lead; sulphur dioxide; and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) which arise from site related Combustion Processes including stand-by equipment. These pollutants shall be predicted at the nearest relevant receptor locations. The predicted concentrations for each receptor shall be formatted for comparison with the Air Quality Objectives in the Air Quality Standards Regulations 2010 for Local Air Quality Management in England. (Note: for these purposes Sizewell Beach must be included as a relevant receptor location for pollutants objectives with averaging times of 15 minutes and 1 hour.)

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<sup>1</sup> Highways England (2013) *Updated air quality advice on the assessment of future NO<sub>x</sub> and NO<sub>2</sub> projections for users of DMRB Volume 11, Section 3, Part 1 Air Quality*

177. The atmospheric concentration of the above listed pollutants resulting from any combined emissions arising from Sizewell A, B and C shall be predicted at the nearest relevant receptor locations (this should include emissions from standby equipment). The predicted concentrations for each receptor shall be formatted for comparison with the Air Quality Objectives in the Air Quality Standards Regulations 2010 for Local Air Quality Management in England. (Note: for these purposes Sizewell Beach must be included as a relevant receptor location for pollutants objectives with averaging times of 15 minutes and 1 hour.)
178. If any of the afore-mentioned Air Quality Objectives are predicted to be exceeded by the site related Combustion Processes, including stand-by equipment, more detailed assessment will be required. This may include monitoring at relevant receptor locations, detailed computer modelling and investigations of mitigation options and solutions to reduce pollutant concentrations.
179. Full details shall be submitted regarding the type, location, chimney height requirements and emissions from the Standby Diesel Generators.

#### **Other ancillary matters**

180. 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)

#### **Health and Safety**

181. 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 during once Sizewell C is operational.
182. 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.
183. 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.

#### **Radioactive discharges**

184. At Stage 1, the Councils commented that Stage 2 consultations should include likely volume, character and profile of radioactive waste arisings, including throughout the decommissioning phase. Wet or dry storage is not referred to as a preferred option. Contingency arrangements should be in place should it prove impossible to deliver a Geological Disposal Facility for fuel nationally. A



precedent was set by the creation of a Sizewell B Dry Fuel Store Amenity and Accessibility Fund, and a similar requirement should be made in respect on the Sizewell C Interim Spent Fuel Store (ISFS). The destination for operational low-level waste is unclear; this should be set out in more detail at Stage 2 and reassurance sought from EDF Energy that the intention on decommissioning is for the complete radiological clearance of the Sizewell C site, and for it to be fully de-licensed (excluding the ISFS and ILW store, in the interim). It is acknowledged that we are now at Stage 2 of a 3 stage process and therefore this level of detail may not be forthcoming until Stage 3.

185. Following on from this second Stage 2 consultation, the EIA should include any proposed future use of Mixed Oxide Fuels (MOX) and comment on the radiological significance and justification for this fuel if used.
186. The EIA should identify and compare baseline/existing radiological data with any projected data for the new Sizewell C site.
187. 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.
188. 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.
189. The issues surrounding the utilisation 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.
190. 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.

## **Decommissioning**

191. Decommissioning is covered by site licencing and the Nuclear Decommissioning Authority. However, the Councils still have an interest in obtaining information on final site clearance and would therefore ask for details of:
  - i. The types of works that will be undertaken,
  - ii. The removal of existing structures,
  - iii. The disposal of all remaining waste material, and

- iv. The suitability of the site for restoration or future use.

### **Flood and Water management**

- 192. The EIA should detail any potential impact on hydraulic continuity (e.g. dewatering and coffer dam construction) which may adversely affect private water supply quality and should therefore be identified together with the proposed measures to protect the source.
- 193. There is some disappointment in the consultation document as it fails to recognise SCC as the Lead Local Authority, the Suffolk Flood Risk Management (SFRM) Strategy or Partnership or Local Sustainable Drainage Systems (SuDS) Guidance. It is understood that while this is a nationally significant infrastructure project, its potential impacts are in the majority local to the immediate area and Suffolk, hence the need to recognise and apply local policy and strategy. Incorrect reference is made to the Environment Agency as being the responsible body for consultations on surface water, groundwater and ordinary watercourses, this needs to be amended to refer to SCC as the Lead Local Authority. Changes in flood risk are not just associated with changes in surface water run-off volumes but also rates of flow, this does not appear to be acknowledged in the document and should be. As well as best practice techniques (7.9.56), the SFRM Strategy should be applied. In addition, SCC is able to provide both fluvial and pluvial flood maps for the development site which can be requested at any time.
- 194. The MLSG has raised some ongoing concerns with regards to the coast and shoreline to the north and south of the development and the ground water systems within the Minsmere Levels. The impact for the Minsmere coastal function, the inland drains, groundwater systems and the functioning of the sluice are of concern during construction and potentially during the operational phase of Sizewell C. They are also concerned (and we share this concern) that if this information is not made available until a Stage 3 consultation, they would have inadequate time to properly scrutinise the proposal.
- 195. At 7.4.44 the proposal to route surface to outfall at sea will require accurate modelling with high degree of confidence in order to assess the impact of what could give rise to long term dewatering of the area; surface water derived from rainfall, which currently will to a degree percolate into the ground, hence currently contributing to groundwater levels. The intention is to pump treated foul water and any excess 'run off' collected in water management zones, from the main construction site into the sea through an outlet 300 metres from shore. This could lead to potential blockage of the drainage corridor of Sizewell Marshes SSSI and a reduction in natural drainage from the land taken up by the construction site. This is a concern shared by the Councils and the MLSG. The cumulative impacts of the Sizewell C development on the Minsmere Levels

and Sizewell Marshes SSSI with the supporting evidence should be set out in advance of a Stage 3 consultation ideally.

## Transport

### Introduction

196. A request for information was submitted to EDF Energy by SCC on Tuesday 13 December 2016. At the time of producing this Stage 2 consultation response, a response has not been received from EDF Energy, and so has not been taken into consideration.

### Development Proposals Summary

197. **Whilst the Stage 2 consultation provides detail on the potential transport elements of the proposal, there is limited evidence to support the analysis that has been undertaken. Further clarification is required in a number of areas related to EDF Energy's traffic modelling and gravity model.**

198. This response highlights information that needs to be provided to the Councils in order for a more informed response to be made along with providing comments in regards to the proposed elements, and setting out the Councils' current position regarding the proposed mitigation.

199. 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, however, it is reasonable at this stage to identify issues to ensure that a dialogue can continue that will ensure that any information gaps are fully closed prior to any formal DCO submission.  
Transport Strategy

### Overview

200. EDF Energy acknowledges that the construction of Sizewell C would involve the daily movement of a large potential workforce plus the need to transport large amounts of building materials and equipment. EDF Energy states 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, where reasonably practicable, in advance of effects being felt".

201. At Stage 1, the Councils stated in their response that they encourage the use of freight delivery by rail and sea as this will minimise the number of delivery vehicles on the highway network. They requested that further information on quantities and modes should be urgently provided so that the full impact of the proposals can be assessed.

202. **At Stage 2, the Councils remain supportive of a marine and/or rail maximised construction programme. This is consistent with advice in**

**National Policy Statement EN-1. It appears that the consultation offers either a rail or a marine maximised scenario. The Councils would urge EDF Energy to also fully investigate the option of a both rail and marine maximised scenario, and to indicate if that way the use of rail and marine transport could be further increased, including taking account of current and projected shortages of capacity on the wider rail system beyond Ipswich.**

203. However, the Stage 2 consultation does not provide assurances that either of these modes (marine or rail) will ultimately be used, and as a result, the Councils remain unconvinced that the development impacts on the highway network will not be significantly greater than those identified in the Stage 2 Consultation, meaning that the impacts on the highway network may be grossly understated within their document.
204. Importantly, EDF Energy will need to consider and provide details of the contingencies (and supporting network modelling) that will be put in place to safeguard the highway network in the event that rail and/or marine transportation fails to materialise.
205. Whilst details of the potential transportation options for construction materials (particularly the proposal for sea and rail transport, i.e. jetty and extension to railway line) have been identified, no evidence or supporting information has been provided that the transportation of 60% of construction materials by rail/marine will be achieved. **As a result of this lack of evidence, the Councils will continue to assume that a worst case of 90 to 100% will be transported by road as a basis for testing and assessment at this stage.**
206. It is recommended that the traffic impacts for each development scenario, including the minimal marine/rail option, are provided to the Councils and clearly evidenced so that further discussions and a worst case assessment can be undertaken. The Councils need to understand the potential worst case scenario and the relative frequency of the worst case scenario.
207. The Councils also strongly recommend that the base traffic model is agreed as soon as possible to allow future traffic models to be fully assessed and to avoid any potential future delays.
208. The proposed development has the potential to have a significant impact on non-motorised users within the A12 villages and the proposals need to minimise the number of additional HGV movements along the network, this is likely to be with the provision of a bypass arrangement and effective management of the construction traffic.
209. The proposals are likely to have a negative impact on road safety, with a significant increase in HGV movements travelling along B1122 and to the south

along A12. The proposals are likely to increase severance in a number of locations, by increasing traffic numbers and thereby potentially reducing crossing opportunities, including along the B1122 and A12.

### **Construction Workforce**

210. At Stage 1, the Councils commented about the movement of the construction workforce that they felt the assumptions used in the gravity model underestimated the level of car traffic; this would impact on assumptions used for the Park and Ride sites and on-site parking provision. The Councils also stated at Stage 1 that the level of driving provided for in the Car Usage section of the Transport Strategy would be unacceptable. Particularly in the case of the area to the east of the A12 where there is scope for more sustainable modes of transport such as direct bus pick-up, cycling and walking by improving and extending the existing rights of way.
211. At Stage 2, we still do not have full information to alleviate our concerns. Separate details are required on the actual travel mode and peak travel times of each group of employee (e.g. home based / non home based) to allow a more detailed picture to be drawn up on the demand for the separate facilities e.g. what proportion of the construction workforce staying at the on-site accommodation has been assumed to use the Park and Ride service, how many by rail, how many using local bus services.
212. Evidence is required to understand the number of off-site trips that have been assessed for the non-home based construction workforce.
213. Further details are needed to understand the assumptions that have been made in relation to the potential for non-home based workers returning home at working week or shift end and have any other allowances been made to accommodate those workers that leave the site accommodation at the end of shift to take advantage of local facilities, therefore these trips could add to the network demand at key times including peak holiday-maker journey times, festivals and outages.

### **Park and Ride Strategy**

214. **The Councils support the principle of Park and Ride sites to transport workers to the development site.** Comments about the specific Park and Ride sites proposed can be found below under Associated Developments.
215. Further details are required to identify the target audience and anticipated turnover associated with the proposed Park and Ride facilities to demonstrate their effectiveness and capacities in terms of effective operations and potential impact on the neighbouring highway network.

216. The assumptions in terms of operational capacity of the Park and Ride should be identified (e.g. 85% full would be a reasonable assumption on the basis that drivers become frustrated searching for a space).
217. Detail is required on the Park and Ride service frequency that will be provided to confirm and understand the size of fleet that will operate during peak and off peak hours at each Park and Ride facility. Any submission should include an assessment to identify whether the proposed facility can cater for its demand. A high turnover of bus services must be achieved during shift change to provide an attractive facility.
218. Given the lag between arrival/departure profiles at the Park and Ride and start/end of shift due to travel distance with the construction site, evidence is needed to show that the highway impact of Park and Ride activity been modelled independently to provide assurances that the proposed junction arrangements are effective during times of peak demand.
219. It should be noted that both Park and Ride sites have the potential to be used as relatively long stay car parks, given the likelihood that a proportion of the workforce lodging at the accommodation campus could use them in the absence of a parking allocation on-site. The Councils would need clarification on whether this is intended and the consequences of such an arrangement.
220. Additional information is required so that the Councils can understand the consideration that has been given to the likelihood that construction workers lodging at the on-site accommodation will return to the Park and Ride at the end of their shift and whether these have been included in the service patronage figures and in any associated traffic generation.
221. The Transport Strategy is fundamentally reliant on Park and Ride provision at two locations and based on assumptions of very high usage by construction workers travelling to the site. Evidence of this level of compliance has not been demonstrated through comparable developments. The Park and Ride sites will themselves also generate a significant number of car trips in addition to buses. The location and proportional split of the Park and Ride is heavily reliant on the assessment of the workforce location being accurate.
222. Stage 2 consultation para. 6.3.11 indicates that the Park and Ride strategy will include an actively managed parking system for the construction workforce to limit and control the allocation of permits on the main development site during construction.
223. A management strategy to ensure that staff approaching the site from outside of east of A12 utilise the correct Park and Ride facility should be considered. It is understood that only workers living east of the A12, south of the River Blyth and north of the River Deben will be permitted to travel and park direct to site.

We would expect there to be programmes in place to encourage alternative, more sustainable means of transport, such as cycle provision or car sharing, to those persons living in this zone.

### **Direct Bus Service**

224. Confirmation and evidence is required that existing and forecast future scheduled bus services will provide sufficient capacity to maintain the attractiveness of this mode of travel by the target workforce. It is important that the potential for travel to/from the site by sustainable transport is maximised and that the opportunity to travel by this mode is well promoted within the site's Travel Plan.
225. Evidence will need to be provided to show that the operating times of the scheduled buses coincides with the proposed shift patterns, which could have a critical impact on mode choice.
226. It is worth investigating the impact of providing local shuttle bus facilities for non-home based staff located in the surrounding area to minimise the impact of their car journeys on the local highway network. This could also have the potential of reducing the on-site car parking provision.
227. Overall, Stage 2 consultation anticipates that a combination of the Park and Ride buses and local buses would equate to 350 – 400 daily bus movements during the peak construction period, with most associated with the Park and Ride facilities.

### **Car Parking**

228. The Councils request that EDF Energy confirms the demand, distribution and car parking occupancy associated with the proposed on-site car park facility to provide reassurances that sufficient effort will be made to maximise the use of the sustainable alternatives for construction traffic parking and that the proposed on-site provision for 1,000 spaces can be fully justified.
229. It is understood that the proposals include a provision of 2,900 car parking spaces split across three locations (the two Park and Ride sites and at the main construction site) to accommodate a peak of 5,600 members of construction staff of which up to 2,400 would be based on-site with 1,500 spaces provided at the campus (4,400 total).
230. The proposals include 1,500 car parking spaces at the proposed accommodation campus, which equates to one space per 1.6 bed spaces (2,400). This should be compared against the relevant car parking standards, and must be evidenced.

231. Therefore, the remaining 3,200 staff members, who would not be based at the on-site accommodation campus, who would be split over a number of shift patterns, would require 1,900 car parking spaces at two Park and Ride sites. This level of car parking provision will need to be assessed, evidenced, and tied in with the objectives of the site wide Travel Plan, which will need to minimise the potential for single occupancy vehicle journeys to/from the site, including during shift changeovers.
232. The proposals include 1,200 staff car parking spaces during operation of which 700 would be for normal operation with 500 additional spaces during outages. An assessment is needed to justify this level of provision. It is not clear why outage car parking provision could not be shared with Sizewell B.
233. The potential exists that 'informal' car parking may take place in and around Leiston and Sizewell. Some workers may opt to drive closer to work instead of using the Park and Ride system. EDF Energy needs to set out how or if they intend to monitor or control their workforce using their cars.
234. Overall, the analysis and justification for car parking requires further explanation and expansion to ensure that the provision is fully justified and appropriate to the circumstances.

**Construction Logistics General (see also Freight Management Facility section in Associated Developments)**

235. At Stage 1, the Councils stated that, while there were uncertainties in the modal split, EDF Energy assumed between 100 and 300 HGVs movements, which could increase by a further 50% on individual days (up to 900 HGV movements a day). We commented that:
- a. EDF Energy should not assume 24 hour deliveries to site.
  - b. Freight deliveries by road will require significant mitigation – on the A12, A12/A14 junctions, B1122 and the local network to Sizewell.
  - c. Due to cumulative impacts relating to Sizewell C and other development, a significant upgrade of the Seven Hills roundabout will be required.
  - d. Minor roads west of the A12 should be protected from substantial increases in traffic flows and that strict enforcement of HGV controls both to and from the site will provide such protection.
236. At Stage 2, the Councils require further information to fully understand how the split of rail and marine haulage materials would translate to an equivalent number of HGV movements for transfer to road haulage, to allow a worst case highway impact assessment to be assessed. By undertaking a very simplified assumption that the existing number of HGV movements (representing 40% of



the total construction haulage) would undergo a pro rata increase, and would therefore increase to broadly 2,000 HGV movements (1,000 deliveries) on the busiest day with 1,000 movements on the typical day (500 deliveries). This would lead to even more significant impacts on the B1122 and A12 than those set out within the Stage 2 Consultation. The factors that need to be determined for a rail/marine scheme to be progressed, and the risks associated with each of these factors should be fully set out.

237. In summary, current estimates of material quantities include some 9 million tonnes of material needing to be imported to the site, with around 4.5 million tonnes of excavated material suitable for re-use of which 2 million tonnes could potentially be redeployed on site. The remaining 2.5 million tonnes is therefore likely to require off-site transportation.
238. In addition, estimates relating to moving some 300,000 to 400,000 tonnes of material are also provided that are associated with off-site associated development, such as the two Park and Ride sites, rail and highway improvements. The traffic impacts associated with the works will need to be confirmed to ensure that they do not have any local network implications.
239. Stage 2 consultation provides an indicative estimate at this stage that at least 60% by weight of the total construction materials could either be sourced from the development site or delivered by marine transport or rail. There is no further information or explanation provided to determine how these figures were calculated and how the distribution of the 60% has been derived or how the various loads would be allocated between site, rail and sea. It is difficult to equate the overall volumes to the potential number of HGVs required in the event that either rail and / or marine transportation does not materialise.
240. In addition to the above, the origin, destination and route of all LGV traffic to/from the site needs to be provided, so that traffic impacts can be understood. It is noted that all vehicles above 3.5 tonnes will be classified as HGV and will therefore have to follow an agreed HGV route to the site which will be monitored, further evidence on how this will be managed and controlled and the associated penalties to ensure compliance will be required.
241. A freight management plan should be provided as part of any submission, this will help to provide an evidence base for the traffic impact calculations within the model. This should include the mix of HGVs (in terms of size and load and our preference for Euro VI vehicles solely to be used) and evidence to show that the traffic impact during the construction periods where the rail / marine capacity is reduced (outside of peak construction) that the HGV traffic impact is less than at peak construction. Clarification will also be required of material, quantities, types and likely sources for all construction materials. The Councils also require that the derivation of distribution for construction haulage traffic is

determined. A substantial number of details are required to ascertain the full extent of construction materials to be transported to/from the site. No detail is offered to explain whether the proportions would change without rail or marine support; events that could significantly impact on the origins and destinations of construction related materials in tandem with heavier reliance on road haulage.

242. Details are required that outline how the general level of HGV and LGV traffic has been derived and how this translates to material movement over the course of the construction period.
243. It is expected that construction related LGVs will be subject to monitoring and control to follow the regime indicated to manage route choice for HGVs, so that LGVs and HGVs are not travelling along unsuitable roads. Therefore, all construction related HGV and LGV traffic will be expected to use the A12 and then the B1122 to access the construction site. This should be reflected in the traffic model. It is noted that the postal consolidation facility to be located at the southern Park and Ride will be for the majority of deliveries to the main construction site and campus, details on how this will be controlled will be required. By what means will this then be transported to site? Consolidated into one vehicle or will the Park and Ride buses be utilised? It is expected that the results of the agreed traffic assessment, with regards to construction vehicle numbers, will be reflected in management controls that restrict HGV and LGV movements on the highway network during construction.
244. As set out in para. 7.5.74 of the Stage 2 consultation, stage 1 of construction includes the excavation of material for borrow pits and stockpiling for backfill purposes, with the material, if unsuitable, used to form construction platforms and environmental boundary. Confirmation will be required to show that the unsuitable fill can be used for construction platforms, as indicated, and whether this would impact the number of HGV movements to / from the site.
245. Assessments should be undertaken to show the development traffic impacts for the typical day and the busiest day, along with evidence to show that traffic during all construction periods and during operation will not exceed these periods. This should also include details on the operation workforce and workforce during outages to show the traffic impact during daily operation compared to the existing Sizewell B site.
246. It needs to be understood whether an assessment has been undertaken of the impact of construction traffic during peak construction and in combination with a Sizewell B outage.
247. **EDF Energy currently propose not to have Freight Management Facility, but instead have traffic incident management facility at their southern Park and Ride site at Wickham Market (Hacheston). The Councils strongly**

**encourage EDF Energy to reconsider the establishment of a Freight Management Facility at a different location along the A14, as was proposed in Stage 1, and not to proceed with the traffic incident management facility at Wickham Market (Hacheston). (see further details in the associated development section below)**

## **Marine Haulage**

248. EDF Energy does not provide information about the capacity of the temporary and reduced scale jetty, the contingencies in times of inclement weather and the marine infrastructure in case no marine or rail maximised scenario was achieved. If there is a reliance on the use of an alternative to marine transportation for material transfer, the Councils require that EDF Energy provide details on the potential level of construction traffic movements that will be necessary to service the site.
249. It needs to be understood how the proposed marine facilities and construction material handling capabilities would translate through to alternative rail and/or daily rail movements and capacities as well as to a HGV alternative. This will inform a worst case assessment of construction vehicle impacts.
250. Already at Stage 1, the Councils commented that contingency measures should be considered to deal with freight deliveries in the event that weather and other events prevent delivery by sea. This is still the case, and we request details outlining the proposed contingencies if marine transport is non-operational e.g. through inclement weather. EDF Energy is also asked to confirm the vessel handling capabilities and potential number of sailings on a daily and weekly basis.

Rail Haulage (note: for comments on the specific rail head option and use of rail see Associated Development section)

251. At Stage 1, the Councils supported the use of rail to deliver freight is supported as it has the potential to significantly reduce the level of HGVs on the highway. We requested evidence to ensure there will be sufficient capacity on the East Suffolk line and the wider rail network.
252. At Stage 2, we still support the use of rail to deliver freight as part of the overall transport strategy. Details should be provided on the potential level of construction traffic movements that will be necessary to service the site if there is a reliance on the use of an external rail head for material transfer. It is understood that the rail head will be used in the early years of construction regardless of whether a rail max or sea max strategy is followed for the construction. Therefore, there will be use of the existing Sizewell halt rail head in the early stages of construction.

253. It needs to be understood how the proposed rail service schedule and construction material handling capabilities translates through to daily rail movements and capacities. There is no information given as to whether there is capacity in the rail network beyond the East Suffolk Line. From other work, the Councils are aware of the significant constraints that there are to the capacity of the route towards London and cross-country. While NR is considering plans to overcome these infrastructure issues, it is not clear that these will be achieved before the Sizewell C works. This needs to be fully clarified if the rail option is to be seen as a viable alternative for the haulage of bulk materials.
254. The current traffic modelling is based on an assumption that 60% of materials will be brought to site by either sea or rail. There is no evidence to support this, as there is no indication that the five rail services can be accommodated on the rail network, and as such any transport assessment by SCC as highway authority will have to be based on a worst case scenario that 90 to 100% of materials would be brought to site by HGV. EDF Energy's consultation sets out the following:
- “in the event that the rail and/or marine solutions, which remain EDF Energy's preferred strategy, prove to be impractical or not cost effective, EDF Energy may explore road-based scenarios for freight movement with appropriate mitigation of the resulting greater highway impacts that would arise”.*
255. The use of rail infrastructure to deliver direct into the construction site includes the provision of a level crossing on the B1122 Buckleswood Road, which is only 'potentially acceptable' and casts further doubt on the use of rail.
256. The consultation indicates that currently two trains can be accommodated per day on the existing rail infrastructure setting out that Sizewell Halt would be used for the first 12-18 months of construction, equating to two trains per day. The Councils request to see a breakdown so that we understand the level of traffic during all construction phases, such as while there are only two trains per day.
257. If there is a reliance on the use of an alternative to marine transportation for material transfer, the Councils require that EDF Energy provide details on the potential level of construction traffic movements that will be necessary to service the site.
258. The Councils will need to understand the impact of the additional 10 rail services on the East Suffolk Line and the greater rail network. Has it been investigated whether the existing W10 gauge and the route availability for axle loading for the rail line is sufficient? It also needs to be determined whether

EDF Energy will be financing any necessary improvements to the rail network to provide the additional rail capacity that is likely to be required. EDF Energy will need to provide details of any agreement with NR on the number of train paths to be made available and how these will interact with the current shortages of availability on the line beyond Ipswich. The Councils would expect it to be demonstrated at Stage 3 (if not before) that the proposals for use of rail to Sizewell C will not prejudice the Port of Felixstowe requirements and takes full account of the projected increases in passenger service frequencies.

259. There are a significant number of residential properties in close proximity to the rail line between Ipswich and Leiston which will suffer both noise and vibration impact should freight train movements be undertaken at night. The EIA should detail the degree of noise or vibration which might be caused to properties which are within 50 metres from the rail line should night time movements be required.
260. The Stage 1 Pre-Application consultation indicated a passing loop at Wickham Market Station, Campsea Ashe. This is not indicated within the Stage 2 Pre-Application consultation so it is assumed this loop has been removed from the proposal or is being considered separately by NR. If it is still under consideration then the EIA should detail the degree of noise which might impact the nearby housing development and consideration should be given to minimising train waiting times during passing manoeuvres. If the work is to be undertaken by NR it is assumed they will undertake this assessment.
261. The Department for Environment, Food and Rural Affairs (Defra) Local Air Quality Management guidance advises that stationary locomotives, both diesel and coal-fired, can give rise to high levels of sulphur dioxide (SO<sub>2</sub>) close to the point of emission. Investigation of SO<sub>2</sub> concentrations is needed if there are any areas where diesel or steam locomotives are regularly stationary (3 or more times per day) for periods of 15 minutes or more, and where there is the potential for regular outdoor exposure of members of the public within 15 metres.
262. At Stage 3 we will need to see information regarding the rail network to confirm whether there is any likelihood that the above LAQM criteria may be breached. If there is any likelihood we will require submission of a Detailed Assessment to confirm any likelihood of Air Quality Objective exceedances. Should any exceedances be predicted we shall require mitigation measures to be put in place.
263. There is no information given as to whether there is capacity in the rail network beyond the East Suffolk Line. From other work, the Councils are aware of the significant constraints that there are to the capacity of the routes towards London and cross-country. While NR does have plans to overcome these

infrastructure issues, it is not clear that these will be achieved before the Sizewell works would require any further capacity. This needs to be fully clarified if the rail option is to be seen as a viable alternative for the haulage of bulk materials.

264. What will happen if the proposed level crossing closures cannot be achieved, will this impact on the length of train, and subsequently therefore on the amount of materials that can be transported?
265. EDF Energy need to confirm whether they plan to reimburse Council costs (such as reviewing / liaising with relevant parties) regarding Right of Way diversions resulting from rail line proposals.

### **Traffic Modelling**

266. At Stage 1, the Councils commented on EDF Energy's traffic modelling that we considered the assumptions in the gravity model as optimistic, which understated 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 Council's 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.
267. **While at Stage 2 further information has been provided, EDF Energy's traffic modelling still requires further clarification and agreement from SCC as Highways Authority.**
268. Formal agreement is necessary on the base and reference case traffic flows to determine if suggested impacts when construction traffic is added to the base can be justified.
269. Overlay highway network diagrams are required that clearly demonstrate the contribution and potential impact associated with the various elements of the construction plan e.g. Park and Ride demand and car parking occupancy, Park and Ride demand with Construction Site, HGV and LGV deliveries to site (numbers and routes), construction workers by mode and daily/ hourly profile linked with shifts to allow a full picture of the traffic impacts to be built up.
270. Sensitivity testing assuming no rail, no marine or neither and the corresponding result of additional impact of construction traffic on highway network is required, to include construction activity associated with off-site rail head for transfer.
271. The VISUM model is based on traffic counts undertaken in May 2015; therefore it does not take into account any seasonality phenomenon on the network traffic. Stage 2 consultation does however acknowledge that both average weekday and PM peak period traffic flows along the A12 north of Woodbridge

are higher during August than in May, mainly due to tourism. The transport model should be updated to reflect seasonality impacts on the A12.

272. The Stage 2 proposals state that the peak construction workforce consists of 5,600 workers. In various statements throughout the report, a further 500 workers are mentioned as 'associated development operational staff'. The additional 500 workers are said not to have been included within the gravity model studies and therefore excluded from all assessments and summaries within the report. It is not clear as to the reasoning behind why these workers have been excluded from the gravity model / traffic calculations. When calculating the proportions of non-home based and home based, the additional 500 workers were not included within the calculation. It is therefore unanswered as to what type of worker they are and what their anticipated mode of transport would be.
273. Clarification of the number of vehicle movements associated with each type of staff (e.g. non-homes based) and their approximate location (this should include both work trips and other daily trips).
274. Evidence needs to be provided identifying that 100 HGVs a day are required to build the 2 village bypass. Clarification of the traffic volumes associated with construction of all off-site developments including highway, rail, Park and Ride facilities, and how these have been assessed is also required.
275. Evidence is needed to justify the modal split for all travel modes to the site (e.g. direct bus, rail and two workers by car in car shares). With regards to car sharing, evidence will need to be provided to justify the average of two workers per car for non-home based staff.
276. Road capacities and volume/capacity ratios are not included in the consultation report to verify capacity claims for the highway network.
277. Where mitigation measures are being proposed an output from a more detailed assessment of junction capacity should be provided based upon locally observed traffic count data factored to represent the future forecast year to be assessed using a suitable TEMPRO growth factor and traffic from Sizewell (sourced from the model) added. Where observed data is not available then traffic counts should be undertaken to provide suitable data.
278. Further to the above, para. 7.5.108 of the Stage 2 consultation sets out that the proposed rail terminal would receive 20 trains per month (equivalent to 900 HGVs). This does not match the envisaged five train paths per day and this should be clarified. Is this potential use during the early phases of construction using the existing rail head? Some clarification in relation to this is required.

279. It is requested that a flow chart that sets out the traffic associated with each construction and operation phase should be provided and evidenced, so the scale of traffic impacts can be understood for each construction scenario.
280. Evidence should be provided to corroborate the statement that the A12 / B1122 junction will be operating over capacity during the 2024 base scenario as the base traffic model has not been agreed.
281. Once peak hour traffic impacts are provided for the main junctions within the network, capacity assessments should be undertaken at the following, as a minimum with additional junctions likely to be required once the full traffic impacts are known:
- a. Existing A12 / B1122 junction;
  - b. Proposed A12 / B1122 junction (taking into consideration the potential impact of queuing to / from the A12 / A1120);
  - c. A12 / A1120 junction (taking into consideration the potential impact of queuing to / from the A12 / A1120);
  - d. Both proposed Park and Ride accesses (and other relevant local junctions);
  - e. A12 / A1094 priority junction;
  - f. A12 / Great Glemham Road; and
  - g. Any other junction where there is a significant hourly traffic impact.
282. Although Farnham appears to be the focus for some mitigation measures there is a case to confirm regarding the effective operation of other sections along the route of the A12 and other routes likely to face additional traffic demand. In this respect output from a more detailed junction capacity along the A12, especially where they relate to the four villages, should be provided based upon locally observed traffic count data. This should be factored to represent the future forecast year to be assessed using a suitable TEMPRO growth factor with traffic from Sizewell C (sourced from the model) added. Where observed data is not available then traffic counts should be undertaken to provide suitable data.

## **Road Safety**

283. Extremely sizeable increases in the proportion of HGVs have been identified within the consultation at the following locations:
- a. B1122 Theberton = 542% (1310);
  - b. B1122 Yoxford = 722%(1310);



- c. A12 Farnham = 101% (950);
  - d. A12 Yoxford = 114%(950);
  - e. South of Wickham Market = 76% (860); and
  - f. A145 Beccles = 17% (40).
284. The proposed development would result in a significant increase in HGV traffic travelling along the B1122 and south of Yoxford along the A12 (based on the current position of 60% by rail / marine). This will have an associated impact on road safety, and would be of detriment to non-motorised user movements along the B1122, especially at Theberton, as well as within the villages along the A12. Therefore, the level of HGV traffic through all villages should be minimised, with the need for appropriate mitigation.
285. Stage 2 consultation forecasts that at peak construction Sizewell C could add some 1,300 total vehicle movements at the north west end and 2,050 at the south east end of the B1122. It is suggested within the Stage 2 consultation that this will lead to an increase of approximately 36% to background traffic during the peak construction phase.
286. The minor road improvements within Theberton, and along B1122, are unlikely to mitigate the impact of such a significant increase in HGV and other vehicle movements, although they would provide a legacy benefit for the road network beyond the construction period. The details of the type of pedestrian crossings proposed along the B1122 needs to be clarified.
287. With regards to EDF Energy's proposals at the Farnham bend, although the widening of the carriageway may improve the movement of HGVs through that part of the network, there would still be a significant number of additional HGV movements through the village, which includes narrow footways and houses fronting onto the A12, and therefore this would not alleviate general concerns regarding the impact on non-motorised users within the community.
288. A road safety assessment must be undertaken, paying attention to the history of collisions involving goods vehicles on the local road network. An initial review of the A12 at the four villages indicates a number of rear shunts occurring and this should also be reviewed.
289. The proposals potentially include the provision of a roundabout at the A12 / B1122 junction, and the safe routing of cyclists at the roundabout needs to be fully considered.
290. The potential impact on road safety with regards to access to / from Leiston House Waste Recycling Centre needs to be considered.

291. All proposed road off-site highway works will need to be subjected to a Road Safety Audit and swept path assessments.
292. The justification for a reduced speed limit is also necessary to ensure that any proposed restriction is appropriate to the circumstances and ultimately enforceable. Ultimately the objective should be that posted speed limit is relatively self-enforcing.

### **Severance**

293. The potential increase in HGV movements along the B1122 and the A12 has the scope to lead to severance within communities such as Theberton, Farnham, Stratford St Andrew and Little Glemham, and therefore the level of HGV traffic through these villages should be minimised.
294. The proposal may include closing Buckleswood Road, Leiston, and any impact on severance to the local community needs to be fully assessed.
295. The proposals for either rail option potentially include a level crossing at B1122 Abbey Road and the impact on all road users, but especially pedestrians, horse riders and cyclists needs to be fully considered.
296. The potential for the proposed junction arrangements at the A12 / B1122 junction to lead to severance should be considered and adequate pedestrians / cycle / horse facilities should be incorporated into any design.

### **Travel Plan**

297. 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 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 its guidelines and past experience.

### **Highways improvements**

#### **Road improvements – A12 Farnham bend**

298. **With regard to the options put forward by EDF Energy, in summary the Councils believe that options 1 (“no change”), 2 (Farnham bend road widening) and 3 (Farnham bypass – a one village bypass) are unacceptable, and that option 4 (Stratford St Andrew and Farnham Bypass) would be the minimum mitigation.**
299. At Stage 1, the Councils were concerned that the proposals for Farnham were inadequate, and that without producing any evidence, EDF Energy had argued that the growth in traffic created by the construction traffic does not justify the

building of a four village bypass. At that point, the Councils believed that a bypass for all four villages along the A12 was necessary as a consequence of the additional traffic that will come from Sizewell C construction project. We stated that any traffic delays along the A12 due to Sizewell C traffic could have a significant impact on business and economic growth in the county, and identified air quality as a potential concern.

300. Since Stage 1, the Councils have continued to press for a four village bypass and have separately lobbied Government for funding for such a scheme (now known as part of the Suffolk Energy Gateway – SEGway). Support has now been agreed by Government for the development of a business case for the 4 village bypass element of the SEGway. In this context, the Councils recognise that the Sizewell C Stage 2 consultation does not include a four villages' bypass and they only comment below on the options identified by EDF Energy. However, there is the opportunity for the equivalent of funding for any scheme that is finally agreed to be appropriate for mitigating Farnham related Sizewell issues to be used to support the four villages bypass if the latter can be delivered at an appropriate time by SCC as Highway Authority.

301. The following provides comments on each of the options put forward in Stage 2.

### **General position on A12 south of Saxmundham**

302. While the A12 is dualled along the length of the Wickham Market Bypass, the section through the “four villages” (Marlesford; Little Glemham; Stratford St Andrew; and Farnham) is on the original alignment. North of this there is then a short section of dual carriageway and a new single carriageway as the Saxmundham Bypass. Additional traffic passing through the villages will cause adverse impacts for the nearby residents and for the existing users of the road. The most significant of those impacts is at the sharp bend in the middle of Farnham village where the combination of buildings close to the highway and a constricted highway width create a poor environment for residents and a potential bottleneck for larger goods vehicles. However there are also related problems in the other villages.

303. While EDF Energy forecasts that Sizewell C construction will add 6% to the future flows on the A12 through Farnham, this rises to 101% increase when looking at slower moving HGVs and buses. The A12 is the principal route from the south to Lowestoft and the consequent difficulties of dealing with a slower journey will increase the perception of isolation and economic difficulties of that town. Furthermore there is the danger that it will increase displacement of traffic to other less suitable routes. An example here is the A1152/B1069 route through the villages of Melton, Eyke, Tunstall and Snape which is only marginally longer timewise under current conditions to Aldeburgh and Leiston

than via the A12 and is likely to be perceived as more attractive if the A12 becomes appreciably slower. Accordingly, the options proposed by EDF Energy need to be considered in the light of the impact that they have on wider traffic flows as well as on the immediate situation to assess whether they can be seen as adequate mitigation. From information provided it would appear that only HGV's will be given a prescribed route to site, all other vehicles (vehicles under 3.5 tonnes) including LGV's will be permitted to use any route on the highway network, including the A1152/B1069, if it is perceived to be quicker and they are not penalised for doing so.

304. Looking at the information provided by the consultation documents, there is some inconsistency on sources and the level of detail provided as they have come from different sources (EDF Energy's own work for Options 1 – 3 and AECOM's studies on behalf of SCC for Option 4). Further work will be required to put these on a common footing but in the meantime, this report seeks to draw conclusions from the information that is available.

305. With regard to air quality, no additional information has been presented in this Stage 2 Pre-application consultation and no reference made to the impact from additional Sizewell C traffic on the currently declared Air Quality Management Area (AQMA) at Stratford St Andrew. We will need to see results of detailed air quality dispersion modelling for each of the four options before we can comment.

### **Option 1 “No change”**

306. This option does nothing to resolve the localised or wider traffic impacts referred to above, nor does it deal with the adverse environmental consequences of significant increases in larger vehicles passing through the villages.

307. With regard to noise, we consider option 1 will not adequately mitigate noise impact at either Farnham or Stratford St Andrew. With regard to air quality, Option 1 causes concern as to 'do nothing' would result in increased emissions within the villages of Farnham and Stratford St Andrew including the declared AQMA at Stratford St Andrew. Studies undertaken on behalf of SCDC in Stratford St Andrew have shown that HGVs account for a disproportionate amount of emissions and as during construction a large percentage of additional traffic will be HGVs this is concerning. While improved emissions from vehicles may take the “reference case” levels down to acceptable figures, a more than doubling of HGV and bus traffic through this part of the A12 is likely to see it back to exceedance levels. This option has implications for SCDC's Air Quality Action Plan which is currently being drafted for public consultation.

308. In addition, a substantial increase in the number of HGV's and accompanying additional buses through Farnham and Stratford St Andrew will increase road safety implications for motorised and non-motorised road users. There are

limited opportunities to cross the A12, there being a single island crossing, an increase in vehicles using this route, in particular, HGV's and buses, will make opportunities to use this crossing safely limited. The "do nothing" option would lead to segregation of the villages of Farnham and Stratford St Andrew alongside the path of the A12.

### **Option 2 – Farnham bend road widening**

309. This option would marginally improve traffic flows through the village, but would not make any further improvements to environmental conditions for existing residents. In addition it would have adverse impacts on other factors. As in option 1, with regard to noise, we consider option 2 will not adequately mitigate noise impact at either Farnham or Stratford St Andrew. With regard to air quality Option 2 again causes concern as although the receptor at the old Post Offices Stores will no longer be present, there will still be increased emissions within the villages of Farnham and Stratford St Andrew including the declared AQMA at Stratford St Andrew. HGV emission concerns are the same as above and again this option has implications for SCDC's Council's Air Quality Action Plan which is currently being drafted for public consultation.
310. As above, a substantial increase in the number of HGV's and accompanying additional buses through Farnham and Stratford St Andrew will increase road safety concerns for motorised and non-motorised road users. This option would again lead to segregation of the villages of Farnham and Stratford St Andrew alongside the path of the A12.
311. This option is also from a building conservation perspective unacceptable, due to the demolition of the Old Post Office Stores in Farnham. This building alongside the George and Dragon, Turret House and Turret Cottage, are identified as an asset grouping (the Stage 2 consultation incorrectly states in 11.6.11 that these buildings are not identified as an asset grouping) – the annotation 'GV' indicates that they are listed together for their group value. Therefore, changes to one building in the group will have impacts on others as part of that group value. Thus, demolition of the Old Post Office Stores will also have an adverse effect on the group value of these other identified list buildings. Reference in para 11.6.10 to the features within the Old Post Office Stores being 'not potentially sensitive or of particular merit' is not considered to be a correct statement. SCDC's Principal Conservation Officer has been in the building in 2016 and considers the reverse to be true – there are features within the building that are of significance, are sensitive and have merit. The demolition of this building in the absence of any justification (none of which is provided) to enable a road widening scheme to go ahead is objectionable and not supported by appropriate expert opinion. The loss of this building would be permanent and irreversible and is not therefore considered to be an acceptable impact.

312. The demolition of the old Post Office Stores may also result in the demolition of any bat roosts in the structures of the building.
313. The compound associated with road widening may have a below ground archaeological impact and the area also has paleo-environmental potential. Therefore, further information is required to determine an appropriate archaeological assessment / mitigation strategy.

### **Option 3 – One village bypass**

314. There are two alternatives within this option. Some of the comments relate to the differences between these alternatives, but the majority are relevant to both. With regard to noise, we consider option 3 will not adequately mitigate noise impact within Stratford St Andrew. In addition, the provision of a bridge, viaduct or embankments to provide a raised section of road across the River Alde and floodplain will present a new noise source to the rear of the properties in Farnham and be difficult to screen and adequately mitigate. Consequently, we consider the only suitable option in this regard is option 4, the two village bypass.
315. With regard to air quality, preliminary work indicates that Option 3A (Farnham bypass – signalised junction) would remove any emission implications and improve air quality within the village of Farnham. It would still result in increased emissions within the village of Stratford St Andrew, including the declared AQMA at Stratford St Andrew, as for option 1 and 2. We have additional concerns regarding the possibility that traffic stopped at a signalised junction could queue back into Stratford St Andrew and the declared AQMA at busy times, we would require evidence from EDF Energy to demonstrate that this will not happen. This would result in even higher emissions associated with queueing traffic. This option has implications for SCDC's Air Quality Action Plan which is currently being drafted for public consultation.
316. Option 3B (Farnham bypass – T-junction) would remove any emission implications and improve air quality with the village of Farnham. It would still result in increased emissions within the village of Stratford St Andrew, and the declared AQMA at Stratford St Andrew, as for option 1 and 2. This option has implications for SCDC's Air Quality Action Plan which is currently being drafted for public consultation.
317. As with options 1 and 2, there are road safety implications and perceptions with the 1 village bypass options as proposed. The 1 village bypass would create a divide in the villages of Farnham and Stratford St Andrew by dissecting across the existing recreation grounds at the Riverside Centre. Given that the two villages share a parish council and are united it would be detrimental to this to provide a bypass dividing the two elements of the village. On the positive, the existing A12 would remain a much quieter stretch of highway thus improving air

quality and noise around the Farnham bends but the setting of historic buildings may still be affected by the proposed 1 village bypass.

318. From an archaeological perspective, the south-western corner of this option and the north-eastern end of the route situated on higher ground, both of which are situated outside of the flood zone, have high below ground archaeological potential. There is also high potential for palaeo-environmental and waterlogged occupation remains in the floodplain. In table 11.3 there is a reference to managing archaeological potential during construction, however, this will not be an appropriate strategy. A full archaeological evaluation, in the form of geophysical survey and trenched evaluation, would need to be undertaken to design an appropriate archaeological mitigation strategy before any works in this area were to commence. Palaeo-environmental assessment will also be required, including auger survey of the route across the floodplain. The compound may also have below ground archaeological impact however further information would need to be provided to enable us to advise on appropriate assessment / mitigation. This option would also have direct impact and substantial impact upon the setting of the historical settlements. The long term landscape impacts would need to be considered as they likely to be an unfortunate legacy of this option and contribute to its unsuitability as mitigation in this location.
319. The landscape impact of the bypass in a historic context is referred to above. In terms of the wider impact, the “fly-through” demonstration as part of the exhibition accompanying this consultation showed the way in which this puts a physical barrier between the two villages of Farnham and Stratford St Andrew. It would tend to form an incongruous linear feature. This would only be exacerbated if it was required to top the embankment with noise attenuation barriers, referred to as a possibility in the Consultation Document. Traffic flows on the road would add to this sense of separation and while provision is made for an underpass alongside the river, this would not be passable when river levels are at anything above normal depth. At present the two villages share a parish council, village hall and shop.
320. The route of the new road takes a substantial part of the amenity land used by the two villages. Part replacement amenity land is proposed on the eastern side of the bypass but this would be separated from the remainder of the amenity land on the western side. The “usability” of this arrangement is not clear, nor is the access to it.
321. The route through the flood plain amenity land adjacent to the Riverside Centre at Farnham will significantly disrupt and fragment a functional ecosystem which is a Natural Environment and Rural Communities Act 2006 s41 Priority habitat that is Flood Plain Grazing Marsh. It is also anticipated the severance to and

dissection of this area may have a significant impact on a range of Priority and Protected species including otter, water vole and bats.

322. Overall it would be difficult to adequately mitigate the likely impact of this proposal on this Priority Habitat and its ecological function, without the creation of replacement Priority habitat in a new location.
323. Furthermore the location of almost all of the construction within the flood plain will mean that the creation of considerable new flood storage capacity upstream as required by the Environment Agency is likely to be significant with adverse impacts for ecology as well as landscape and archaeology.

#### **Option 4 - two village bypass**

324. This option has been put forward by the councils as being less damaging than the other options set out by EDF Energy at Stage 1. With regard to noise, preliminary work commissioned by SCC indicates that a significant number of properties are removed from the threat of additional traffic noise resulting from increased volumes of flows arising from Sizewell construction. The preliminary work indicates a major decrease in noise levels in Farnham with a reduction in Stratford St Andrew. While it is recognised that some additional properties would be affected by noise from the new route, these are significantly more limited in number and to a large extent these new receptors are at a considerably greater distance from the road than would be the case with other options. Noise attenuation barriers could be provided for those likely to be most affected, but it is not anticipated that these would have as significant an effect on the landscape as those suggested for Option 3.
325. With regard to air quality, preliminary work indicates that Option 4 would lead to traffic being moved away from most receptors and that it would lead to the greatest benefit in terms of air quality in comparison to the other options and would lead to a large improvement in Stratford St Andrew and Farnham. Option 4 would remove any emission implications and improve air quality within the villages of Farnham and Stratford St Andrew including the declared AQMA at Stratford St Andrew. It is very likely that this option would enable SCDC to revoke the AQMA at Stratford St Andrew. The suggested route for the bypass does not appear at this stage to pass close to any receptor locations to cause concern regarding air quality but we will need to see further detail and results of air quality modelling at Stage 3 in order to confirm this view. Consequently, Option 4 would be our preferred option at this stage with regard to air quality.
326. From an archaeological perspective, various potential sites have been identified through cropmarks and finds scatters, particularly of prehistoric and medieval date. We would note that the term 'local' rather than 'low' archaeological value is preferred (11.8.28 and 11.8.29). There is also high potential for palaeo-environmental remains in the floodplain. A full archaeological evaluation, in the



form of geophysical survey and trenched evaluation, would need to be undertaken to design an appropriate archaeological mitigation strategy before any works in this area were to commence. Paleo-environmental assessment will also be required. The compound may also have below ground archaeological impact however further information would need to be provided to enable us to advise on appropriate assessment / mitigation.

327. This proposal would result in an improved setting for heritage assets within Stratford St Andrew and Farnham (in comparison with the one village bypass), this should be afforded significant weight in the determination of the appropriate mitigation for the 'Farnham Bends', even if this proposal introduces potential impacts on other listed buildings.
328. The proposal will have both a below ground and settings impact on the Grade II registered Glemham Hall parkland as well as a settings impact upon the Grade II Farnham Manor. The proposed route also passes through areas of early (pre 18th Century) enclosure, as identified by HLC data, and therefore has the potential to impact upon the wider historic landscape. The loss of historic boundaries and other historic landscape features should be avoided. As there would be long-term impacts upon the parkland, setting of listed buildings and historic landscape, further assessment is required.
329. While the two village bypass is more extensive than the one village bypass, having a much larger total footprint, the ecological sensitivity of the receiving land is, for the most part, less than that of the one village bypass route. The majority of this route passes through a fragmented arable ecosystem with a limited network of hedges and scattered woodlands. Only a short section of the two village bypass passes through the floodplain and floodplain grazing marsh, and thus the extent of disruption to ecological function is less than the one village route. Additionally, the section through the floodplain may, unlike the one village option, be suitable for an elevated section rather than a culverted embankment, as shown in the consultation document. Such a solution would minimise adverse impacts on the hydrological and ecological function of the floodplain.
330. Significant direct impacts on Ancient Woodland are avoided as Foxborrow Wood is bypassed, although there may be indirect effects to the north-west corner of the wood. Some small areas of secondary woodland may also be impacted at Nuttery Belt and Pond Wood. However these impacts can be mitigated in the long term through effective and robust planting schemes and mitigation for disruption to connectivity for both Otters and Badgers can be incorporated into the detailed design of the scheme as required. It may also be possible for minor alterations to the routing of the two village bypass in order to avoid these woodlands.

331. Similarly, whilst the two villages bypass is more extensive than the one village bypass, having a much larger total footprint, the landscape sensitivity of the receiving landscape, and the proximity and number of, sensitive visual receptors, is (largely) significantly less than that of the one village bypass route.
332. This is because the section of the route passing through the most sensitive and coherent floodplain landscape, (and within the locally designated landscape), is minimised, as are the impacts on sensitive amenity land as well as on visual and residential receptors.
333. As with the one village option the proposal will have residual harm on some landscape features and may be at odds with the pattern of the landscape, at least in some locations. However, the two village bypass can accommodate effective landscape mitigation. This is because it is, along the majority of the route, within larger scale landscape of arable fields, woodland blocks and belts, rather than the intimate landscape of the floodplain. Therefore, unlike that for the one village bypass option, mitigation planting would not significantly diminish or be at odds with the existing key characteristics of the receiving landscape.
334. It is also notable that where this route does cross the flood plain it is principally through arable fields, minimising the landscape and ecological impacts in this sensitive location. Furthermore, as identified in the consultation document, there is likely to be scope to review the detailed routing, and further minimise adverse impacts on specific landscape features (para. 11.8.38).
335. If this option is pursued, numerous public rights of way would be affected. Segregated crossings should be provided including using any farm accommodation underpasses.

### **Impacts on Marlesford and Little Glemham**

336. **Mitigation for the impacts on the villages of Marlesford and Little Glemham needs to be considered.**
337. This Stage 2 consultation only concentrates on Farnham and Stratford St Andrew villages, it does not present any improvement schemes for other villages or road junctions along the A12 which may be substantially affected by increased traffic movement. There is genuine concern that additional traffic will adversely affect the villages of Marlesford and Little Glemham, as well as Yoxford, and there has been no evidence presented to the contrary at this stage of consultation.

### **B1122 proposals**

338. At Stage 1, the Councils were concerned about the potentially 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, and in particular, the junction of the A12 and B1122 where EDF Energy proposes a new roundabout.

### **Remodelling junction at Yoxford**

339. **Regarding the two options for junction improvements at the A12/B1122 junction at Yoxford put forward in the consultation, it is not evidenced that either proposed option (signalised junction or roundabout) would work effectively, and there are some environmental and design concerns, so the Councils have not concluded on their preferred option and would like to engage further with EDF Energy on this.**
340. The Stage 2 consultation suggests that changes to the junction at Yoxford will be required to mitigate the impacts of the Sizewell C construction traffic; it is proposed that any remodelling be a permanent feature (there is no suggestion that such a change would be reversed in the future). Two options are presented in the Stage 2 consultation by EDF Energy, the first being a roundabout, the second being a signalised junction.
341. From an air quality and noise perspective, we consider a roundabout to be the better option for the B1122 junction at Yoxford, as would expect this to reduce traffic queueing within the village which would impact on both road noise and air quality. As the junction for the roundabout would be further away from the village itself. If traffic queueing in other option would be likely to reach back into the village of Yoxford, this could potentially cause exceedances of the Air Quality Objectives at residential properties close to the roadside. We will need to see results of detailed air quality modelling for both of these options at Stage 3 before we can comment fully and at this stage there is inadequate information or confidence in the information presented to fully support any preferred option. At this stage, the appropriate level of detail is not provided to make this judgement without caveat.
342. It is requested that outputs of the assessment of the junction layouts are provided so that an informed response can be provided regarding the operation of the junctions. The assessment of the operation of the junction should include details of its relationship with the A12 / A1120 junction, including the potential for queuing between the two junctions.
343. From a building conservation perspective, it is not clear from the documentation how impact assessments were arrived at for the setting of surrounding designated heritage assets (para 11.11.11 p. 281) including the Yoxford Conservation Area, Satis House, White Lodge and the White House and the

East Lodge to Cockfield Hall. Both the roundabout and the signalised junction have potential for serious impacts. Option B (signalised) is less preferable from an historic environment perspective due to the urbanising effects of signalisation in a sensitive village edge and countryside edge setting. The existing boundary to the Yoxford conservation area is currently under review (Dec 2016). In addition, archaeological assessment will be required to determine whether either option may have an archaeological impact and to develop an archaeological mitigation strategy as appropriate. Option A (roundabout) would require archaeological evaluation followed by mitigation, Option B (signalised) would require an appropriate archaeological mitigation strategy. The compound may also have below ground archaeological impact so further information will be needed in order to advise on appropriate assessment / mitigation. Fields to the east of the A12 are part of a surviving area of early (pre 19th Century) enclosed landscape as identified though HLC data. Loss of historic boundaries and other historic landscape features in all circumstances should be avoided.

344. There will be a need for EDF Energy to consider whether either of these schemes has an impact on the A12/A1120 junction and the High Street, Yoxford. At this stage, we do not have a preference regarding the layout of the junction and traffic modelling will be required to support the solution that is ultimately proposed, while taking due regard to the proximity to the A12 / A1120 junction.

#### **Other mitigation measures along B1122**

345. **The Stage 2 consultation proposals for the B1122 are, in the Councils' view, not appropriate to mitigate for the impact of increased traffic volumes. We recognise that the B1122 has a relatively light traffic load for being a 'B' road, but it is the significant change in traffic volume and composition that gives rise to the extent of concerns, particularly for the residents of Yoxford, Middleton and Theberton. By contrast, the Stage 2 proposals from EDF Energy make very modest changes to the road, consisting of speed limits, pedestrian facilities and some road alignment. The Councils consider that, for the B1122 to work as the main access route to the site, significant further measures need to be undertaken to mitigate the impact on communities. EDF Energy is urged to look at alternatives, including those put forward in AECOM report, and reconsider the Accent report.**
346. There are very substantial increases in traffic flows along the B1122, in particular in terms of HGVs and buses (EDF Energy forecasts 542%). The impact that this will have on the communities along the road can be seen from the outcomes of the Accent report (May 2016). It should be recognised that the B1122 is a relatively lightly trafficked road, being a 'B' road, and it is the

significant change in traffic volume and composition that gives rise to the extent of concerns; a focus on absolute numbers or reference to levels more suitable for urban environments will not sufficiently represent the deterioration in environmental conditions. The aspects of construction traffic which the survey indicated caused the most concern were the volume of traffic (91%), number of lorries and other heavy goods vehicles (82%), traffic speed (71%), and pedestrian safety access (67%).

347. By contrast, the Stage 2 proposals from EDF Energy make very modest changes to the road consisting of speed limits, pedestrian facilities and some road alignment. The Councils consider that, for the B1122 to work as the main access route to the site, significant further measures need to be undertaken to mitigate the impact on communities. SCC commissioned AECOM to look at opportunities for alleviating some of the environmental and community impacts of the development along the length of the B1122 and the outcomes of this study are drawn to EDF Energy's attention as they develop further proposals in the area.

348. Notwithstanding these more general concerns, there are a number of points relating to EDF Energy's current proposals:

- Road noise and deterioration of air quality should also be considered at Middleton Moor and the village of Theberton.
- Mill Street – further information will be required from an archaeological perspective in order to advise whether archaeological assessment will be required. The compound may also have below ground archaeological impact so further information will be required to advise on appropriate assessment / mitigation. The Grade II listed Pine Tree Cottage also sits on this junction and has the potential to be affected by these works.
- Theberton road improvements – further details of the new footpath works adjacent to St Peter's Church, Theberton is required due to the archaeological sensitivity of the area.
- B1122 re-alignment – from archaeological perspective further information regarding the planned works is required in order to be able to advise whether archaeological assessment will be required. The compound may also have below ground archaeological impact so further information will be required prior to being able to advise on appropriate assessment / mitigation. Any ancient trees or historic boundaries should be protected.

## Other highway improvements

349. **EDF Energy do not refer to any further highway improvements in other locations. The Councils recognise that the development may have wider impacts on the A12, the A14 and the cross country routes and further work is required to consider what impact the construction phase is likely to have on parts of these road and how it might be mitigated. This may need to look at capacity and the impact of larger numbers of slow moving vehicles. Examples include the section of the A12 from its junction with the A14 northward through to the A1214, the single carriageway section of the Woodbridge bypass, and the single carriageway section between Woods Lane and the Wickham Market bypass. Improvements may also be needed on rural roads and roads and rights of way in and around Leiston.**
350. At Stage 1, the Councils stated that other roads would be affected including roads around Leiston and the A1120. The Suffolk lorry route network should be complied with, ensuring HGVs use appropriate routes. Use of the existing road network by an increased volume of HGVs is likely to have an adverse impact on the condition of the road itself.
351. As well as the key issues of the A12 Farnham Bend and B1122 referred to above, there is a list of other locations along the A12 where further work is required to consider what impact the construction phase is likely to have on parts of this road and how it might be mitigated. This may need to look at capacity and the impact of larger numbers of slow moving vehicles. Examples include the section of the A12 from its junction with the A14 northward through to the A1214, the single carriageway section of the Woodbridge bypass, and the single carriageway section between Woods Lane and the Wickham Market bypass.
352. The traffic forecasting figures included in the Consultation Document include a number of locations off the main route to the site but where there are seen to be significant increases in traffic as a result of the development of Sizewell, either in overall terms or in the increase of HGVs and buses. They include examples such as through Leiston, at Wickham Market and through Westleton.
353. Further consideration needs to be given to the impact of displacement of existing traffic from busier roads such as the B1122 and the A12, particularly in the area where slower main road speeds with greater volumes of HGVs make less suitable roads more attractive to other traffic.
354. Leiston: There are concerns over noise and air quality impacts from additional traffic movements within the town of Leiston, particularly at the two traffic light junctions in Leiston. We will expect to see results of detailed air quality modelling within Leiston at Stage 3.

355. All of these impacts should be examined further within the EIA.

### **Rights of Way and Cycling**

356. At Stage 1, the Councils asked for more consideration to be given to the use of rights of way in the area. Recreational use of the rights of way network must not be negatively impacted by the development.

357. At Stage 2, further information has been provided. The Councils feel that 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. Please see the previously published Access Principles developed by the Councils. The Councils would wish to work with EDF Energy to seek a better alternative.

358. The closure of Bridleway no 19 and the intermittent closures of the public footpath along the coast (Suffolk Coast Path) and the Sandlings Walk is a significant loss of amenity which is only mitigated in part by the provision of an alternative route. Thus the Councils will seek compensatory measures by way of additional enhancements to the access network.

359. Permissive access at Goose Hills will be lost and that retained at Kenton Hills will be compromised by the proximity of the construction site and the traffic using Lover's Lane and the secondary HGV entrance associated with the rail head and the proposed caravan park at Eastlands Industrial Estate.

360. The increased volume of traffic on the road network near the site and further afield on the B1122 and the A12, the exact volume of which is still unclear from the consultation, will impact on the users of the rights of way network and promoted cycle routes, causing severance and displacement. Further clarification is required in the Transport Strategy to fully assess the impact on non-motorised users.

361. 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.

### **Rights of Way strategy**

362. The principles in the Rights of Way Strategy (section 11.17) relating to construction need strengthening as shown below:

- To minimise the physical disturbance of existing rights of way and other access areas including the beach, open access land, the permissive network and promoted cycle routes.
- To minimise the direct impact of the development on the access users (on rights of way, open access land, the beach, and permissive paths) particularly by ensuring that any necessary alternative routes meet the best interests of the user in respect of directness, safety, and quality.
- To provide mitigation and compensation for the direct and indirect impacts of the development on access, including but not limited to the rights of way network (physical improvements to routes and creation of new access).

363. The principles in the Rights of Way Strategy (section 11.17) relating to operation need strengthening as shown below:

- The principles should be extended to cover access in all its forms - open access land, permissive paths, and the access on the beach.
- The commitment for improved connectivity, linkages and circular routes is welcomed but must be primarily as permanent public rights of way, not as permissive paths that can be removed or have access restrictions enforced.
- Post-construction, there should be a commitment for dedication of open access land where new heathland has been created.
- To commit restoring the Sandlings Walk (from the beach north of the site to link with Bridleway 19 as proposed, but as a permanent public right of way and not a permissive route.

### **Construction Phase detailed Rights of Way comments**

364. Suffolk Coast Path and Sandlings Walk – Leiston Public Footpath No 21 and likely route of the England Coast Path:

- The commitment to minimise the periods of closure of this public footpath and promoted route is welcomed but further clarification is required as to the timetable and duration of any closure period – for the jetty construction, BLF construction and operation, construction of the sea defences and subsequent changes to the sea defences. As regards the sea defence works, clarity is sought as to where the footpath will be positioned in proximity to the mean high tide mark.

365. Public Bridleway No 19 from Lover’s Lane to the Eastbridge Road near Round House:



- The closure of this bridleway for the full period of the construction phase is not acceptable but it is recognised that it lies within the construction/campus areas and hence presents practical difficulties for EDF.

366. Kenton Hills:

- The Hills and car park will remain open and this is welcomed. There should be a commitment to dedicate the link from Bridleway no 19 to Kenton Hills as a public right of way.

367. The alternative route for the Suffolk Coast Path, Sandlings Walk (Public Footpath no 21), Public Bridleway no 19 and the likely route for the England Coast Path:

- a. The alternative route proposed is very poor – an indirect lengthy route involving 3 controlled crossings of Lover’s Lane and the B1122, an uncontrolled crossing on Lover’s Lane, the rail level crossing on the B1122, the site access entrance hub and crossing of the Eastbridge Road. The volume of traffic on Lover’s Lane will be substantially increased because of the proposed use of the Eastland’s site and on Abbey Road from both north and south. The quality of the user experience will be substantially less than the original access and the road crossings introduce a safety risk.
- b. The crossing of the north part of Lover’s Lane is proposed to be uncontrolled – this is unacceptable. The road will remain carrying traffic to Sizewell B but also traffic to and from the caravan park at the Eastlands site.
- c. Three of the crossings are located approximately within 450m of each other - the uncontrolled crossing of Lover’s Lane, the rail signal controlled level crossing and the controlled crossing of Abbey Road. This is inconvenient for users and could encourage misuse.

368. Other options for an alternative route should be explored, to improve the overall amenity and to reduce the number of road crossings.

369. Clarity is sought as to:

- a. The standard of construction of the alternative route;
- b. The standard of maintenance for the route and who will be responsible for ensuring that it is safe, fit and easy to use all year round;
- c. The legal status of the alternative routes during the construction phase; and

- d. The legal status, construction standard and maintenance responsibility for those routes retained after construction.
370. Campus site: The alternative bridleway route through the proposed campus, option 2, must be given enough width (5m corridor minimum) and must have sufficient separation from the site fence next to the campus access road and the bunding/planting proposed along the Eastbridge Road.
371. The visual and noise impact of the borrow pit sites can't be underestimated; the scale and duration of the spoil management will significantly impact on those using this route as the alternative to the Suffolk Coast Path, Sandlings Walk and public bridleway no 19. Borrow pit field 1 will require construction traffic to cross the Eastbridge road whilst Borrow pit field 2 and the stockpile site will lie immediately adjacent to the Eastbridge road.
372. An off road bridleway route should be provided from the end of the campus site beyond the borrow pit sites to Eastbridge village to maintain connectivity in the area.
373. There is no clarity in the proposals at the moment of how access to the coast for the Sandlings Path will be re-created following the loss of the permissive path that currently crosses the Sizewell Drain.
374. Note – wherever new pedestrian, equestrian and cycling routes are created, legal status, construction detail and maintenance responsibility should be clearly stated.

### **Cycling provision**

375. The provision of a new cycleway/bridleway on the land east of Lover's Lane from King Georges Avenue to Sandy Lane is welcomed. However, would this not be better retained on the western side of Lover's Lane in order to avoid multiple road crossings?
376. Post-construction, any provision should be retained as an off road public cycleway/bridleway and further extended along the east side of Lover's Lane to the entrance of the re-opened Bridleway no 19 (near to Fiscal Policy), thereby contributing to the connectivity of the coastal bridleway network.

### **Impact of Rail provision for Rights of Way (see Associated development section for full commentary on rail options)**

377. It is not acceptable to divert Leiston public footpath no 6 and public footpath no 10 to Abbey Road and then along Abbey Lane to re-join the original alignment. This adds over 900m to the onward journey for a walker using public footpath no 10 and places walkers on Abbey Lane without a segregated footpath.

378. The expectation is that there will be a low number of train movements, at low speed and design could ensure good line visibility. On that basis, the safety aspect of a level crossing to serve these two footpaths should be assessed using the ALCRM assessment used by Network Rail. There is the very real possibility of misuse if a crossing isn't provided; the low frequency of trains and low speeds will foster a sense of security for making an informal crossing. An easily accessible, well designed level crossing would ameliorate this.
379. The link between public footpath no 6 and no10 along the south side of the railway is welcomed.
380. We recognise that Sizewell C has the potential to deliver significant local economic benefits and employment opportunities in Suffolk for many years to come and we welcome EDF Energy's aspirations in this respect. We are determined to ensure that Suffolk residents benefit from its construction and its operational life.

### **Socio-economic**

381. At Stage 1, the Councils commented on the socio-economic proposals that:
- The coverage of economic growth was modest
  - With regard to the supply chain, we want to maximise the opportunities for local businesses to win a significant share of the contracts for Sizewell and other nuclear projects. Specific consultations were included and suggested. Aim is for a lasting legacy.
  - With regard to employment, the 34% target for local employment should be a minimum expectation.
  - Proposals to develop and implement education and workforce strategies were required; interventions and support to include 'Raising the Bar' initiative, mitigation of skills displacement.
  - With regard to Community and Social Issues, the Councils stated that the construction of Sizewell B led to considerable number of social issues. No evidence has been included at Stage 1.
382. The Stage 2 documentation confirms EDF Energy's positive aspirations, but still does not yet provide sufficient detail of the mechanisms how these aspirations can be achieved. We acknowledge that we are only part way through the pre-application process, with much detail still to come forward.
383. **We welcome EDF Energy's aims, objectives and aspirations around socio-economics, aspiring to limit any significant adverse economic and social impacts, while creating significant business, training and job**

**opportunities for local and regional communities during construction and operational stage.**

384. While EDF Energy has undertaken further work with the councils and other bodies to set up a structure within which the effects of the project on socio-economics is discussed, analysed and eventually assessed and managed, there is a need following the Stage 2 consultation to agree on firm outputs and commitment to action.

385. The consultation document states that the next steps include:

- a. a community impact report, drawing on evidence from topic areas including noise, air quality, visual and transport, to identify the specific combined environmental effects on residential amenity in local areas;
- b. a Health Impact Assessment;
- c. a Public Services Strategy, including an Emergency Services Plan, Community Safety Management Plan and Worker Code of Conduct; and
- d. preparation of an economic strategy, including the approach to quantifying economic impacts, the supply chain and procurement, a skills, education and employment strategy, and a construction workforce development strategy.

386. These will be important documents which we anticipate will provide more clarity on how EDF Energy's aspirations can be achieved. We would expect that our comments below will be considered and reflected in these reports and strategies, and would request further involvement in the development of these.

387. We are committed to continue working with EDF Energy over the coming months, in advance of the Stage 3 consultation, to provide further input to their evolving proposals.

**Economic strategy**

388. For the development of an economic strategy that optimises the benefits of the Project, particularly for supply chain and skills, EDF Energy state that they will continue to work closely with the councils, the Suffolk Chamber of Commerce, New Anglia Local Enterprise Partnership, education and skills providers and private partners. There are not many specific proposals to achieve EDF Energy's aspirations.

389. As part of the strategy, the following should be considered:

- a. We agree that it is important to update the baseline information (as suggested in 5.1.16 of the consultation document) as currently there seems to be a heavy reliance on the 2011 census data which of course

is already rather dated and is likely to be 10+ years old by the time construction actually starts.

- b. We would like clarification of EDF Energy's definition of "local" (frequently referred to in section 5 with regard to socio-economic impacts), which we believe to mean Suffolk.
  - c. An independent validation of the economic impact metrics will be required.
  - d. We would like to see the project used as an opportunity to improve digital connectivity.
390. The Economic Strategy needs to be properly resourced, owned and monitored. We urge EDF Energy to engage with the Growth Hub and consider creating a dedicated, embedded Sizewell C specialist. This could enable start-up business generation as well as assist existing businesses to grow and take the opportunities that will arise.
391. To ensure maximum advantage of the development to the Suffolk economy, the Councils will continue to work closely with the Suffolk Energy Coast Delivery Board, Government, China General Nuclear, the Suffolk Chamber of Commerce and other partners in conjunction with EDF Energy to ensure that the right framework is created in order to lever the maximum economic benefit for Suffolk.

### **Supply chain**

392. **In order to maximise the opportunities for local businesses to win a significant share of the contracts for Sizewell and other nuclear projects, and for the local economy to thrive as a result of the development, a local supply chain plan should aim to engage with businesses in the area and build local capacity.**
393. We wish to make the following comments:
- a. To maximise positive impacts on the local economy, it would be crucial for EDF Energy to both focus on growing our local companies and encouraging relocation of established Tier 1 contractors into Suffolk, albeit potentially temporarily, as well as assisting Tier 2 and 3 contractors to be ready to participate. EDF Energy is asked to assess the opportunities and potential leads for inward investment moves and joint ventures and support inward investment delivery. Local Suffolk businesses would be better placed to participate in the Sizewell C project by working on its predecessor at Hinkley Point C; we urge EDF Energy to put together a serious offer to help Suffolk companies get involved in Hinkley Point C.

- b. A local procurement presence or supply chain adviser would be essential to maximise supply chain opportunities in Suffolk.
- c. EDF Energy is asked to explore opportunities to link in with other developers and providers in the energy sector, such as offshore wind, to consider for example shared apprenticeships. It may be beneficial for EDF Energy to work with EEEGR to link with the whole energy sector in the region.
- d. Increasing productivity and encouraging innovation are key national and regional aims, just as they are local priorities. A project of this magnitude should be a key driver. We encourage EDF Energy to engage with New Anglia LEP and bodies such as Tech East, with the aim of making Sizewell C a catalyst and exemplar project.

## Skills and employment

### Overall

- 394. **While local partners welcome EDF Energy’s recognition of the significant opportunities to maximise and support the uptake of local socio-economic benefits through targeted enhancement, initiatives and support offered by this project, current proposals lack sufficient detail regarding how this will be achieved.**
- 395. Local partners share the high level ambition to create “an environment in which education, skills and workforce development can flourish” but cannot support these proposals until there is greater clarity about how these opportunities will be maximised for the benefit of local people and businesses.
- 396. EDF Energy sets out its understanding of the characteristics of the economy and labour markets within Suffolk as a basis for predicting potential skills and employment responses and effects of the project on these markets (5.3.1 – 5.3.14). While most of this evidence does provide useful context, local partners have some concern regarding the validity of certain aspects of the evidence / assumptions made. In particular:
- 397. When calculating the potential available construction workforce EDF Energy have used the 2011 Census which was conducted at the height of the last economic downturn and is therefore of limited value in terms of the current available workforce. This data needs to be revisited to gain a current understanding of labour pressures in the construction industry and wider related sectors.
- 398. Data sets used to measure economic inactivity, unemployment and worklessness also provide an incomplete picture. In particular there is an over

reliance on Jobseekers Allowance Data, rather than an assessment of the whole cohort currently claiming work related benefits. Job Centre Plus data indicates that Jobseekers Allowance claimants equate to only one fifth of those unemployed within Suffolk.

399. The demographic data which has also been used to predict potential responses assumes that the workforce will be solely UK based as it also is taken from the UK Census results.
400. We note the 500 staff working at the offsite associated developments, which are, in addition to the peak construction workforce of 5,600 working on the Sizewell C development itself (para 5.1.11). It is unclear whether and where these additional 500 staff have been included in the impact assessments. We request clarity about how the Gravity model and other work has been or will be adjusted by this new addition.
401. We request clarity on how EDF Energy will secure a better understanding of the existing labour market and its ability to respond to the project/potential labour market pressures and tensions resulting.
402. **We welcome EDF Energy's statement in support of the Councils aspiration to maximise opportunities for local people to secure high-skilled and well paid roles within the project (para 5.3.8). However, this stated commitment is not reflected in EDF Energy's current level of ambition for homebased workers as demonstrated in the current low targets. Homebased workers, currently proposed at 36%, while a small increase compared to Stage 1, is still set at a level that lacks ambition. This lack of commitment by EDF Energy to local upskilling is reinforced when considering the projected proportion of home-based workers in higher skilled jobs.**
403. This projected proportion of home-based workers in higher skilled jobs is unacceptably low and we ask EDF Energy to demonstrate a level of ambition that matches our own commitment in Suffolk to upskilling our local population. For example, the higher technical occupations of mechanical and engineering Operatives (30%) and management functions (15%) compared to 90% homebased for the low level occupations of site services, security and clerical occupations (Table 5.4). EDF Energy state the number of anticipated home based workers is calculated on the current availability of skill sets (5.4.6), this calculation does not take into account the skills response that could be achieved within Suffolk if key interventions are made sufficiently early, as set out by EDF Energy elsewhere in this section (5.6.27). We would urge more ambition in securing employment benefits through upskilling local residents and would expect an increase in the overall proportion to between 40% and 50%, with a

particular focus on increasing the proportion in higher skilled jobs through an early skills intervention.

404. The number of job roles (25,000) and the construction labour demand curve (figure 5.5) are well known, but if we are to achieve maximum beneficial impact from this project local partners need more detail about the different roles within the categories shown. Our expectation is that EDF Energy already has a detailed breakdown of the different occupational roles that will be needed in order to reach these aggregated forecasts and we urge this data to be shared at the earliest opportunity.
405. There is no mention of impacts from other large infrastructure projects national (such as High Speed 2 and other new nuclear) or local and how the combined effects will affect workforce availability; salary levels and displacement employment issues for established local businesses. Forecasts for the impact of known other national and regional projects need to be considered when assessing the workforce needs and strategy for mitigation and skills development. A further factor which should also be assessed is the potential effect of Brexit on availability of migrant labour in the local economy and the direct and indirect impact of this on the labour market.
406. In addition to the above feedback on the overall skills and employment section, we would like to offer the following comments that relate to specific aspects of our local skills strategy within the consultation documentation.

### **Work Inspiration**

407. We welcome the approach that EDF Energy sets out within its 'Approach to education' (5.6.11 – 5.6.18), key to this being that the work is not all upstream to opportunities that will be available within EDF Energy but to opportunities in the wider industry.
408. We will expect EDF Energy to invest in a comprehensive programme of activity that complements existing interventions at primary, secondary and post-16 phases, to inspire and enable more young people to achieve in Science, Technology, Engineering, Mathematics and Construction (STEMC) subjects. The focus would be on developing programmes that promote and reward excellence in teaching and learning in STEMC subjects, raise awareness of STEMC careers and enable experiences relevant to these occupations, starting at primary school age.

### **Apprenticeships**

409. We will expect EDF Energy's Apprenticeship strategy (5.5.25) to set ambitious and stretching targets for Apprenticeship recruitment across all levels during the construction and operational stages of the project. The consultation



document does not provide details of any mechanisms that will be used to deliver this aspiration.

410. Alongside the expectation of stretching Apprenticeship targets for EDF Energy and its supply chain partners, we will expect EDF Energy to support the fostering of Apprenticeships in small and medium sized enterprises to help mitigate the effects of workforce displacement.

### **Education and Training**

411. It is very positive that EDF Energy recognises that a strategy that integrates and seeks to add value (5.6.20) to existing policies and strategies will leverage maximum impact across Suffolk and the ambition to provide opportunity for all people within the community to participate in the workforce through targeted initiatives (5.5.25) has the potential to deliver employment benefits.
412. We urge EDF Energy to follow up with more details and discussions on how we can work together to achieve this. For example, our young people have difficulty accessing training if it is not located in convenient locations for public transport and even then, travel can be too expensive. All employment opportunities throughout the project should be made accessible to all Suffolk residents, helping to narrow inequalities (e.g. rurality), tackle worklessness and deprivation alongside the target groups that EDF Energy outline within the consultation document (5.5.25). We would also like to see EDF Energy explore the use of Social Value as a measure of quantifying any interventions success.

### **Infrastructure**

413. We recognise EDF Energy's aspiration to support the creation of a long term skills legacy as demonstrated in the consultation document (5.6.21).
414. We will expect EDF Energy to support the building of STEM capacity through investment in cutting edge facilities and specialist teaching resources that build on local training providers' existing facilities to create a lasting education and skills legacy beyond the build.

### **Adverse economic impact**

415. **The potential negative economic impacts from a development of this scale must be fully recognised by EDF Energy and appropriate minimisation/mitigation/compensation of these impacts must be implemented.**
416. In particular, EDF Energy needs to conduct further work on the following:
- a. More robust modelling on the impact of skills displacement and suitable mitigations to reduce the effects of labour market displacement. This

should include assessing and mitigating against impacts on key sectors such as tourism and other service industries, on 'key workers' such as on-call firefighters, the police workforce or carers, and impacts on the available construction and technical workforce for other major infrastructure projects and established businesses in Suffolk. Mitigation proposals need to be developed.

- b. The Stage 2 documentation focusses on impacts on the tourism and agriculture sector, however while these are important sectors, they are not the only ones in the locality; the impact on other sectors needs to be more thoroughly explored.

417. We also do not feel that the effect on tourism is adequately addressed in the Stage 2 consultation. As stated in the "East Suffolk Growth Plan", "The ability of the tourism sector to grow and develop depends to a great extent on the safeguarding of the area's tourist assets and on the ease of access to the area".

418. Sizewell C will have a massive impact on the AONB area and the idea of a 'building site for 10 years' will hugely impact on potential visitor perceptions of the area. While the proposed new visitor centre for Sizewell C is welcomed as a new visitor attraction, it needs to be recognised that the main tourism draw to East Suffolk is the countryside, which is negatively impacted by the development of Sizewell C.

419. The whole Visitor Economy will be negatively affected and EDF Energy need to consider the effects on a much wider basis. This includes the following:

- a. The accommodation strategy does not just affect accommodation supply but, through the accommodation campus, also servicing. The effect of diverting the servicing staff from elsewhere (whether from tourism provision or care homes for example) has not been adequately addressed.
- b. The increase in traffic, and in particular HGV traffic, will have a significant negative impact on access to the area which will affect the tourism industry.
- c. EDF Energy say "The tourism sector represents an estimated 10-12% of all jobs in Suffolk, which is significant, but similar to tourism's share across the UK as a whole". This is not true as the proportion of people working in the tourism sector is higher in Suffolk Coastal than the rest of Suffolk and the national figure. The last Volume & Value studies we had covering 2015 state that tourism jobs as a percentage of employment are 11% in SCDC and 15% in WDC using the Cambridge criteria model of data analysis – EDF Energy claim this averages out at 10-12% percent (presumably based on the SCDC figure alone) but this is considered to

be slightly disingenuous as it ignores the potential impact on jobs in the Waveney area. The Councils would suggest a combined estimate of 12-14% covering all of East Suffolk. Additionally, we would like to understand what definition criteria have been used – for example, are bar and restaurant employment included as these businesses tend to depend significantly on visitors but aren't seen as classic tourism sector businesses.

- d. We welcome EDF Energy's plan to commission a visitor survey and would like to be involved in scoping and designing this. The survey should be agreed in advance with the interested parties including the Councils, the AONB, RSPB and the Suffolk Coast Destination Management Organisation (DMO). We feel very strongly that there is a case for significant mitigation or compensation funding to alleviate the negative impacts of the build and operation lifecycle, as well as promotion of the area to counteract the perceptions of Suffolk as a building site. The results of the survey should feed in to an Impact Assessment (whether a separate Tourism one or as part of the wider Economic Impact Assessment).

### **Community impact – Housing**

420. **As part of EDF Energy's accommodation strategy we expect robust measures mitigate any impacts on the wider housing market and local services and facilities associated with the demands of EDF Energy workers. We will look to explore opportunities for the Council to work with EDF Energy around these impacts.**
421. An accommodation campus housing 2400 workers is one element of the wider accommodation strategy for EDF Energy (see Associated Development section). In total at the peak of construction there will 5,400 + 500 workers in associated developments employed in relation to the development. A proportion of these would be home based workers (driving up to 90 minutes to work) but a larger majority would be non-home based and requiring accommodation in the local area (taken to mean Suffolk in this instance).
422. The peak workforce for building Sizewell C is around 700 workers higher than for Sizewell B. Anecdotally, the campus for Sizewell B is said to have been over-subscribed with a waiting list in operation. Research by Professor John Glasson found that significantly more non-home based workers chose (or had) to take up local rented, lodging and B& B accommodation than was predicted (1,350 workers versus 300 – 500 workers). In total nearly half of the non-home based workers took up this option in the immediate area (10km radius).
423. Part of the rationale for the campus is to reduce pressure on local accommodation and thus any impacts arising from that, and this is understood.

However, there will still be a large proportion of workers distributed within 60 minutes of the site according to availability of accommodation, from both the tourist and private rented sector (PRS) . A proportion of workers will purchase property if they are to be involved in the build for a longer period of time. There may also be workers that arrive during the construction phase but stay on into the operational phase. - the current requirement for many Sizewell B operational staff is that they are located within 25 miles of the site.

424. The Gravity Model has been applied to accommodation and demonstrates that the higher proportion of impacts on the housing market, tourist accommodation and PRS will be in the immediate areas: Leiston, Aldeburgh, Saxmundham, before spiralling outwards across the rest of SCDC and then Waveney and elsewhere.
425. This suggests pressures arising on the PRS in the wards local to the site where it is predicted most workers would wish to locate due to the relative travel costs. A key concern of the Councils would be non-home based workers competing with housing benefit claimants for occupied and vacant private rented sector (PRS) properties. The displacement of existing tenants in PRS could lead to instances of homelessness within East Suffolk. Equally, those not receiving housing benefit, but on low wages may be affected by increases in rent owing to greater local demand. A consequence of this could be additional pressure on Suffolk Coastal and Waveney District Councils to meet the accommodation needs of vulnerable persons.
426. The Councils support the development of a Housing Fund to be secured by a Section 106 legal agreement, this would enable improvements to existing housing stock and provide funds for delivering new housing (which may include that for operational staff) to offset pressures on the local market. The Fund could encourage to market more latent accommodation that may remain as tourist accommodation in the future.
427. During negotiations at Hinkley Point C such a Housing Fund was secured via Section 106 legal agreement, from EDF Energy, to mitigate pressures on the PRS, which supports initiatives that increase the local supply of housing by, for example, bringing empty homes into use, providing grants to facilitate moves out of the PRS to owner occupation, and to help people downsize if appropriate. A similar approach would be supported and encouraged in Suffolk as this would derive a real legacy benefit. We would seek associated nomination rights being given to Suffolk Coastal District Council in connection with this. Temporary accommodation is very limited in this locality (Suffolk Coastal), temporary accommodation if required would be provided in Ipswich or Lowestoft.
428. In relation to tourist accommodation, pressures will arise in the immediate area, with workers potentially taking a high proportion of tourist accommodation in

Leiston, Aldeburgh and Saxmundham. Although individual proprietors would benefit, the spending patterns of construction workers in such accommodation would be different to those of tourists – as such the wider tourism economy may well be dis-benefitted by the effective loss of significant accommodation stock in the locality.

429. Consideration is required in relation to outages at Sizewell B, these are planned every 18 months and will take place during the construction of Sizewell C. Currently they are usually planned for Spring/Autumn to avoid the high tourist season and non-home based workers use tourist accommodation and the PRS. There will be cumulative effects with the continuous Sizewell C construction and this needs to be fully assessed, examined and mitigated for. Similarly, consideration and strategies are required to meet the accommodation needs during unplanned outages of Sizewell B.
430. It is requested that EDF Energy clarify the apparent anomaly between the stated number of construction workers anticipated to use Owner Occupied accommodation in Stage 2 Consultation Figure 5.8, which appears at variance with the numbers quoted in paragraph 5.11.10 and in Table 5.10.

### **Other community impacts**

431. The details of community impacts and mitigation in the consultation documentation remain at this stage very limited, thus it is difficult to respond in any more depth on the outline proposals made at this Stage 2. However, impacts on the host communities including service provision, community cohesion and general wellbeing are a key area of concern for the Councils.
432. It is essential that EDF Energy works with key local partners in order to take a holistic view of the impact of Sizewell C on communities in the locality. We believe that doing this could reduce resistance from individual communities if they feel that their views have been both heard, taken into account and are reflected in the refined proposals included in the Stage 3 consultation.
433. The Sizewell C Stage 2 consultation includes the following ‘community’ themes that all relate to potential impacts on the host communities:
- Community Cohesion – the relationship between the temporary and local populations
  - Physical and Mental Health and Wellbeing – acute health and social care, including hospitals
  - Emergency Services – the capacity of police, fire and ambulance services and emergency planning

- Other Public Services – including community safety/anti-social behaviour, schools, leisure and sports facilities and support for children, young people and families
- Community Impact – particularly individuals and communities impacted by but not directly benefitting from Sizewell C

434. It is essential that any package of mitigation and compensation proposed by EDF Energy delivers positive, sustainable local community legacy benefits that alleviates the disruption associated with the build and operation of Sizewell C and that EDF Energy look at all key issues holistically, given the intrinsic relationship between community impact and the accommodation, transport and environmental aspects of the Sizewell C proposal.

435. The consultation references the development of a Community Impact Report (5.7.1) and a Community Safety Management Plan (part of Public Services Strategy) (5.5.28, 5.7.1), and the Councils and local communities are keen to understand what this Report and Plan will cover.

436. EDF Energy is encouraged to involve the Councils in the development of all community related documents and strategies, given the reach of the Councils into the locality. This would enable EDF Energy to fully understand and address the concerns raised by local communities, including Town and Parish Councils.

437. It is essential that there is an accurate and agreed baseline for each key issue as proposed through the audit and based on the EDF Energy gravity model.

### **Community cohesion**

438. **The Councils welcome the specific actions/approaches to manage community effects of Sizewell C during both build and operational phases identified by EDF Energy in its Stage 2 consultation document, and are committed to be involved in any conversations about how the community liaison/relations function would work.**

439. In the Stage 2 consultation document, EDF Energy identifies a number of specific actions/approaches to manage the community effects of Sizewell C during both build and operational phases. These include:

- Worker Code of Conduct (part of Public Services Strategy) (5.5.25, 5.7.1)
- Drug and alcohol testing policies (5.5.25)
- Provision of occupational health services (5.5.28)
- Community liaison (5.5.21)

- Welcome Pack (5.5.25)
- Dedicated communications and community relations function (5.5.27)
- Hotline for reporting incidents (5.5.27)

The Councils welcome these commitments, many of which build on learning from the Sizewell B build process.

440. The Councils are committed to playing a constructive and active role in any conversations about how the community liaison/relations function would work, particularly given the concerns raised by local communities and partners about the impact of Sizewell C on community relations. Key concerns, some of which are based on negative experiences associated with Sizewell B, include:

- i. drugs (there are already specific issues within Leiston);
- ii. the potential increase in sex workers in the area during the construction phase and, possible sexual exploitation/grooming of local girls and young women (again, already currently an issue in Leiston and a focus of the last two Leiston partnership Anti Social Behaviour meetings - with specific work being undertaken to help girls/young women to understand the difference between a healthy relationship and grooming/abuse);
- iii. potential confrontations between residents and workers (particularly in local bars and pubs); and
- iv. the legacy from Sizewell B in terms of family breakdown and increase in unplanned pregnancies.

Strategies to minimise the above should be considered as part of the Community Impact Report / Community Safety Management Plan and embedded within the Code of Conduct, Welcome Pack and community relations function that EDF Energy are proposing.

### **Blue Light Services and Emergency Planning impact**

441. **On Blue Light/Emergency Services, the Stage 2 consultation does not provide much detail on 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.**

442. The Stage 2 consultation does not provide much detail on impacts on Blue Light/emergency services. It refers to an Emergency Services Plan (part of Public Services Strategy) (5.7.1) to be put together, and an Emergency Services Working Group (5.5.29) to be established.

443. Feedback from the Blue Light services suggest that they need the Emergency Services Working Group to be established as soon as possible. Emergency planning and regulatory consultation during construction, operation and outage

phases should be a key consideration. The development of a Community Safety Management Plan is also a critical factor to ensure safe delivery of the project and emergency services need to be engaged proactively with this planning.

444. Town and Parish councils have expressed strong concerns about increased emergency response times (particularly where persons are trapped in fire situations and the 'golden hour' i.e. the immediate hour following traumatic injury being sustained by a casualty or medical emergency, during which time there is the highest likelihood that prompt emergency interventions will prevent death).

445. Key blue light services concerns include:

- i. Emergency service response times to the immediate locality and surrounding communities, which are likely to be increased due to increased traffic volumes and congestion
- ii. 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)
- iii. The resourcing implications arising from the safety aspects above
- iv. Extended community safety impacts, including road safety, residential fire safety and night time economy related potential issues
- v. Impact on workforce retention in emergency services, with staff potentially being displaced to work as part of the Sizewell C development.

### **Emergency Planning Assessment**

446. SCC is required under Radiation (Emergency Preparedness and Public Information) Regulations 2001 (REPPiR) to maintain detailed off site emergency planning arrangements for the existing Sizewell B Power Station. As part of this duty, the SCC is also required to monitor all development within the area around the Sizewell B Power Station and to provide 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.

447. The proposed Sizewell C construction activity will take place within the current emergency planning zones around the Sizewell B Power Station and will therefore be covered by REPPiR. This will require SCC during the Development Consent Order (DCO) assessment phase to confirm that EDF Energy's construction activities can be accommodated within existing nuclear



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.

448. SCC's 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 has been recent dialogue on the topic and in December 2016 a list of detailed information requirements was provided to the EDF Energy to help progress a timely debate.
449. The Joint Emergency Planning Unit, on behalf of SCC, will continue to offer the option of early emergency planning discussions up to the pre-DCO application phase. At this stage if no detailed information has been provided to allow SCC's assessment to take place, the provisions of REPPIR will be used to require the cooperation of EDF Energy to ensure that this process is completed before any DCO assessment starts within the Planning Inspectorate. SCC will also need to request a condition within the DCO that requires EDF Energy to agree relevant emergency planning arrangements with SCC before construction activity begins.

### **Community facilities**

450. **Further detail is required to determine and mitigate the impact of the proposal on public services, to ensure that Councils and partners can effectively deliver its services to this increased population alongside Suffolk's current residents. This include full assessment and mitigation of the impacts of Sizewell C on demand for services at medical practices, dentists and hospitals, and school places.**
451. EDF Energy proposes additional work to enable greater understanding of the impact of Sizewell C on local community facilities. This includes:
- An audit of existing and potential school places, sports and leisure facilities, healthcare, social services and children's services (5.5.30)
  - A Health Impact Assessment (5.3.33, 5.7.1) and Health Action Plan (5.5.36)
  - A review of any residual public health care requirements (supplementary to the proposed on-site occupational health services) (5.5.28)

452. The Councils are committed to work with EDF Energy in the development of these respective audits/assessments/plans and believe that we can help to ensure involvement from all relevant partners in relation to each of the plans referenced above.

### **Health impact**

453. Town and Parish Councils in the area have already expressed strong views about the likely impact of Sizewell C on demand for services at medical practices, dentists and hospitals and school places. These impacts will need to be fully assessed and appropriately mitigated by EDF Energy.

454. EDF Energy state that they will be 'supporting local health care and emergency services through the provision of appropriate resources' (5.5.25). Further detail is required to ensure that these resources are indeed at an appropriate level. This is particularly relevant in the context of recent closures/changes at Southwold and Halesworth hospitals and the need to improve infrastructure at Aldeburgh hospital. Town and Parish Councils are clearly concerned about additional emergency response times due to increased congestion (see above).

455. EDF Energy states that they propose to provide occupational health services on site (5.5.28). It would be useful to understand what occupational health services will be available on site (and therefore what will not) and whether there are any plans to work in conjunction with local doctor practices in order to deliver specific health services. Town and Parish Councils were keen to understand whether there would be any opportunity for people from the local area to access the occupational health services provided on site i.e. whether there would be wider access than just EDF Energy employees.

456. This is a major infrastructure project which will bring its own benefits and challenges to the local communities in terms of Public Health. The Public Health issues are addressed broadly under three areas; impact on health, health determinants and health services. These will occur both at construction stage and some will continue during the operation phase.

457. During the construction stage the main health impact on the health of the population are likely be due to noise pollution and air pollution and the more non-specific effects of large, new, populations moving into an area. Although the consultation document makes brief reference to these not much detail is provided and they need to be evaluated as part of the Health Impact Assessment. The resulting Health Plan must contain adequate safe guarding measures to the satisfaction of concerned parties including EDF Energy. Although Health Impact Assessment (HIA) is not mandatory it would have been helpful if this has been included as part of section 12.

458. The environment needs to be considered and the impact of a health promoting environment needs to be part of the HIA and addressed through the Health Action Plan. Access to adequate leisure opportunities need to be planned for both the workforce and any impact in terms of subsequent reduction in access to these for the local communities. It is important that the health of the workforce is supported through appropriate workplace health plans and opportunities.
459. The impact on health care utilisation also needs to be considered in detail. Primary and secondary care services are commissioned by the NHS commissioners, and specific services to promote health are commissioned by Public Health Suffolk. During the construction as an influx of working age population is expected they will need access to GP, hospital, and ambulance services. EDF Energy needs to seek feedback from the local NHS Commissioner (Ipswich & East Suffolk Clinical Commissioning Group) for this. As some if not all of the workforce are likely to be young the increased demand for some of the services commissioned by PH Suffolk, particularly smoking cessation and sexual health services need to be considered and addressed.

### **Community amenities**

460. EDF Energy proposes the ‘construction and enhancement of local community amenities and facilities’ (5.5.23) and ‘recreational facilities including sports facilities’ (5.5.28). **The Councils need to be involved in relevant discussions about the enhancement of local community amenities and facilities.**
461. Accommodation Campus Option 2 (ii) incorporates proposals for off-site sporting facility provision in a location to be determined. This could be a long term benefit to the people of Leiston and the surrounding area if such facilities are appropriately located in a sustainable location. The Councils will expect to be involved in such discussions alongside Leiston-cum-Sizewell Town Council and any other relevant / interested community groups. It may be that such provision could augment existing provision in the locality or provide an upgrade. However, use by construction workers would be for up to 12 years, the condition of any such facility at the end of this period would need to be assessed and possibly improved if it is to be a true legacy in the locality.
462. Whatever is proposed must be developed in the context of existing plans, policies and proposals including, for example, the four priorities of the new Leiston First Partnership (which includes the District Council, Town Council and Leiston and District Community Partnership), the Leiston Neighbourhood Plan (and other local Neighbourhood / Parish Plans) and the respective Councils specific plans to enhance services, for example Suffolk Coastal District Council’s proposed Leisure Centre improvements in Leiston.
463. A new Change Manager for Leiston started in post on January 3rd 2017 and she will play a pivotal role in terms of advocating for the Leiston community.

The Leiston First Partnership (and associated sub groups relating to the four priority themes – Town Centre Regeneration, Health and Wellbeing, Young Adults and Post 16 provision and Business & Enterprise) and other relevant local groups, including the Partnership ASB Group and Multi Agency Conferences, will all be key mechanisms through which EDF Energy can engage with representatives of the community of Leiston.

464. The Sizewell C development will have a significant impact on the **Leiston Household Waste Recycling Centre** (Lover's Lane IP16 4UJ) by increasing congestion, the increased risk of queuing along Lover's Lane and demand for the service. The County Council will seek early discussions about how the impact can be mitigated so that Leiston and the surrounding area can continue to receive a good recycling service.

### **Community Impact Fund**

465. **The Councils would ask EDF Energy to recognise that there will be many individuals and communities who consider that they would be adversely impacted by Sizewell C and who do not directly benefit from it. Our position is therefore that EDF Energy should provide a Community Impact Fund in Suffolk.**
466. Whilst the consultation references such a local Community Impact Fund, there is no detail what this would look like. The recent Town and Parish Council workshop hosted by the Councils identified a number of specific ideas about what could be included in any package of community benefits (including as one specific example, wider community access to any enhanced Wi-Fi provision and/or mobile phone signal coverage for the accommodation campus). There is an associated question about whether this Community Impact Fund will involve any hierarchy of benefit based on the varying levels of impact of the Sizewell C development on individual host communities.

### **Associated Development**

#### **Context**

467. In submitting their application for DCO, EDF Energy will be required to define what is principal development and what is associated development. In their assessment they will have to state when associated development is to be temporary and when it is to be permanent. It is likely that the majority will be temporary but some elements such as highway proposals and sea defences may be permanent. This section focuses on the associated development that is likely to be temporary and / or not required as mitigation (in the case of the visitor centre proposals).

468. At Stage 1 it was noted that while the Associated Development sites proposed by EDF are forms of mitigation (other than the Visitor Centre), they will have specific impacts of their own which need to be carefully evaluated and also mitigated. This position has not changed.
469. Having regard to ecological survey; all land-use changes must be accompanied by the appropriate ecological survey. While the focus is understandably on the main construction site and main platform, other associated developments should not be overlooked in terms of ecological survey and mitigation/compensation, as required. Each is significant development in the countryside in their own right and therefore surveys should identify any impacts on priority species or habitats, protected species and designated sites.
470. At Stage 1, the Councils highlighted areas to be looked at including impact on amenity, reversibility of impact, legacy benefit, and effectiveness in implementing. Specific considerations are:
- i. sites should minimise removal of landscape and habitat features;
  - ii. sites should minimise impact on populations of protected or Biodiversity Action plan species;
  - iii. sites should minimise the loss of historic landscape features and buried archaeological features;
  - iv. sites should have a minimal impact on the Suffolk Coast and Heaths AONB; and
  - v. sites should minimise visual and landscape impacts, and those on the setting of heritage assets.
471. There are over-arching environmental issues in relation to all of the associated development sites, this was raised at Stage 1 with an acknowledgement that the assessments of environmental impacts appeared to be desk-based, where local wildlife designations and species records had not been examined. Landscape mitigation included additional planting – given the relatively short life of the sites, this is unlikely to have a significant mitigation effect for local receptors, however, planting schemes could create a positive landscape legacy for those sites if they restore and enhance local landscape features and create habitat. The majority of the sites proposed the use of extensive lighting; this has the potential to have a significant impact on bats. With the exception of Stage 1's campus option 1, the consultation documentation at Stage 1 lacked statements of the potential impact on the historic environment at each of the sites. It was not clear that the Sites and Monuments Record has been consulted consistently. The Environment Record stated that ground and surface water modelling had been undertaken but not finalised and alluded to discussions with

local authority. However, SCC as Lead Local Flood Authority had not been contacted at this time.

472. There are still some outstanding questions regarding the above that have not been resolved in the Stage 2 consultation. It is therefore considered useful to restate our Stage 1 position to ensure that further detailed assessment is carried out in the highlighted areas and findings produced for local authority review.

### **Accommodation Campus**

473. In response to Stage 1 the Councils commented that EDF Energy had not clearly explained why a single campus of the scale suggested was necessary, or why alternative strategies which could provide some legacy housing, or other socio-economic benefit, had been discounted. The Councils raised furthermore at Stage 1 that:

- Full consideration of all traffic movements associated with campus developments needed to be considered including site management staff and movement on and off site for recreation.
- Option 2 was asked to be eliminated (located in AONB).
- Further work needed to understand the comparative merits of Options 1 and 3 and whether there are alternative permutations that are more satisfactory.
- There had been no consideration of campus options further afield in nearby urban centres such as Lowestoft and Ipswich. It was understood that there were likely to be commercial reasons as to why these sites were not appropriate, a robust business case should be provided that includes all alternative options.

474. It is noted that in Stage 2, the site at Eastbridge Road (which was Option 1 at Stage 1) is EDF Energy's preferred site, providing three masterplan layout options (Option 1, Option 2(i) and Option 2 (ii)). Within the various layouts proposed, the building heights are to be up to 4 or 5 storeys.

475. We understand that EDF Energy's preference is for a campus at the entrance site, with its operational advantages to have its workforce essentially on site. While an on-site location has advantages in terms of reduced bus journeys throughout the build period, traffic impacts of an offsite location are expected to be comparably small if shuttle buses are used to move the workforce between the campus and the development site – as EDF Energy's own assessment of offsite campus accommodation at Hinkley Point C has shown.

476. While the Councils understand the rationale of an accommodation campus located at or close to the construction site, we remain concerned about the

environmental impacts of the proposed site location, which may cause an overload on the sensitive environment of the AONB.

477. The Councils have pressed EDF Energy since Stage 1 to be supplied with the details of alternative options that have been considered. The Councils expect a review of potential alternative sites for the accommodation campus, to consider whether or not there are credible alternative sites in proximity to the development site, which potentially may be considered to have less environmental impact, more legacy potential and/or better community integration. The review should also consider alternative site layouts for the proposed site being considered, such as a layout that spreads the development to the whole site area of Option 1 without the sports facilities, to achieve lower level (height) accommodation units.
478. **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.**
479. **For any accommodation campus site, the Councils believe that sports facilities for campus residents should be provided at a site in Leiston, in order to provide benefit and legacy to the local community.**
480. Discussions with EDF Energy regarding this potential option would be welcomed; any such offer would require additional future investment / funding by EDF Energy in order to ensure an appropriate high standard for the facilities is maintained for the benefit of Leiston residents in the future (following 10 – 12 years use by construction workers).
481. The Councils understand the operational benefits of EDF Energy having its accommodation campus in close proximity to the site. There will be significant advantages of having the leisure facilities located within a town. Leiston also has a Neighbourhood Plan which has recently been cited with reference to recommendations of planning approval for circa 500 dwellings in the town. Growth in the town is therefore happening. The Councils and the Town Council have established a programme called Leiston First to help develop and regenerate the town. The Councils propose that there are significant cumulative benefits with co-ordinating these development opportunities in the town to make

Leiston more vibrant and strong. The Councils will welcome positive engagement with EDF Energy and others to embed the opportunities arising.

### **Specific concerns about the proposed site**

482. While the Councils are unable to confirm the preferred location / layout due to lack of information and full appraisal of alternative site locations, as well as alternative layouts of the currently proposed site, we would like to make the following technical comments on the proposals put forward for Eastbridge Road.

### **Landscape, heritage and visual impacts of proposed accommodation campus at Eastbridge Road**

483. The full impact of any form of development on the wider landscape and heritage features would need to be fully assessed. Before Stage 3 of the consultation, we would expect to receive full landscape and visual impact assessments so that we can fully understand the scale of the proposal, and to help understand the need and effectiveness of any mitigating planting. Provision of effective mitigation will need to be considered against a realistic timescale for the presence and persistence of the Campus – the described campus options, whilst outside the AONB, are immediately adjacent to it and fall within the setting of it. The sensitivity of the site in landscape terms should not be underestimated and should be fully acknowledged.

484. Of the proposed layouts, Option 2 (ii) appears to present the best option for reducing impacts on Leiston Abbey, as well as on public and residential amenity to the west of the site. The smaller footprint may also reduce impacts on the landscape fabric and any associated habitats. The extra height on accommodation blocks and the location of recreation facilities elsewhere may create additional impacts – these have not been assessed at this time but it is likely that 5 storeys in this location would have greater impacts in views from the north such as at Whin Hill.

485. There are other heritage assets in the vicinity of the campus which may be affected by the proposed development: Upper Abbey Farm, Leiston (Grade II listed), Theberton House (II\*), Abbey Cottage (II), Potter's Farmhouse (II), Bob's Cottage (II), Flash Corner Cottage (II), No's 1&2 Flash Cottages (II) and Leiston Abbey itself (3 Grade II listed, one Grade I) which is also a Scheduled Ancient Monument. The setting impact and mitigation options for these heritage assets will need to be discussed with Historic England.

486. The impacts arising include: lighting, landscape setting, noise, introduction of vehicle movements, intensification of vehicle movements, new built forms and their scale, design and proximity, boundaries and these must be fully assessed.



487. Para.7.6.48 (p.171) refers to the accommodation campus having setting impacts on Upper Abbey Farm. Appeal decisions relating to listed building settings have shown that temporary harm is still harm and must be taken into account. Particularly as temporary in this instance is up to 12 years. At this stage of consultation, it is unclear as to whether Upper Abbey Farm is proposed for use as part of the surrounding campus / hub proposals – if it is, impacts arising from such use would need to be assessed.
488. The next stage of consultation is expected to be more detailed and as such impact assessments for any proposed campus location and layout will be needed that define the significance of affected heritage assets; what constitutes the setting of these heritage assets, what aspects and features of the setting contribute to the significance of the heritage assets; what effects will arise from changes to these features arising from the development proposals; and in what way these effects will impact upon the significance of the heritage assets. The effect of the temporary nature of some of the proposals should also be taken into account, their reversibility, and their permanence.
489. From an archaeological perspective option 1 is least preferred due to significant interruption of views and the settings impact upon above ground heritage assets. In both options 2 (i) and (ii), there is less of an impact on views, as to the west of Eastbridge Road there are either no developments (2ii) or only sports facilities (2i) proposed to the west of Eastbridge Road. Option 2 (ii) is the preferred proposal due to development being fully confined to the west of Eastbridge Road. All options would require archaeological assessment and mitigation.
490. For all three layout options, there is potential for below ground archaeology of all periods. Archaeological assessment in the form of geophysical survey and trial trenched evaluation will be required for all options. A WSI is in place for part of the area covered by these proposals, however, as the red outline has changed since Stage 1, further amendments to existing WSI's will be required to include additional areas presented in the Stage 2 documentation. Following evaluation, archaeological mitigation strategies will need to be designed for all areas.

### **Environmental and ecological impacts of Eastbridge Road options**

491. Further work is required having regard to ecological impacts – surveys should identify any impacts on priority species, or habitats, protected species and designated sites.
492. From an environmental protection perspective, the temporary accommodation and additional transport infrastructure will adversely impact on the existing environment during the 'Construction Phase' but providing reasonable

mitigating measures are taken, impacts can be minimised and some lasting legacy can be incorporated into the schemes.

493. The need to survey for priority habitats and species, as well as protected species, appears to have been overlooked. Particularly concerning given its proximity to known bat corridors and roosts, so lighting will be a key consideration. The mitigation measures for lighting shall indicate the extent of light reduction likely to be achieved. Representations have been made to the Councils by the DASH Astro Society (Darsham and Surrounding Hamlets Astronomy Society who have gained Dark Sky Discovery Status for Westleton Common and are therefore concerned regarding potential use of security lighting at the accommodation campus at the construction site. It is important that local concerns such as this are taken into consideration prior to Stage 3 of public consultation.
494. The alternative bridleway route through the proposed campus, option 2, must be given enough width (5m corridor minimum) and must have sufficient separation from the site fence next to the campus access road and the bunding/planting proposed along the Eastbridge Road. In addition, there is potential for the alternative bridleway route to accommodate a cycle pathway to Leiston. This would open up an option for cycle hire to be promoted at an on-site accommodation campus to encourage workers to cycle into Leiston and utilise local facilities in a sustainable manner.

### **Freight Management Facility**

495. **The Councils strongly encourage EDF Energy to reconsider the establishment of a Freight Management Facility at a different location along the A14, as was proposed in Stage 1, and not to proceed with the traffic incident management facility at Wickham Market.**
496. At Stage 1, EDF Energy suggested that a Lorry Park may be required for 50 – 100 vehicles. This was suggested to be sited at either one of the southern Park and Ride sites or adjacent to the A14. Provision of this type of facility was supported by the Councils'. However, it was considered that co-locating the facility at a southern Park and Ride site would not provide mitigation of impact on the A12 travelling north. The Councils strongly supported a site directly off the A14 which could also be used for freight consolidation. More information on potential monitoring systems needed to be provided. There was considered to be a legacy potential for any such facility adjacent to the A14 to accommodate Operation Stack. This is identified within SCC's Local Transport Plan as a medium to long term strategic improvement.
497. It is disappointing that EDF Energy have not chosen to take the option for a freight management facility forward in their Stage 2 consultation. The traffic incident management area proposed as part of the Park and Ride South –

Wickham Market, is not considered to be as robust a solution as a properly managed and facilitated freight management centre.

498. The Councils consider a separate freight management facility (as suggested at Stage 1) will have better control of HGV movements through congested parts of the A12 near Woodbridge, will result in a reduced scale of development of the southern Park and Ride site, and have potential for realising a legacy use for Operation Stack and potential for freight consolidation to occur, further reducing HGV trips. At stage 1, there were three options proposed for freight management sites. The Councils considered that option 3 was likely to have significant impacts on the natural and historic environment; option 1 is employment land allocation; legacy use for Operation Stack could conflict with this local plan designation. Option 2 is within the AONB but is an isolated part, considered preferable to use Option 2 rather than Option 1. Offsetting the permanent impact on the AONB would have to be considered as part of the environmental mitigation package.
499. The Emergency Services have indicated a similar preference due to its potential legacy use as a Multi-Agency Strategic Holding Area (MASHA). The Councils retain concerns that increase in HGV flows on the A12 between Seven Hills and Woods Lane during peak periods, increase in HGV flows on the A12/A14 junctions at Copdock and Seven Hills during peak periods and the potential parking up in local communities and rural roads north of Woodbridge to enable drivers to meet their delivery time, would affect local communities. There are reservations regarding the use of the Park and Ride site for incident management given that the HGV's will have to traverse through the aforementioned peak period bottlenecks on the existing highway network.
500. The Stage 2 consultation does not address in full the concerns raised at Stage 1 by the councils. Further work in relation to this subject is requested. At this stage the councils are not satisfied with the traffic incident management zone proposed on the southern Park and Ride side at Wickham Market.

### **Park and Ride sites**

501. Although from the perspective of the project as a whole the Park and Ride sites appear comparatively small, the Park and Ride sites are substantial works in the countryside and are large projects in their own right. Although not permanent, the length of time that the duration will be is long term in relation to landscape visual impacts. At Stage 1 representation was made by the councils regarding the positioning of Park and Ride sites close to the main source of the workforce. We were keen to maximise the use of non-car commuting to the site. It was stated that consideration should be given to the provision of a rail passenger service for works during the construction phase of the development, opportunities for "legacy" use of the line to provide a passenger rail service for

Leiston – this is not considered in the Stage 2 consultation. Transport modelling suggests a car share ratio of two for non-home based workers - further information to support this is required.

502. Further detail is required to identify the target audience and anticipated turnover associated with the proposed Park and Ride facilities to demonstrate their effectiveness and capacities in terms of effective operations and potential impact on the neighbouring highway network. The assumption in terms of operational capacity of the Park and Ride should be identified (e.g. 85% full would be a reasonable assumption on the basis that drivers become frustrated searching for a space). Further detail is required on the Park and Ride service frequency in order to confirm and understand the size of fleet that will operate during peak and off peak hours at each Park and Ride facility. Any submission should include an assessment to identify whether the proposed facility can cater for its demand. A high turnover of bus services must be achieved during shift change to provide an attractive facility.
503. Given the lag between arrival/departure profiles at the Park and Ride and start/end of shift due to travel distance with the construction site, evidence is needed to show that the highway impact of Park and Ride activity has been modelled independently to provide assurances that the proposed junction arrangements are effective during times of peak demand.
504. Additional information is required so that SCC (as Highway Authority) can understand the consideration that has been given to the likelihood that construction workers lodging at the on-site accommodation will return to the Park and Ride at the end of their shift and whether these have been included in the service patronage figures and in any associated traffic generation. Additional clarification has been requested on the level of car parking that is provided across the entire site during the construction period. A management strategy to ensure that staff approaching the site utilise the correct Park and Ride facility should be considered. The Consultation proposes that residents leaving to the east of the A12 can drive to and park directly at the site provided they live north of the River Deben and South of the River Blyth. This would be an acceptable area to the Councils but further detail on the number of staff and how to further reduce the number of vehicles driving direct to site needs to be considered i.e. travel plan measures such as inducements for car sharing, use of public transport, cycling).
505. During construction of both sites there would be associated dust emissions – the mitigation measures proposed would be necessary and we will need to see more detail during Stage 3.
506. Restoration and remediation is a key area - the reversibility of the Park and Ride developments should be properly and demonstrably considered at the

design stage. The restoration of a good soil profile for arable agriculture and the reinstatement of land drainage need to be considered carefully, (as does the arrangement of drainage on the surrounding agricultural land whilst the sites are in use), otherwise the landscape impacts of the sites could extend well beyond their lifetime.

### **Park and Ride South Wickham Market (Hacheston)**

**507. For the Southern Park and Ride Site, the Councils would request consideration of sites further south of Woodbridge, closer to Ipswich, to reduce the number of cars on the road in the Woodbridge area. If EDF Energy consider the Wickham Market (Hacheston) site further, there may need to be improvements to the A12 between the dualled sections of the Wickham Market and Martlesham bypasses.**

508. It was noted at Stage 1 that both Park and Ride sites were to have the same facilities but that the southern Park and Ride may include lorry parking for 50 – 100 vehicles. EDF Energy preferred their site to the north of Wickham Market (Hacheston) (option 1). However, the Councils considered that decoupling the southern Park and Ride from the freight management facility would provide significant transport and potential legacy benefits. The environmental implications of the more substantial facilities required for lorry parking are likely to be damaging in the locations proposed for Park and Ride facilities.

509. At stage 1, the Council commented on the options:

- Option 3 (Potash Corner) to be discounted immediately.
- Option 1 (Wickham Market) and 2 (Woodbridge) retained for more detailed study, regarding archaeology at Option 1, and regarding potential low-intensity legacy use, Option 2 (Woodbridge).
- EDF Energy should also keep open the option of using other potential sites to the south of Woodbridge.

510. It is noted from the Stage 2 submission that Wickham Market (Hacheston) is EDF Energy's preferred location for the southern Park and Ride site, yet using a revised area. Of the three options presented at Stage 1, the Councils felt that Option 1 did appear the most sequentially preferable given its proximity to the A12 and the limited number of sensitive receptors nearby. However, it does have issues including its landscape sensitivity and the potential presence of archaeological resource, although the latter does appear to have been partially mitigated through the amended site area.

511. Although the Park and Ride site at Wickham Market (Hacheston) is still considered the best of the three options originally presented, it has issues and challenges that will need addressing. It is suggested that further work is carried

out on exploring an alternative southern Park and Ride option along the A12 nearer to Ipswich – possibly by extending the existing Park and Ride site at Martlesham – it is acknowledged that further assessment on this would be required. This would take vehicles off the local highway network at a more appropriate stage of their journey and onto buses to the site. A smaller Park and Ride could be proposed at Wickham Market (Hacheston) to accommodate the cross-country commute if considered essential.

512. Notwithstanding the desire for an alternative site to be explored, there are concerns around the traffic incident management area to be co-located with the southern Park and Ride site. See previous paragraph on Freight Management Facility.
513. The proposed area differs significantly from that considered under Stage 1 and includes land to the north of the existing Public Right of Way to the east of Whin Belt. The development area is further away from the nearest sensitive residential receptors located to the south west of the B1116. The amended site access directly transects an existing bridleway. Consideration will need to be given to the usage of the bridleway and whether a diversion is necessary. Either way the development will have a significant impact upon users of the Public Right of Way as it follows the western boundary of the site in close proximity to the proposed vehicular circulation area.
514. The proposal represents significant development in otherwise undeveloped countryside. From a landscape perspective, the positioning of mounding and the design of the site components will need to be carefully considered, including the issue of lighting. The reversibility of the development will need to be designed from the outset to ensure successful restoration. Key to this will be the arrangements for the storage of topsoil to ensure that it remains viable for agriculture post restoration (use in bunds?).
515. Further consideration should be given to providing additional landscaping along the sensitive boundary. The previous site area benefited from a degree of containment by virtue of its position relative to the existing woodland areas, the change in site area has necessitated additional, more extensive soil bunds to mitigate potential visual impacts. The proximity of this site to the Special Landscape Area (SLA) and AONB raises concern. It is considered that thought needs to be given to the timing of the landscape mitigation, in particular, whether the proposed bund should be provided early on in the construction phase to mitigate the visual impacts of construction activity.
516. It is noted that the postal consolidation facility is to be placed at the southern Park and Ride site – given its closer proximity to Ipswich this is also considered logical. It is expected that this facility will be used to restrict deliveries to site

thus reducing the number of LGV's/smaller vans accessing the roads to the east of the A12 to the site.

517. With reference to the proposed traffic incident management area, it is notable that the proposed traffic incident management area at the southern site does not include any lighting; given the expected infrequent use of this area temporary lighting would be a reasonable approach if required in order to minimise visual impacts. Although this area is shown in green on the drawing it is assumed this area will require a hard robust surface to support large vehicles – further detail of this will be expected. There are cellular systems available for coach and HGV parking which should be considered for this area. The impact of this on drainage would also need to be covered. However, as a strategy the Councils' do not support this area being provided and would prefer a Freight Management Facility be provided at a more southern position on the highway network – see the previous paragraph.
518. Through systematic evaluation, archaeology has been identified across the majority of the site and is not just confined to the southern half of the field (as is stated in 10.3.23). There will be a direct impact upon below ground archaeology as the proposed Park and Ride is located on part of a known Roman small town at Hacheston. 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. The mitigation strategy is likely to involve a combination of excavation and strip, map and record. Full excavation is likely to be costly and a significant time frame will be required.
519. We would expect to see the same ecological mitigation measures for lighting at the southern Park and Ride site (particularly given Whin Belt is known to support bats) (Table 10.2 pp.235), as EDF Energy has proposed at the northern Park and Ride site, given the proximity of woodland on both sites, both with records of bats.
520. The traffic modelling prepared by EDF Energy appears to show that this location for the Park and Ride would pull through additional traffic on the B1078 through Wickham Market. The impact of this would need to be considered further if this site is to be pursued. In addition, there has been no consideration of improvements to the A12 between the Wickham Market (Hacheston) Park and Ride site and Woodbridge that may be required in relation to provision of a Park and Ride and ancillary facility in this location.

## **Park and Ride North Darsham**

521. **The Councils are content with the proposed Northern Park and Ride site at Darsham, subject to satisfactory access arrangements, with a useful location next to the railway station with potential legacy opportunities.**
522. At Stage 1, the Councils commented that Stage 1's Option 1 (Yoxford Road) and Option 3 (A12/A144 junction) were to be discounted immediately, with Option 1 being too close to the main site and therefore not realising the benefits that a Park and Ride should and option 3 having environmental and traffic safety impacts. Option 2 (Darsham) was the Councils' relative preference, though it may be considered to be too close to the main site, and further work on a more northern Park and Ride site would be required.
523. Since Stage 1, the Councils are not aware of any further work to have been carried out in relation to a Park and Ride site further north. The Councils agree that the preferred option at Stage 2 for the northern Park and Ride is the sequentially preferred site of the three options put forward in Stage 1. However, there are outstanding concerns with regards to accessing the site that will need to be detailed and the Councils will need to be content that the access arrangements are satisfactory.
524. Long term legacy potential is mentioned but has not been moved forward. In addition, the area of site for the Park and Ride seems excessive, consolidation of the site to reduce land take would be beneficial given its sensitive location and the nearby receptors. Further information in relation to potential mitigation or where appropriate, compensatory, measures for occupiers of properties close to the site would be welcomed. Further details, including aspects relating to site mitigation, lighting design, and noise from the site, are required in order for the impacts to be assessed in full. Stage 2 contains no reference to review of potential sites further north on the A12, some additional work in relation to this is requested.
525. In the Stage 2 submissions, the relocation of the induction centre to the main development site is considered logical in terms of efficiency of operation and assists in reducing "land-take" at the Park and Ride sites.
526. There is a question around the scale of land take proposed which is significant compared to the area identified for development? Is it possible for the site to be consolidated towards the southern portion of the site thus minimising land take and subsequent impacts? From a landscape perspective the site does represent significant development in otherwise undeveloped countryside. The positioning of mounding and the design of the site components will need to be carefully considered, including the issue of lighting. The reversibility of the development will need to be designed in from the outset to ensure successful



restoration. Key to this will be the arrangements for the storage of topsoil to ensure that it remains viable for agriculture post restoration.

527. The site and its surroundings are not designated for their landscape sensitivity which reduces the significance of any landscape impact. The character of the landscape will change significantly from short and mid distance and for users of the public Right of Way. The site levels rise quite significantly in a north west direction meaning that visibility into the site from the railway line will be good and visual impacts from the A12 significant.
528. With regards to archaeology, there is high potential for medieval and earlier settlement fronting the A12 and geophysical survey has identified anomalies likely to be archaeological in nature. The extent of surviving archaeological remains within this site is currently unknown but should be established through trial trenched evaluation, as per the approved WSI, before the next stage if this is the preferred option. As this proposal will have a direct impact upon any surviving below ground archaeology, an archaeological mitigation strategy will need to be developed following the evaluation.
529. The Northern Park and Ride site at Darsham has residential properties close to the site, with impacts on residential amenity particularly upon occupants of Moat Hall, Darsham Cottage and White House Farm, which back onto the proposal site. Whilst the proposed 3m bund will assist in mitigating noise and visual intrusion upon residents this beneficial impact needs to be weighed against the loss of openness. We will need to see the results of air quality modelling for this location to determine whether there is the possibility for exceedance of any Air Quality Objectives as set out in the Air Quality Standards Regulations 2010 for Local Air Quality Management in England. Should any exceedances be predicted more detailed assessment will be required. This may include monitoring at relevant receptor locations, detailed computer modelling and investigations of mitigation options and solutions to reduce pollutant concentrations.
530. The design and layout of the access needs to be carefully considered to minimise the impact on the A12. The introduction of any new access is likely to lead to an increase in delay along the route, and its design should aim to minimise this. Capacity assessments will need to be undertaken, while taking into consideration the access's proximity to Darsham level crossing.
531. The Councils' general position (subject to the aforementioned comments) is that we are accepting of Darsham as the preferred site for the northern Park and Ride but we would request further detailed access arrangements to be provided for consideration and assessment.

## **Rail terminal options**

532. **Regarding EDF Energy’s two options for rail access to the development site, the Councils’ current preference is for the green route, as this will reduce traffic through Leiston and on Lover’s Lane.**
533. At Stage 1, the Councils commented that a new rail head option would result in a significant number of HGV trips on the local network; this would significantly impact on other trips in the area and recreational access. We stated that environmental consequences of the alternative rail routes are not included particularly the impact on the Scheduled Ancient Monument of Leiston Abbey. We felt that all routes proposed at stage 1 would have potentially significant ecological impacts and affect the Public Rights of Way network and may require new level crossings. Option 1 and the red route would have left freight trains running through Leiston and crossing the B1122, the timing of such deliveries would be relevant. We also requested evidence to ensure there will be sufficient capacity on the East Suffolk line and the wider rail network, and supported the provision of a passing loop at Wickham Market.
534. At Stage 2 the consultation indicates the current rail terminal is insufficient in capacity for the requirements of Sizewell C and narrows the choice to the green rail route into the main development site or a new terminal to the east of Eastlands Industrial Estate in Leiston. In view of the close proximity of a large number of residential properties to the existing rail line through the town of Leiston and the likely need to utilise evening or night time rail slots to fit in with existing Network Rail requirements, it is considered that option 1 ‘the green rail route into the main development site’ is preferable to use of the existing / new rail head into land to the east of Eastlands Industrial Estate. In addition, this route would reduce traffic impacts and movements on Lover’s Lane to the site. The green route would also avoid an additional 10 trains per day travelling over the existing level crossing in Leiston, but would alternatively include a new level crossing at Abbey Road. Should the Eastlands Rail Terminal be determined to be the preferred option then the impact on vehicle movements within Leiston due to an increase in the calling of the level crossing needs to be considered.
535. A number of noise complaints were received during the construction of Sizewell B Power Station and these were all in respect to the unloading of bulk materials at the existing Sizewell Halt terminal. Given that this development is significantly larger and up to 5 train deliveries per day are anticipated to be needed during construction, we have concerns over noise and dust impact on nearby residential properties from gantry crane use, the unloading of bulk materials and HGV movements should a new terminal be created to the east of Eastlands Industrial Estate, Leiston. The Councils’ technical experts will expect to be fully engaged with the air quality findings in relation to this option should it be progressed further.

536. Green rail route – this route was less favourable from an archaeological perspective compared to other options at Stage 1 due to its greater setting and landscape impact, however from a highway perspective the green rail route direct into the construction site takes traffic from the local highway network which is welcomed. The proposal will impact upon the setting of Leiston Abbey and Grade II listed buildings, as well as the historic landscape more widely (direct and cumulative in conjunction with other aspects of the scheme) and so these impacts need further assessment. The fields through which the rail route passes are a surviving area of early (pre 18th Century) enclosed landscape, as identified through HLC data. The loss of historic boundaries and other landscape features should be avoided. Should the green rail route be progressed further there will need to be below ground archaeological assessment and mitigation as there is moderate potential for medieval and earlier activity and the proposal would directly impact any surviving below ground archaeological remains. Archaeological evaluation in the form of geophysical survey and trial trenched evaluation will be required, to enable an archaeological mitigation strategy to be developed. Appropriate mitigation and if appropriate compensation will be required in relation to whichever rail route is carried forward to DCO.
537. It is not acceptable to divert Leiston public footpath no 6 and public footpath no. 10 to Abbey Road and then along Abbey Lane to re-join the original alignment. This adds over 900m to the onward journey for a walker using public footpath no 10 and places walkers on Abbey Lane without a segregated footpath.
538. The expectation is that there will be a low number of train movements, at low speed and design could ensure good line visibility. On that basis, the safety aspect of a level crossing to serve these two footpaths should be assessed using the ALCRM assessment used by Network Rail. There is the very real possibility of misuse if a crossing isn't provided; the low frequency of trains and low speeds will foster a sense of security for making an informal crossing. An easily accessible, well designed level crossing would ameliorate this.
539. The link between public footpath no 6 and no10 along the south side of the railway is welcomed.

### **Marine Landing Facilities / Jetty**

540. **With regard to EDF Energy's three options for marine landing facilities, the Stage 2 consultation provides inadequate information in order for the Councils to give a preference. Further assessments around the impacts on coastal processes, landscape impacts and marine ecology is required, as well as confirmation of modal split.**

541. There is little if any assessment of likely landscape /seascape impacts arising from the marine landing facilities that are being considered (wide jetty, narrow jetty and beach landing facility (BLF)). LVIA will be necessary with particular regard to any cumulative impacts that may arise from other offshore developments (windfarms). Foreshore works (pp144) – ecological and HRA issues need to include the Southern North Sea pSAC for harbour porpoise, which appears omitted from 12.3.2.
542. The impact of either jetty option on coastal processes is not fully explained, there is concern that if the structure remains in the long term, it may impact or interfere with coastal processes (this has been seen with the Great Yarmouth Outer Harbour). It is assumed that the footprint of the main platform has influenced the positioning of the BLF – the jetty at the northern end of the site that will receive sea-delivered abnormal loads during the operational phase. There is potential that it could be used during construction subject to unresolved rail/sea/road options currently.
543. From a landscape perspective, the jetty proposals seek to create a new port facility on the coast in an area that is generally lightly trafficked by shipping, with an associated deeper water berthing area further offshore (7.5.27).
544. In this consultation there is no consideration of the landscape or seascape impacts of these proposals. If these options are to be developed further a reasonable worst case in terms of the visual impacts of shipping operations based on number of movements, hours of operation and size of vessels that is length, tonnage, unladen air draft as well as the location of and the extent to which any anchorage would be likely to be used. Furthermore, dependent on the timing of construction there may be in combination effects with the construction of offshore wind farms.
545. At this stage of consultation there is inadequate information provided in order to give a preference. It is acknowledged that two options for a jetty are suggested, one would enable a rail max. scenario, the other would not, this has implications for the whole transport strategy and potential impacts on the highway network. Until a modal split has been confirmed the Councils are not able to give a preference to the jetty options proposed. In particular, further details are required to inform such a decision having regard to construction of the jetty, appearance and impact on coastal processes.

### **Land to the east of Eastlands Industrial Estate, including temporary caravan accommodation**

546. At this stage, without discussion and oversight of survey work, we would not agree with the statement that Eastlands has no significant ecological issues. We have seen no detail of surveys undertaken, and would therefore welcome the opportunity to do so, if EDF Energy wish to confirm that ecology is not an

important factor on this site. Again for the use of the existing rail terminal, we would welcome the opportunity to see survey results, if EDF Energy wish to confirm that ecology is not an important factor on this site. Further detail of the proposed layout, including any proposals for permanent buildings, will be required in order for an LVIA to be carried out in relation to the uses proposed.

547. Archaeologically this is a preferred option to the green rail route due to reduced landscape and settings impact. Archaeological evaluation has now been completed for this site and has identified multi-period below ground heritage assets of local or regional significance. An archaeological mitigation strategy now needs to be designed as proposals will have a direct impact upon surviving archaeology.
548. There are a number of uses put forward for this site including storage, temporary caravan accommodation for workers and the potential for an extended rail head into this area. There is very little detail submitted in relation to all of these options and use as a caravan site has been introduced publicly in this consultation.
549. **Regarding the temporary caravan accommodation site to the East of Eastlands Industrial Estate, the Councils supports the principle of caravan accommodation, but require further information on the assessment of alternative sites, and the proposed site design.**
550. While we recognise the principle of caravan accommodation, we require further information on assessment of alternative sites, and proposed site design. Use of any part of this site for accommodation purposes needs to be considered by EDF Energy (and assessed by the Councils) having regard to an over-arching accommodation strategy. This information has yet to be provided. There are concerns regarding the potential impact of use of a rail head in this location and caravan accommodation, details on mitigation between the various uses proposed will be required.
551. Use for temporary caravan accommodation may be appropriate for a time limited period and restricted to worker accommodation solely. However, further work will need to be carried out having regard to impact on noise from other activities at the site including the potential rail head and storage necessitating in vehicular and equipment movements on the site. The proposed caravan site would be expected to operate in accordance with the same model standards as would be required for a site licensed under the Caravan Sites and Control of Development Act 1960. With so few details as to numbers, sanitary facilities and other pertinent matters no detailed comments can be made.
552. Movements from the site to the main construction site are not specified. It may be that a more sustainable mode of transport such as cycling/walking to the main construction site could be encouraged or a shuttle bus from the main

construction site to the temporary caravan accommodation. There are other existing temporary accommodation sites in the visit (e.g. at Sizewell), it is not clear whether an extension of these existing sites has been considered which may be more appropriate. Further detailed information is required having reference to the overall strategy for accommodating non-home based workers in the locality and how use of this site would fit with the overall strategy.

### **New Visitor Centre**

553. No new information has been presented in respect of a new visitor centre. There is a suggestion that the visitor centre for Sizewell C could be accommodated with that for Sizewell B in a revised location not yet determined. The councils are still supportive of visitor centre provision and consider that it should be available during and post-construction of Sizewell C. An iconic building, responding to the surroundings should be delivered. We await further details on any new proposals prior to commenting anymore.
554. Assuming the three options previously presented in the Stage 1 consultation still apply, from an environmental protection perspective it is considered that option 3 at Goose Hill is the best location, as it has the least impact on surrounding residential properties during construction and operational use, but may have potentially significant environmental impacts that would need to be mitigated and offset as necessary. Option 1 should be discounted as it lies in the AONB. A temporary option at Option 2 (land adjacent car park at Sizewell Beach), should be considered until Option 3 can be commissioned.